

Manufacturing Bridge Semester 1 Lesson Plans for Reading & Writing

(Weeks 1-16 for High Intermediate ABE Classrooms)

Developed by Stephanie Sommers

A collaborative project between City Colleges of Chicago and Women Employed

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Introduction to the Manufacturing Bridge Semester I

Reading and Writing Lessons for High Intermediate Adult Basic Education (ABE)

Why Bridge Programs?

Adult education programs have long been the places adults come to earn their High School Equivalency or to improve their basic English, reading, writing, and numeracy skills. However, adult education programs are rarely viewed as stepping stones to a pathway that allows adults to attain the post-secondary education and credentials needed to secure employment with family-sustaining wages.

National research on adult education participation show that a student who attends 100 or more hours in an adult education program with support tend to earn their High School Equivalency at a higher rate (36% versus 16% for students with fewer hours) and after several years these students earn a premium of \$10,000 more a year in salary. (Source: <http://sites.ed.gov/octae/2015/03/27/impact-data-on-adult-ed-program-participation/#more-2580>.)

Prior to the introduction of City Colleges of Chicago Bridge and Gateway programs, less than four percent of students transitioned to the post-secondary level. Bridge students transition to college credit at a rate of 63 percent, and Gateway students earned 282 certificates and degrees between 2011 and Spring 2015.

Research from the Community College Research Center has shown that there is an added value to teaching adult learners using contextualized instruction related to students' industry sector of choice. In 2012, City Colleges of Chicago (CCC) developed the Bridge program to provide an accelerated pathway for students to meet their goals, earn their high school equivalency (HSE), improve their workforce outcomes, and/or increase their language skills. The City Colleges of Chicago Manufacturing Bridge is designed for these students.

Introduction to Daily Lesson Plans

These lessons are designed to improve the basic reading and writing skills of High Intermediate Adult Basic Education (ABE) students who enter City Colleges at the sixth- to eighth-grade literacy level, while exposing those students to key Manufacturing issues that are relevant to their lives and the Manufacturing field. This intensive sixteen-week course will prepare students to:

- Advance to a ninth grade or Adult Secondary Education (ASE) reading level as measured by the Tests of Adult Basic Education (TABE).
- Meet Illinois ABE/ASE Content Standards for Reading, Writing, Language, and Listening and Speaking for the National Reporting System (NRS) Level 4. All skills for this level are correlated with skills on the High School Equivalency (HSE) exam.
- Progress to the Manufacturing Bridge Semester 2, which prepares students who have reached the secondary level for the HSE/GED exam, college studies, and the college entrance test.
- Fully articulate a personalized training and employment plan in the Manufacturing field.

These High Intermediate ABE lesson plans were created through a collaborative project between City Colleges of Chicago and Women Employed. The lessons are based on the Illinois Community College Board's *ICCB Manufacturing Bridge Curriculum* and the *SER Manufacturing Bridge Curriculum* previously used at Richard J. Daley College.

Defining Bridge Programs

The Illinois Community College Board (ICCB) defines bridges as programs that prepare adults with limited academic or limited English skills to enter and succeed in credit-bearing post-secondary education and training leading to career-path employment in high-demand, middle- and high-skilled occupations. The goal of bridge programs is to sequentially bridge the gap between the initial skills of individuals and what they need to enter and succeed in post-secondary education and career-path employment. Bridge programs must include three core elements:

- **Contextualized instruction** that integrates basic reading, math, and language skills and industry/occupation knowledge.
- **Career development** that includes career exploration, career planning, and understanding the world of work.
- **Transition services** that provide students with information and assistance to successfully navigate the process of moving to credit or occupational programs. Services may include academic advising, tutoring, study skills, coaching, and referrals to individual support services.

Bridge Program Student Qualifications

The Manufacturing Bridge Semester 1 is designed for:

- High Intermediate Adult Basic Education (ABE) students who score at the 6.0 to 8.9 level on the TABE test in reading and 5.0 to 8.9 in math.
- English as a Second Language (ESL) students in high intermediate ESL or above who score 6.0 to 8.9 on the TABE test.
- Highly motivated students who are interested in entering or advancing in a Manufacturing career and are able to devote at least 20 hours per week plus homework time for the duration of the program.

Upon enrollment, City Colleges transition specialists or other trained staff members should have already talked to students about any life situations that would interfere with their ability to succeed in a bridge program, such as work schedule, lack of child care, or lack of time to study and do homework outside of class. Other potential barriers include the need to pass background checks for Manufacturing programs and discharge current debt to the college before entering this course. While these lessons include activities that focus on and reinforce the importance of punctuality, good attendance, homework completion, and team work, instructors are not expected to act as advisors. Should any of these issues arise after classes begin, students should be referred to the transition specialist or a trained staff member who can help address them.

Expectations of Bridge Program Students

Through the recruitment and orientation process, students are made aware of and agree to meet the following expectations:

- Attend all classes. If a student must be absent, they must notify the instructor and request missed work.
- Arrive to class on time and stay until class ends.
- Respect instructor, classmates, and self.
- Complete all assigned work; ask questions when not sure.
- Meet with a transition specialist and college advisor and prepare to eventually transfer into a credit/career program.

Manufacturing Bridge Semester 1 Program Benefits to Students and to City Colleges of Chicago

During this Bridge Semester1 Reading and Writing course, students will:

- Improve their basic reading and writing skills using materials related to the Manufacturing industry.
- Engage in interactive learning, including group activities, giving and getting peer feedback, and utilizing evaluation and editing processes to turn rough drafts into improved rewritten drafts.
- Gain experience using computers, as a number of classes will take place in a computer lab.
- Explore Manufacturing career options and incorporate them into a personalized career plan that outlines achievable goals to further advance their education and career.
- Learn the skills employers want, such as communication, teamwork, dependability, problem-solving, and technology skills.
- Learn and practice test-taking skills to prepare for future TABE tests, practice HSE tests, future HSE tests, and the college entrance exam.

Because these lessons are not lecture-based, students will need time to become comfortable with the learning activities and contextualized nature of these lessons.

At the conclusion of this course, students will be prepared to enter Manufacturing Bridge Semester 2 at the Adult Secondary Education level (literacy level 9.0 to 12.9). When followed by Manufacturing Bridge Semester 2, students should be able to pass the Reading and Writing portions of the HSE exam as well as the Social Studies, Science, and Math portions of the test, which is a prerequisite for financial aid for college level courses. Students who are not able to pass all sections for the HSE test, may be eligible to enter the Gateway program where they will receive continued support.

When followed by Manufacturing Bridge Semester 2 students may also be able to score high enough on the college entrance exam to enter college-level courses and earn credit towards degrees or certificates without needing additional remediation. This will keep students from using precious tuition and financial aid dollars for additional basic skills remediation classes.

Additional resources available for bridge program students include:

- Free tutoring.
- Transition specialists who will meet with students to work through challenges and make future plans.
- Academic, financial aid, and/or career advisors to help students learn the steps to enroll in college occupational programs and learn about available jobs in their chosen occupation.

The following graphic illustrates the various components of the two-semester Manufacturing bridge model; the configuration of days and times may vary by campus.

Semester 1:	Semester 2
Language Arts for Manufacturing	Language Arts for Manufacturing
Fractions & Decimals and Shop Math	Math for the GED/HiSET
Test-Taking Skills	Reading, Writing, Social Studies and Science for the GED/HiSET
Computer Skills	College-credit Course: Machining Processes I
Industry Credential Earned: NIMS Material, Measurement, and Safety	

Semester One

	Monday	Tuesday	Wednesday	Thursday
9:00 – 10:00 am	Test-Taking Skills	Computer Skills	Test Taking Skills	Computer Skills
10:00 – 11:00am	Language Arts for Manufacturing	Shop Math	Language Arts For Manufacturing	Shop Math
11:00 – 12:00 pm				
12:00 – 1:00 pm				

Semester Two

Schedule: PMS				
	Monday	Tuesday	Wednesday	Thursday
9:00 – 10:00 am	Language Arts	Math	Language Arts	Math
10:00 – 11:00am				
11:00 – 12:00 pm	HSE Prep: Language Arts, Social Studies, & Science	HSE Prep Block: Math	HSE Prep: Language Arts, Social Studies, & Science	HSE Prep Block: Math
12:00 – 1:00 pm				
College Course*	College credit course: Machining Processes I (MFGT 111)			

Manufacturing Bridge Semester 1 Correlation with State and National Standards

To ensure that the Bridge Semester 1 lessons meet state and national learning standards, curriculum designers compared the Illinois ABE/ASE Content Standards¹ in Reading, Writing and Language, and Speaking and Listening with the NRS² descriptors for the High Intermediate ABE level (sometimes referred to as Level 4). This comparison was then condensed into a document called the “Condensed NRS Level 4 Standards,” which are contained within these lessons. These condensed standards can be used to:

- Understand the relationship between each lesson and the required standards. To do this, this curriculum document includes a listing of associated standards at the beginning of each lesson.
- Connect classroom activities and assignments to formal standards that describe the skills students are learning.
- Understand the relationship between Bridge Semester 1 skill-building standards and HSE skill requirements.

Specific HSE skills are not explicitly incorporated in the Condensed NRS Level 4 Standards because these students are not yet at the adult secondary skill level. However, this framework is directly tied to HSE skills. What students learn in the Bridge Semester 1 course lays the foundation that they will need for specific HSE learning covered in Bridge Semester 2. At the end of this introduction is a chart of the NRS Level 4 skills covered in these lessons.

Principles for Lesson Plans

The principles that these lessons are based on include:

¹ The Illinois ABE/ASE Content Standards were created to ensure students receive the same level of preparation that high schools are expected to deliver, and that they are ready for the new GED test and for college-level work.

² As a state and federally-funded program, City Colleges of Chicago’s adult education programs must use the National Reporting System in classifying instructional levels and student performance and in demonstrating student progress.

- All work must be grounded in students' experiences, decisions, and goals.
- Teachers must ask, not tell. Teachers should avoid having the answers. They should instead set up situations where students can pose questions, find their own answers, and propose ways of discovering additional information. This will help students develop the critical skills they will need to do well on the HSE exam and in college-level courses.
- Classrooms must incorporate visual, auditory, and kinesthetic techniques in each activity or set of activities to make sure all students can be tuned in.
- Activities must encourage students with varying skill levels to bring their thoughts and experience to the table as equals with other students in the classroom.
- Students need to work in pairs and groups to hear, see, and work with material before they present considered answers to the class.
- Students can learn to teach and learn from each other through pair and group work.
- Writing first drafts must be free of worry. Work on penmanship, spelling, and grammar need to be part of the rewriting process, not the initial drafting process.
- Grammar is best learned in the context of a writing project in which students are invested in communicating something that is important to them.

Strategies for Structuring the Course

The strategies for structuring these High Intermediate ABE lessons include:

- Each course includes several, multi-week thematic units.
- A variety of readings are assigned for students to analyze individually, to compare, and to use to draw information and form conclusions.
- Students use the writing workshop pattern of drafting, evaluating, editing, and rewriting for writing assignments. In order for students to become comfortable with writing and this process, work on penmanship, spelling, and grammar should not be part of the initial drafting process.
- Appropriate conventions of Standard English, word usage, vocabulary, and spelling are covered as needed to support the improvement of written drafts. The Bridge does not focus on grammar as a separate area of study.
- At this level, writing assignments build on each other and cover informative and explanatory writing forms.
- Technology research projects are incorporated into the lesson plans. Therefore, some lessons require access to a technology lab. Icons appear at the beginning of each lesson to identify days that should be taught in the technology lab.
- Activities are designed to ensure that students are learning presentation skills that are integrated into both reading and writing activities, as well as a PowerPoint project.
- All HSE standards work is taught in the Bridge Semester 2 course.

Teaching Strategies Embedded in the Curriculum

The approach to reading, writing, and grammar embedded in this curriculum is based on guidelines established by City Colleges of Chicago for all new adult education curricula. The Bridge Lesson Plans are structured around repeating cycles of student-centered activities that help students:

- Comprehend and analyze a variety of reading materials on a high-interest, sector-relevant topic.
- Conduct on-line research and in-class presentations to broaden each other's knowledge of the topic.
- Complete writing assignments that require that students to utilize the information they have learned as the basis for informative written work.

- Go through a peer-review, editing, and re-writing process of their written work so that students can turn in a complete paper they have had the opportunity to think through and refine based on other students' and their teacher's input.

This cycle of classroom activities in the Bridge Lesson Plans has been established to allow students to go deeply into topics that are of high interest in their chosen career field while improving their reading, research, presentation, and writing skills along the way.

Reading strategies: In *Reading Comprehension: What Works*, Fielding and Pearson write: "There is no quick or simple fix for reading difficulties. More than four decades of research have shown that reading is a complex cognitive and social practice. In building reading aptitude, there is no skills-only approach that can substitute for extensive reading. On the contrary, repeated studies have shown that instruction in isolated comprehension, decoding, or grammar skills may have little or no impact on students' activity while actually reading."¹³

Reading Comprehension activities are organized under four primary reading comprehension strategies:

Reading Strategy #1 – Predicting:

There are two types of predicting strategies: 1) Students look at the title, author, and sources and predict what they think the text will be about; 2) Students learn to understand and identify key signal words that indicate a shift in the author's thinking and predict how the author's ideas might be shifting whenever these signal words occur in the text.

Reading Strategy #2 – Annotating:

- * **Annotating:** Students use a simple system of five symbols to mark a text as they read to identify important point, surprising information, questions, and thoughts and ideas that they agree or disagree with.
- ✓ **Talking-to-the-Text:** Students learn to write questions and other comments on the text while reading the text.

Reading Strategy #3 – Questioning:

- **Request:** Students work in pairs to come up with a set of questions about the text that they know the answers to. Pairs then take turns asking one of their questions, calling on other students who think they know the answer, and repeating this process for the pair that answers the question correctly.
- ? **Question Around:** Students learn to identify the types of question typically asked on multiple choice tests like the HiSET and college placement exams. The four types of questions are: Right there (in the text); Pulling it together (from the text); Author and me: where students use information in the text and his/her knowledge; and On my own: where the answer is not in the text.

Reading Strategy #4 – Summarizing:

1. ³ L.G. Fielding and D.P. Pearson, "Reading Comprehension: What Works," Educational Leadership, Feb. 1994, pp. 62-68


Students use language and writing to summarize what they read in their own words. While summarizing is fully described in the writing section, verbal summaries are also important after reading and before writing. A primary activity that supports verbal summaries includes: pairs working together to talk about the meaning of the text in preparation for delivering their summaries. Delivering the summaries includes discussion about the listeners' ease of understanding and how comprehensive each summary is.

Writing Strategies: Fluency, clarity, and correctness are the three primary writing skills employed in a developmental writing process that emphasizes students' need to learn writing fluency first; to work on clearly communicating their ideas to a reader next; and focuses on correctness last. The relative importance of these skills during different phases of the two-semester program is demonstrated in the chart below:

Semester 1, Weeks 1-8	Semester 1, Weeks 9-16 Semester 2, Weeks 1-8	Semester 2, Weeks 9-16
<p>FLUENCY CLARITY CORRECTNESS</p> <p>Focus on getting ideas on the page without worrying about making mistakes.</p>	<p>FLUENCY CLARITY CORRECTNESS</p> <p>Focus on making ideas clear to a real reader.</p>	<p>FLUENCY CLARITY CORRECTNESS</p> <p>Focus on writing 45-minute essays for the HSE exam.</p>

- **Revision Process:** This curriculum utilizes peer review, editing, and revising processes for each piece of formal writing throughout the two-semester program. Peer review involves students reading other students' work and learning to give feedback on issues of clarity, paragraph development, and effectiveness. Editing focuses on students learning a succession of sentence structure and punctuation skills and applying them to student drafts. Revising includes creating a revision plan based on peer and teacher feedback and writing a final draft.
- **Narrative, Informative, and Persuasive Writing:** These are the three types of writing taught in this program. These types of writing are taught in succession so that students learn to understand how to connect classroom topics to their own experience, learn to write about new information they have learned, and then form and present their own opinions in essays on the topics and issues they have studied.
- **Adopting College-Level Skills:** Students learn the technical writing skills that will prepare them for college level courses. These include: writing summaries and essays with proper citations, taking notes on reading, video, and class discussions, creating outlines to prepare for writing essays, and referencing course readings in essays.

Grammar: City Colleges of Chicago intensive programs at the High Intermediate ABE and ASE levels, including the Bridge and the HSE Intensive programs, utilize a trimmed down approach to grammar that adheres to the following principles:

 Grammar should be taught to support the specific writing goals for students at the different developmental levels. This means that grammar should support the development of:

- Sentences and paragraphs at the first level. The focus is on fluency and basic writing tools.
- Sentence-level editing skills at the second level. The focus is on writing clarity.

- The ability to use a full range of punctuation in the editing process, as correctness is the focus at this level.
- Students and teachers should help each other edit only those grammar issues that are appropriate to each level. Mistakes must be tolerated so that students can be fluent and clear first.
- Grammar rules should exclude the use on any specialized grammatical language, as all basic grammar can be taught using a far simpler conceptual framework that will allow students to more easily understand and apply.

Learn signal words to aid reading comprehension and writing sophistication: This type of language development will help students improve their reading comprehension (as in Predicting) and to give them more sophisticated language tools for their own writing. These increased tools will better help students organize their thoughts for complex essays that refer to multiple readings and lay out their own ideas in response.

Recommendations for Program Delivery

The lesson plan activity instructions contain full and detailed descriptions of the activities down to what questions teachers can ask and what information should be recorded on the board. These instructions are intended to help the teacher understand the intention and flow of the activity. However, they are not intended to be a script and in fact have more detail than can be brought into the classroom.

To adapt the lesson plans, we suggest that teachers use the following process for preparing for each day:

- Familiarize yourself with the materials and issues in whole units before teaching them.
- Read all assigned material; view all videos; work through all charts and graphs so that you understand all that is to be presented.
- Go through all the activities to make sure you can answer any study questions or would feel comfortable leading any of the activities presented there.
- Highlight the specific portions of the activity that will help you remember the full flow of the activity.
- Make adjustments to the size or the emphasis of each activity to best fit the needs and interest of your class.
- Bring a highlighted outline or create a separate outline that can remind you of how to implement the activity and will be simple for you to follow.
- Prepare all handouts and projection materials so presentation of each activity can go smoothly.

Although suggested time durations for each activity are included, the time devoted to any given activity in the daily lesson plans may vary. Teachers must decide how to adapt the activities to meet the needs and interests of students in their classrooms.

These guidelines will help teachers make decisions about how to customize the curriculum for their own classrooms:

- Select and use grammar materials as needed to support student essay editing processes in the writing weeks.
- Include short vocabulary quizzes as needed to ensure that students learn new words they select from the readings. Some classes will need more work on vocabulary than others.
- Use these materials in the order they are presented. The activities in this curriculum build on one another and lead to subsequent discussions, readings, and writing assignments. Because the lesson plans have a cumulative structure, it is important for teachers to familiarize themselves with the materials and issues in whole units before teaching them.
- Make decisions to modify, eliminate, or change lessons carefully. While teachers can adapt these lessons for their own students, they should do so with caution because of the cumulative structure of

these lessons. Decisions to modify one activity could result in students being unprepared for later activities. Therefore, it is important for teachers to familiarize themselves with the materials and issues in whole units before teaching them and before modifying a lesson or activity.








This document begins with the condensed standards for reference. Each section that follows presents the full curriculum for each week, including daily lesson plans that include activities and worksheets as well as list of the standards covered in each lesson.

City Colleges instructors and staff with questions about the design of the bridge program or customization of the lessons should contact Lauren Hooberman, Bridge Director, City Colleges of Chicago, at lhooberman@ccc.edu or Stephanie Sommers, Curriculum Specialist, at ssommers11@gmail.com.

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Reading, Writing, and Grammar Strategies Key

This key is a guide for teachers as they navigate the strategies used in the curriculum. You will find these symbols next to activities used repeatedly throughout the lesson plans to build student skills.

Strategy	Symbol
Predicting	
Annotate	
Talk to the Text	
Question Around	
Grammar	
Journaling	
Peer Review	

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Week 1, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Introduction to Writing in the Bridge

Students discuss their goals for the first semester of the Bridge and compare them to the course goals. Students review the process for becoming a good writer by reflecting on the topic, annotating an article on writing, and journaling about whether or not they currently enjoy writing.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
Goals for Manufacturing Language Arts Bridge Semester 1

For Activity #2:

- Handout (attached): Make one copy for each student.
Teaching Writing to Adult Education Students

For Activity #3:

- Classroom Resource: Blank paper for journal writing or journal booklets. Teachers will instruct students that they will need a notebook or notebook section dedicated to journal writing to use throughout this course.

