In Unit One, students read and analyzed graphs about the labor market in general, and learned about job trends specific to the Technology sector. They also learned about the different types of employers in this sector.

In Unit Two, students reflected on their own work history, as well as their personal values and interests. They also practiced using career databases such as New York State’s CareerZone and Career Cruising.

In Unit Three, students learned about different factors that can impact the choice to change careers. They also learned about different career paths in Technology, as well as how to access the training and education required to pursue these careers.

In Unit Four, students explore the daily realities of various Technology careers through detailed worker narratives.

1. TECHNOLOGY CAREERS IN VIDEO

Students view, discuss and write about a number of short videos to learn about the reality of careers in Technology.

2. CAREER NARRATIVES IN TECHNOLOGY SERIES

Students read about Technology careers in the Healthcare, Construction and Media fields, from the perspective of the workers themselves. They practice writing and answering questions about the reading, citing facts, evidence and opinion, then conduct their own research into these and related careers of interest.

2.1 • Using Question Stems as a Reading Strategy:
Technology Workers in the Healthcare Sector

Students read about an information service desk (IT) analyst in a hospital. They learn what information service desk workers typically do at work, the education needed to become one and possible paths of advancement. They develop and answer questions, citing evidence and developing opinions as a way to glean as much as possible from the text.
Unit 4 • Summary

2.2 • Using Question Stems as a Reading Strategy: Technology Workers in the Construction Sector
Students discuss the field of solar energy by reading an interview with a solar panel installer. They develop questions about the reading, then use the article to find evidence for their answers.

2.3 • Using Question Stems as a Reading Strategy: Technology Workers in the Media Sector
Students learn about the field of graphic design, from day-to-day activities to requirements in the field. They develop and answer questions as a reading strategy.

2.4 • Computer Research: Career Narratives in Technology
After reading a Technology career narrative, students learn more about one career by reading about it on a career database, such as the Bureau of Labor Statistics.
Technology Careers in Video

Students view short videos about workers describing their job in the Technology sector and write responses to questions about the videos. The following page describes and provides links to short videos on various technology careers. YouTube has hundreds of short videos on dozens of technology careers. Teachers may use the ones listed or find new ones.

PREP

- Pre-screen and select a video that students will view.
- Adapt the Written Response: Technology Career Video Narratives worksheet to the video you choose.

MATERIALS

- Requires use of a computer and projector.
- Written Response: Technology Career Video Narratives worksheet

EXPLAIN

1. Analyzing data about careers is important, but it’s also helpful to hear about how workers in the field experience their jobs. If you met someone who works in a field you are interested in, what questions would you ask them?
   - What they do at work, how they got their job, what they like and don’t like about it, and advice for newcomers to the field.

2. Today we are going to watch a video about working as a ____________. We are going to watch it twice. The first time, listen for the main ideas. Which career does the video describe? Does the worker seem to like his/her job? How do you know? Then, you are going to read a series of questions about the video, and listen with answering the questions in mind. After watching a second time, you are going to write responses to the questions.

3. Play the video. Have a brief discussion about what students learned about the career and the worker’s experience of it.

4. Distribute the Written Response worksheet. Ask students to read the questions, but not write anything yet.

5. Play the video a second time.

6. Ask students to complete the Written Response worksheet.
Video Interviews about Careers in Technology

The videos listed below depict Technology careers from the worker’s perspective across a variety of sectors. YouTube has hundreds more which can be found by doing keywords searches for “_____________ career.”

1. Information Technology Career Pathways
   An overview of several careers in IT, with a first-person account from an IT repair technician. (7:18)
   https://www.youtube.com/watch?v=IPjsYU2RELE

2. Cablevision Field Tech
   Describes the working conditions and training for Cablevision field techs. (5:53)
   https://www.youtube.com/watch?v=aUon496vrVA

3. Manufacturing
   Describes the field of manufacturing, including technology's impact, and ease of entry in the field without an advanced degree. (2:11)
   https://www.youtube.com/watch?v=pURx4I0LfK0

4. Lab Technician
   Describes duties of lab technicians and importance in medical field and required skills. This career requires a degree. (4:04)
   https://www.youtube.com/watch?v=wdQEp6jRDyzIk

