**Getting It Down in Writing**Print:[print_icon.gif](https://mccwdta.edc.org/print/60)[pdf_icon.gif](https://mccwdta.edc.org/printpdf/60)[sm-icon-word.gif](mccwdta-word-export/60)

Overview of how all personnel use writing on the job Industry Sector: [Advanced Manufacturing](industry-sector/advanced-manufacturing)Content Area: [Literacy](content-area/literacy)Core Topic: [Written communication](core-topic/written-communication)Expand All | Collapse All

**Common Core State Standards**

**W.11-12.2.** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

**W.11-12.4.** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

**W.11-12.5.** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

**L.11-12.1.** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

**L.11-12.2.** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

**WHST.11-12.2.** Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

**Adult Basic Education Standards**

**Writing Standard 1: Learners will express themselves through writing for a variety of purposes.**

**W1.4a** Write correctly punctuated and constructed paragraphs describing how to make, build or do something.

**W1.4b** Compose a personal opinion (e.g. letter to the editor of a newspaper) that consists of at least three paragraphs.

**W1.5b** Compose a formal business letter using appropriate tone, style, and organization.

**W1.5c** Complete an application for a job or college that requires paragraph-length responses to personal questions.

**W1.5h** Write a resume and cover letter.

**Writing Standard 2: Learners will apply knowledge of English vocabulary, language structure, and mechanics when they write.**

**W2.5a** Use correct sentence structure and follow the conventions of Edited American English (EAE) in all formal writing.

**W2.5b** Use figurative language in appropriate contexts with increasing frequency.

**W2.5c** Proofread and revise an essay to assure correct punctuation, spelling, grammar, cohesiveness, idea development, clarity, and relevant supporting details.

**Writing Standard 3: Learners will use a variety of strategies to convey meaning through written English.**

**W3.4a** Use graphic organizers to generate and organize ideas (e.g. word web, mind map, timeline)

**W3.4b** Practice all steps of the writing process: prewriting, drafting, eliciting feedback, revising, editing, producing finished copy

**Industry Overview**

**Today?s Manufacturing Workplace**

A manufacturing renaissance is occurring in the United States. The United States is the largest manufacturing economy in the world, producing 21 percent of the goods manufactured across the globe. In addition to the 12 million Americans working directly in the manufacturing industry, manufacturing supports more than 6.5 million other jobs, thus accounting for nearly 17 percent of all private sector jobs in the United States. In 2010, the average U.S. manufacturing worker earned $77,186, including pay and [benefits](lexicon/6#Benefits) (the average in all industries was $56,436).1

While manufacturing jobs in Massachusetts have declined, as they have nationally, manufacturing is still a critical industry in this state and provides opportunities for good, high-paying jobs. In the Greater Boston area, most of the manufacturing jobs are in computer and electronics companies, and much of the state relies on manufacturing positions in these and other very high-tech areas, such as aerospace and biotechnology.2

Advanced manufacturing involves the use of computers and technology in the [manufacture](lexicon/6#Manufacture) of products. While not all manufacturing companies use technological innovations in developing their products or processes, the competitive advantage of the United States in the [manufacture](lexicon/6#Manufacture) of goods relies on technological innovations. This means that today?s manufacturing workplace is usually highly technical, which accounts for the high-paying positions many workers in this field receive in compensation for their work. It also means that today?s advanced manufacturing workplace is very different from many people?s conceptions of factories and mills as dark, dirty, and unsafe. Today?s advanced manufacturing facilities are usually bright, clean, and very safe, and the emphasis is on working efficiently?with as little waste as possible.

In the advanced manufacturing industry, there has been a marked [shift](lexicon/6#Shift) from the traditional role of [line workers](lexicon/6#Line_Workers) to workers who demonstrate creativity and innovation. Innovation is a hallmark of the U.S. manufacturing industry, and key to maintaining its position in the global market since products can often be produced at a lower cost in developing countries. Critical-thinking, problem solving and reasoning are important components of the innovation process. Today?s manufacturing workers are expected to formulate solutions to problems using critical thinking and reasoning skills while working independently and/or in teams.