ACTIVITY #1: Introduction – 60 minutes

Articulate Student Goals

- Welcome students to the Manufacturing Bridge course.
- Introduce yourself and tell them why you will be a strong and supportive teacher.
- Write the following question on the board:
 - What are the reasons you decided to take this course? Consider your personal, academic, and career goals.
 - What skills do you need to prepare for college? Consider reading, writing, and grammar skills.
- Put students into pairs and have them list their goals in the different categories: personal, academic, career, reading, writing, and grammar.
- Put students into small groups to come up with a master list with no duplicated reasons. The more reasons, the better.
- Set up the board to record reasons in six categories: personal, academic, and career and reading, writing, and grammar.
- Go from group to group asking for a reason for taking the course, having each group add one reason that is different from what has already been said.
 - Write the reasons on the board in the category the team identifies.

Compare Student Goals to Formal Course Goals

- Provide an overview of the course.
- Pass out the *Goals for Manufacturing Language Arts Bridge Semester 1*.
- Go round robin and have each student read one item.
- For each item, ask:

- Is this item already on the list of student goals on the board?
 - If yes, check off the item on the board.
 - If no, ask: What category does this item go in?
 - Write all new item in the appropriate category.
 - Tell students to write down three things they most want to get out of this course.
 - Have students share what they wrote.
-

Break – 15 minutes

ACTIVITY #2: Introduction to Writing – 80 minutes

Discuss the Writing Process

- Tell students you would like them to understand the writing process that will be used in this class.
- Ask:
 - How do you feel about writing?
 - Suggested answers:
 - I enjoy writing.
 - I am uncomfortable writing.
 - Something in between.
 - Why do you feel this way about writing?
- Write the following questions on the board:
 - How does someone become a good writer?
 - What is an effective process for improving your writing?
- Put students in pairs to talk through their answers.
- Lead a discussion on the ideas pairs came up with. Record their responses on the board.



Predict What the Article Will Be About

- Tell students they are now going to read about the writing process that is used in this course.
- Pass out the article *Teaching Writing to Adult Education Students*.
- Have a student read the title and ask:
 - What is the title of the reading?
 - Where did this reading come from?
 - Who are the authors?
 - Who is the audience for this reading?
 - What do you predict this reading will be about?



Annotation Instructions

- Ask:
 - What does annotation mean?
 - Why is it important?
 - Tell them that annotation will help with their comprehension and provide a way to 'interact' with the text; they will be practicing different kinds of annotation in this course.
- For this article, have students underline one sentence in each paragraph that speaks to them and their experience or that they think is important. If they don't understand something, they can put a question mark next to the sentence they don't understand.
- Have students read silently and annotate.

Discuss What the Writer Believes

- After students have read and annotated their articles, tell them to refer to the sentences they underlined to answer the following questions:
 - What are the important messages in the article?
 - Which sentences emphasize the ideas of the authors?
 - Why is fluency so important?
 - What sentence explains this?
 - What is clarity?
 - Which sentences gave this information?
 - What is correctness?
 - Why is correctness the last thing to be concerned about?
 - Which sentences give you this information?
 - Write this question on the board:
 - What is the difference between your ideas about the writing process and the ideas of the author?
 - What parts of the article do you agree with? Why?
 - Are there parts that you disagree with? Why?
 - Tell students that in this class they are going to focus on fluency first, then clarity, then correctness. This approach may be different than what they have done before, but they will get comfortable with this approach and learn to write easily about their own ideas. This is important for their high school equivalency exam and beyond.
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Break – 15 minutes

ACTIVITY #3: Journal About Writing – 40 minutes

Set up the Writing Situation

- Write the following prompt on the board:
 - Do you enjoy writing? Why or why not? What skills do you want to work on to improve your writing?
- Tell students they will write a journal entry in response to these questions during this activity. Students should bring a notebook or journal that they will use throughout the course or set aside a portion of their notebooks for journaling. They will need to bring their journals to class every day.
- Tell students the rules for journaling are:
 - Write without stopping.
 - Don't focus on grammar or penmanship; focus only on what you have to say without worrying about the technicalities.
 - Enjoy the process!



Practice in Pairs and then Write!

- Put students in pairs and have them:
 - Share their responses to the prompt on the board.
 - Ask questions to get more information on why their partner does or does not enjoy writing. The more details the better!
- Next, give student 10 minutes to write nonstop about the prompt.

Final Discussion

- Ask:
 - How did the journaling go?
 - Was it easy or difficult? Why?
 - Can journaling help you gain more fluency in writing?
 - How can journaling be used as a way to become a better writer?
-

HOMEWORK



WRITE: Tell students that they will often have a journal writing assignment as homework. In order to do journal writing, they will need to:

- Have a notebook they can write in with standard-sized, lined paper. This can be a separate notebook for journaling only or it can be a section of a larger notebook. They should always bring this notebook to class!
- They will need to write at least two pages in response to the journal prompt.
- Their writing does not need to be polished they just need to write what comes to their mind naturally. They do NOT need to worry about spelling, vocabulary, or penmanship.
- No one will read students' journal work. They will be required to show you, however, that they have written a response that is an appropriate length.
- Each journal prompt will address a topic that will be needed for in-class work later in the week or later in the course. Thus, the writing students do in their journals will make it easier to complete in-class assignments.
- The goal of journal writing is for students to share their opinions on the topics in class and to learn to enjoy writing so that they can become independent thinkers – the key to success in these classes, on the High School Equivalency (HSE) exam, and in college.

Journal Writing Prompt: Have students write in response to the following prompt:

- How could becoming a strong writer improve your life? Can it help with your future?
- In order to prompt students' thinking, you might raise these questions in class:
 - Can becoming a strong writer help you
 - Find out more about the way you think?
 - Become a better reader?
 - Help your children become better writers?
 - Become a stronger voice in your community?
 - Solve pressing problem?
- Choose one positive aspect of becoming a strong writer and explain how writing can help you accomplish your goals.

Remind students that they:

- Should write non-stop until they complete two pages in their journals.
 - Are not to worry about correctness: grammar, spelling, or penmanship.
 - Just keep writing!
-

Teacher Preparation Note: Prior to the next lesson, teachers should practice annotating the first paragraph of the *What is Reading?* Article. You will then demonstrate how to use the Annotation Key.

Goals for Manufacturing Language Arts Bridge Semester 1

Prepare for Tests:

- Improve Reading test scores on the Tests of Adult Basic Education (TABE).
- Practice skills needed to pass the high school equivalency exam, including selected Science and Social Studies skills as they apply to Manufacturing.
- Develop reading strategies that will be used to answer high school equivalency-type test questions.
- Learn to use journals and reading summaries as the basis for writing the kind of essays required for the high school equivalency exam. .

Prepare for a Career:

- Learn about career pathways in the Manufacturing field.
- Explore your skills and learning styles, and how they make you a good fit for programs available at the City Colleges of Chicago.
- Create a PowerPoint presentation with your education and career plan.
- Understand the basics of manufacturing processes and how manufacturing has reshaped our society.

Learn Specific Reading Skills:

- Predict what a reading or a reading passage will be about based on context clues.
- Annotate readings in order to increase comprehension skills.
- Write different types of questions about a text; this will improve your ability to answer high school equivalency-type questions.
- Improve your vocabulary.

Learn Specific Writing Skills:

- Journal about important topics to explore your own ideas.
- Summarize what you have read in a clear and concise manner.
- Respond to your peers' writing in ways that will help them clarify their own writing.
- Revise first drafts based on feedback from peers and your teacher.
- Write introduction, body, and conclusion paragraphs for essays.

Learn Specific Grammar Skills:

- Identify what is a complete sentence.
- Correct fragments and run-on sentences.
- Form paragraphs.
- Join two sentences together with connecting words and punctuation.
- Add additional details to sentences using appropriate punctuation.

Other Course Features:

- There will be reading and writing during every class.
- There will be reading or writing homework after every class.
- In-class reading and writing assignments build toward longer writing assignments.
- All students will complete longer writing assignments and a PowerPoint presentation.
- Writing assignments will include a first draft, input from your peers and your teacher, and revision.

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Teaching Writing to Adult Education Students

Adapted and paraphrased from original source: *Learning to Write, Writing to Learn*

Original authors: John S. Mayer, Nancy Lester, and Gordon M. Pradl

Research shows that the only way one learns to write is by writing. Teachers have too often viewed writing as a skill that can be learned without any actual need to write. This has led to teachers using too many workbook exercises.

But real writing involves a purpose and an audience. The purpose must always be the writer's. Good writers learn to make even the most boring assignment their own. They learn that during the act of writing, they will discover what they want to say. Writing which has a real purpose, whether it is making lists, writing letters, emails, notes, memos, or more formal written work, always has a real audience.

But most school writing has only the teacher as its audience. Student writers think teachers as having all the answers and are more concerned with "getting it right" than students' ideas. Student writers often understand writing is about learning rules, without being too concerned about what they have to say.

Good writing takes time to develop and goes through these three steps: first *fluency*, then *clarity*, then *correctness*. With *fluency*, the goal is to build a sense of comfort, confidence and control in the writer. Writers must feel they have ideas and language in their heads that they can use to fill up blank sheets of paper. Only when words fill the page can we focus on *clarity*: does the writing make sense to others? The final concern is whether the text uses correct written English.

Our reasons for focusing last on correctness are that there's little point in having a "correct" paper without clear meaning and that a fearful writer is generally one who worries constantly about making mistakes.

The problem arises when teachers operate on the mistaken notion that one must know the rules of grammar in order to speak and listen or to read and write. **Research study after research study has shown that knowledge of grammar and usage rules does *not* make students better writers.**

Grammar continues to be taught because of the belief that new grammar rules can be applied while you are writing. Unfortunately, it's this view that causes many of the biggest writing problems. Even fluent writers would become pen-tied if they have to deal with all the rules.

It is false to think that error-free texts are the goal of writing and that such texts can be written on the first try. Teaching too many grammar rules has created many fearful writers. They become very worried about correctness, so worried that by the time they've written three words of a sentence, they're sure they must have made an error already. This correctness anxiety is not useful at all.

There's a story about a teacher who showed a student a number of drafts of Richard Wright's when he was writing *Native Son*. There were lots of changes and cross-outs. The student remarked, "Oh, look at all those cross-outs; he must be a lousy writer," as though correct writing is what happens the first time you write something down. Professional writers write many, many drafts before they call what they are working on finished.

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Week 1, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Introduction to Reading in the Bridge

Students read about the process of reading, get a demonstration of how to annotate to improve comprehension, and practice annotating an article before they journal about it.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
What is Reading?
- Handout (attached): Make one copy for each student.
Annotation Key
- Teacher Resource (attached): Make one copy to project overhead.
First Paragraph of "What is Reading?"

For Activity #3:

- Handout (attached): Make one copy for each student.
The Health Benefits of Journaling

TEACHER PREPARATION: Prior to this lesson, practice annotating the first paragraph of the *What is Reading?* article so you can demonstrate how students should use the Annotation Key.

ACTIVITY #1: Introduction to Reading – 40 minutes

Check-In About Journaling

- Ask students:
 - How did their journaling assignment go?
 - Was it easy or difficult to write two pages? Why or why not?
 - Did anything interesting come up? What?
 - Is there anything you wrote that surprised or interested you?
- Make sure you check students' journaling. You are checking for the number of pages they have filled out by sight without reading anything.
- Tell students that you will check each day to make sure that they are journaling. Again, students should see journaling as an opportunity to write freely and, then, to use the ideas they write about as part of their formal writing projects.

Students' Ideas about Reading

- Tell students they are going to practice annotating using an article about reading. But first, we want to talk about their opinions.
- Write the following questions on the board:
 - What kinds of reading do you enjoy? Why?
 - What kinds of reading do you not enjoy? Why?
 - Do you have goals around reading? What are they?
- Put students into pairs and have them discuss these questions.

- As a class, discuss the students' answers to these questions:
 - Record student responses on the board.
 - Review student responses as a class and ask:
 - Based on class responses, what conclusions, if any, would you draw about our relationship to reading?
 - What is the evidence for your answer?
-

Break – 10 minutes

ACTIVITY #2: Annotating an Article on Journaling – 70 minutes

* Model Annotation

- Pass out the *What is Reading?* article. Ask:
 - What is the title of the reading?
 - Where did this reading come from?
 - Who is the author(s)?
 - Who do you think is the audience for this reading?
 - What do you predict this reading will be about?
- Pass out the *Annotation Key*.
 - Have students read the *Annotation Key* aloud, one item at a time.
- Tell students they are going to use this *Annotation Key* while they read this article, but first you will demonstrate.
- Project the *First Paragraph* of “*What is Reading?*” overhead.
 - Read each sentence and decide if there is an annotation that you would make for that sentence. Narrate your thinking as you decide on which annotation to use, if any.
 - Write your annotations on the overhead, as you decide.
 - Allow students to make their own annotation suggestions and record them on the overhead.

TEACHER NOTE: Students need to circle words they don't understand as part of their annotation. Make sure you routinely ask for words they don't understand, give the class the chance to define the words in context, and have students use phones, dictionaries, or provide the definition as needed. You can collect these words and post them on a “Word Wall” for reference for use later as a unit unfolds.

* Students Annotate the Article

- Tell students to slowly and carefully read and annotate the article.

Students Discuss their Annotations

- When students are finished, write the following questions on the board:
 - Of those things you underlined, what were the most important points brought up in the article?
 - What was surprising or interesting?
 - What was hard to understand or confusing?
 - Include words that students didn't understand.
 - When students identify words, write them on the board and ask the class to define them based on the context. If not, give the definition as needed.
 - What aspects of this article did you agree with? Disagree with?
- Put students in pairs to talk about their answers to the questions on the board.
- Come together as a class and ask the questions on the board, allowing pairs to present their responses to the class.

- Lastly, ask:
 - How would you summarize how this class has responded to this article on reading?
 - What is the evidence for your answer?
 - Does this article describe the way you read?
-

Break – 10 minutes

ACTIVITY #3: Journal About Journaling – 50 minutes



Journal about Reading

- Tell students to get out their journals.
- Write this prompt on the board:
 - How does this article describe the way people really read?
 - Does this accurately describe the way you read? Explain what you mean.
- Instruct students to:
 - Respond to the questions on the board in their own words.
 - Write without stopping.
 - Don't worry about correctness: grammar, spelling, or penmanship.

Report on the Journal Writing

- Ask students:
 - Who thought the article gave an accurate description of the way you read?
 - Why or why not?
 - Did writing down your ideas help to clarify your thinking?



* Read an Article on Journal Writing

- Pass out *The Health Benefits of Journaling* article.
 - Tell students to use their Annotation Key to annotate this article in full.
-

HOMEWORK



WRITE: Have students write in their journals in response to the following prompt:

Do you agree with the author that journal writing will improve your health? Why or why not?
Would you be interested in using journaling for this purpose? Why or why not?

Remind students that they:

- Should write non-stop until they fill up two pages in their journals.
- Are not to worry about correctness: grammar, spelling, or penmanship.

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What is Reading?

Adapted and paraphrased from original source: *Reading For Understanding*

Original authors: Ruth Schoenbach, Cynthia Greenleaf, and Lynn Murphy

Reading is not just a basic skill. Many people think that if you teach someone to read once, that should be enough. They think that after you learn to read in primary school you just need more vocabulary and information around new concepts to read something new. Seen this way, reading is a simple process: readers just have to figure out how to pronounce each word in a text and then automatically comprehend the meaning of the words, just as everyone does with everyday spoken language.

This is not our understanding of reading.

About Reading

The need to continue to teach reading as students move on and to read complex academic material and tasks is a very important thing to do. Reading now is understood as being the following:

- Reading is a complex process.
- Reading is problem solving.
- Each reader could have better comprehension with certain kinds of reading and have more difficulty with others.

Here are descriptions of what we mean.

Reading is a Complex Process

You will notice that often when you are reading a text, it will call to mind voices, memories, knowledge, and experiences from other times and places—some from long ago and some more current. If you are reading a more difficult text about complex and unfamiliar ideas, you have to work hard to understand it. Your reading probably included many false starts and frequent backtracking to figure out what the text was trying to say. You were also probably trying to relate what you were reading to your existing knowledge. You might have stumbled over unfamiliar words and found yourself trying to figure out what they mean by looking around for clues in the text. And you might have found yourself silently agreeing or disagreeing with the author as you read.

While reading a newspaper article on a war in a foreign country, for example, you may have silently disagreed with the author and found yourself thinking about debates you have had with friends on the topic or something you saw on television. Lost in these memories, you may find that even though your eyes have scanned several paragraphs of the article, you have taken nothing in, so you must re-read these paragraphs—this time with more focus to be sure you understand what the author is trying to say.

Reading is Problem Solving

As the example above makes clear, reading is not about simply looking at and trying to understand words on the page, one right after the other. Reading is a process of problem solving in which the reader tries to make sense of a text by using their own ideas, memories, and knowledge in relation to the text they are reading. Readers also have to deal with the many views involved when reading a text: the author, the reader, and others the reader has heard, read about, or known during their life.

Reading Fluency

Reading fluency begins to develop when students have frequent opportunities to read texts that are relatively easy for them because the vocabulary, the concepts, or both are (mostly) familiar. However, in order to be comfortable reading more difficult texts, it is important that readers get the opportunities, support, and encouragement they need to understand a wide variety of texts on a variety of topics. Learning to deal with more challenging texts is how reading fluency grows.

As we know, a person who understands one kind of text easily may have difficulty reading other types. For example, someone good at reading math texts may have problems understanding poems. Someone comfortable reading novels or magazines might have trouble with a college textbook. Someone who is good at reading motorcycle repair manuals may have trouble understanding his son's chemistry homework.

In other words, reading fluency can vary depending on a reader's particular experience. However, researchers have found that all fluent readers have the same set of characteristics. They found that all fluent readers are:

- Mentally engaged.
- Motivated to read and learn.
- Persistent in the face of challenge.
- Use a variety of comprehension strategies to understand what they read.

*** ANNOTATION KEY**

Underline or highlight what you think is important.

Circle words you don't understand.

! - Put an exclamation point next to anything surprising or interesting.

? - Put a question mark next to anything you don't understand or is confusing.

* - Put an asterisk next to anything you agree with.

NO - Write No next to anything you disagree with.

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First Paragraph of *What is Reading?*

Reading is not just a basic skill. Many people think that if you teach someone to read once, that should be enough. They think that after you learn to read in primary school you just need more vocabulary and information around new concepts to read something new. Seen this way, reading is a simple process: readers just have to figure out how to pronounce each word in a text and then automatically comprehend the meaning of the words, just as everyone does with everyday spoken language.

This is not our understanding of reading.

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The Health Benefits of Journaling

Adapted and paraphrased from original source: <http://psychcentral.com/lib/the-health-benefits-of-journaling/000721>

Original author: Maud Purcell, LCSW, CEAP

I'll bet you write (or word process) daily. If you are like most people, you record only what you must. In an effort to change your mind and your habits, I'll let you in on a well-kept secret: A pen coupled with paper can serve as a powerful life tool.

Journaling (or keeping letters or diaries) is an ancient tradition, one that dates back to at least 10th century Japan. Successful people throughout history have kept journals. Presidents have maintained them to pass on to history; other famous figures for their own purposes. Oscar Wilde, a famous 19th century playwright, said: "I never travel without my diary. One should always have something sensational to read on the train."

Health Benefits

Contrary to popular belief, our forefathers (and mothers) did know a thing or two. There is increasing evidence to support the notion that journaling has a positive impact on physical well-being. University of Texas at Austin psychologist and researcher James Pennebaker contends that regular journaling strengthens immune cells, called T-lymphocytes. Other research indicates that journaling decreases the symptoms of asthma and rheumatoid arthritis. Pennebaker believes that writing about stressful events helps you come to terms with them, thus reducing the impact stress on your physical health.

I know what you're thinking: "So writing a few sentences a day may keep me healthier longer, but so will eating lima beans! Why should I bother journaling when I've already got too much on my plate?" The following facts may convince you.

Scientific evidence supports that journaling provides other unexpected benefits. The act of writing accesses your left brain, which is analytical and rational. While your left brain is occupied, your right brain is free to create, intuit and feel. In sum, writing removes mental blocks and allows you to use all of your brainpower to better understand yourself, others and the world around you. Begin journaling and begin experiencing these benefits:

- a. **Clarify your thoughts and feelings.** Do you ever seem all jumbled up inside, unsure of what you want or feel? Taking a few minutes to jot down your thoughts and emotions (no editing!) will quickly get you in touch with your internal world.
- b. **Know yourself better.** By writing routinely you will get to know what makes you feel happy and confident. You will also become clear about situations and people who are toxic for you — important information for your emotional well-being.
- c. **Reduce stress.** Writing about anger, sadness and other painful emotions helps to release the intensity of these feelings. By doing so you will feel calmer and better able to stay in the present.