5. Wind Turbine Technician
   Shows a day in the life of a wind turbine technician, a career that generally requires an associate’s degree and/or a training program. Note that demand for wind turbine technicians and solar panel installers is significantly higher in other areas of the country. (2:59)
   https://www.youtube.com/watch?v=ZgaD5b_bdzs

6. Software Engineer
   A young immigrant software engineer discusses her path to emigrating to the U.S. and becoming a software engineer. (3:15)
   https://www.youtube.com/watch?v=xoSGg6db6hs

7. Electrical Engineer
   An exciting look at using electrical engineering to solve real-life problems. (5:00)
   http://science360.gov/obj/video/76df0a49-1fd4-4c6d-b233-17dd81a8dbf1/ profiles-scientists-engineers-electrical-engineer
**Written Response:**
**Technology Career Video Narratives**

Write complete responses to the questions below, based on the video narrative.

1. Which career(s) does this video describe?

2. What does the person/people in the video do at work?

3. In addition to what they describe doing at work, what additional tasks do you think they do at work?

4. Does the main speaker in the video enjoy his/her job? Provide evidence from the video that supports your claim.
Section 1

5. What kind of preparation is required for this career?

6. What are some advantages and disadvantages of working in this field?

7. Which additional careers does this career interact act with?

8. Is this a career you would be interested in? Why or why not?
### Career Narratives in Technology Series

Students learn about Technology careers in the Healthcare, Construction and Media fields, while practicing reading strategies such as developing and answering questions from question stems.

**Activities in This Series**

- **2.1 • Using Question Stems as a Reading Strategy:** Technology Workers in the Healthcare Sector
- **2.2 • Using Question Stems as a Reading Strategy:** Technology Workers in the Construction Sector
- **2.3 • Using Question Stems as a Reading Strategy:** Technology Workers in the Media Sector
- **2.4 • Computer Research: Career Narratives in Technology**
Using Question Stems as a Reading Strategy: Technology Workers in the Healthcare Sector

Students read about a day in the life of an information service desk analyst in Healthcare. They develop questions based on the reading, then answer those questions. Then, they brainstorm additional industries that employ Technology workers. This is one example of a Technology career in a sector other than Information Technology. This can be used as a point of departure to discuss Technology careers in various sectors.

PREP

- Read A Day in the Life: Information Service Desk Analyst article.

MATERIALS

- A Day in the Life: Information Service Desk Analyst article
- Question Stems: Information Service Desk Analyst worksheet

EXPLAIN

1. Technology workers can work for technology companies or they can work in other fields, such as Healthcare. Ask students to brainstorm what kinds of technology Healthcare workers use. Write student responses on the board.

   › Ultrasound and X-ray machines, software which code and track for medical procedures, billing software, paging or public address systems, scheduling software.

2. If it hasn’t already come up, remind students that almost every Healthcare professional uses a computer, so people are needed to help them use those computers, and fix them when there’s a problem. Today they will read a story about a woman named Tami Swain who works at the Information Service Desk of a hospital.

3. Distribute Question Stems: Information Service Desk Analyst worksheet. Ask students to complete the top portion only which asks them to predict what the daily activities of an Information Service Desk Analyst might be like.
Distribute *A Day in the Life: Information Service Desk Analyst* article. Ask students to read and annotate it, marking anything they find interesting, surprising, important or confusing. They should also read to see if their predictions are correct.

When students are finished, ask them to develop the questions on the worksheet.

Then ask them to answer the questions on the worksheet. As an alternative, put students into pairs and have them answer one another’s questions.

**DISCUSS**

- Ask students if they would like a job like Tami’s. **What is attractive about a job like this? Or what would deter them from pursuing a job like this?**

- Remind students that workers with technology skills can work in a lot of different fields or industries. Ask students to brainstorm as many fields or industries as they can that Technology workers can work in.