1. <http://www.nam.org/~/media/AF4039988F9241C09218152A709CD06D.ashx>
2. <http://www.bostonglobe.com/business/2012/05/08/high-end-factory-jobs-boston-paying-high-wages/3gZuNc6GywDGKoYNP2hnaO/story.html?camp=pm>

**Careers in Advanced Manufacturing**

The manufacturing sector includes jobs related to planning, managing, and performing the processing of materials into intermediate or final products and related activities such as production planning and control, maintenance, and engineering. Thus, this industry includes not only those people who actually produce the manufactured goods, but also managers, maintenance staff, scientists and researchers, analysts, administrative personnel, and IT personnel.

**Career Pathways**

The manufacturing industry includes six career pathways:

Production is the construction and assembly of parts and final products. People in these positions work in factories and mills, with machines, to make or assemble parts, construct components of parts (such as plastics), and print materials. Occupations in this pathway range from production helpers who move parts and materials around the factory, to numerical control machine operators who run the computer-controlled machines that modify metal and plastic to create products, to manufacturing production technicians who oversee production.

Manufacturing production process development occupations are involved in designing products and manufacturing processes. People in these occupations work with production workers to set up the machines and processes to develop new products. These occupations include engineers and production managers.

Maintenance, installation and repair workers take care of products after they?ve been sold and delivered to customers?they install the products, perform maintenance on machines, tools, and equipment so that they work properly, and repair systems that are not performing adequately. Workers in this pathway include automotive technicians, automotive electronics installers, building maintenance workers, industrial electronics repairers, industrial machinery mechanics, millwrights, and small engine mechanics.

Quality assurance is provided by quality control inspectors and technicians, who ensure that products both meet design standards and are of high quality.

Logistics and [inventory](lexicon/6#Inventory) control workers ensure that those working in Production have the materials they need to complete their work. Workers in these occupations [inventory](lexicon/6#Inventory) materials and products, move materials to the line, and pack and ship finished products. Thus, they include production and planning clerks, and operators of moving machinery such as cranes and forklifts, and packers.

Health, safety and environmental assurance occupations are focused on keeping the workplace safe by ensuring that workers are using equipment safely and that manufacturing processes are as safe as they can be. The also conduct investigations and conduct inspections.

**Mathematics and Communication Skills Needed in Advanced Manufacturing**

Mathematics and communication are key skills needed for success in today?s high-performance advanced manufacturing workplaces. Mathematics is used in the advanced manufacturing industry to measure the amounts and sizes of materials and parts, create ?recipes? used to [manufacture](lexicon/6#Manufacture) man-made materials, and analyze data. Data analysis is critical at many levels of a manufacturing organization in order to ensure quality and to continuously improve both quality and processes. Today?s manufacturing industry must operate extremely efficiently and produce very high-quality products in order to maintain competitiveness. Many front-[line workers](lexicon/6#Line_Workers) are involved in collecting data and working to improve quality and efficiency. Thus, in addition to basic mathematical calculations (which rarely involve simple whole numbers), workers are engaged in mathematical reasoning and solving problems using a variety of mathematical tools.

To succeed and move up the ladder in today?s advanced manufacturing workplace, workers need reading skills to understand technical concepts, vocabulary, and to bring together information needed for a particular situation; to locate, organize, and document written information from various sources needed by co-workers and customers; and to locate written information needed by co-workers and customers. They need to use correct grammar, punctuation and terminology to write and edit documents and to develop and deliver formal and informal presentations using appropriate media to engage and inform audiences. In addition, they need to interpret verbal and nonverbal behaviors to enhance communication with co-workers and clients/participants; apply active listening skills to obtain and clarify information; and interpret and use information in tables, charts, and figures to support written and oral communications. They also must communicate with co-workers and customers using technology tools. As they move up the corporate ladder they will need to explain written organizational policies, rules and procedures to help employees perform their jobs.