- d. **Solve problems more effectively.** Typically we problem solve from a left-brained, rational perspective. But sometimes the answer can only be found by engaging right-brained creativity and intuition. Writing unlocks these other capabilities, and affords the opportunity for unexpected solutions to seemingly unsolvable problems.
- e. **Resolve disagreements with others.** Writing about misunderstandings rather than stewing over them will help you to understand another's point of view. And you just may come up with a sensible resolution to the conflict.

In addition to all of these wonderful benefits, keeping a journal allows you to track patterns, trends and improvement and growth over time. When current situations appear overwhelming, you will be able to look back on previous problems that you have since resolved.

How To Begin

Your journaling will be most effective if you do it daily for about 20 minutes. Begin anywhere, and forget spelling and punctuation. Privacy is key if you are to write freely. Write quickly, as this frees your brain from “shoulds” and other blocks to successful journaling. If it helps, pick a theme for the day, week or month (for example, peace of mind, confusion, change or anger). The most important rule of all is that there are no rules.

Through your writing you'll discover that your journal is an all-accepting, nonjudgmental friend. And she may provide the cheapest therapy you will ever get. Best of luck on your journaling journey!

Week 2, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Why Manufacturing is a Great Career

Students use a treasure hunt to take notes on articles and videos that help define manufacturing and identify reasons why manufacturing is an excellent career choice.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
Treasure Hunt on Manufacturing and Why It Is a Good Career
- Handout (attached): Make one copy for each student.
CUNY Career Kit: What is Manufacturing? p. 16

For Activity #2:

- Three Videos on Why Manufacturing Makes a Good Career:
 - Video: Dream it! Do IT! Promoting Manufacturing Careers (running time: 02:11)
<https://www.youtube.com/watch?v=pURx4lOLfK0>
 - Video: An Introduction to Manufacturing Careers (running time: 01:27)
<https://www.youtube.com/watch?v=t2bLTd5Afew>
 - Video: Women in Manufacturing (running time: 04:37)
https://www.youtube.com/watch?v=jN_35uExbgU
 - Handout (attached): Make one copy for each student.
The 6 Reasons It's Great to Work in Manufacturing
-

ACTIVITY #1: What is Manufacturing? – 60 minutes

Check Journaling Homework

- Ask students:
 - How did the journaling assignment go?
 - Was it easy or difficult to write two pages? Why or why not?
 - Does anyone think that journaling will help them with their health?
 - Are you interested in journaling for health purposes? Why or why not?

How to Take Notes

- Tell students that they are going to do a treasure hunt today to come up with a definition of manufacturing and explain why manufacturing is an excellent career choice. During this treasure hunt, they will take notes on what they read and what they see in videos.
- Ask students:
 - Why do people take notes? (Answer: To quickly write down the important things they hear or read.)
 - Do notes have to be taken in complete sentences? (Answer: No.)
 - What is it, then? (Answer: A phrase that summarizes what you've heard or read.)
 - What kinds of phrases make good notes? (Answer: Those that are short and clear and include important information.)

- Write on the board:
 - What notes would you take to remember the important parts of our discussion?
 - Instruct students to write down their notes on the discussion. Take notes about taking notes!
- Ask two students to volunteer to write their notes on the board:
 - Go over each set of notes.
 - Discuss which notes are clearest.
 - Ask: Do you have any suggestions for notes to add or change?
- Tell students that you take notes of what they have to say on the board. These notes are a good model because they capture the important elements of their comments in quick phrases.

Define Manufacturing

- Pass out the *Treasure Hunt on Manufacturing and Why It Is a Good Career*.
- Go over the instructions.
- Put students in pairs and instruct them to:
 - Talk through their definition of manufacturing.
 - Take notes on their definition.
 - Compare notes and make updates to their own notes.
- Go from pair to pair to get one element of their definition and take notes on the board. Continue this process until you have all the elements.
- Ask students: Using these notes, how would you summarize the definition of manufacturing?

* Read, Annotate, and Discuss a Definition of Manufacturing

- Pass out *What is Manufacturing?*
- Give students the following instructions:
 - Read the article.
 - Underline those elements of the definition that are NOT on the board.
 - Take notes on what you underlined and add it to your treasure hunt.
- Put students into new pairs and have them compare notes.
- As a class, go from pair to pair to add to the definition on the board.
- Lastly, ask:
 - How has our definition changed because of the article?
 - Can someone summarize the new definition from the notes?

Break – 10 minutes

ACTIVITY #2: Watch Videos and Fill Out Your Treasure Hunt – 50 minutes

Why Did You Choose Manufacturing?

- Tell students they will identify reasons for going into manufacturing and then write about them.
- Write the following question on the board:
 - Why are you interested in going into manufacturing?
 - What makes manufacturing attractive to you?
- Have students write down their reasons for being interested in manufacturing in their treasure hunt notes.
- Ask each student one reason and record these on the board.

Watch Video #1: *Dream it! Do IT! Promoting Manufacturing Careers*

- Tell students they will watch three videos and take notes on any NEW reasons to add to the class list.
- Watch the video and have students take notes.
 - Watch the video a second time if students want to collect more notes on what they saw. Watching the video a second time is optional.
- Put students into new pairs to compare notes and adjust their own notes as needed. After the pairs have finished comparing notes, ask:
 - What new reasons did you take notes on that we should add to our class list on the board?
 - Take notes on student's answers on the board.
 - Which of these new reasons for going into manufacturing are also important to you?

Watch Video #2 & #3: *An Introduction to Manufacturing Careers and Women in Manufacturing*

- Use the process used for Video #1 for the other two videos.

Read *The 6 Reasons It's Great to Work in Manufacturing*

- Pass out *The 6 Reasons It's Great to Work in Manufacturing* article.
 - Instruct students to:
 - Read the article.
 - Underline any new reasons in the article that are not already on the board.
 - Put students into new pairs to compare notes and adjust their own notes as needed.
 - Ask students What new reasons should we add to our class list on the board?
 - Take notes on student's answers on the board.
-

Break – 10 minutes

ACTIVITY #3: Write About Your Reasons for Choosing Manufacturing – 50 minutes



Write About Students' Reasons for Choosing Manufacturing as Their Career

- Write the following question on the board:
 - What are the most important reasons you want to go into manufacturing?
- Tell students they will write about why they have chosen manufacturing as their career by answering the question on the board. Tell students they should:
 - NOT focus on grammar, spelling, or penmanship.
 - Focus on why they feel so strongly about going into manufacturing.
 - A classmate will read their work and ask them questions to get clarification or more information.
- Give students 12 minutes to respond to the question on the board.
- Put students in pairs to:
 - Read their partner's work.
 - Write three questions that ask more information.
 - Give their partner's work back and discuss the questions, as needed.
- Tell students to respond to their partner's questions in writing.
- When they have all finished writing questions on their partner's work, ask:
 - Will the questions your partner asked make your written piece more interesting? Why or why not?
 - How could you integrate the additional information into your written piece?
 - How can you revise this piece to make it more detailed and easier for a reader to understand?
- Lastly, ask: What personal experiences made you choose the field of manufacturing?

- Tell us some of the details.
-

HOMEWORK

READ: Find an article in a newspaper, magazine, or online that will help you describe modern advanced manufacturing. Choose an article that you are interested in and feel comfortable reading on your own.

Once you have selected your article, write down the name of the article, the source (where you found it), the author and the date. After reading and annotating, make a list of facts that best explain what modern advanced manufacturing is. Turn in this list during the next class.

Tips:

- You can use resources like the *Chicago Tribune* or the *Sun-Times* online to find articles.
- Use each website's search feature and put in the topic you want to know more about to find articles.
- Pick the one that most interests you.

Teacher Preparation Note: Before the next class, familiarize yourself with the graphs as well as the questions that are used in the next lesson so that you are prepared to help students understand how to read them.

TREASURE HUNT ON MANUFACTURING AND WHY IT IS A GOOD CAREER

This sheet can be used to take notes on to answer the question: What is manufacturing and why is it a good career?

QUESTIONS	YOUR NOTES
What is your definition of manufacturing?	
What new facts would you add to your definition from the reading: <i>What is Manufacturing?</i>	
What are your reasons for choosing manufacturing as a career?	
What new reasons for going into manufacturing are presented in video #1: Dream it! Do IT! Promoting Manufacturing Careers?	

What new reasons for going into manufacturing are presented in video #2: An Introduction to Manufacturing Careers?	
What new reasons for going into manufacturing are presented in video #3: Women in Manufacturing?	
What new reasons for going into manufacturing are presented in the reading: <i>The 6 Reasons It's Great to Work in Manufacturing</i>	

Manufacturing Sector Profile

Adapted and paraphrased from original source: www2.cuny.edu/wp-content/uploads/sites/4/page-assets/academics/academic-programs/model-programs/cuny-college-transition-programs/adult-literacy/cuny-careerkit-for-hse-esl-learners/6-MA-CUNY-CK2017-U1-F-web.pdf

Original author: The City University of New York

1. What is manufacturing?

Manufacturers convert raw materials or parts into finished goods. For example, a paper mill turns wood from trees or recycled materials into paper. A garment manufacturer turns fabric into clothing. Some manufacturers make parts for other manufacturers to use. For example, one manufacturer may make the parts another business needs to assemble an airplane or a computer.

Manufacturers also produce their products in different ways. For example, some make items by hand, others produce items using the latest technology or produce large amounts of standardized products using an assembly line process. Manufacturers use these different techniques as needed to make a wide range of products such as apparel (clothes), computers, electronic equipment, aluminum, glass, concrete, tractors and televisions.

2. Technology's impact on manufacturing

Manufacturing employers are increasingly using high-tech production processes to make their work more efficient and precise. Manufacturers need fewer workers in today's technologically advanced factories than they did in the past because automation is replacing workers. The workers they do hire need more advanced technical skills than those who worked in the industry before. Manufacturing workers use technology at work to do tasks such as collecting, organizing and analyzing data; creating products or parts of products; managing production processes; keeping track of the hours people work; communicating with colleagues; and scheduling their appointments. Basic computer skills are needed for most jobs in the industry.

3. Outsourcing Abroad

Some manufacturers have moved their production facilities overseas or contract with companies in other countries to manufacture parts or products for them. In general, the cost of labor and raw materials is cheaper in these countries. Manufacturing abroad can save manufacturers money, but it reduces the number of jobs in the United States. Because Manufacturing has become so automated, some experts say that manufacturing products in the United States is becoming cheaper, so some companies are starting to do work in the U. S. that they used to do overseas.

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The 6 Reasons It's Great To Work In Manufacturing

Adapted and paraphrased from original source: <https://blog.thomasnet.com/the-7-reasons-its-great-to-work-in-manufacturing>

Original author: Zachary Smith

The manufacturing industry is one of the largest and most influential sectors of the United States economy.

But what is it like for the millions of people who actually work in the industry? The truth is, it's pretty fantastic. Here are some reasons why:



You Contribute To The Economy

Manufacturing helps support the global and national economies, as well as individuals and families. In fact, research shows that:

- Manufacturing is ranked among the most important industries in maintaining a strong U.S. economy
- Eight in 10 Americans believe U.S. manufacturing is important to maintain Americans' standard of living.
- Manufacturing has the greatest effect of any other major sector.
- Every dollar spent in manufacturing contributes \$1.81 to the economy, allowing the industry to add nearly \$2.2 trillion to the U.S. economy.
-

Clearly, manufacturing is having a big impact on jobs, livelihoods and the economy. That's something to be proud of.

On The Cutting Edge

Manufacturing always includes the latest technology. 3D printing, drones, and the Internet of Things are just the latest examples of manufacturing companies adopting new technology long before the public gets their hands on it. It's good to be ahead of the curve.

It's Totally Safe

A myth manufacturing has been fighting for decades is the idea that manufacturing is not safe. And for a long time, it absolutely was a high-risk career path with many dangerous chemicals, machines, and other hazards. But we've come a long way. Robots are making our jobs safer, and technology like the Internet of Things and automation keeps us out of harm's way. We are working smarter, and safer, than ever before.

Fruits Of Your Labor

One of the great benefits of working in manufacturing is that you make real products that make real improvements in people's lives. Whether working on everyday items you can buy at the store or huge set pieces for blockbuster movies, you can point to something and get the very satisfying pleasure of saying, "I made that." That's more than most service or white-collar jobs can say.

Room To Grow

Once you choose a sector to go into, there are plenty of options for your career path. From production work and welding to research and distribution, the possibilities seem endless. There is always room to grow and advance your career.

Week 2, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Manufacturing: Myth vs. Reality

Students will identify myths and realities about manufacturing that can help them understand how modern advanced manufacturing is different than manufacturing in the past.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
Treasure Hunt on Myths and Realities of Manufacturing
- Handout (attached): Make one copy for each student.
"Mike LeFevre, Steel Worker": A Summary of an Interview with Studs Terkel

For Activity #2:

- Handout (attached): Make one copy for each student.
Packet of Graphs #1-5
 - Graph #1: Average Compensation Per Hour By Industry
CUNY Career Kit: p. 40
<http://www2.cuny.edu/academics/academic-programs/model-programs/cuny-college-transition-programs/adult-literacy/cuny-careerkit-for-hse-esl-learners/#manufacturing>
 - Graph #2: Percent of Workers with Medical Care and Retirement Benefits
CUNY Career Kit: p. 42
 - Graph #3: Manufacturing Workers and Educational Attainment
CUNY Career Kit: p. 44
 - Graph #4: Total Jobs in Illinois, 2005-2015
 - Graph #5: Average Earnings of Production Employees In Chicago Area
<https://fred.stlouisfed.org/series/SMU17169743133300008A>

For Activity #3:

- Video: Manufacturing in America: Perception vs. Reality (running time: 02:10)
<https://www.youtube.com/watch?v=8unOccHBxzc&t=21s>

For Homework:

- Handout (attached): Make one copy for half the class.
Debunking Myths About Manufacturing Jobs

TEACHER PREPARATION: Prior to this lesson, make sure that you are familiar with the graphs as well as the questions used in the lesson to help students understand how to read them. Be prepared to project these materials overhead as well as hand them out.

ACTIVITY #1: Manufacturing Myths – 50 minutes

Follow-Up on Reading Homework

- Tell students that their classmates want to know what they found out about modern advanced manufacturing from their homework.

- Next, go from student to student to have them:
 - State the reference they used.
 - Give one fact about modern advanced manufacturing.
 - Take notes on facts students provide on the board.
 - Keep going from student to student until you have collected all their facts.



Prediction Exercise

- Tell students they need to define a few words before they start looking at the myths and realities of modern advanced manufacturing.
- Put the following two words on the board: “Stereotype” and “Myth”.
- Put students in pairs to define the two words in one sentence.
- Go from pair to pair to get their definitions for the word “stereotype”.
- .
- Repeat this process for the word “myth”.
- Next, ask:
 - How are the two words similar?
 - What are the stereotypes/myths we have about manufacturing? Do your parents have certain ideas of manufacturing that you think might no longer be true?
 - List these on the board.

*Read, Annotate, and Discuss a Reading

- Tell students they are going to go on another treasure hunt that will help them collect information on what advanced manufacturing is like and give them new ways to explain why manufacturing makes a great career.
- First, they will read about a Chicago steel worker who worked in the factories back when Chicago made steel. This article will help them understand some of the myths that people have about manufacturing.
- Pass out the *Treasure Hunt on Myths and Realities of Manufacturing*.
- Review instructions so that students are clear about what they are taking notes on: myths, realities or both.
- Pass out the article “Mike LeFevre, Steel Worker” and instruct students to:
 - Read the article.
 - Underline things about Mike LeFevre’s story that they think are no longer true about manufacturing.
 - Take notes in their treasure hunt sheet based on what they underlined.
- Put students in pairs to review what they underlined and noted.
 -
 - Students can add information that they think were true during LeFevre’s life that are no longer true about modern advanced manufacturing.
- Ask: What do you think were true during LeFevre’s time that are no longer true for modern advanced manufacturing workers?
- Add new items to the list of myths already on the board.
- Lastly, ask:
 - Do you know people like Mike LeFevre?
 - How long ago did people do jobs like Mike’s?
 - What do you think happened to his kids?
 - What is your evidence?

Break – 10 minutes

ACTIVITY #2: Reading Graphs to Find Facts About Manufacturing – 70 minutes

- Tell students they will now look at five graphs that provide new information about modern advanced manufacturing that they can record in their treasure hunt sheets.

Graph #1: Average Compensation Per Hour By Industry

- Tell students that the first graph will give information on average pay per hour by industry. But before they look at it, they will predict.
- Ask: Do you have any guesses on how much manufacturing jobs pay compared to other industries?
 - Write student guesses on the board.
- Pass out Graph #1 and project it overhead.
- To get information from the graph ask:
 - What are the hourly earnings for manufacturing workers?
 - What are the hourly earnings for non-manufacturing workers?
 - Who gets the most in benefits per hour?
 - How much more do manufacturing workers get than non-manufacturing workers in each category?
 - Instruct students to set up the subtraction problems for you on the board to get these answers.
- Tell students to fill in three important facts from this graph into their treasure hunt sheet.

Graph #2: Percent of Workers with Medical Care and Retirement Benefits

- Before you hand out the graph ask students:
 - Do you have predictions about how many manufacturing workers have medical benefits and retirement benefits compared to service industry workers?
 - Write student guesses on the board.
- Pass out Graph #2, *Percent of Workers with Medical Care and Retirement Benefits* and project it overhead. Ask:
 - What do the blue bars in this graph represent? The pink bars?
 - Which workers are more likely to have medical care benefits-- manufacturing or service workers?
 - Which workers are more likely to have retirement benefits?
 - Which workers are more likely to have both medical and retirement benefits, if you put the two together?
- Lastly, ask: Why do you think manufacturing workers are more likely to have benefits than service workers?
- Tell students to fill in three important facts from this graph into their treasure hunt sheet.

Graph #3: Manufacturing Workers and Educational Attainment

- Before you hand out the graph, ask students:
 - Do they have predictions on how educational requirements for manufacturing jobs may have changed in recent years?
 - Write student guesses on the board.
- Pass out the Graph #3, *Manufacturing Workers and Educational Attainment* and project it overhead.
- To get information from the graph at the top of the page, ask:
 - What does the top graph show about the number of manufacturing workers who have high school education or less? (Answer: It has declined sharply since 2002.)
 - How about manufacturing workers with some post-secondary education? (Answer, It has increased significantly since 2002.)
 - During what year were there the same percentages of both groups? (Answer: 2007)
 - In what year did the percentages stabilize? (Answer: 2009)

- To get information from the graph at the bottom of the page, ask:
 - What does the blue bar represent? How about the green bar?
 - How much more do manufacturing workers make than non-manufacturing workers when they have a high school diploma? (Answer: Roughly \$1 an hour more.)
 - Some college or associate degree? (Answer: Roughly \$2 an hour more.)
 - Bachelor's degree or higher? (Answer: Roughly, \$4 an hour more.)
 - How much more per hour do manufacturing students with Associate's Degrees make than those with High School diplomas or less? (Answer: \$5 more per hour.)
 - How much more per hour do manufacturing students with Bachelor's degrees make than those with High School diplomas or less? (Answer \$16 more per hour.)
- Lastly, ask students to make some predictions:
 - Based on what we know thus far about advanced manufacturing, what kinds of jobs do you think people with BAs are doing?
 - Those with some college or associate degrees?
 - Those with a high school diploma or less?
- Tell students to fill in three important facts from this graph into their Treasure Hunt.

Graph #4: Total Jobs in Illinois, 2005 & 2015

- Project this graph overhead.
- Put students into pairs to review this graph and come up with four facts that are relevant to manufacturing.
- Go from pair to pair to get new facts to add to the notes on the board.
- Tell students to fill in the important facts from this graph into their treasure hunt sheet.

Graph #5: Average Hourly Earnings in the Chicago Area

- Before you pass out the graph on average hourly earnings in manufacturing in the Chicago area, ask students:
 - Do you have any guesses about what those hourly earnings might be?
 - Write student guesses on the board.
- Pass out the Graph #5, Average Hourly Earnings in the Chicago Area, and project it overhead.
- To get information from the graph ask:
 - How much did manufacturing workers make in 2003, on average?
 - 2012?
 - 2016?
 - What's the trend in manufacturing wages?
- Put students into pairs and have them answer the following questions:
 - Look at Graphs #1 and #5 to compare wages for the same year.
 - How do Chicago area wages compare with national wages?
 - What are Chicago wages now?
- Allow students to share their findings.
- Tell students to fill in three important facts from this graph into their treasure hunt sheet.
- Lastly, ask:
 - How do all these new facts make you feel about going into manufacturing?
 - Which of these facts are most surprising?
 - Why?