  **Examples:**
  
  ➤ *Healthcare*
  
  ➤ *Education*
  
  ➤ *Business*
  
  ➤ *Hospitality*
  
  ➤ *Fashion*
  
  ➤ *Sports*

- Whether or not you are interested in a career in Technology, how could today’s activity be useful to you and why?
A Day in the Life:
Information Service Desk Analyst
July 9, 2013

Adapted from http://inside.akronchildrens.org/2013/07/09/a-day-in-the-life-is-service-desk/

The phone is already ringing when Tami Swain, a service desk analyst for Akron Children’s Hospital’s Information Services (IS) department, gets to her workstation at the start of her shift. On the line is a new employee who’s having trouble logging onto his computer. “I’m sure I can help you with that,” says Swain. She turns on her two computer monitors and starts working on the problem. In just a matter of minutes, Swain has resolved the issue. As the hospital has grown, so too has the need for the service desk staff to help employees with a range of technical issues.

“We are responsible for more than 4,000 PCs in the hospital’s system,” said Ronda Wicks, IS service desk team leader. “We take calls for problems with everything from the keyboards to the monitors to the software.”

Swain’s morning goes quickly while she fields calls from the hospital’s Akron campus and its many remote sites. On most days, she handles about 30 calls asking for help with any number of software and hardware issues. “Sometimes what might seem like a minor problem to some people might be a big issue for the person calling,” she said. “I always try to keep a positive attitude when I’m on the phone. That seems to help the caller relax and realize that we’ll be able to resolve the problem.”

Swain may handle 50 or more calls a day when a system fails or has major issues. She and the other service desk staff are responsible for notifying and updating IS leadership and system users throughout the hospital of the status of major issues, and staying in touch with the technical staff working on the problem. They also verify the status at clinical units, and notify system users when the issue has been resolved.

Each day at 10:45 a.m., Swain and her colleagues have a service desk “huddle”—a brief meeting lasting about 15 minutes. “We talk about common issues that may have come up and ways to resolve them,” Swain said. “The huddle is a great way for us to
bounce ideas off each other and collaborate on solutions.” The analysts also review the previous day’s statistics so that they are always aware of how well they service their customers. If a problem seems to come up time and again, the service desk staff creates a tip sheet explaining the problem and the solution. “A lot of employees have trouble remotely logging into their email,” said Swain. “I always talk the employee through the process when they call, but I also send them a tip sheet that lists the steps. If they encounter the problem again, they can just refer to the sheet to help resolve the issue.”

Swain’s next call is for help with installing new software. One of the monitors on her desk allows her to see what the caller is seeing on his computer. She moves through the various screens and gets the software up and running. While some of the “fixes” are routine, others aren’t. “Technology is changing all the time,” said Wicks. “We try to be proactive and make sure that we keep on top of what’s out there, so that we can help the employees if they run into problems.”

Swain, a five-year Children’s Hospital employee with an associate’s degree in computer science from the University of Akron, appreciates the hospital’s commitment to education. “Thanks to the hospital’s education reimbursement program, I’m going back to the University of Akron in the fall to get my bachelor’s degree,” she said. “I know it will be a lot of work, but I also know it will be worth it.”

In between her calls, Swain checks the service desk email. Hospital employees often send requests about non-critical issues, such as a printer that’s low on ink or a keyboard with a sticky key. Swain handles several emails before her phone rings again. The caller is a neonatal intensive care unit (NICU) nurse who’s having trouble with a bar code reader.

“When an employee calls our department, they’re given the option to move their call directly to a service desk analyst if they have a problem that’s critical to patient care,” said Wicks. “We take these calls very seriously. We don’t ever want a technology issue to get in the way of helping our patients.” Swain quickly resolves the issue from the NICU nurse and takes another look at the department’s email before heading home at the end of her shift.

“My favorite part of the job is that every day is different, and it is always a challenge,” she said. “I really enjoy my job and I knew the first week I was here that I could spend the rest of my career working for Children’s Hospital.”
Question Stems: Information Service Desk Analyst

Before reading the article, predict what the daily activities of an Information Service Desk Analyst might be like. After reading, write and answer the questions below.

I think an Information Service Desk Analyst ________________________________

______________________________________________________________

______________________________________________________________ at work.

1. Where does Tami Swain ________________________________?

2. What does she typically ________________________________ at work?

3. What are some of the most common problems that she ________________________________ at work?

4. How does she prioritize the tasks that she needs to_______________________________?
5 What type of ____________________ did she earn from the University of Akron?