**Career Opportunities in Advanced Manufacturing with Education from Community Colleges**

Massachusetts Community Colleges play an important role in preparing the state?s citizens to take advantage of the career opportunities available in advanced manufacturing. Degree and certificate programs prepare students to enter advanced manufacturing occupations, including:

production occupations, including people who work as assemblers (such as airplane assemblers), machine operators, machinists, systems operators, [CNC](lexicon/6#CNC) machine tool operators, machine setters, laminators/fabricators, metal and plastic workers, packers, molders, semiconductor processing operators, welders and solderers, tool and die makers, and other production workers;

manufacturing production process development occupations, including numerical control tool programmers who write the programs that control machine tools and industrial production managers who plan and oversee production;

maintenance, installation and repair occupations include automotive, electronics, and biotechnology technicians, industrial machinery mechanics, and millwrights (who install and maintain heavy equipment);

quality assurance occupations including quality control technicians and inspectors.

**Recent Career Opportunities in Massachusetts**

The following is a sample of advanced manufacturing job listings in Massachusetts that require associate?s degree or certificate:

* Manufacturing Engineering Technician, Randstad Corporation, Framingham, MA,
* Quality Control Technician, QD Vision, Lexington, MA
* Manufacturing Technican, Hologic, Marlborough, MA

**Employment Outlook for Advanced Manufacturing**

Advanced manufacturing continues to be a high-growth industry, given the knowledge capital in the United States. However, the work in this industry is increasingly technical and requires far fewer workers as more tasks are automated. Entry-level positions in this industry require the same skills that only a select group of highly-experienced and well-paid workers once had. Unfortunately manufacturers find it difficult to fill these high-skill positions. A 2011 survey found that there is a persistent skills gap between the skills that are needed in the today?s manufacturing workplace and the skills that candidates bring to the workforce.

Most of the advanced manufacturing companies in Massachusetts are small to mid-sized operations that employ smaller numbers of workers and rely on computer-operated machinery for production. While the numbers of workers are smaller than in the past, the more highly-skilled nature of the work means that these are high-paying jobs and provide workers with opportunities to grow through training and education and to be part of the effort to innovate.

**Resources:**

Advanced Manufacturing Industry

* [National Council for Advanced Manufacturing](http://www.nacfam.org/)
* [Advanced Manufacturing](http://en.wikipedia.org/wiki/Advanced_manufacturing)
* Brookings: ?[Why Does Manufacturing Matter? Which Manufacturing Matters?](http://www.brookings.edu/~/media/research/files/papers/2012/2/22%20manufacturing%20helper%20krueger%20wial/0222_manufacturing_helper_krueger_wial.pdf)? (2012)
* National Association of Manufacturers: ?[A Manufacturing Renaissance: Four Goals for Economic Growth](http://www.nam.org/~/media/AF4039988F9241C09218152A709CD06D.ashx)? (2012)

Advanced Manufacturing Industry Outlook Information

* [Bureau of Labor Statistics: Manufacturing Industry at a Glance](http://stats.bls.gov/iag/tgs/iag31-33.htm)
* [Massachusetts Labor Market Data](http://www.mass.gov/lwd/economic-data/)
* [Massachusetts Career Information System](http://masscis.intocareers.com/info2.aspx?FileID=Occ&FileNum=111300&TopicNum=0)

Careers in Advanced Manufacturing

* [Massachusetts Career Information System](http://masscis.intocareers.com/info2.aspx?FileID=Occ&FileNum=111300&TopicNum=0)
* [Manufacturing Career Opportunities](http://www.amcsquared.com/careers.asp)
* [Manufacturing Career Pathways](http://www.iseek.org/iseek/images/content/pathways/large/production-pathway.html)
* [Industry Competency Model for Advanced Manufacturing](http://www.careeronestop.org/competencymodel/pyramid.aspx?hg=Y) shows the skills and knowledge needed to work in this industry
* [National Association of State Directors of Career Technical Education Consortium?s Common Career Technical Core](http://www.careertech.org/career-technical-education/cctc/)
* [National Association of State Directors of Career Technical Education Consortium?s Knowledge and Skills: Manufacturing](http://www.careertech.org/career-clusters/resources/clusters/manufacturing.html)
* [O\*NET](http://www.onetonline.org/find/career?c=13)
* [WorkKeys Occupational Profiles](http://www.act.org/workkeys/analysis/occup.html)
* [Manufacturing?s Missing Generation](http://www.massmac.org/toolbox/workforce_training.htm)
* [A Career in Toolmaking or Machining Technologies: The Right Choice for Students, Community, & Country](http://www.massmac.org/toolbox/careers_in_mfg.pdf)