Break – 10 minutes

ACTIVITY #3: Debunking More Manufacturing Myths – 40 minutes

Watch a Video

- Tell students they will watch a short video about how manufacturing has changed and the problem manufacturers are having filling new positions.
- To predict some of the ideas in the video, ask:
 - Do you think large numbers of parents encourage their kids to go into manufacturing? Why or why not?
 - Do you think there are lots of people who choose manufacturing as their top career choice? Why or why not?
 - List students' answers on the board.
- Write the following four questions on the board. Arrange the questions as headings for four columns:
 - Group #1: What are the facts about current manufacturing jobs?
 - Group #2: Over the past two decades, how has manufacturing changed?
 - Group #3: What has happened to all of the low-skilled jobs?
 - Group #4: Why do employers need so many skilled workers?
- Divide the class into four groups and assign one question to each group; instruct them to take notes only on the question assigned to their group.
- Watch the video, *Manufacturing in America: Perception vs. Reality*.
- Ask students if they want to watch it again to get more information. If so, watch it again.
- Have groups report out on each of their questions.
 - Take notes on their answers in the appropriate column.
 - After each group has finished, ask the rest of the class if they want to add anything.
- Lastly, ask:
 - What facts here surprise you? What didn't you know before?
 - Do you think your predictions about why parents and students don't see manufacturing in a favorable light were accurate? Do you have anything more to add?
 - How does the high demand for manufacturing jobs make you feel about your career choice?
 - How do you think this growth will influence your future?

Review Treasure Hunt

- Give students time to complete their treasure hunt sheets.
- Pass out the reading: *Debunking Myths About Manufacturing Jobs* to do as homework so students can complete the last section of the treasure hunt.

HOMEWORK



WRITE: Have students use the following prompt for their journal writing homework:

What were some facts that surprised you about modern manufacturing that you learned today? How does the high demand for modern advanced manufacturing jobs make you feel about your career choice? How do you think this growth will influence your future?

Remind students that they:

- Should write non-stop until they fill up two pages in their journals.
- Are not to worry about, spelling, or penmanship.
-

READ: Have students read *Debunking Myths About Manufacturing Jobs* and fill in the last section of the treasure hunt sheet to turn in during the next class.

Teacher Preparation Note: For Activity #1 in the next lesson, fill out the first two pages of the treasure hunt sheet after watching the video and reading the article. This will act as your answer sheet for those activities during class.

Teacher Preparation Note: Before the next lesson, prepare 11 index cards with one of the following on each:

- Work ethic
- Specialized
- Adaptable
- Manual
- Flexibility
- Spatial understanding
- Cooperation
- Initiative
- Persistence
- Dependability
- Independence

TREASURE HUNT ON MYTHS AND REALITIES OF MANUFACTURING

For each of the sources listed, take notes on either the myths or realities you find in the readings or graphs, as marked.

SOURCE	
<p>Article:</p> <p><i>“Mike LeFevre, Steel Worker”: A Summary of An Interview with Studs Terkel</i></p>	<p>What are the Myths?</p>
<p>Graph #1:</p> <p>Average Compensation Per Hour By Industry</p>	<p>What are the Realities?</p>
<p>Graph #2:</p> <p>Percent of Workers with Medical Care and Retirement Benefits</p>	<p>What are the Realities?</p>

Graph #3: Manufacturing Workers and Educational Attainment	What are the Realities?
Graph #4: Total Jobs in Illinois, 2005-2015	What are the Realities?
Graph #5: Average Earnings of Production Employees In Chicago Area	What are the Realities?

	What are the Myths?	What are the Realities?
Video: Manufacturing in America: Perception vs. Reality		
Article: Debunking myths about manufacturing jobs		

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“Mike LeFevre, Steel Worker”: A Summary of An Interview with Studs Terkel
Interview Conducted in 1972

Adapted and paraphrased from original source: <https://tgbs.wordpress.com/2014/05/01/studs-terkels-mike-lefevre-steel-worker/>

Original author: Tanner Bugger

Life as a steel worker is not an easy life. The job is a simple job, but that never means it's an easy job. Every day, LeFevre does the same job and the same routine of pulling steel. This job is a very physical job that requires heavy lifting.

At the same time, Mike has to deal with bosses that are much younger with a college education. These daily routines give LeFevre a feeling of frustration that is only vented through the many bar fights that erupt after work. Also, if the fight happens with the boss or another worker, it would likely lead to the loss of a job. In LeFevre's position, a loss of a job is not an option for his obligation to his family.

If that is not enough to deal with, the knowledge that the work is never finished, and he will never see the finished work. This might not seem like a big deal but when LeFevre refers to this act of producing a product but never seeing it finished, it is like never accomplishing the task and not being able to take pride in the work. At one point in time, a man was able to make something and take pride in the work being done, creating the finish product: a "cabin". Because of the assembly-line process of producing needed items, a person is not able to take pride in what is finally being made.

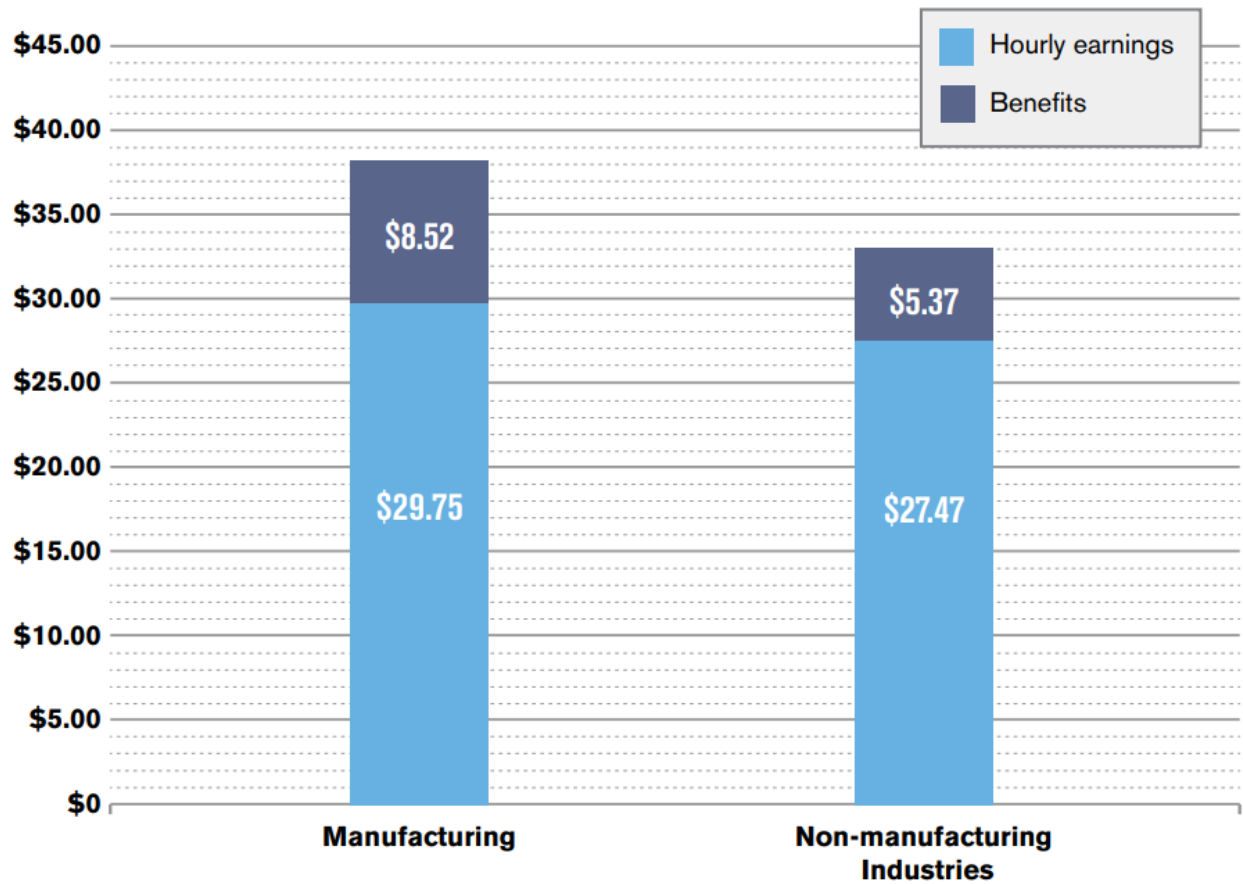
Would society be better off with an educated population that is given an opportunity to achieve better standards of living? These are questions that are being asked when LeFevre dreams of a 20-hour work week. This 20-hour work week is the only way he believes he could do something more than work and also give the needed attention to his family. In his current job, he doesn't have time for these things or time for furthering himself.

Because of experience, LeFevre comes to the conclusion that the only way to further the education in the family is to make sure family members go to college, preferably a son that will one day have the chance to walk around in a "suit and tie."

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Graph #1

Average Employee Compensation per Hour by Industry, 2010



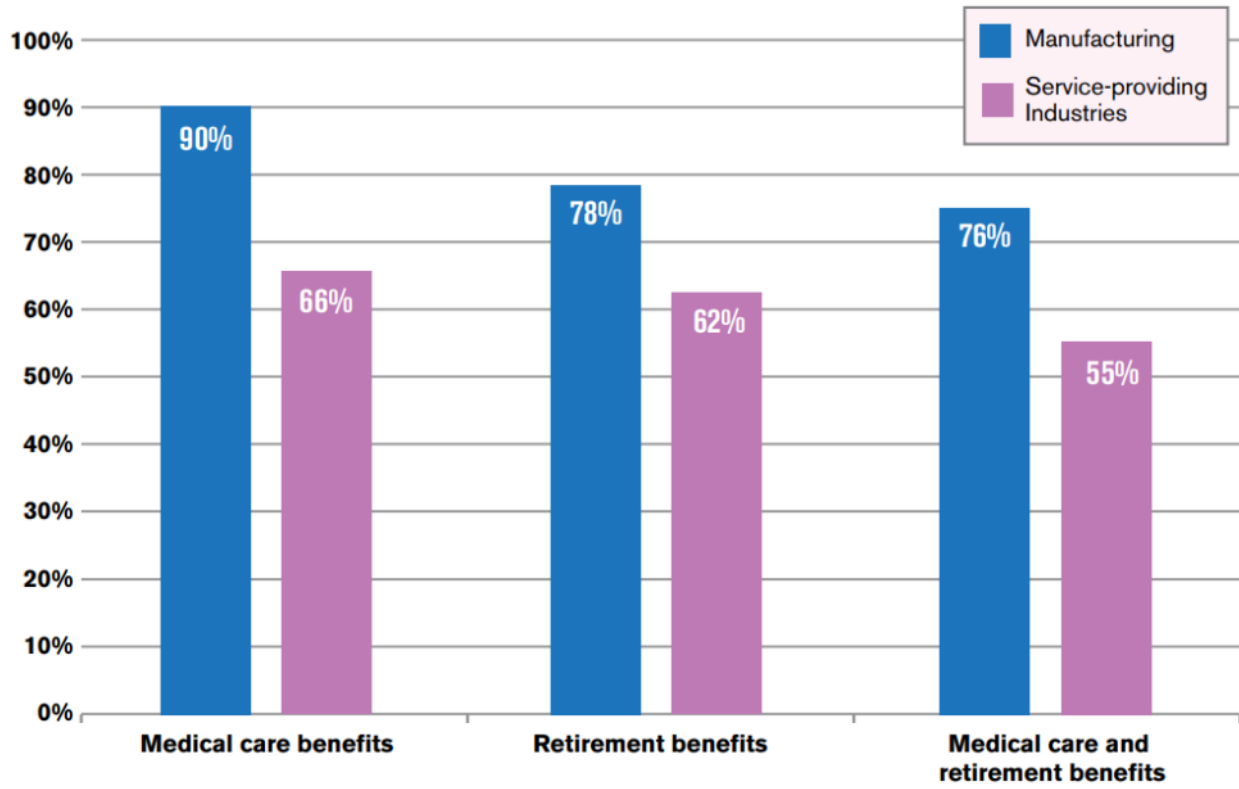
Source: Benefits of Manufacturing, U.S. Dept. of Commerce

Note: Wages and Salaries include paid leave and supplemental leave, such as overtime and premium pay.

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Graph #2

Percent of Workers with Medical Care and Retirement Benefits, March 2011



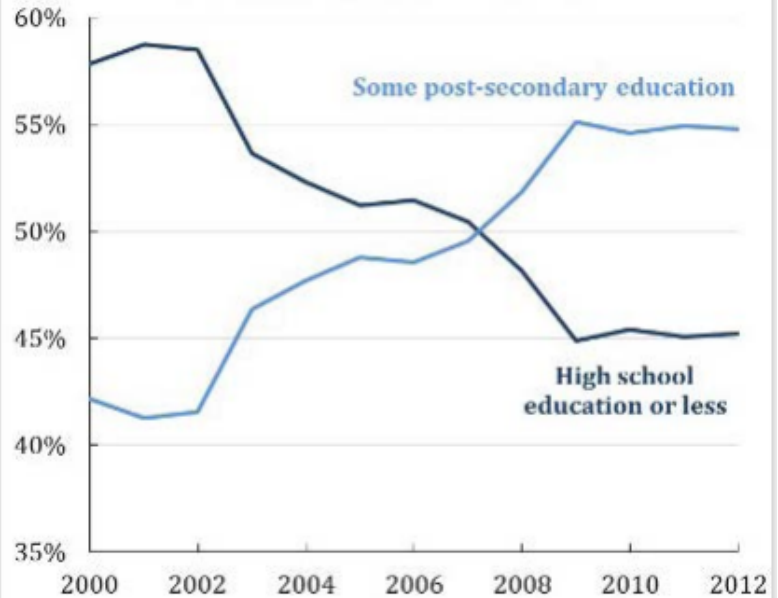
Source: Benefits of Manufacturing Jobs, U.S. Dept. of Commerce

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Graph #3

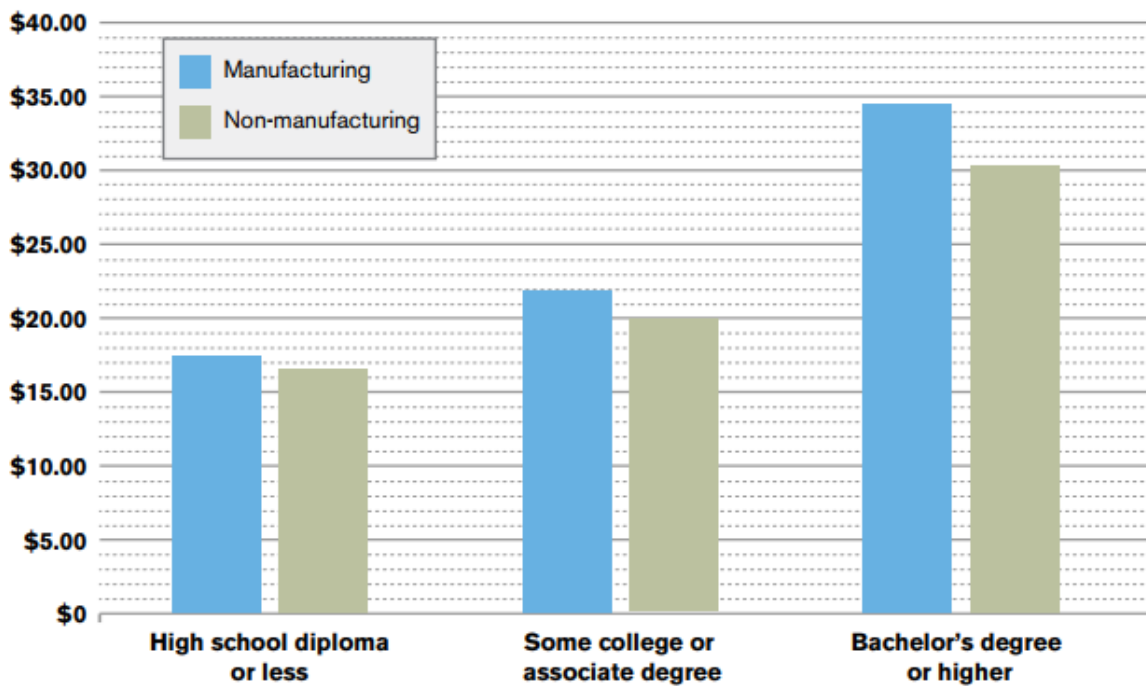
GRAPHS: **Manufacturing** **Workers and** **Educational** **Attainment**

Figure 5. Manufacturing Workforce
 Share of workers entering manufacturing
 by educational attainment, 2000 - 2012



Source: JEC Democratic staff calculations based on data from the Bureau of Labor Statistics, Current Population Survey, matched month-to-month.

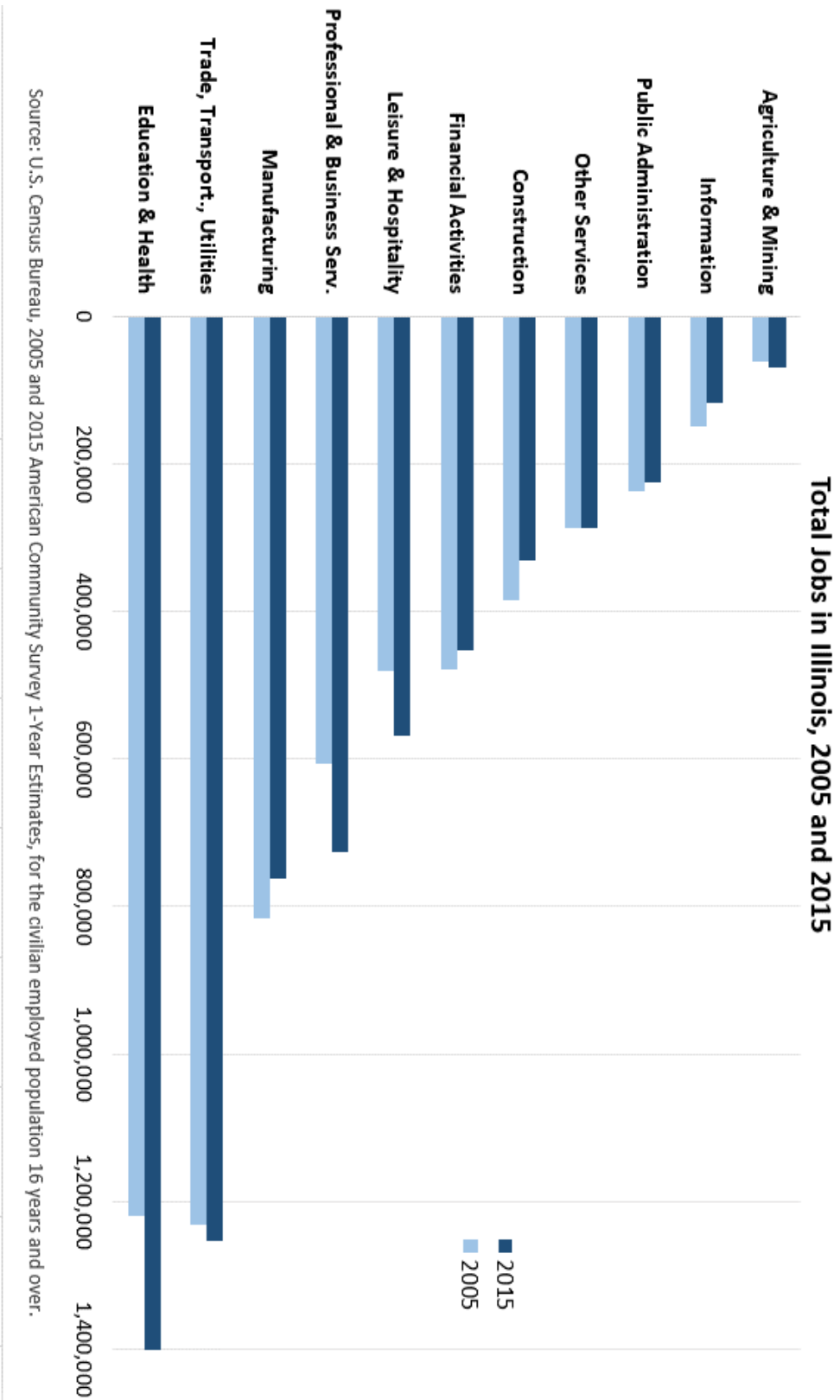
Average Hour Earnings by Industry and Educational Attainment, 2011



Source: Benefits of Manufacturing Jobs, U.S. Dept. of Commerce
 Note: Estimates are for full-time private wage and salary workers age 25 and over.