6 How does Akron Children's Hospital encourage their staff to pursue higher levels of ____________________?

7 Why does Tami say, “__________________________?”

8 How does Tami Swain feel about ____________________?
Using Question Stems as a Reading Strategy: Technology Workers in the Construction Sector

Students read an interview with a solar panel installer. They develop questions based on the reading, then answer those questions. This is one example of a Technology career in a sector other than Information Technology. This can be used as a point of departure to discuss Technology careers in various sectors.

Note to Teachers: In this activity, students write questions about the texts they have read. They can either answer their own questions, or trade questions with a partner.

PREP

- Read An Interview with a Solar Panel Installer article.
- Be prepared to discuss the terms: **Renewable (energy)**—energy such as coming from the sun or wind, that will not run out; **Photovoltaic (PV)**—Building and energy professionals refer to solar panels as photovoltaics, photo—relating to the sun or light, and volt—referring to units of energy.

MATERIALS

- An Interview with a Solar Panel Installer article
- Solar Panel Installer Interview Questions worksheet

EXPLAIN

1. **Ask:** Who has heard of solar energy, and why is it important?
   - Solar energy harnesses power from the sun and can replace other forms of power such as gas or coal. It is important because the sun is a renewable source of energy, meaning it will never be used up.

2. Tell students that they are going to read an interview with someone who installs solar panels on roofs. Why would solar panel installation be included in an exploration of Technology careers?
   - Solar panels use technology to take energy from the sun and transform it into a form of energy that can be used to power batteries, lights or other electrical equipment.
Solar Panel Installers are one example of an entry-level career in the solar industry. The industry also includes higher level careers, such as engineers and managers. After reading the interview, you will write questions about what you’ve read, then answer your own (or a classmate’s) questions.

Distribute the Solar Panel Installer Interview Questions worksheet. Ask students to complete the top portion only, which asks them to predict what the daily activities of a solar panel installer might be like.

Distribute An Interview with a Solar Panel Installer article. Ask students to read and annotate it, marking anything they find interesting, surprising, important or confusing. They should also read to see if their predictions are correct.

When students are finished, ask them to develop the questions on the worksheet.

When students are finished, ask them to answer the questions on the worksheet. As an alternative, put students into pairs and have them answer one another’s questions.

**DISCUSS**

Do you think you would want to be a solar panel installer, or work in the solar industry? Why or why not?
Solar Panel Installer Interview Questions

Before reading the interview, predict what the daily activities of a Solar Panel Installer might be like. After reading, write and answer the questions below.

I think a Solar Panel Installer ________________________________
________________________________________________________
________________________________________________________
________________________________________________________

at work.

After reading the story, fill in and answer the following questions:

1. What __________________ does Jason Edens do at work?

2. What kinds of __________________ do Solar Panel Installers use?

3. How much do Solar Panel Installers __________________?

4. What __________________ does someone who wants to be a Solar Panel Installer need to have?
Section 2.2

5. What ________________ and ________________ does Jason Edens look for in an employee?

6. What is the ________________ between energy efficiency and conservation?

7. How did Jason decide ________________?

8. Why did Jason Edens say ________________? What does it mean, and why is it important?

9. What recommendations does Jason Edens give to ________________?

10. What are some ________________ or ________________ things you learned about being a Solar Panel Installer and why?
An Interview with a Solar Panel Installer

Adapted from https://www.iseek.org/industry/energy/careers/solar-panel-installer-interview.html

Describe a typical day at your job.
I would if there was one! Every day is unique. As an organization, we do a lot of solar heating and solar electric, more heating, but we do both. We do solar heat for low-income families. We’re out in the field installing supplemental solar heating systems. It’s a smaller organization in terms of size so different people do different things. We have an installation crew in the field most days. There’s a lot of prep in doing and managing the solar energy installations. So in terms of defining a typical day, it is tricky to explain.

Do you work normal hours (9 a.m. to 5 p.m.)?
No, definitely not; 8 to 5 would be a vacation! It’s usually a 7 a.m. to 7 p.m., or 6 a.m. to 6 p.m. job with 12-hour days being common.