**Workplace Scenario (8th Grade Level)**

This scenario is based on the work of a worker in a manufacturing firm. For more information, view [this video](http://wpc.2a70.edgecastcdn.net/002A70/CareerVideos/00-0000.13.flv%20).

People who work in manufacturing need to be able to write. A mid-sized plastics manufacturing company and Western Massachusetts has three shifts. These shifts take place seven days a week. The shifts are from 7 AM ? 3 PM, 3 PM ? 11 PM, and 11 PM ? 7 AM. People who work in the [human resources (HR) department](lexicon/6#Human_Resources_HR_Department) usually work their eight hour day on a 9 AM to 5 PM schedule. People who work in the HR department usually work Monday through Friday. You and your coworkers were told about how to get in touch with HR staff during [orientation](lexicon/6#Orientation) for all new employees. You learned that people who work the second and third [shift](lexicon/6#Shift) need to use email to send questions to the HR department. These questions could be about their timesheets, [benefits](lexicon/6#Benefits), or other issues. You also learned that all timesheets need to be submitted electronically.

People in all positions have many questions and [inquiries](lexicon/6#Inquiries) that must be sent to the HR department in writing online. You and your coworkers have questions for the HR department staff. You are new to the company. You have to choose a medical plan from three options. You have a new baby and have many questions about how to tell the difference between the services and cost of each plan. One of your colleagues, Sam, is an employee who has not been paid on time. Sam wonders if he is submitting his [timesheet](lexicon/6#Timesheet) correctly. He keeps getting an electronic message bounced back to him when he submits his [timesheet](lexicon/6#Timesheet). Sam doesn?t understand what this message means. Another [colleague](lexicon/6#Colleague) with questions for the HR department is Lori. She is planning a vacation to Florida in three months. Lori wants to confirm how much vacation time she has. Lori also wanted to know if she can use any of her unused sick time. Han is a co-worker that is making some repairs on his house and would like to get an advance on his paycheck to pay the contractor. Finally, Alyssa is a co-worker that has been with the company for 10 years and wants information about how to become more involved on company-wide teams that focus on community issues.

Another way manufacturing workers using writing skills on the job is when writing reports. These reports tell about what occurs on the job. Finding out the ?root cause? of accidents on the job is a good example. Manufacturing workers who have been hurt or who have seen accidents are interviewed. During these interviews, they respond to the 5Ws (who, what, where, why, when and how). Their responses provide important details needed to find the root cause of the accident.

Supervisors write [accident reports](lexicon/6#Accident_reports) after they talk to the people who got hurt and the people who saw what happened. [Accident reports](lexicon/6#Accident_reports) tell what happened, why it happened and how it could not have happened. These reports also tell what action needs to be taken to make sure it does not happen again. These types of examples show that manufacturing personnel at all levels need to have the ability to communicate technical and non-technical information clearly in writing. These examples also show that people need to use technical words correctly. They also need to be able to change their writing style based on the reason they are writing and who will be reading their writing.

**Workplace Scenario (High School Level)**

This scenario is based on the work of a worker in manufacturing firm. For more information, view [this video](http://wpc.2a70.edgecastcdn.net/002A70/CareerVideos/00-0000.13.flv%20).

Workers in manufacturing firms operating on multiple [shift](lexicon/6#Shift) schedules have some unique needs for which they need to write. A mid-sized plastics manufacturing company in Western Massachusetts operates three shifts. These shifts take place seven days a week. The shifts are from 7 AM ? 3 PM, 3 PM ? 11 PM, and 11 PM ? 7 AM. As office workers, the [human resources (HR) department](lexicon/6#Human_Resources_HR_Department) staff usually work their 8 hour day on a 9 AM to 5 PM schedule Monday through Friday. During [orientation](lexicon/6#Orientation) for all new employees, you and your coworkers were told about how to communicate with HR staff and that manufacturing personnel on the second and third shifts who need to communicate with HR about their time sheets, [benefits](lexicon/6#Benefits), or other work related issues must submit their questions in writing through email. In addition, the HR department requires that all time sheets be submitted electronically.