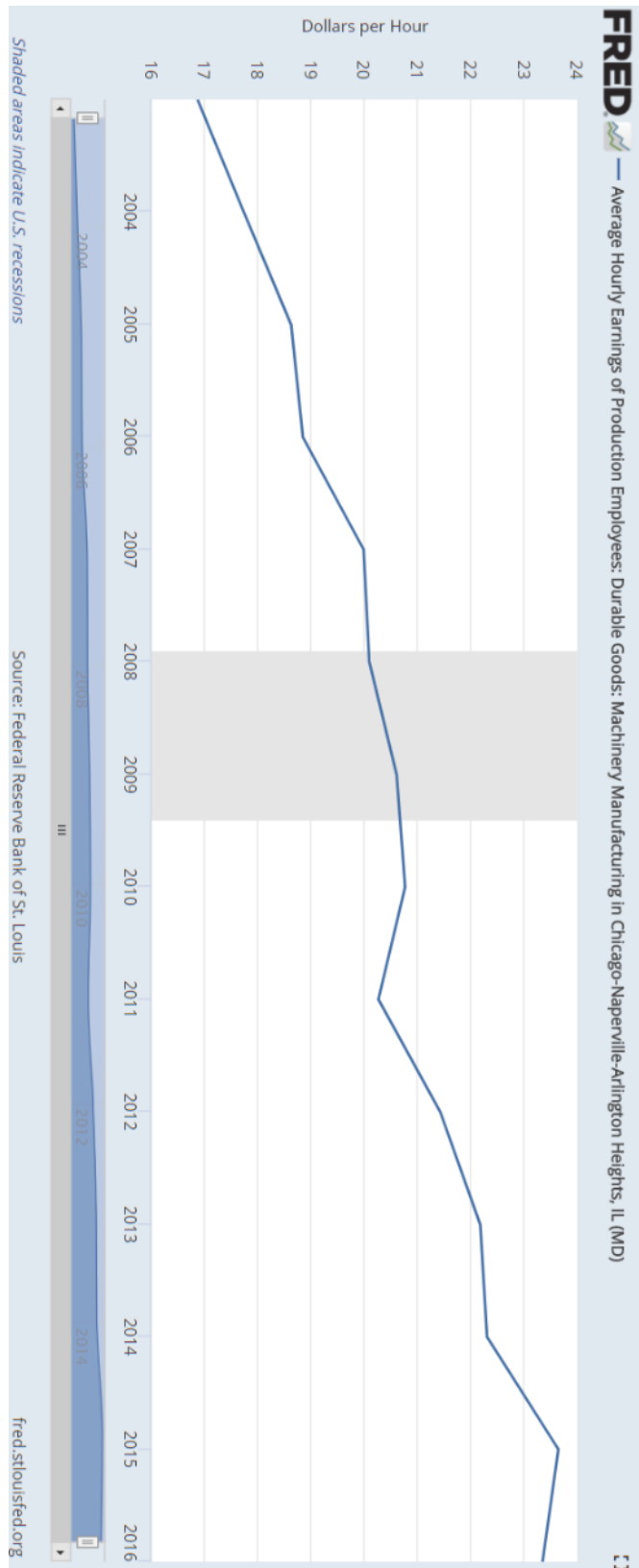
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Graph #4



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Graph #5



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Debunking Myths About Manufacturing Jobs

Adapted and paraphrased from original source: <https://www.cnbc.com/2015/06/17/debunking-myths-about-manufacturing-jobs-.html>

Original author: Lauren Flick

Manufacturing jobs have a reputation—and it's often not complimentary.

The image of a manufacturing job is that it is dirty, backbreaking, and low-paying. Further, women need not apply as manufacturing is an industry dominated by men. But separating fact from fiction about the actual people behind the welder's mask and on the assembly line can be tricky.

One of the above statements is true, but only one. Do you know which?

Myth No. 1: Manufacturing jobs are low-paying.

Reality: According to a 2013 congressional report, hourly pay was 17% higher in manufacturing than in other industries.

What does that mean for the average salary? More than you might think. According to the National Association of Manufacturers (NAM), as of 2013, the average manufacturing worker in the United States earned \$77,506 each year, including pay and benefits.

The congressional report also says that "manufacturing jobs are more likely to come with benefits, including medical and retirement benefits, than service-sector jobs. They also are more likely to require on-the-job training than jobs in other segments of the economy."

Myth No. 2: Manufacturing jobs only require low-skills and there are limited opportunities.

Reality: "The reality is that today's manufacturing workers are as likely to operate robots as they are wrenches, and use math more than muscle—this isn't your grandpa's factory floor," Sen. Klobuchar said in her email.

A report released this February from Deloitte and The Manufacturing Institute said that 84% of manufacturing executives are concerned about a significant talent shortage in manufacturing. Between now and 2022, the manufacturing sector will need to fill 2.2 million openings for production workers. Half a million of those openings will be for engineers, and a large number of job openings will be for new occupations.

Myth No. 3: Manufacturing is a male-dominated industry.

Reality: Manufacturing *is* a male-dominated industry.

GM CEO Mary Barra might be a high-profile head of a well-known manufacturing company, but she's the exception to the rule. Women currently hold only 27% of manufacturing jobs, according to the congressional report.

For an occupation that offers so much opportunity, why aren't more women in this sector?

In August 2014, Women in Manufacturing (WiM) surveyed 877 women and found that:

- Less than 10% of women between 17-to-24 years old chose manufacturing as one of their top five career fields.
- Less than half thought the work would be interesting or challenging.

Among women already in the manufacturing sector, 82% said they found their field offered interesting and challenging work. Additionally, 74% of women felt it did in fact offer multiple career opportunities.

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Week 3, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: The Skills You Bring to the Manufacturing Field

Students take notes about modern manufacturing skills mentioned in a video and in an article and check off those that they already have. Students then take two skill inventories and list their strongest skills. Lastly, students journal about how their skills prepare them for jobs in modern advanced manufacturing.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
CUNY Career Kit: Myths and Facts About Jobs in Manufacturing – Quiz and Answer Sheet: p. 20-21
- Handout (attached): Make one copy for each student.
Treasure Hunt on Skills Modern Manufacturers Need
- Video: Manufacturing Has a Home for Everyone (running time: 02:33)
<https://www.youtube.com/watch?v=p3RgWhSVUok>
- Classroom Resource: 11 index cards with one of the following on each:
 - Work ethic
 - Specialized
 - Adaptable
 - Manual
 - Flexibility
 - Spatial understanding
 - Cooperation
 - Initiative
 - Persistence
 - Dependability
 - Independence
- Handout (attached): Make one copy for each student.
Manufacturers Are Hiring Again; What Skills Are They Looking For?

For Activity #2:

- Handout (attached): Make one copy for each student.
Skills Identification
- Handout (attached): Make one copy for each student.
Multiple Intelligences Teacher

TEACHER PREPARATION: Prior to this lesson, fill out the first two pages of the Treasure Hunt for Activity #1 after watching the video and reading the article. This will act as your answer sheet for those activities.

ACTIVITY #1: Conduct a Manufacturing Skills Treasure Hunt – 70 minutes

Review Journaling Homework

- Ask students:
 - How did your journaling assignment go?
 - Was it easy or difficult to write two pages? Why or why not?
 - How do you think the realities of modern manufacturing might influence your future?
- Walk around the room and check that each student has done their journal writing homework.

Review Reading Homework

- Instruct students to get out their *Treasure Hunt on Myths and Realities of Manufacturing*.
- Put students in three groups to find facts that dispel the myths listed in the homework article. Assign each group one myth:
 - Group #1: Myth #1
 - Group #2: Myth #2
 - Group #3: Myth #3
- Instruct each group to do the following:
 - State the myth.
 - State the facts that show the myth is true or false.
 - Prepare for a brief presentation.
- Have groups give their brief presentations. After each, ask:
 - Are their additional notes for the final section in their *Treasure Hunt for Debunking Myths About Manufacturing Jobs* sheet?
 - Tell them to fill that section in with new information.

Take the CUNY Myths and Facts Quiz

- Tell students you think they are fully prepared for a quick True/False quiz on the Myths and Facts in Manufacturing.
- Pass out the quiz and have students answer the questions.
- Put students in pairs and instruct them to:
 - Review their answers.
 - Choose facts from their treasure hunt that prove that their answer is right.
- Ask one pair:
 - What is your answer to the first question?
 - What were the facts did they choose to prove their answer is right?
 - Ask the class:
 - Are there other facts that you want to add?
- Use this procedure for the remaining four questions.

Watch Video and Identify Skills Required for Advanced Manufacturing

- Tell students they will learn about skills that modern manufacturers need in their employees and see which ones they already have.
- Pass out *Treasure Hunt on Skills Modern Manufacturers Need*.
- Go over the treasure hunt instructions as a class so students understand what notes they are to take.
- Have students take notes while they watch the video.
-
- After students have watched it once, ask if they need to watch it again..
- Put students in pairs to share notes and add to their lists:
 - Go from pair to pair to name a skill.
 - List all skills on the board.
 - Continue until students have no new skills to add.

- Instruct students to make sure they have all the skills listed on the board in their checklist; then, they should check off the skills they have.
- Ask students to share some of the skills they checked off.

Vocabulary Needed for the Reading

- Put student in four groups and deal out the index cards. Some groups will have more cards than others.
- Have students define the words using their phones and/or dictionaries and put their words in a sentence that clearly demonstrates their meaning.
- Go from group to group to:
 - Get the definition and sentence for one of their words.
 - Write down the words and definition as students present them.
- Continue going from group to group until you have all the words and their definitions on the board.

* Read, Annotate, Discuss Reading

- Tell students they are going to take a close look at an article about modern manufacturing skills.
- Pass out *Manufacturers Are Hiring Again; What Skills Are They Looking For?* and project a copy overhead.
 - Have students take out their *Annotation Key*.
 - Tell students that what is important in this reading are the skills needed for modern advanced manufacturing. That is the only thing they should focus on underlining.
- Use the following Think Aloud process to understand the first two paragraphs:
 - Read the first sentence out loud and ask:
 - How would you say this sentence in your own words?
 - Is there anything in this sentence you would annotate?
 - Something you don't understand, are surprised about, agree or disagree with?
 - Are there any skills for modern manufacturing in this sentence?
- Repeat this process for each sentence in the first two paragraphs.
- After the first two paragraphs have been fully annotated, tell students to complete the rest of the article, underline modern manufacturing skills, and make other annotation marks.
- When students are finished, go round robin to have each student give you a new skill that you write on the board.
 - Continue this process until you have a full list.
- Instruct students to write this list of skills in their treasure hunts sheet and check off those that they already have.
- Ask students to share those skills they checked off.

Break – 10 minutes

ACTIVITY #2: Take Two Skills Inventories – 50 minutes

Take the First Skill Inventory

- Tell students they are going to take two skill inventories to see if they can add more skills to their list.
- Pass out the *Skills Identification* list and tell students to:
 - Check off all skills that they have.
 - Circle their strongest skills.
- Ask different students:

- Which skill categories were your strongest?
- Which individual skills were your strongest?

Take the Second Skill Inventory

- Pass out the *Multiple Intelligences Teacher* list and tell students to:
 - Check off all skills that they have.
 - Circle their strongest skills.
 - Ask:
 - Which statements in each category describe you best?
 - Who has strengths in a number of areas? Name your top two.
 - Write the following seven words on the board: Linguistic, Logical, Spatial, Bodily-Kinesthetic, Musical, Interpersonal, and Intrapersonal.
 - Ask:
 - What do the words interpersonal and intrapersonal mean?
 - What do you think the “intra” means?
 - What do you think “inter” means?
 - What do you think the other categories mean?
 - Tell students to copy their strongest skills into the inventory and put check marks next to those they think will be useful in a modern manufacturing job.
 - Ask students to share their findings.
-

Break – 10 minutes

ACTIVITY #3: Write About Your Skills – 40 minutes



Journal Writing

- Ask: What are the skills manufacturers are looking for? Why do they need these skills?
 - Take notes on student answers on the board.
 - Ask: What are the skills you have that make you a good match for the manufacturing industry?
 - Take notes on student answers on the board.
 - Ask them for examples and explanations that can make a clear connection between who they are and the how they see the modern manufacturing world.
 - Have students write in response to this prompt: Describe yourself in terms of the skills you have. Explain how your strongest skills would make you effective in jobs in modern manufacturing.
 - Remind students that their writing should go on for two pages and that they do not have to be concerned about grammar or spelling.
-

HOMEWORK



WRITE: Have students write in response to the prompt: Tell a story from your life that demonstrates one of your strongest skills. How did you learn that skill? How do you use it now?

Important! Students should bring ALL of their reading and writing assignments to the next class.

Teacher Preparation Note: Before the next class, write a short one-page journal entry that responds to the first part of the writing prompt (describe yourself in terms of the skills you have) and prepare to do a demonstration in Activity #1 from the next lesson that shows students how to use the *Organizer Sheets*.

Myths and Facts About Jobs in Manufacturing Anticipation Guide

SOURCE	
Article: <i>"Mike LeFevre, Steel Worker": A Summary of An Interview with Studs Terkel</i>	What are the Myths?
Graph #1: Average Compensation Per Hour By Industry	What are the Realities?
Graph #2: Percent of Workers with Medical Care and Retirement Benefits	What are the Realities?

With a partner, write **True** or **False** based on your understanding of the following statements.

- _____ Hourly pay in Manufacturing jobs is higher than in other industries.
- _____ Manufacturing workers must be in strong physical shape.
- _____ Between now and 2022, there are expected to be over 2 million openings for production workers in the Manufacturing sector.
- _____ You need an Engineering degree to work in Advanced Manufacturing.
- _____ Women currently hold about 50% of Manufacturing jobs.

Anticipation Guide Answer Key

Adapted from “Debunking myths about manufacturing jobs” by Lauren Flick
<http://www.cnn.com/2015/06/17/debunking-myths-about-manufacturing-jobs-.html>

1. **TRUE** According to the U.S. Department of Commerce, hourly compensation is 16.5 percent higher on average in Manufacturing than in other industries.
2. **FALSE** “The reality is that today’s Manufacturing workers are as likely to operate robots as they are wrenches, and use math more than muscle—this isn’t your grandpa’s factory floor.”
3. **TRUE** Between now and 2022, the Manufacturing sector will need to fill 2.2 million openings for production workers.
4. **FALSE** “You don’t need an Engineering degree, or even any degree, to work in Advanced Manufacturing, although of course it is helpful.”
5. **FALSE** Women currently hold a mere 27 percent of Manufacturing jobs, according to the congressional report—only 17 percent hold board seats, only 12 percent are executive officers, and just 6 percent are CEOs.

For the video and the reading, take notes on the skills mentioned in each and then check off those skills you have. For the inventories, first take the inventories and then copy those skills that you think are strongest into the last section of this Treasure Hunt.

[illegible]

[illegible]

INVENTORIES: YOUR BEST SKILLS FROM BOTH INVENTORIES

[illegible]

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Manufacturers Are Hiring Again; What Skills Are They Looking For?

Adapted and paraphrased from original source: <http://www.softwareadvice.com/resources/manufacturers-skills-in-demand>

Original author: Justin Guinn

The Loss of “Old-Line” Manufacturing

We’ve moved out of an age where a pair of hands, a strong back, and a healthy work ethic is all that’s needed to get a good paying job in manufacturing. The shift away from “old-line” manufacturing toward more advanced, computer-assisted manufacturing has changed the type of worker needed. As new technical processes become increasingly complex, the need for specialized and adaptable workers grows as well.

Many jobs that were once common, like manual sorting, are now gone. Automation on the shop floor has replaced much of the manual labor workforce. Now a different kind of worker is needed. Here is a summary of the skills needed:

Old World	New World
Learning one or two specific technical roles	Mechanical reasoning, logical problem solving, and spatial understanding
Physical strength and flexibility	Personal flexibility, communication, and cooperation
Ability to follow fixed, unchanging procedures	Initiative, persistence, and independence
General attention to production and safety procedures	Attention to detail, self-control, and dependability
Following orders	Making independent decisions
Operating, maintaining, designing mechanical machinery	Operating computers or computerized machinery and using computers for many different needs

Today, manufacturers need workers who either have a technical skill set or possess specialized skills that machines can’t do. These are in high demand and short supply.

What are some of the skills that modern manufacturers are looking for?

- Knowledge of mechanical and electrical engineering processes
- Ability to work with computerized systems
- Ability to read and write machine programming code
- Ability to read manufacturing blueprints
- Ability to operate automated manufacturing systems
- Understanding of hydraulic, pneumatic, and electrical systems

Manufacturers Can’t Find the Talent They Need

As US manufacturing has advanced, workers have struggled to keep up with the changes. The National Association of Manufacturers (NAM) recently reported that over 80% of manufacturers are having difficulty finding qualified talent to fill their employment needs. This labor shortage is made worse by the retirement of Baby Boomers.

The Global Intelligence Alliance (GIA) expands on this sentiment. In a recent survey of 95 global manufacturing executives, the GIA found that the lack of workforce skills is the top concern for manufacturers across the world.

The shortage of skilled labor is both a problem and an opportunity. It is a problem that manufacturers everywhere are anxious to overcome. It is an opportunity that individuals seeking manufacturing employment across the nation should rush to take advantage of.

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Skills Identification

Put a checkmark next to each skill that you have. Add up the number of checkmarks for each category, and put the number next to the title of the category

Communication Skills

- ☐ reading and following directions
- ☐ putting things in alphabetical order
- ☐ comparing or cross-checking two lists
- ☐ filling out forms
- ☐ writing letters and memos correctly
- ☐ reading and understanding policies and memos
- ☐ writing reports
- ☐ speaking to people you don't know
- ☐ speaking English *and* another language
- ☐ taking notes while someone speaks
- ☐ finding information (getting what you need to know out of the phonebook, dictionary, library, etc.)
- ☐ using a map
- ☐ reading bus, train, and plane schedules
- ☐ explaining things to other people
- ☐ know when to ask for help or more explanation

Number Skills

- ☐ doing arithmetic correctly
- ☐ using percentages and decimals
- ☐ using a calculator
- ☐ rounding off numbers
- ☐ typing/keyboarding
- ☐ calculating hours worked, money owed, etc.
- ☐ estimating costs and/or time needed to complete a job
- ☐ using a database program on a computer

Technical Skills

- ☐ making, fixing, and repairing things
- ☐ operating machinery
- ☐ installing things
- ☐ building things
- ☐ gardening, landscaping, and farming

Business Skills

- ☐ operating a computer
- ☐ using a business telephone
- ☐ filing, sorting, and classifying information
- ☐ balancing checkbooks
- ☐ working with budgets
- ☐ setting up and closing out a cash register

Management and Self-Management Skills

- ☐ being patient with others
- ☐ keeping a cheerful attitude
- ☐ getting interested/excited about the task at hand
- ☐ offering to help when it's needed
- ☐ knowing how to take directions
- ☐ motivating myself to do what needs to get done
- ☐ helping motivate others to get the job done
- ☐ prioritizing tasks so that the larger goal is met on time
- ☐ following the rules
- ☐ presenting a neat and professional image
- ☐ checking your own work
- ☐ working hard without complaining
- ☐ using courtesy when dealing with others
- ☐ seeking help when needed
- ☐ being eager to learn
- ☐ speaking up for yourself
- ☐ solving problems in a cooperative way

Creative/Artistic

- ☐ artistic
- ☐ drawing
- ☐ expressing
- ☐ performing
- ☐ presenting artistic ideas
- ☐ dancing, body movement
- ☐ visualizing shapes
- ☐ designing
- ☐ model making
- ☐ making handicrafts
- ☐ writing poetry
- ☐ illustrating, sketching
- ☐ doing photography
- ☐ mechanical drawing

People Skills

- ☐ caring for children responsibly
- ☐ caring for the sick and elderly
- ☐ showing warmth and caring
- ☐ calming people down
- ☐ helping people complete a task
- ☐ teaching someone how to do something
- ☐ knowing how to get along with different people/personalities
- ☐ leading groups or activities

From: Integrating Career Awareness into the ABE & ESOL Classroom, **Section II, Lesson 7: Identifying Skills**

MULTIPLE INTELLIGENCES TEACHER

<http://uw.kqed.org/edresources/plan>

(Adapted from the works of Howard Gardner, David Lazeer and Jim Mundell)

Place a check in all boxes that best describe you.

LINGUISTIC

- ☐ I really enjoy books.
- ☐ I hear words in my head before I write, read or speak them.
- ☐ I remember more when I listen to the radio or an audiocassette than when I watch television or films.
- ☐ I enjoy word games such as crossword puzzles, Scrabble™, anagrams or Password™.
- ☐ I like puns, tongue twisters, nonsense rhymes and double meanings.
- ☐ English, social studies and history were easier subjects for me than science and math.
- ☐ When I am driving I like to read the billboards and signs, and I notice them more than the scenery along the road.
- ☐ I often refer to things I have read or heard in conversations.
- ☐ People often ask me the meaning of words.
- ☐ I have written something recently that I was proud of or that was published or otherwise recognized.

☐ Total Linguistic boxes checked

LOGICAL

- ☐ I can quickly and easily compute numbers in my head (example: double or triple a cooking recipe or carpentry measurement without having to write it on paper).
- ☐ I enjoy math and science in school.
- ☐ I like solving brainteasers, logical games and other strategy games such as chess and checkers.
- ☐ I like to set up "what if" experiments (example: "What if I fertilized my plants twice as often?").
- ☐ I look for structure, patterns, sequences and other logical order.
- ☐ I wonder about how some things work and keep up-to-date on new scientific developments and discoveries.
- ☐ I believe that there is a rational explanation for almost everything.
- ☐ I can think in abstract, clear, imageless concepts.
- ☐ I can find logical flows in things people say and do at work and home.
- ☐ I feel more comfortable when things have been quantified, measured, categorized or analyzed in some way.