Do you work on the weekends?
Sometimes we work on the weekends, but we’re trying to do this less and less. Sometimes there’s just work that needs to be done.

How did you get started working in this field or interested in the field?
Personally, I got into it because I was low-income and was struggling with my winter heating bill. I wanted to get a loan for a solar energy system, because I was an environmental studies graduate student and broke. They said no, and I said “oh?” But I found a way to finance my own solar energy system installation and it dramatically reduced my heat load, expense, and carbon footprint. That was the “ah-ha” moment where we realized we could do this for other people. So I guess I got into it through experience with fuel poverty and an enthusiasm for solar energy.

Describe your training or educational background.
I have an undergraduate degree in high school education with an emphasis on social studies. I also have a graduate degree in environmental studies in policy and planning. In terms of certifications or licensures for solar energy, I have a general contractor’s license as well.

How did you know what to do when you built your first system at home?
It was probably a combination of things. I had been attending workshops on solar energy and reading about it for a decade, and I had a lot of help. It certainly was not representative of best practices in the solar industry.

Describe your work environment.
As an integrated manufacturer and installer, we have a lot of different people doing different things. It’s a combination of deskwork and fieldwork. There’s a lot of engineering time, time spent crunching numbers, time spent on the actual manufacturing and selling of our product. We have people full time doing the manufacturing, people doing sales, and then the installation team who is basically out in the field most days working out of the truck as opposed to the desk. It takes a lot of pieces to put together the puzzle. People have different work environments.

I spend most of my time at my desk or the podium, more than with a tool belt on. That wasn’t the case in the past. There are people
here wearing tool belts full time, and people handling computer mice full time.

What sort of tools, machines, or equipment do you use regularly?

In the manufacturing facility, we use a lot of large sheers, aluminum chop saws, drill press, pneumatic riveters, and things of that nature. Of course in the field, it’s a diverse collection of conventional construction tools. What’s unique to the solar energy industry is that you often have to have a slightly larger toolkit because you encounter so much from the point of installing the equipment to delivering the energy. For example, with a solar electric installation, you’re potentially going from the roof to the mechanic room, so you pass through a variety of boundaries. You require a large toolkit because you have to deal with all different aspects. If you do a combination of solar electricity, solar water, solar air heat, you have electricians, plumbers, and mechanical contractor toolkits all in one. And of course, trucks. As a manufacturer, we receive and ship a lot of raw materials and products, so we’re using large fork trucks and things of that nature.

When you hire people for your installation team, do you expect them to have skills with all the aspects of solar energy?

The short answer is no. It would be difficult for any one person to have all those skills. From a project management perspective, it makes more sense for us to partner with other people in those situations. Our installation team has a broad spectrum of skills, but there are always aspects of our projects where we need to partner with others. There’s a lot of on-the-job training as well.

We don’t expect people to completely understand the process when we hire them. And although we’re growing, it’s not like we are hiring people on a regular basis.

What skills or personal qualities are good for this job?

I don’t know if there’s anything really unique about the renewable energy industry in terms of employability characteristics. With our particular mission as a non-profit, being a people person is particularly important. We work with a broad spectrum of demographics, so being comfortable and competent with our clients is important. For people on the manufacturing team, I guess being a people person is less important than people who are actually interfacing with clients. But I’m not sure there’s anything specific about our work and the set of employability skills.

Is there anything specific that you look for when you are hiring people?

A lot of what we consider when we hire people has to do with their commitment to our mission, and how well they’d fit with our existing team. We want people who are aware of our mission and willing to put in long days. We can have a really rigorous work schedule,
especially during the construction season, although that’s not unique to solar energy. And as a non-profit, things are often very intense and amorphous. We never know what any day will bring.

What do you enjoy most about your job?
All of us here love our work, and we’re very dedicated to the work. It is never a struggle to get up and go to work in the morning. More often than not it’s a blast. The most enjoyable for me is definitely working with our lower-income families. That’s the most rewarding aspect of it. It’s great hearing the feedback from them that it has made a dramatic difference in their ability to weather the heating season. And to hear that we’re using clean energy to address poverty, that’s what you work for. Those stories and feedback are what it’s all about.