Workers in all positions, from entry-level to advanced, have many HR-related questions and [inquiries](lexicon/6#Inquiries) that must be communicated in writing online. You and your coworkers have questions for the HR department staff. You are new to the company and have to choose a medical plan from three options. You have a new baby and have many questions about how to evaluate the services and cost of each plan. One of your colleagues, Sam, is an employee who has not been paid on time and wonders if he is submitting his time sheet correctly. He keeps getting an electronic message bounced back to him when he submits his time sheet, but he doesn?t understand what it means. Another [colleague](lexicon/6#Colleague) with questions for the HR department is Lori. She is planning a vacation to Florida in three months and wants to confirm how much vacation time she has and if she can use any of her unused sick time. Han is a co-worker that is making some repairs on his house and would like to get an advance on his paycheck to pay the contractor. Finally, Alyssa is a co-worker that has been with the company for 10 years and wants information about how to become more involved on company-wide teams focusing on community issues.

Another way manufacturing workers use written communication skills on the job is when writing reports that document what happens on the job. The process for getting to the ?root cause? of accidents on the job is a good example. Manufacturing workers who have been injured or who have witnessed accidents take part in interviews responding to the 5Ws (who, what, where, why, when and how) providing critical details needed to find the root cause of the accident.

Supervisors write [accident reports](lexicon/6#Accident_reports) after they talk to the people who got hurt and the people who saw what happened. [Accident reports](lexicon/6#Accident_reports) tell what happened, why it happened and how it could not have happened. These reports also tell what action needs to be taken to make sure it does not happen again. These types of examples show that manufacturing personnel at all levels need to have the ability to communicate technical and non-technical information clearly in writing. These examples also show that people need to use technical words correctly. They also need to be able to change their writing style based on the reason they are writing and who will be reading their writing.

**Core instructional context**

Lack of writing skills presents significant challenges to students? career and college readiness. In response to a 2006 survey, 72% of employers stated that they considered high school graduates to be deficient in writing and 80.9% deemed high school graduates deficient in written communication skills (Conference Board, 2006). As a result of these and other factors, writing is a critical skill for career readiness.

Writing is typically considered to be a **five-step process:** pre-writing, drafting, revising, editing and publishing. It?s important to keep in mind that writing is a recursive process in which good writers move back and forth between pre-writing, drafting, and revising many times during the course of creating a single document.

For many adult writers, **pre-writing** may actually be a pre-thinking stage before any writing is started. In this pre-thinking stage various ideas are considered about the topic. If the topic has not been assigned by the instructor, this is the time the writer chooses and narrows the topic. According to [Purdue Online Writing Lab](http://owl.english.purdue.edu/owl/resource/587/01/), the writer then needs to ask questions about the writing project such as:

* Who is the audience?
* Are they interested in the topic? Why or why not?
* What does your audience need to know about this topic?
* What experiences has your audience had that would influence them on this topic?
* What do you hope the audience will gain from your text?

To kick off the pre-writing process, lead students in [brainstorming, clustering or questioning](http://www.beaconlearningcenter.com/documents/1044_01.pdf) to generate ideas about the topic. This is also the time to gather any additional information required to write about the topic. Mind mapping is a brainstorming technique that helps build connections between ideas. [The Brain](http://www.thebrain.com/) is a website that provides free tools including for one for mind mapping. Another useful and free site is [Spiderscribe](http://www.spiderscribe.net/).

One way for students to identify the additional information they need is to use a [KWL chart](http://www.eduplace.com/graphicorganizer/pdf/kwl.pdf) to identify what they need to know. Groups of students can work on KWL charts together to guide their research.