☐ Total Logical boxes checked

SPATIAL

- ☐ When I close my eyes, I can see clear visual images.
- ☐ I respond to color.
- ☐ I often use a camcorder or camera to record my surroundings.
- ☐ I enjoy visual puzzles such as mazes and jigsaw puzzles, and 3-D images.
- ☐ I have vivid dreams at night.
- ☐ I navigate well in unfamiliar places.
- ☐ I often draw or doodle.
- ☐ Geometry is easier than algebra.
- ☐ I can imagine what something would look like from a bird's eye view.
- ☐ I prefer reading publications that have many illustrations.

Total Spatial boxes checked

BODILY-KINESTHETIC

- ☐ I take part in at least one sport or physical activity regularly.
- ☐ I find it difficult to sit still for long periods of time.
- ☐ I like working with my hands (for example, sewing, weaving, carving, carpentry, model building).
- ☐ I frequently get insights or ideas when I am involved in physical activities, such as walking, swimming or jogging.
- ☐ I enjoy spending my free time outside.
- ☐ I tend to use gestures and other body language when engaged in conversations.
- ☐ I need to touch or hold objects to learn more about them.
- ☐ I enjoy daredevil activities such as parachuting, bungee jumping and thrilling amusement rides.
- ☐ I am well coordinated.
- ☐ To learn new skills, I need to practice them rather than simply read about them or watch them being performed.

Total Bodily-Kinesthetic boxes checked

MUSICAL

- ☐ I have a nice singing voice.
- ☐ I know when musical notes are off-key.
- ☐ I often listen to music in a variety of formats -- radio, records, tapes, CD and so on.
- ☐ I play an instrument.
- ☐ My life would be less dynamic without music.
- ☐ I often have a tune running through my mind during the day.
- ☐ I can keep time to a piece of music.
- ☐ I know the melodies of many songs or musical pieces.
- ☐ If I hear musical piece once or twice, I can easily repeat it.
- ☐ I often tap, whistle, hum or sing when engaged in a task.

Total Musical boxes checked

INTERPERSONAL

- ☐ People often come to me to seek advice or counsel.
- ☐ I prefer team and group sports to individual sports.
- ☐ When I have problems, I prefer to seek help from other people rather than work it out alone.
- ☐ I have at least three close friends.
- ☐ I enjoy social pastimes like board games and charades more than individual pastimes such as video games and solitaire.
- ☐ I like the challenge of teaching other people what I know how to do.
- ☐ I have been called a leader and consider myself one.
- ☐ I am comfortable in a crowd of people.
- ☐ I am involved in local school, neighborhood, church and community activities
- ☐ I would rather spend a Saturday night at a party than spend it at home alone

Total Interpersonal boxes checked

INTRAPERSONAL

- ☐ I regularly spend time reflecting, meditating or thinking about important life questions.
- ☐ I have attended classes, seminars and workshops to gain insight about myself and experience personal growth.
- ☐ My opinions and views distinguish me from others.
- ☐ I have a hobby, pastime or special activity that I do alone.
- ☐ I have specific goals in life that I think about regularly.
- ☐ I have a realistic view of my own strengths and weaknesses backed up by accurate feedback from others.
- ☐ I would rather spend a weekend in a cabin or some other hideaway than at a large resort with lots of people.
- ☐ I am independent-minded and -willed.
- ☐ I keep a journal or diary to record the events of my inner life.
- ☐ I am self-employed or have seriously considered starting my own business.


Total Intrapersonal boxes checked

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Week 3, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Writing About Yourself and Manufacturing

Class to be held in the Technology Lab 

Students prepare to respond to a set of writing prompts for a longer piece, talk through their response with a partner, and write their first draft in class.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
Organizer Sheets for a First Draft
- Teacher Resource: Teacher Demonstration Materials
 - A copy of a journal entry that you, the teacher, have written that responds to the first part of the writing prompt.

TEACHER PREPARATION: Prior to this lesson, write a short one-page journal entry that answers the first question of the writing assignment and prepare to do a demonstration in Activity #1 that shows students how to use the *Organizer Sheets*.

ACTIVITY #1: Present and Prepare for Writing Assignment Prompts – 60 minutes

Check-In About Journaling

- Ask students:
 - How did their journaling assignment go?
 - Was it easy or difficult to write two pages? Why or why not?
 - What skills did you write about?
 - How did you learn them and how do you use them now?

Present the Writing Prompts and the Organizer Sheet

- Write the following prompts on the board:
 - What are the mistaken ideas people often have about manufacturing?
 - What is the truth about modern manufacturing?
 - Why are you interested in manufacturing?
 - What kinds of skills and talents do you have that would make you a good fit for a manufacturing career?
- Tell students they are going to do a first draft of a longer piece of writing that draws from their journal and class readings. They will be able to prepare for their first draft by talking it through with a partner.
- Go over the questions on the board. Ask:
 - Which assignments that you have done so far will help you answer each of these questions?
 - Write the name of the assignment next to each of the questions on the board.
- Pass out the *Organizer Sheets for a First Draft*. Give the following instructions for each question:
 - Review past assignments.
 - Review what you underlined in the articles and take notes on those facts or ideas you think that you will use in your answer to the question.

- Underline the portions of your own writing you want to use and then take notes on the *Organizer Sheets*.
- Repeat this process for each of the writing prompt questions.
- When you have collected all the information that will help answer the question, read it over to yourself and decide what will help you write and the order that you want to present the information.
- Lastly, number each of their notes.
- Write the ordered notes on page 2.
- Demonstrate how to do complete this task by narrating your thought process through each of these steps:
 - Project the *Organizer Sheet*, page 1.
 - Read the directions out loud.
 - Project the journal entry that you, the teacher, prepared before class and read it through, underlining those parts of the entry that would be useful in answering that question.
 - Project the *Organizer Sheet* and take notes on the points you want to make from your journal entry into the appropriate place on the organizer sheet.
 - Add other ideas that come to mind.
 - Go to page 2 and talk through the order you want to put them in when you write.
 - Fill in the appropriate box in page 2.
- Answer student questions.

Complete the Organizer Sheet

- Work individually with students to help them complete their organizer sheets.

Break – 10 minutes

ACTIVITY #2: Do a Talk Through of Your First Draft – 50 minutes

Demonstrate a Talk Through of a First Draft Question

- Tell students they will now talk through their first draft with a. As before, their partner should ask questions that will help make the writing clearer and more detailed. Feel free to make changes to your notes as a result of talking to your partner.
- Remember: The most important part of writing is clarity!
- Explain guidelines for a talk through:
 - The writer is not to read the prompt out loud but share their answer with their partner.
 - The listener is to pretend that he/she does not know anything about the assignment or the topic and is listening to a friend talk to them about the topic.
- Ask a student to talk through their first paragraph with you as an example. Then,
 - Ask questions that will help the student clarify what they have to say.
 - Ask other students to talk through one of the questions from the *Organizer Sheet* to make sure they understand the process.
 - Encourage students to make changes.

Pairs Do a Full Talk Through

- Put students in pairs to do a Talk Through as described above.
- When the first author/speaker has answered all of the questions, they will exchange roles.

Final Talk Through Questions

- When students have completed their talk through, ask:
 - Was this talk through helpful?

- Did you make changes based on your partner's questions?
 - What did you change to make what your ideas clear??
-

Break – 10 minutes

ACTIVITY #3: Write Your First Draft – 50 minutes

- Tell students they are now going to write their first draft. Provide these guidelines for their writing:
 - Write a new paragraph for the answer to each question, but do not include the question itself in the paragraph.
 - Ask: How do you make a new paragraph? (*Answer: Indent.*)
 - Students should use their notes and include those ideas in their writing. If other ideas come to them while they are writing, they are welcome to use those.
 - They should listen to the voice in their heads and write down what it says, similar to when they are speaking.
 - They should not worry about grammar, spelling, or penmanship.
 - They should not worry if their writing is not perfect--; this is a first draft and they will have time to revise.
 - A first draft is a first try!
 - Have students write their drafts.
 - Circulate around the room and provide assistance to students who have questions or who are getting stuck.
-

HOMEWORK

COMPLETE: Have students complete their first draft for others to read in the next class and type them up on a computer if possible.

Teacher Preparation Note: Before the next class, create 10 index cards with sentence fragments listed in the material list for Activity #2:

- My house in Chicago
- Is on the desk
- Because I'm tired
- The officer on foot patrol
- Addressing the crowd
- When she was little
- Sick and sad
- Before his game
- My husband on his phone
- Over the top

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ORGANIZER SHEETS FOR A FIRST DRAFT

Go through your writings and readings and underline those parts that will help you answer these questions. On page 1, copy or take notes on what you have underlined under the appropriate question below. On page 2, put these notes in an order that makes the most sense to you.

1. What are the stereotypes or myths people often have about manufacturing?
Notes:
2. What is the truth about modern manufacturing?
Notes:
3. Why are you interested in manufacturing as a career?
Notes:
4. What skills and talents do you have that make you a good fit for a manufacturing career?
Notes:

1. What are the mistaken ideas people often have about manufacturing?
Notes:
2. What is the truth about modern manufacturing?
Notes:
3. Why are you interested in manufacturing as a career?
Notes:
4. What skills and talents do you have that make you a good fit for a manufacturing career?
Notes:

Week 4, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Peer Review and Peer Editing for First Drafts

Students review each other's first drafts and make a plan for rewriting their first draft. They learn the definition of a sentence and how to find and correct sentence fragments.

MATERIALS

For Activity #1:

- Handout (attached): Make two copies for each student.
Reader Comment Page

For Activity #2:

- Classroom Resource: 10 index cards with one of the following sentence fragments written on each:
 - My house in Chicago
 - Is on the desk
 - Because I'm tired
 - The officer on foot patrol
 - Addressing the crowd
 - When she was little
 - Sick and sad
 - Before his game
 - My husband on his phone
 - Over the top

For Activity #3:

- Handout (attached): Make one copy for each student.
Fragments Worksheet
- Teacher Resource (attached): Make one copy for the class to sign up for readings to be made available during the next class.
CUNY CareerKit: Career Narrative Sign-Up, page 177

TEACHER PREPARATION: Prior to this lesson, create 10 index cards with sentence fragments listed in the material list for Activity #2.

ACTIVITY #1: Peer Review – 60 minutes



Peer Review

- Students will provide feedback on each other's written work. They should offer constructive feedback to make their partner's work clearer and more interesting.
- Put students into groups of three and have students take out their drafts.
- Pass out two copies of the *Reader Comment Page* to each student. Explain that they are going to:
 - Read the paragraphs written by the other two people in their group.
 - Fill out one *Reader Comment Page* for each author's written work that they review.
 - They are NOT to comment on grammar or spelling yet. However, if they are not sure what something means, they can ask the writer for clarification.

- They should be encouraging and helpful. Specific comments on their partner's work will help them when they do a re-write.
- After students have evaluated one written work, they should pass it to their left and evaluate another.
- After students have completed two *Reader Comment Pages*, they should give their evaluations to the authors, and the authors should read the comments.

Talk About the Reader Comments as a Class

- Ask the class:
 - Did your evaluators say the same or different things?
 - Did your evaluators say things that give you ideas for how to make your paragraphs better?
 - What are they?
 - Did your evaluators write anything that you don't understand? Ask for clarification when you are back in your group.
- Put students back in their groups to discuss feedback and to get clarification.

TEACHER NOTE: Evaluate the student essays using a copy of the *Reader Comment Page*. You will need to read the essays and the student comments on those essays, in order to see if the reviewers' comments will help the student improve their written work. Your comments should include suggestions on how better to develop the piece of writing. You can reinforce feedback from other reviewers and/or steer the writer to consider other important issues. Additionally, **DO NOT** correct grammar issues in students' drafts. In your comments, you should also indicate a due date for rewrites of these drafts.

Break – 15 minutes

ACTIVITY #2: Grammar Lesson on Sentences – 60 minutes

Nouns, Verbs, Adjectives Activity

- Tell students they will discuss different types of words that make up sentences and define what a sentence is.
- To get students limbered up, use the following exercise:
 - Ask: What is a noun?
 - Have students call them out all at once or go around and have each student say one at a time – but fast. Challenge students by saying, “Name 5,000 nouns. Go!”
 - Repeat procedures as above. Ask:
 - What is a verb? “Name 5,000 verbs. Go!”
 - What is an adjective? “Name 5,000 adjectives. Go!”
- Put students in groups of three. Have them each get out a sheet of paper and write one of these headings at the top of their paper:
 - Nouns
 - Verbs
 - Adjectives
- Tell students they are to pass their papers around as quickly as possible and add a new item on each list that comes around.
 - “One, two, three. Go!”
- After five minutes, say “Stop!” Have the groups tally the number of words they have on each list.
- Put three columns on the board for Nouns, Verbs, and Adjectives. Ask groups how many words they have in each category and write the numbers under the appropriate columns.
- Go around the room and have each group read one noun. Write these on the board until you have 10 nouns in the column on the board. Then, repeat for verbs and adjectives.

Proper Nouns Activity

- Ask students:
 - What is a proper noun? (Answer: *The formal name of a person place or thing.*)
 - What is the rule for proper nouns? (Answer: *Capitalize them, even in the middle of a sentence!*)
 - Have students line up at the board; and each write one proper noun and pass the chalk.
 - Encourage them to write all different kinds of proper nouns.
 - Ask:
 - What is the rule for proper nouns?
 - Are all of these proper nouns written correctly?
-

Break – 15 minutes

ACTIVITY #3: Fixing Fragments – 60 minutes

Fixing Fragments on Index Cards

- Write the following sentence on the board:
 - Children jump all over the place.
- Write the following on the board as well:
 - What is a sentence?
 - What is a subject? (Answer: *The subject is a noun and is the word that the sentence is about.*)
 - What is a predicate? (Answer: *The rest of a simple sentence; it comes after the subject.*)
 - What is always in the predicate? (Answer: *A verb.*)
 - What are the two requirements to be a sentence? (Answer: *A noun and a verb.*)
- Ask the questions on the board. Write down only the answers that students give that are correct.
- Ask the questions about the “Children jump...” sentence:
 - What is the subject? (Answer: *Children.*)
 - What is the predicate? (Answer: *Jump all over the place.*)
 - What is the basic sentence? (Answer: *Children jump.*)
- Ask the above questions for a few more sentences to make sure students understand sentence structure.
- Put students in pairs or groups, depending on class size, and deal out the 10 index cards to the pairs or groups.
- Tell students that all the cards have sentence fragments, meaning they are not full sentences. They will:
 - Create a full sentence using the sentence fragments on the cards.
 - Decide if they have added a subject or a predicate.
 - Write their fragment and new sentence on the board.
- When students are finished, go from sentence to sentence and have the students:
 - Read their sentence fragment and new sentence.
 - Explain what they added to make it a full sentence.
- Ask:
 - What is a sentence?
 - What is the rule about fixing fragments? (Answer: *Make sure there is a clear subject and a clear predicate.*)

Fixing Fragments in a Reading

- Pass out the *Fragments Worksheet*. Tell students there are 26 fragments in the reading. (You can plan to use just the first page if the two pages seem too much.) Tell students to:
 - Read the article.
 - Underline the first 10 fragments they find.
 - Circle the sentence the fragment should be attached to.

- Put the worksheet on the overhead and demonstrate the instruction on the first fragment in the reading.
- When students are finished with this exercise, put them in pairs to compare notes and make revisions. They should see if they can integrate the fragment with the sentence they circled.

Give points for finding and fixing sentence fragments

- Create a table with a column on the board for each pair and tell them they can earn points for each of the following:
 - Identifying a fragment correctly.
 - Identifying the part of the sentence the fragment should be attached to.
 - Giving a full sentence that includes the fragment they identified.
- Go from pair to pair using this process:
 - Ask the pair:
 - What is the first/next fragment in the reading?
 - What is the sentence it is attached to?
- Give a point for correct answers to each of these questions.
 - Ask the pair:
 - What is your new sentence?
 - Have the pair read their sentence.
 - Ask the class:
 - Is this new sentence correct?
 - If so, give the pair a third point.
 - If not, ask another pair to give their sentence. If they get the answer right, give that pair the third point.
- Repeat this process for the next 16 fragments in the reading.

Prepare for Next Class

- Pass around the *Career Narrative Sign-Up* sheet and have students sign up so you know how many copies of each narrative to bring to the next class. Make sure each student signs up for two narratives: one to complete in class and one for homework.

HOMEWORK



WRITE: Have students journal using this prompt: Did you find the peer review and editing processes useful? Do you have new ideas for making your first formal written piece better? What are they?

Teacher Preparation Note: Before the next lesson, be sure you are familiar with all the City Colleges of Chicago Manufacturing Career Pathways Charts and the questions that will help students understand how to read and understand them.

READER COMMENT PAGE

WRITER _____ READER _____

1. What is clear and interesting to you about this piece of writing? Help the writer by being as specific as you can.
2. As the reader, what is not clear or not easy to understand? What would you like to hear more about?
3. Do you have additional comments or suggestions?

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Fragments Worksheet

Adapted and paraphrased from original source: <https://www.alamancecc.edu/library-site/files/2014/06/FINDING-AND-FIXING-FRAGMENTS-WORKSHEET-SUMMARY-OF-THE-FILM-BELLE.pdf>

Original author: Alamance Community College

Belle is a 2013 British film which I highly recommend. Directed by Amma Asante. It stars Gugu Mbatha-Raw as the illegitimate mixed-race daughter of a Royal Navy officer in Britain. The officer's name is Captain Sir John Lindsay. The movie takes place in the middle of the 18th century. When slaves were still legal in England and the British were conducting a very profitable slave trade between Africa and the New World. Sir John Lindsay has met and fallen in love with a slave. Whom he rescues from a French slave ship. He names their child Dido Belle. After her mother dies, Sir John Lindsay brings the eight-year-old Belle back to Britain. He asks his great uncle William Murray, who is the 1st Earl of Mansfield and the Lord Chief Justice of England, to raise her. Because he must return to the Navy. The Lord Chief Justice is a very wealthy man. With a huge mansion and many servants. He has no children of his own. At first the Lord Chief Justice is reluctant to take the child. Because she is a mulatto. Sir John Lindsay says that Belle is his blood, his daughter and his heir, and has the right to be raised in England.

The Lord Chief Justice and his wife are already raising another grand-niece, Elizabeth Murray. Whose father has put her out of the house because he has re-married. Elizabeth Murray is the same age as Dido. Because Elizabeth needs a companion. The Lord Chief Justice decides to raise Belle as his own. The two nieces grow up to be beautiful young women. Belle has a fortune of her own. While Elizabeth's father won't give her a penny for a dowry.

The two girls are introduced to society. And put on the "marriage market." Each is expected to find a husband of suitable social class and wealth. They are introduced to the Ashfords, who have several sons. The oldest, James, will inherit the estate and wealth of his family, because of the law of primogeniture. Which held that estates cannot be divided, but must be inherited by the oldest son. The younger one, Oliver Ashford, will be a career military officer and can offer his noble name.

(Optional extension for the fragment assignment.)

Oliver Ashford is fascinated by Dido. Because she is “exotic.” Elizabeth thinks that the older brother, James, is in love with her, because he flirts with her the entire evening. But when Lady Ashford discovers that Elizabeth has no dowry. She absolutely forbids James to have anything to do with her. James agrees. He is a selfish and cruel man, only interested in wealth and power. Oliver proposes to Dido, who hardly knows him. However, she accepts his proposal, because that is what is expected of her.

At a party a week later, Oliver’s brother James physically assaults Belle for “ensnaring” his brother. Belle is shocked and afraid. At the same time, Elizabeth is jealous that Belle is engaged. And heartbroken that she has heard nothing more from James. Belle tries to convince Elizabeth that James is not the man for her. Elizabeth can’t believe that James put his hands on Belle. And assaulted her. They two girls fight. Elizabeth says she is better than Belle because Belle is illegitimate. Belle says that her father did not marry her mother but her father acknowledged Belle and left her all his money. While Elizabeth’s father won’t acknowledge Elizabeth or give her any money. Therefore it is Elizabeth who is inferior. Elizabeth runs away in tears.

The day after being manhandled by James. Dido tells her aunt and uncle that she no longer wants to marry Oliver. Reluctantly her aunt and uncle bring her to the Ashton estate to explain this to Lady Ashton. Lady Ashton is furious. She thinks that her son was already making a sacrifice to marry a half-black girl. And that Belle should be grateful to be admitted into such a noble family who is willing to accept such a half-breed. Belle answers that she doesn’t want to belong to a family that thinks she is lower than they are.