It’s also easy to become jaded. In the grander scheme of things, we’re using such monumental quantities of energy on the planet. It seems like it is just a drop in the bucket. If everyone pitches in and contributes their drop to the bucket, the effect is positive.

What future changes do you expect to see in the field?
I think there’s going to be a lot more regulation and a lot more competition. I think there’ll be a lot more certification required for installation services and products manufactured. It’s kind of a double-edged sword in a way, because at a time when we need to be fast-tracking renewable energy technologies, we also need to be ensuring quality in the marketplace. It’s a hard balance to strike. I really hope we start to see more demand.

Are there any common misconceptions about this type of work?
I think for the work it really depends because different people have different misconceptions. People who have been in the trades for a long time have the misconception that they can easily understand what’s involved with a solar energy installation. We encounter a lot of people who have been builders of different types for a long period of time, who often assume they can just simply incorporate it into their regular trade without the understanding that solar energy is an oscillating resource, requires some rigorous math, and other aspects that might not have been part of their regular skill set.

What is your advice to someone interested in this field?
Great question because we actually have a youth training program. The refrain I use is today’s youth are making tomorrow’s energy choices. It’s important, at a bare minimum, to expose young adults to the different renewable energy options so it can at least be on the menu in the future. Whereas most people making the dominant energy choices don’t see it on the menu.

I guess in terms of concrete advice: get your hands dirty—volunteer, figure out if it’s what you want to do and if it’s a good match with your skill set.
Using Question Stems as a Reading Strategy: Technology Workers in the Media Sector

Students read an article about working as a graphic designer. They develop questions based on the reading, then answer those questions. This is one example of a Technology career in a sector other than Information Technology. This can be used as a point of departure to discuss Technology careers in various sectors.

*Note to Teachers:* In this activity, students write questions about the texts they have read. They can either answer their own questions, or trade questions with a partner.

**MATERIALS**

- *A Day in the Life of a Graphic Designer* article
- *Graphic Design Narrative Questions* handout

**EXPLAIN**

1. Ask students to get into pairs and discuss a logo, magazine or advertising image, or website they particularly like, and ask them to explain what they like about it. *What do you think it took to make it? Who do you think was involved?*

2. Today we are going to learn about one of the many careers involved in creating images—graphic designers. What do you think graphic designers do?  
   > *Graphic designers take the concepts that a client wants to express, and transform those ideas into a visual image—in a book, magazine or website, usually.*

3. Distribute *A Day in the Life of a Graphic Designer* worksheet. Ask students to complete the top portion only, which asks them to predict what the daily activities of a graphic designer might be like.

4. Distribute *A Day in the Life of a Graphic Designer* article. Ask students to read and annotate it, marking anything they find interesting, surprising, important or confusing. They should also read to see if their predictions are correct.
5 When students are finished, ask them to develop the questions on the worksheet.

6 Then ask them to answer the questions on the worksheet. As an alternative, put students into pairs and have them answer one another’s questions.

DISCUSS

Do you think you would want to be a graphic designer? Why or why not?
Graphic Design Narrative Questions

Before reading the interview, predict what the daily activities of a graphic designer might be like. After reading, write and answer the questions below.

I think a Graphic Designer ________________________________

_____________________________ at work.

After reading the story, fill in and answer the following questions:

1. List three ________________ that graphic designers do at work.

2. Which ________________ do graphic designers tend to use most?

3. Why does the writer say that ________________ is an important skill for graphic designers to have?

4. Which non-design ________________ should graphic designers possess?

5. What ________________ does some who wants to be a graphic designer need to have?
   Explain in detail.
Why does the writer say it's hard to say what type of ________________ graphic designers need to have?

According to the article, when graphic designers are not ________________ at work, what do they spend their time doing?

What kinds of products do graphic designers who specialize in ________________ produce?

What recommendations does the writer give to ________________?

What are some ________________ or ________________ things you learned about being a graphic designer?