In the **drafting stage**, the writer?s goal is to use the pre-writing outcomes to help build the content. In this stage, the writer can use various strategies to get started, including free writing, listing and outlining both to develop the topic and get started. During the drafting stage, students should concentrate on organizing information logically and developing the topic with enough detail for the audience and purpose. At this stage, it is a good idea for students to work with a partner to discuss the early draft versions and to get another point of view about the organization and sequencing of the content.

**Revision** is the process of refining the draft by evaluating it and making changes in order to improve the draft. Revising is a critical stage of the writing process and for most writers it is the most difficult. This stage is a good time for students to work in peer review groups. Peer reviewers need preparation for this role. The [Conducting Peer Reviews](http://writing.wisc.edu/Handbook/PeerReviews.html) section of the Writer?s Handbook website from University of Wisconsin-Madison provides guidance for peer reviewers. For more information on guiding peer reviewers, visit the resource [Using Peer Review to Help Students Improve Their Writing](http://teachingcenter.wustl.edu/node/425) from Washington University at St. Louis.

**Editing** is a stage distinct from revision and it should be done after the revision process is completed. This stage is sometimes referred to as proofreading. During this stage, the writer takes a close look at the piece of writing with an eye to correcting errors in grammar and punctuation, checking spelling and word choice, and checking each sentence for readability. During this stage, the focus is on correctness and clarity. . Common errors to look for while editing are listed in the [Twelve Common Errors](http://writing.wisc.edu/Handbook/CommonErrors.html) section of the Writer?s Handbook website from University of Wisconsin-Madison.

**Publishing** takes place when a piece of writing is shared with its intended audience. Ideally students will write for an authentic audience (beyond the instructor) such as for the whole class or others outside class through a class website or other means. A [student wiki](http://www.wikispaces.com/) or [blog](http://blog.com/) or other free online platform is another excellent way for students to share their writing beyond the classroom.

The workers mentioned in the scenario all use email to find out information from their company or they prepare reports about events or situations. In both cases, the workers will go through the writing process by considering what they want to say, drafting an email or report, revising the wording until it clearly asks a question or describes a situation or event, editing to polish the piece, and then publishing it by sending the email or delivering the report.

**Example**

In one of the examples in the scenario, the person in the scenario is new to the company and has to choose a medical plan from three options. The person has a new baby and has many questions about how to evaluate the services and cost of each plan. Students will play the role of this employee and prepare an email to send to the instructor with questions he or she has about coverage and plans. To help students get started, lead a brainstorming session with the class to identify the kinds of questions this employee might have. Alternately, consider assigning small groups to [brainstorm](lexicon/6#Brainstorm) on their own the kinds of questions this employee might want to ask.

**Assessment**

Use a classroom or college informal writing rubric to assess student email writing. Other sample rubrics or checklists to review are:

* [Email Writing Rubric](http://ed.fnal.gov/lincon/w01/projects/library/rubrics/letterubric.htm), Fermilab
* [iRubric: Business Email Assignment Rubric](http://www.rcampus.com/rubricshowc.cfm?code=G56396&sp=yes&), RCampus
* [10 Rules of Email Netiquette](http://www.zimbio.com/Email+Etiquette/articles/rWrb7GXQ3Vr/Ten+Rules+of+Email+Netiquette), Zimbio

Other rubrics for writing projects to review are:

* [College Writing Rubric](http://www.riosalado.edu/about/teaching-learning/assessment/Documents/WritingRubric.pdf), Rio Salado College
* [Grade 11 Writing Rubric](http://wvde.state.wv.us/teach21/writingrubrics/West%20Virginia%20Writing%20Rubric%20-%20Grade%2011.doc), West Virginia Department of Education Teach 21
* [Writing Rubric](http://course1.winona.edu/shatfield/air/writing%20skills.pdf), Winona State University
* [Rubric Examples](http://www.csub.edu/TLC/options/resources/handouts/Rubric_Packet_Jan06.pdf), California State University, Bakersfield

**Contextualized learning activities**

*1. Standards for email correspondence*

At the beginning of the semester, have students email the instructor a question about the class or subject matter. Respond to each question with an email that models professional standards and etiquette for online communications and how to ask clarification questions. Develop a PowerPoint from the emails as examples for the class to review using a checklist that includes items such as was the email address professional, did the email contain texting abbreviations, were there spelling/grammar mistakes/punctuation mistakes, and did they understand the question being asked? Use the checklist as the beginning of a rubric for assessing written emails in a work environment. Have students add in other items to the rubric based on the discussion. This rubric can then become an assessment standard for online communication.