Career Narratives in Manufacturing Sign-up

In the space below, sign up to read a story about one of the following careers:

- Shipyard Welder
- Machinist
- Quality Control Inspector
- Industrial and Systems Manufacturing Engineer
- Sales Representative

Name	Career Narrative

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Week 4, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Review City Colleges of Chicago Manufacturing Career Pathways

Students learn about the City Colleges of Chicago Manufacturing Career Pathways and read about “days in the life of” different kinds of manufacturing professionals.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
City Colleges of Chicago Manufacturing Career Pathways chart

For Activity #2:

- Handout (attached): Make one copy for each student.
CUNY Career Kit: Interview with Amanda Reel, Welder, pages 171-172
CUNY Career Kit: Handout: Constructed Response: Amanda Reel, pages 173-174
<http://www2.cuny.edu/wp-content/uploads/sites/4/page-assets/academics/academic-programs/model-programs/cuny-college-transition-programs/adult-literacy/cuny-careerkit-for-hse-esl-learners/6-MA-CUNY-CK2017-U3-F-web.pdf>
- Handout (attached): Make two copies for each student: one to use during class and one as homework.
CUNY Career Kit: Career Narrative Questions, pages 178-179
- Handouts (attached): Bring the correct number for your class based on the Career Narrative Sign-Up you did during the last class.
CUNY Career Kit: Shipyard Welder, Thomas Tripp, pages 180-181
CUNY Career Kit: Machinist, Molly Woods, pages 182-183
CUNY Career Kit: Quality Control Inspector, pages 184-185
CUNY Career Kit: Tim Leopold, Industrial and Systems Manufacturing Engineer, pages 186-187

For Activity #3:

- Classroom Resource: Flip chart paper and markers.

TEACHER PREPARATION: Prior to this lesson, be sure you are familiar with all the *City Colleges of Chicago Manufacturing Career Pathway Charts* and the questions that will help students understand how to read them.

ACTIVITY #1: Review City Colleges of Chicago Manufacturing Career Paths – 60 minutes

- Tell students they are now going to learn about the Manufacturing career pathways at City Colleges of Chicago (CCC). These pathways and programs feature stackable credentials that result in specific manufacturing jobs and licenses. Our aim is to get comfortable reading this career pathway chart and to choose articles about people whose jobs you are interested in.

Read the Chart

Opening:

- Before getting started, ask:
 - What is a stackable credential?

- Answer: A certificate or degree where the classes students take to earn one credential will be counted towards a higher credential, allowing students to advance more quickly.
 - If there are a number of stackable credentials in a career path, what kinds of choices do you have?
 - Answer: They can complete as many stackable credentials as they want and even build on more later.
- Project the City Colleges of Chicago Manufacturing Career Pathways chart. This is the page that features the stackable credentials in Manufacturing.

Read the Basics in the Chart:

- Call on various students to answer each question regarding City Colleges of Chicago programs:
 - What is the adult education program that prepares you for Manufacturing college credit programs?
 - Answer: The Manufacturing Bridge.
 - How long is it?
 - Answer: The Bridge is two semesters or 32 weeks.
 - Why is it important to get a GED before going to college credit programs?
 - Answer: To qualify for financial aid.
 - What are the certificates and degrees offered at City Colleges of Chicago?
 - Answer: Basic Certificate, Advanced Certificate, Associates Degree.
 - What is the degree that is not offered at City Colleges of Chicago?
 - Answer: Bachelor's Degree.

Read the Career Paths

- For the CNC Machinist career path:
 - How many semesters does it take to get a Basic Certificate?
 - Answer: Two semesters.
 - What certificates/credentials can you earn?
 - Answer: Two NIMS credentials: Measurement, Materials & Safety, CNC operator
 - What is NIMS?
 - Answer: NIMS provides 60 credentials in precision metalworking, industrial maintenance, and on-the-job training.
 - Why would an employer be interested in your having NIMS credentials?
 - Answer: NIMS credentials show you have proven skills with this national level organization. Employers would be more likely to hire you.
 - What jobs can you get with a Basic Certificate?
 - Answer: Machine Operator, Tool and Dye Apprentice
 - What do these jobs pay?
 - Answer: \$12-\$15 per hour.
 - How many semesters does it take to get an Advanced Certificate?
 - Answer: Three semesters: Two semesters for the Basic and one more for the Advanced.
 - What certifications/credentials can you earn?
 - Answer: NIMS CNC Program Setup & Operation.
 - What jobs can get with an Advanced Certificate?
 - Answer: Machine operator and Tool and Dye Apprentice.
 - How much do these jobs pay?
 - Answer: \$14-\$20 per hour.
 - How many semesters does it take to get an Associate's Degree?
 - Answer: Four semesters: one more semester after the Advanced Certificate.
 - What certifications and credentials can you earn?
 - Answer: BC in Quality Assurance.
 - What jobs can you get with an Associates Degree?

- Answer: CNC Machinist, Tool and Dye Apprentice, Quality Assurance, Global Purchasing.
 - How much do these jobs pay?
 - Answer: \$14-\$25 per hour.
 - How many semesters does it take to get a Bachelor's Degree?
 - Answer: Four semesters at City Colleges of Chicago and two years at a university; four years total if attending full-time.
 - What is the total amount of time for the whole career path?
 - Answer: Two years for an Associate's Degree and four years for a Bachelor's Degree.
 - What college can you go to for a Bachelor's Degree?
 - Answer: IIT
 - What are the jobs you can get with a BA?
 - Answer: Global Purchasing, Marketing, and Sales, VP of Maintenance, VP of Production, VP of Quality Assurance.
 - How much will these jobs pay?
 - Answer: \$16 - \$44 per hour.
- For the Factory Automation career path, ask the same pattern of questions as above for each of the certificates and degrees:
 - How many semesters does it take?
 - What certifications/credentials can you earn?
 - What jobs can you get with an Advanced Certificate?
 - How much do these jobs pay?
- For the Welding career path, ask:
 - If you want to be a welder, what Basic Certificate program must you take first?
 - Answer: Welding.
 - How many semesters does it take?
 - What certifications/credentials can you earn?
 - What jobs can you get with an Advanced Certificate?
 - How much do these jobs pay?
 - What certificate do you take after the Basic Certificate in Welding?
 - Answer: Factory Automation Basic Certificate.
 - What would be the advantage of having two Basic Certificates?
 - Answer: Employers would know you could fill more job opportunities.
- Lastly, ask:
 - Based on this information, what career pathway looks interesting to you? Why?
 - How much time do you have for college-level study?
 - What certificate or degree do you think might be a good goal for you?

Break – 10 minutes

ACTIVITY #2: Read Career Narratives – 50 minutes

* The First Career Narrative

- Tell students they are now going to read about someone who has one of the jobs they can train for at City Colleges. They will read one as a class and then choose two others to read on their own.
- Pass out the *Constructed Response: Amanda Reel* handout.
 - Explain that they will answer these questions based on the reading.
- Pass out the *Interview with Amanda Reel, Welder* handout.
- Go round robin and have the students read the questions on the *Constructed Response* out loud.
- Instruct students to:

- Read the article and annotate.
 - Answer the questions on the *Constructed Response*.
 - Get a partner to review their responses and make changes, if needed.
- Go over the questions as a class.

* **A Career Narrative They Chose**

- Pass out the *Career Narrative Questions* handout.
- Pass out the Career Narratives based on the Career Narrative Sign-Up sheet distributed during the last class.
- Put students into groups according to the Career Narrative they chose.
- Go round robin and have the students read the questions in the handout out loud.
- Have students complete the first three prompts explaining why they chose the narrative, what they predict it will be about, and what they expect to learn from reading it.
- Discuss student answers to these first three questions.
- Tell students to annotate their reading, marking parts they thought were important, interesting, surprising or confusing as described in the *Annotation Key*.
- Ask the following set of annotation questions:
 - Of those things you underlined, what were the most important points brought up in the article?
 - What was surprising or interesting?
 - What was hard to understand or was confusing?
 - Were there aspects of this article you agreed with? Disagreed with?
 - How is this reading different than the readings we have done so far?
- After this discussion, direct students back to the questions page. Here, part of the question is written for them, and part of the question they will have to fill in. Tell students to complete the questions.

Break – 10 minutes

ACTIVITY #3: Give Short Presentations on What You Read – 50 minutes

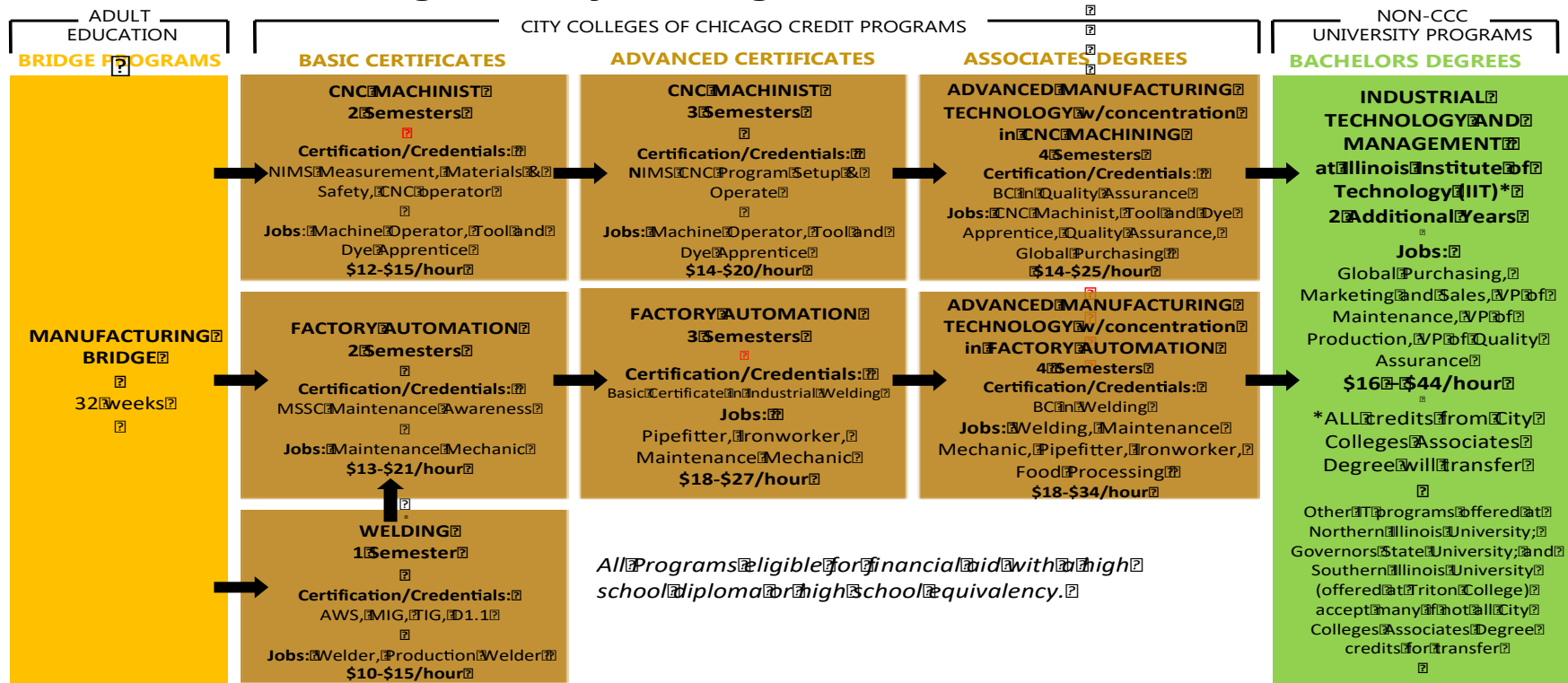
- Tell student groups to prepare a presentation on their Career Narrative using flip chart paper and markers. They must:
 - Discuss the Career Narrative Questions.
 - Identify the most important parts of the narrative to present.
 - Use flip chart paper and markers to prepare
 - All have a role in delivering the presentation.
- Have groups present:
- Have the class ask the presenters questions for clarity and more information.

HOMEWORK

- * **COMPLETE:** Have students read and annotate another Career Narrative they chose and complete the Career Narrative Questions.

Teacher Preparation Note: Before the next lesson, e-mail the *Research Materials for Manufacturing Jobs* from the next lesson to students before the next class so they can access the links during this class.

City Colleges of Chicago: Manufacturing Pathways – Programs with Stackable Credentials



CERTIFICATIONS/CREDENTIALS signify exams or industry credentials that students should be able to earn after completing the required City Colleges coursework.

JOBS listed are a sampling of the types of jobs students can get in the salary range after they are certified. Data source for **SALARY** ranges: Economic Modeling Specialists International Quarter 4 Data Set: February 2016.

Estimated number of **SEMESTERS** for each program assumes students take 12 or more credit hours per semester; English 101 and Math 125 eligibility is also required. Additional entrance and completion requirements for individual programs are listed in the City Colleges of Chicago Academic Catalog.

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Interview with Amanda Reel, Welder

Adapted from <http://www.pma.org/campaign/8WIM/impact/Holidays2016-WiM-Impact.pdf>

Women in Manufacturing (WiM) speaks with Amanda Reel, a Welder at a fabricating plant.

Please tell our readers a little bit about your job and what your work looks like every day.

I am a Welder at a large equipment Manufacturing company. In addition to welding, I handle a number of other tasks in the Sheet Metal Department. Some days I weld, some days I cover drill press and other days I run the laser cutting machines. I also cover for my supervisor or lead man when they are out. Every day I come into work and do a different job, so it's always interesting. When I am welding, I have to read prints and fabricate parts, which means I have to be able to read and understand blueprints. Then I assemble the parts and weld them together. My department makes laser cutting machines, which are our most popular product.

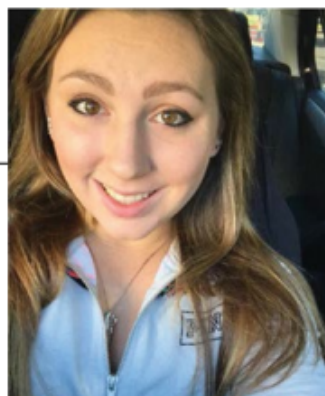
How did you arrive at your current position? What attracted you to a career in Manufacturing?

When I was just about to turn 18, the company called my high school, Howell Cheney Technical High School, and asked if they had any Welders with a good welding skill set. My teacher asked me if I would be interested in an interview. I took the opportunity in a heartbeat. Within one week they contacted me and set up my initial interview. The interviewer asked me to read a blueprint and tell them everything I knew about every type of welding. I was also asked to outline my skills. I would say it went very well. I was immediately offered an in-the-field interview, to demonstrate my physical welding

skills. In the field interview, I welded MIG (gas metal arc welding, or metal inert gas welding) and TIG (gas tungsten arc welding, or tungsten inert gas welding) both vertical and flat. They told me that was all they needed to see and that I would be contacted soon with my start date. I have been a Welder ever since. When I was 14, I chose welding as the trade I would study through high school. My junior year I decided to make welding my career because it's not often you get to turn your passion into a career. Also, I like the challenge of Manufacturing. Something about making things from scratch entices me.

There are many stereotypes about the Manufacturing sector, such as dirty and dangerous workplaces and are most appropriate for men. Have you encountered stereotypes like these in your education or career and how did you overcome them?

My whole career has been full of encounters with these stereotypes. One comment I hear far too often, when someone asks me what I do and I explain to them that I am a Welder, is "Wow I've never met a pretty Welder... actually I've never met a female Welder!" I am our company's first woman Welder, but I will not be the last! It is not true that women can't be Welders. Unfortunately, many are steered away by the awful stereotypes that exist about welding such as it being a man's job, a dirty job,



or a hard job. It is also untrue that welding is only performed in a very dirty environment. That is not the case at my job and at many other Manufacturing companies. In fact, many facilities are cleaner than you can ever imagine! Most of the ones I've seen look like picture-perfect factories.

Research shows that women, especially women in STEM fields, do better if they have a mentor. Has mentorship played any role in your career?

Mentorship has definitely played a huge role in my career. I would not be where I am today without the help of my mentors. My two welding teachers, Kathy McGirr and Bob Cullen, were my first mentors and they helped me to learn almost everything I know about welding. My mentor at my current position is our lead man, Dave Reynolds. Dave has helped me learn new skills, like repair work and time management, through hands-on training. He has also demonstrated great work ethic, leadership skills and brainstorming to make even the most difficult problem seem easy. I try to emulate these skills as I grow in my career.

One of the key findings in WiM's survey is that there is significant overlap between what young women want in careers and the attributes of careers in Manufacturing today. But the survey also found that, too often, young women are not aware of the opportunities available in Manufacturing. What do you think can be done to spread the word to women about career options in modern Manufacturing?

Certainly organizations like Women in Manufacturing (WiM) that make it their mission to support women in Manufacturing go a long way towards raising awareness about Manufacturing. Local WiM chapters have a strong impact here as well. For



example, the WiM Connecticut chapter was established just over a year ago and has really created a buzz in the community. Promoting Manufacturing as a career to middle and high school students—and not just the boys—is crucial. Teachers, guidance counselors and parents are instrumental in communicating the opportunities Manufacturing presents. Many kids, especially girls, don't even know these good, high-paying, rewarding jobs exist. I'm sure if young women knew what an interesting, well-paying career they could have in Manufacturing they would give it a closer look.

Our survey also found that the majority of women in Manufacturing today would recommend the sector to young women considering career options. Would you recommend a career in Manufacturing? And, if so, why?

I would definitely recommend that young women choose a career in Manufacturing! There are so many opportunities out there. You can have any kind of job you want; machine operator, engineer, sales and marketing, finance, even CEO. There is literally something for everyone in the field of Manufacturing. The possibilities are endless! •

Constructed Response: Amanda Reel

Answer the questions below based on the reading about Amanda Reel's career as a Welder.

- 1 Describe Amanda's feelings about her career.
- 2 Identify two ways that Amanda became prepared for her job or updated her skills.
- 3 What is Women in Manufacturing (WiM)?
- 4 What has been challenging for Amanda in her career as a Welder?

- 5 How did Amanda first begin working in the Manufacturing field?
- 6 Why does Amanda mention a few specific people as being influential in her life?
How did they influence her?
- 7 What does Amanda say about women working in Manufacturing?
- 8 What else would you like to ask Amanda?

Career Narrative Questions

Before reading the story, complete the statements below:

1 I chose the story about being a _____ because _____

2 I predict this narrative is about _____

3 I expect to learn _____

_____ from reading this narrative.

After reading the narrative, complete and answer the following questions:

4 What does a _____ do every day?

5 What are the best parts of being a _____?

- 6 What are the challenges of being a _____?
- 7 Why did _____ say _____? What does it mean, and why is it important?
- 8 What is one surprising and/or interesting thing you learned about being a _____?
- 9 What else do you want to find out about being a _____ that's not explained in the article?
- 10 Do you think you would want to be a _____? Why or why not?

Shipyard Welder, Thomas Tripp

Adapted from <http://www.shmoop.com/careers/welder/typical-day.html>

Thomas Tripp wakes at 5:45AM. As he gets ready to leave for work, his mind wanders back to high school. As far back as Thomas can remember, he wanted to work with his hands. That day in auto shop when he fired up a welding torch for the first time, he knew he'd found his calling. Now, several years into his career, he knows exactly what it means to work with his hands—satisfying and also tiring. He pops his morning Excedrin and heads out the door.

He arrives at the weld site, a shipyard, at 6:30AM. Thomas has worked at six firms in the past six years, which is pretty typical for a welder. As he walks onto the site, he's greeted by the sound of squealing metal.

Thomas realizes he's running late for a meeting with his supervisor, Hurley. He hands Thomas a blueprint. "Hope you like tight spaces. You'll be working on the inside of the ship." The blueprint calls for a lot of complex welds...and a lot of grinding and cutting. Thomas sighs. He sees he'll be doing the same thing over and over and over again. Time to get started.

7:15AM. The first thing to do is strap on the safety gear. A respirator snaps snugly over his face, moist and plasticky. He pulls on boots so thick they feel like Santa's boots inside another pair of Santa's boots. He yanks on heavy gloves, thick glasses, and a visor.

It takes another half hour to set up his welding equipment. It's mostly TIG (tungsten inert gas) welding today, so setup time is shorter than usual. Next he crawls deep into the dark insides of the ship hull. And then he welds.

Welding is highly technical, but it's often the same thing over, and over, and over again. His welder lights up. Sparks fly. Metal solders (joins) to metal. Time passes. Distantly, he hears a sharp yell as someone burns themselves with



Image: http://harrisgas.com/wp-content/uploads/2013/08/WELDER_1.jpg



Image: http://maritime-connector.com/ships_uploads/wana_bhum-9308663-container_ship-8-140842.jpg

sparks. He looks into the darkness in the direction of the noise. Ow! Now it's Thomas making the noise as the sparks fly a little too close. He slows down so he can stay focused.