Would you consider being a graphic designer? Why or why not?
A Day in the Life of a Graphic Designer

By Eric Fleming

Adapted from http://careers.collegetoolkit.com/guides/day_in_the_life/graphic_designer.aspx

For students interested in the field of graphic design, there are a few things to know about the career. The first is that although graphic design is a highly competitive career, it is expected to grow along with the population. Second, before signing up for classes or coursework, understanding the necessary skills, required training and the day-to-day activities of a graphic designer will all be information necessary for making a smart, informed career decision.

What Does a Graphic Designer Do Every Day?

While there may be no simple schedule a graphic designer can expect to keep on a day-to-day basis, there are a few tasks you will find yourself spending most of your time completing. The first is figuring out what your project will be, and what your design will look like. Second is actually working on one (or more) possible designs, so your clients have a choice. The third area includes meetings, billing and other organizational activities. Depending on whether you work for a company or for yourself, these organizational activities can be a large or small part of your day. Finally, a graphic designer will spend a good deal of time preparing finalized artwork for presentation, either at a print shop or dealing with finalized electronic files.

What Does a Graphic Designer Need to Know?

Most of your workday will be spent designing commercial artwork. Even here, you can focus your skills on any number of areas. Graphic designers can, in the right situation, specialize in Web design (including HTML, CSS, PHP, Flash and Photoshop work), desktop publishing (including the ability to produce reports, brochures, magazine and book layouts, newsletters and more), advertising design (such as producing print and visual ideas and designs for marketing
campaigns), as well as product design (which includes product boxes and other packaging). In all of these, designers with skills and experience using programs such as Photoshop, Illustrator, InDesign, QuarkXPress and possibly CAD (computer aided design) programs will find themselves in greater demand.

There are many skills necessary for graphic designers, many of which have nothing to do with graphic design at all. For instance, many graphic designers work from home or on a contract basis (working solo, and not as part of a company’s in-house design team). For those designers, financial skills such as billing and hour-tracking are important parts of the job. In addition, communications skills are paramount. Communication often occurs over the phone or via e-mail. Getting to the core of what your customer is looking for in a design or logo is incredibly important. It will lead to fewer redesigns and, ultimately, to happier clients or employers.

**What Is Required Training for a Graphic Designer?**

Different design positions are going to have different degree qualifications so it’s difficult to make a blanket statement for required training. Most graphic designers have, at a minimum, a two-year degree, while many go for a more complete four-year degree. There are many advantages to attaining a higher level of education (although it can be tempting to see how far your natural skills can take you). Among the advantages, the most obvious is the value a potential employer may put on a degree. Having a degree (whether it is an associate’s degree focusing on the more technical skills or a bachelor’s degree that includes social and cultural studies) can be an indicator to an employer that you have a solid skill set, beyond what is observable from your portfolio.

Being a graphic designer can be a very rewarding career, allowing you to flex your creative muscles, but it’s not all about design. Client management and other organizational skills are important elements of a successful graphic design career.
Computer Research: Career Narratives in Technology

Students conduct additional research on the career they read about in the Career Narrative activity, using a career database.

PREP

1. Explore the following career database websites and choose one for this activity:
   - www.careerzone.ny.gov—The New York State career database
   - www.careercruising.com—A subscription-based career database. Requires a login and password. Many programs have subscriptions to this database.

2. Choose a career from the database and be prepared to navigate to, explore and discuss this example career with students.

MATERIALS

• Researching Careers Online worksheet

EXPLAIN

1. If students have not previously used the database you have chosen to use for this activity, give a brief introduction to the website (refer to Career Database Lessons in Unit 2 for more information). Emphasize the ways the database is organized and how students can use it to find careers.

2. Ask students to navigate to the website. Look at a sample career as a class, discussing what information is included and how it is organized.

3. Distribute Researching Careers Online worksheet. Ask students to explore careers related to the one they read about in the Career Narratives and complete the worksheet.

4. If time remains, students can research the career of their choice, paraphrasing the information they find.
Researching Careers Online

Use the career database to answer the questions below.

1. What are some careers that are similar or related to the career narrative you read in the previous lesson? Find at least 6 and list them below:

2. Choose one of the careers you listed above. Write four questions you would like answered about this career.

3. Research the career listed above, and write the answers, in your own words, to the questions you wrote in #2.