*2. Knowing your audience*

Ask students to write emails to three different people asking for money: (a) write to your best friend asking to borrow money; (b) write to your grandmother asking to borrow money; and (c) based on Han in the scenario, write your HR department asking for an advance on your paycheck to help pay for house repairs. Have students then pair up and share their emails, comparing the similarities and differences in how they approached the three people.

*3. Small group activity with peer review*

Divide students into five groups. Distribute the same example of a poorly written email to each group. Have students identify the details that make it a ?bad? example of email. Then give each group the description of only one of the workers in the HR scenario. Each group writes a good email example, avoiding the problems in the ?bad? example, that the worker might send to the HR person and presents it to the class. The other groups then critique the email examples using the assessment rubric developed by the class in the first activity. The rubric could include criteria, such as is there sufficient detail or it is logical? Using Lori?s example in the scenario, point out that if she is writing about vacation and sick time, the HR person may want to know if she means time earned this month or this time period. Have students then revise their emails based on the feedback and submit them to the instructor for final review.

*4. Pair or small group activity:*

A key concern when writing, especially emails, is whether you could be misunderstood by the person on the receiving end of the email. Young adult students experienced with using Twitter, Facebook, and other social media tools may not always be aware of their tone and how their email is received. One way to address this concern is to pair older and younger students or pair strong writers with less-strong writers and have them review a series of emails and discuss if they think the email could be misunderstood in any way. This brings out generational differences of which to be aware.

*5. Writing* [*accident reports*](lexicon/6#Accident_reports)

In the classroom, arrange to have someone unknown to the students come in and do something unexpected that disrupts the class, such as knocking over a trash can or a chair and then running out. Have students write up what happened. What did the students see? Is it similar? Or, have students a view a short video clip such as [Job Accident Humor](http://www.youtube.com/watch?v=sVfNSASxG9U) and then have students write a report about what they saw.

*6. Communicating with email*

Direct students to view each of these videos and take notes to discuss in groups in class. Alternatively, use a jigsaw technique by dividing the class into four groups. Have each group watch one of the videos and prepare a summary of writing effective emails covered in the video and be prepared to share with the class.

* [How to Effectively Communicate with Co-workers Via Email](http://www.youtube.com/watch?feature=endscreen&v=00Hzp0_CYkg&NR=1)
* [Office Email Etiquette](http://video.about.com/careerplanning/Office-Email-Etiquette.htm)
* [Writing Effective Emails ? Common Errors](http://www.youtube.com/watch?v=Ig8Ckg59Jak&feature=related)
* [Daily Writing Tips](http://www.dailywritingtips.com/email-etiquette/)

7. Distribute three different versions of an email and have students write a critique based on the points shared in the four videos above.

**Contextualized test items**

Distribute a copy of the scenarios in this module. Have students read the scenarios and then the emails below that are bad examples of emails for each of the four people from the scenario. Have students rewrite the emails based on the rubric developed by the class.

1. Subject: plan  
Email: Hey -- I want to choose plan for work. How much is it? My baby needs many things. I don?t make much. Thx

2. Subject: MY MONEY!!!  
Email: WHERE IS MY PAYCHECK????? The computer takes my sheet. All I got is stupid message. What the ?!@## Sam

3. Subject: taking vacation ?  
Email: Hi there! I want go 2 Florida in April 4 a tan! My friends will be gelous! I think I have a week of vaca time?always working ?-- and lots of sick time. How long can I go? L

4. Subject: fixing house to look nice  
Hello ? My house has many problems. The roof leaks in hall the stairs are bad. My family is unhappy. I need lots of money to pay for it. The repair guy is mad. Can I get more money now? Han

**Contextualized project**

Develop a case study for a worker who needs to choose between health plans based on cost, coverage for dental and [prescriptions](lexicon/6#Prescriptions), and that has the most flexibility for out-of-network providers. Provide authentic examples of two health plans from a local or MA-based manufacturing company. Have students read the health plans and develop the following written documents:

An email that outlines the questions the worker has for HR that are not answered in the documents. Correspond with the student until clear on the questions being asked and then provide answers to the questions.

A compare/contrast paragraph about the two health plans. Review and provide feedback on clarity, grammar, and other points in assessment rubric.

A one-page essay on the plan the student chooses and why.

**Additional or extension activities, multimedia, readings and/or resources**

[Correct Tone in Email ? A short](http://www.youtube.com/watch?v=8y4xifEt7X8&feature=fvwrel), humorous video

[Know Your Audience](http://www.theladders.com/career-advice/know-your-audience), The Ladders

[Writing Accident Reports in Manufacturing](http://www.bbc.co.uk/skillswise/factsheet/jo06manu-l1-f-writing-accident-report), Skillswise

[Sick Day Email Message](http://jobsearch.about.com/od/excuseletters/a/sick-day-email-message.htm), About.com

Other activities:

1. Have a jar of common manufacturing scenarios/problems that require written communication. Pick a day each week for students to ?pick a problem from the jar? and write an email about it with a partner using the rubric as their guide and self-assessment. The students submit the answer to their instructor. A variation is for the students to write out two emails ? one that is emotion based and then one that is a non-emotion based version, and then have students share them in class.

Another variation is to divide the class into three groups. Have one group write an email based on what was pulled out of the hat. The second group then edits the email for grammar and appropriateness. Then it is given to the third group that represents the intended audience for the email. The third group then assesses whether it is clear and whether they think the email accurately reflects the target audience.

2. Invite a representative from a local manufacturing industry to speak to the class about how workers use writing on the job. Be sure the students have organized their thoughts and prepared questions ahead of time.

3. Have students break into groups and make paper airplanes using letter sized paper and paper clips. Have students test it and fly their paper airplanes. Then each group develops written instructions on how to make the plane to another group. The instructions can include a diagram and test results. Then the second group of students has to duplicate the activity ? make the plane, test it, fly it, and record their flight observations (distance it flew, for example). The second group can provide feedback on whether the instructions were complete and whether they could follow them or not.

4. Have students write directions on how to get from their classroom chair to their car or out the front door of the building. Students usually end up leaving off key details. Relate this back to the importance of having supporting detail in emails and when writing.

5. Present a cartoon scenario about a problem at work. Have a blank thought balloon over the head of the worker. Have students fill in the thought balloon with what the worker might be thinking. Then distribute an inappropriate work email and have students edit it. Reinforce the need to read and edit before sending an email. Teach students that the spell check and grammar check features are not always right.

6. Develop an activity about how to submit an idea for a suggestion box that is appropriate and respectful. Have students think of a situation that could be improved or done differently either where they have worked or at their college or program. Have students write up the suggestion and share their suggestions with the class. Have the class provide feedback on the suggestion, focusing on questions like what is the evidence or supporting details provided to make the point, how realistic is the suggestion, and does the suggestion use evidence gathering.

**Instructor Adapted Classroom Materials**

[Getting It Down in Writing ABE Lesson Plan,](http://www.mccwdta.etlo.org/sites/mccwdta.edc.org/files/section_files/ABE-Writing-Written_communication.doc) Quinsigamond Community College, ABE/GED

[Getting It Down in Writing ESL Lesson Plan,](http://www.mccwdta.etlo.org/sites/mccwdta.edc.org/files/section_files/ESOL-written_communication_in_the_Workplace.doc) Quinsigamond Community College, ESL

[Getting It Down in Writing ABE Lesson Plan,](http://www.mccwdta.etlo.org/sites/mccwdta.edc.org/files/section_files/health_care_four-lesson_plan_unit.doc) Middlesex Community College, ABE/GED