Time stretches and the hours pass. He works by himself, building the ship one metal plate at a time. As he works, his mind wanders. His girlfriend Tiarra wants him to make more money. He's explained to her that his hourly rate will go up as he gets more years of experience. But Tiarra wants a bigger paycheck now. She's been reading about undersea welding and keeps prodding Thomas to do that instead. Thomas has thought about underwater welding. He can swim, he has the welding skills, and he does know two colleagues who went that route.

Finally, after three hours in the hull, it's time for lunch. Thomas crawls out of his hole to enjoy a sandwich, the fresh air, and some socializing with co-workers.

In the afternoon Thomas's assignment involves climbing high up on a girder (a strong beam, often made of steel). It's a welcome change of pace, even if he's a little nervous to be high up off the ground.

The day continues, and Thomas welds. He sees the result of his work right in front of him, which always gives him satisfaction. That's why he got into this work in the first place. He loves making things, and it's still exciting to think that he's helping to make a ship!

At the end of the day, he climbs down off the girder, packs up his equipment, and takes off his gear. He shouts goodbye to his supervisor and to his co-workers. He drives home and thinks about the future. Maybe he will switch to underwater welding. Maybe he'll go for the CNC training his boss keeps offering. Or...maybe he'll just keep doing what he's doing. At least it's predictable. •

Machinist, Molly Woods

Adapted from: <http://flate-mif.blogspot.com/2012/04/day-in-life-of-machinist.html>

Meet Molly Woods, a Machinist at Vulcan Machine Inc.—a company that specializes in custom aerospace machining and commercial precision Manufacturing. Working with machines is second nature to Woods, who has been working for Vulcan—her family owned business—since 2007.

“From start to finish I like running the machines, cleaning the parts, and I love the ‘hey I made that’ feeling.” Woods loves new challenges. She started out doing basic work on the machines, then moved to doing more complex tasks. On any given day, her work could include working with six to seven different machines and ensuring they run smoothly. She works on CNC (Computerized Numerical Control) machines that manufacture parts for Vulcan’s aerospace customers. She is also responsible for operating the mills and lathes, using various methods to remove burrs, and boxes the final product readying them for final shipment. “My job is highly productive and interesting,” says Woods. “I love making parts and seeing that the products that I manufacture can be used by another company.”



A Machinist’s job is not all work and no pay. Nationally, Machinists earn, on average, about \$20 an hour, with average annual income of nearly \$40K (<https://www.bls.gov/Oes/current/oes514041.htm>). Not only is money a motivating factor, but working as a Machinist offers tremendous opportunities, especially for women. According to the Department of Labor, only 3.9% of the total Machinist workforce is comprised of women. Woods agrees that machining may not be a traditional pathway for women, but she encourages women and girls of all ages to look into it as a viable educational and professional pathway that offers a rewarding career. The NIMS (National Institute of Metal Working skills) Certification, for example, is a great way to get started and gain a nationally recognized industry certification.

Just what does a Machinist do?

A Machinist uses machines to shape metal into parts needed to build other machines or tools. You could be making anything from the bolts needed to hold

a bulldozer together, to the joints on robots to keep their arms moving freely. Machinists are basically metal-carvers. They shape metal into whatever form it needs to be.

There was a time when Machinists used equipment like mills, lathes, and handsaws to make their parts. That's the old school way. Nowadays, most machinists are also trained in computer-numerically controlled (CNC) tools. Basically, Machinists write a program (called "G code") telling their CNC tools how to do the cutting for them. The CNC system works through a series of steps—a lot of steps. It is normal to program 400 steps to make one full rotation of an inch long gear.

The results are incredibly detailed. A CNC machine tool can cut at measurements of 0.001 of an inch or less. That's about a quarter of the thickness of a piece of paper!

So, things are definitely changing in the industry. This is a good thing. Hardworking men and women toiling away in dark and steamy factories is way behind us now. A Machinist today looks less like a Henry Ford assemblyman, and more like a computer programmer.

These days the modern Machinist actually faces competition from Engineers, who can design products and let the computers do the building for them, instead of giving the work to a Machinist. If you wouldn't mind designing as well, which means a few more years of intense schooling, it may be worth it to go the Engineering route.

However, if you're interested in becoming a Machinist—you can begin work pretty quickly out of high school. All it takes to get started is a certificate or a two-year degree from a technical college in Machinery. Then you're off to land an apprenticeship. Which is a way to further your education while getting paid. •

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VOCABULARY

CNC machine: computer numerical control; a machine that controls cutting and drilling tools for precision work

lathe: a machine for shaping wood, metal, or other material, by using a rotating drive that turns the piece being worked on

aerospace: the industry that makes and operates airplanes and spacecrafts.

mill: a machine that grinds or crushes something

burr: a rough edge or ridge left on an object after it has been cut by a machine or tool

t The C

Quality Control Inspector

Adapted from <https://www.sokanu.com/careers/quality-control-inspector/>



http://www.lrr.org/en/_images/229-81070_Korean_inspector_Lloyd_s_Register_Energy.jpg

My name is Sam Shah; I am a Quality Control Inspector at Associated Products. Before I started working here, I wasn't even sure what a quality control inspector does! A Quality Control Inspector examines products and materials for defects or deviations from the item's specifications. We ensure that your food will not make you sick, that your car will run properly, and that your pants will not split the first time you wear them! We monitor quality standards for nearly all manufactured products, including foods, textiles, clothing, glassware, motor vehicles, electronic components, computers, and structural steel. I work in a plant that manufactures electronic components. I inspect the components that are used in computers. If the components don't work, the computers don't work!

First off, I read the specifications (measurements, materials to be used, and other elements of the design) for the specific component and make sure I understand what it's supposed to look like and be able to do. I monitor the production process to make sure it meets the standards for product fabrication. If I see something that I think could be done better, I'll make a recommendation.

Once a component is complete, I'll do many tests to make sure it's right. This includes things like making sure all the measurements are perfect. I sometimes use tools like rulers, calipers, gauges, and micrometers, but we mostly use electronic inspection equipment, such as a coordinate-measuring machine

(CMM). If I see a problem, I'll check a few more to find out where the problem is. Is it a design problem? Was there a mistake in cutting the parts? Is it an assembly problem? I need to find out exactly where the issue is so we can fix it! Until it's fixed, I am responsible to reject the part so that it doesn't affect the overall product. It's a lot of responsibility, but I like it.



<https://globalparts.aero/wp-content/uploads/2015/05/processes-right.jpg>

I make sure to track all my findings very carefully, so I can discuss them with my supervisor. I document every test I do and every result, and I create reports so that the whole team can be in the loop. Our inspection process is getting more automated; we have systems installed at a few different points in the production process. In those cases, my job is to monitor the inspection equipment, make sure the reports that it produces are accurate, and randomly pull out parts for a manual check.

I didn't have any experience when I got this job, but it seemed like a good place to be while I looked for something else. Here I am, three years later! I've learned a lot on the job: how to read a blueprint; how to use tools like calipers, gauges, and micrometers, and how to do some basic computer-aided design (CAD). My supervisor says that a positive attitude and a good work ethic are just as important as technical skills. He did tell me that there's a quality control management program at the local community college and I'm thinking about enrolling in a weekend program. I think I'm going to stick with this career, and I want to advance as far as I can go! •

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VOCABULARY

Caliper: measures the distance between two opposite sides of an object

Gauge: measures the amount of something

Tim Leopold, Industrial and Systems Manufacturing Engineer

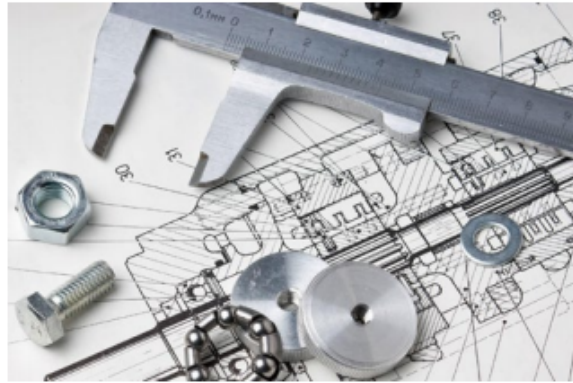
Adapted from http://mycooljob.org/wise/industrial_engineer.php

What exactly do you do?

My job is to evaluate Manufacturing problems and help the Manufacturing departments when they aren't able to properly analyze their problems. One example of this is in our paint department. Because Honda is always striving to produce the highest quality product, we need to make sure that all of our vehicles have no paint defects when they are delivered to our customers. The way we do this is by inspecting every unit that passes through our paint shop, and repairing the units that have a problem. The units that require some re-work are sent to our repair area while the rest of the car bodies (we call them "good bodies") are sent to the good body storage. The storage area acts as a waiting room—the good bodies wait for the unit to be repaired, so it can be joined to its original body in the right sequence. There are many variables that play into how large a good body storage area should be. Because of the complexity of this system, I was asked to study and determine the appropriate size for good body storage areas.

Describe a typical day.

My typical workday has a nice balance of engineering work done behind a computer, where I will study a particular problem, and frequent trips to the Manufacturing floor to go to the actual spot where the problem is taking place. Because the information I need isn't always readily available, we have project teams so we can work together and draw on the expertise of the group. We collect data about the problem at hand, double check the information, and then use the data to help solve the issue.



http://www.nbn.org.il/wp-content/uploads/2014/01/engineering_mechanical_3042380_cropped.jpg

What's the coolest part of your job?

The best part of my job is that I can use my technical abilities creatively. Going through high school and college prepares you technically and gives you the skill sets and tools required to troubleshoot and solve problems, but after that it is our responsibility to know which techniques to use and when to apply them. Learning what approach to take and what theory to use will make the difference between just fixing a problem and coming up with a robust solution to alleviate a problem so that it doesn't happen again.

How do people react when they learn what you do?

Most of the time I tell people that I work at Honda using computer-based simulations to test equipment designs. Some people ask me where I learned to do that. I learned the fundamentals of statistics and probability and some other related concepts at college. I didn't learn how to apply the concepts I was learning until an

internship I had with Honda while I was still at college. The real world application of my studies strengthened my decision to become an Industrial Systems Manufacturing Engineer.

How did you become an Industrial Systems Manufacturing Engineer?

In high school I decided that I would like to give Engineering a try. I didn't have any particular Engineering discipline in mind but I wanted to take a closer look at all of them before I decided. After I took a Fundamentals in Engineering Course, I decided that Industrial and Systems Engineering was the best fit for me because it provided the business aspect as well as the Engineering background.

What disappoints you about your job?

My current group acts in an advisory role. We generally provide recommendations to the department, but we don't have any responsibilities in actually installing or implementing our solutions. Because we aren't involved directly with production we need the departments we are helping to try out the solutions themselves. Also, by the time we complete one project, we are already starting up another one, which means that we generally don't have time for the implementation, testing and debugging phase.

How has your job changed over time?

My role has changed slightly since I first started. I am now not only taking on projects myself, but I am also mentoring and training others. This is a nice change of pace because it allows me

to break up the project work with the work of helping develop my colleagues' capabilities.

What are some of the most important skills and abilities needed for this job?

The most important skill needed for this job is a systematic problem solving approach. Having the correct problem solving approach will allow you to break down even the most complex problem.

A willingness to learn new things and be open to suggestions from colleagues will help your solution be accepted. Communication is also one of the most valuable skills to have. Even the best idea in the world will not be accepted if you don't have the ability to convey the importance and urgency of the solution.

The only other thing that you will need, after you graduate college, would be the motivation to succeed. Motivation to succeed and to do well is entirely based on your own personal drive. This is a character trait that will raise you above the rest of the group when schedules are tight and deadlines are rapidly approaching.

What advice do you have for people who want to enter this field?

My advice is to gain as much exposure as you can in the field you are interested in. Just like you wouldn't want to buy something you have never seen before, you also don't want to select an occupation based off of what you have read about in a book. Experiencing the job through a job shadow day or through talking with people that are currently doing the job is invaluable. •

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VOCABULARY

robust: healthy; strong; not likely to fail

striving: making great efforts to achieve or obtain something


variables: things that can change and then affect the final result

simulation: imitation of a situation or process

Week 5, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Set Up Research Groups and Conduct Research

Class to be held in the Technology Lab 

Students report on their Career Narratives, choose job interests, and work in groups to organize their research using O*NET and prepared lists of online video and reading resources.

MATERIALS

For Activity #2:

- Handout (attached): Make two copies for each student.
*O*NET Research Sheet*
- On-line Resource: O*NET
<https://www.onetonline.org/>
- Handout (attached): Email students these listings before class.
Research Materials for Manufacturing Jobs

TEACHER PREPARATION: Prior to this lesson, e-mail the *Research Materials for Manufacturing Jobs* to students before this class so they can access them during class. Also, be prepared to demonstrate how to use the O*NET site.

ACTIVITY #1: Put Students in Research Groups – 60 minutes

Follow-up on Career Narrative Homework

- Ask students:
 - What Career Narratives did you read?
 - Can you describe the job you read about?
 - What surprised you or was useful to find out?
 - What job types are appealing or interesting to you based on your reading?
 - Have you learned about these jobs from others?
 - What are all the jobs we have read about in the Career Narratives?
 - List the names of the jobs on the board.

Put Students In Research Groups

- Tell students they are going to do research on jobs they could get after going through City Colleges of Chicago Manufacturing programs. There are three goals:
 - Get more information about the jobs you are interested in.
 - Get information about jobs that you might be interested in.
 - Research and report back on assigned jobs that fewer people are currently interested in to make sure the class has the information it needs to make a well-informed choice.
- Put four columns on the board with the following readings: Basic, Advanced, Associates, or Bachelors.
- Tell students to get out their Manufacturing Career Pathway chart and locate the jobs they are interested in on the charts.
- Go round robin and ask each student these questions:
 - What job appeals to you?

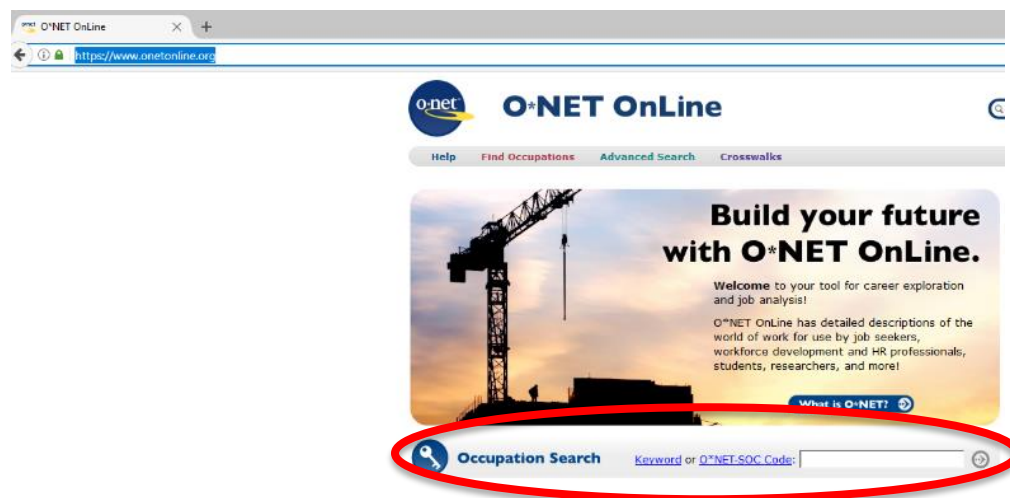
- What certificate or degree will you aim for?
 - Write students' names in the appropriate category.
- What are your reasons for making this selection?
- Put students into research groups according to type of certificate or degree they are interested in researching.
- Tell the groups you want them to look at the jobs listed under the heading assigned to their group (Basic, Advanced, Associates, or Bachelors) and research the two jobs that are most interesting to them.
 - It is okay if there are multiple group members researching the same job, but groups should make sure that each job in the column (Basic, Advanced, Associates, or Bachelors) is assigned to a group member to research.
 - **Note:** If the class is small, these instructions can be modified so that each student researches their two top choices and takes responsibility for researching a third job so that more information on more jobs is brought to the table for students to consider. These additional assignments can be made with class input, putting student's names next to the third job each will be researching.

Break – 10 minutes

ACTIVITY #2: Do O*NET Research on Two Job Types of Interest – 110 minutes

Demonstrate How to Use O*NET

- Have students use O*NET to complete two Research Sheets - one for each job they select.
- Pass out two O*NET Research Sheets to each student
- Have a student read the instructions aloud.
- Demonstrate how to use O*NET by typing in the URL: www.onetonline.org.
 - Scroll to “Occupation Search” on the opening O*NET page.



- Go to the open box and enter: Manufacturing.
- Look at the list of job types that come up and click on the one you want to research.
 - If your job is NOT on the list, type the name of the job in the upper right-hand corner in the box titled: Occupation Quick Search.
 - From the list that comes up, choose the job you think is closest to the job being referred to in the City Colleges of Chicago Career Pathways chart.
 - Confer with your group members as necessary.

- Review the information on the page; go to the sections that match the titles on your O*NET Research Sheet; and take notes on the needed information.
- Have students gather information from the website.
- When they have finished their two O*NET sheets, ask:
 - Did you find any surprises? Did you learn important new information?
 - What are the four questions you have about the job type you are most interested in?
 - Have a few students provide responses.

Additional Research Materials

- Tell students they will now answer their four questions for the two jobs they are researching.
- Project the *Research Materials for Manufacturing Jobs* on the overhead so they can see the resources that you e-mailed to them.
- Demonstrate how to access the videos and readings.
 - Students should watch and read to answer their four questions.
 - They should also take notes on important information they find in these resources.
 - Students are also welcome to look for other resources online.

HOMEWORK

COMPLETE: Have students complete their research on the chosen and assigned jobs as needed.

Teacher Preparation Note: Prior to the next class, become familiar with the ccc.edu Career Finder and prepare to demonstrate how to use it using the instructions on the research sheet attached to the next lesson.

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O*NET RESEARCH SHEET

To complete this worksheet using the O*NET website, you must follow these steps:

1. Enter "ONET" on the subject line and click on the title of the site.
2. Scroll to "Occupation Search".
3. Go to the open box and type in "Manufacturing."
4. Look at the list of types of jobs within Manufacturing that come up.
5. Click on the job you are looking for and read what is of interest to you.
6. If your job is NOT on the list, type the name of the job in the upper right-hand corner in the box titled: Occupation Quick Search.
7. Choose the job title that best fits what you are looking for.
8. Go the sections with the titles in the left-hand column and take notes on what you find there in the right-hand column.

Name of Job Type: _____

	Take Notes
Detailed Work Activities (Choose the most important ones)	
Work Styles (Choose the most significant ones)	
Median Pay	
Projected Growth	

Write down four questions you have about this job type below:

1.

2.

3.

4.

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RESEARCH MATERIALS FOR MANUFACTURING JOBS

Machine Operator

Videos:

Machine Operator: www.youtube.com/watch?v=Aakk0HSI4CM

Machine Operator Plastics Products: www.youtube.com/watch?v=Xta8BL9Tsz4

Reading:

A Day in the Life of a Multi-Machine Operator:

www.pepsibottlingventures.com/careers/ditl_mach_op.html

CNC Machinist

Videos:

CNC Machine Operators: www.youtube.com/watch?v=pZ-kkiWj3i8

CNC Machinist: www.youtube.com/watch?v=0uD6INGRnTE

Career Spotlight: Machinist: www.youtube.com/watch?v=IAERhx-JJrI

Reading:

A Day in the Life of a CNC Operator: www.lincolntech.edu/news/skilled-trades/cnc-machining-and-manufacturing/day-in-the-life-of-a-cnc-operator

Tool and Die Apprentice

Videos:

Mike Rowe Skilled Futures – Tool & Die: www.youtube.com/watch?v=DUhQhhjM8JM

About Trades- Tool and Die Maker Apprenticeship: www.youtube.com/watch?v=PtVJKBpQCKA

Reading:

A Day in the Life: A PSS Tool & Die Maker: www.pss-corp.com/blog/a-day-in-the-life-of-a-pss-tool-die-maker/

Welder

Videos:

*Welder (WorkBC- Episode 109): www.youtube.com/watch?v=IAkPyZ1scuw

Day in the Life of a Tulsa Welding School Graduate: Matt K. Feeling Cool Welding for a Career: www.youtube.com/watch?v=vG-h2WK-k0s

A Day in the Life of a Welder/Pipefitter: www.youtube.com/watch?v=l0Ks-DJoeEM

Reading:

*A Day in the Life of a Welder: www.nebraskamanufacturing.com/2016/01/a-day-in-the-life-of-a-welder/

Welders Life: Day by Day: <http://bestofwelding.com/welders-life/>

Industrial Maintenance Mechanic

Videos:

Industrial Maintenance Mechanic: www.youtube.com/watch?v=rnEOhHETbrE

Frito Lay Industrial Mechanic: www.youtube.com/watch?v=FJUnib976WA

Reading:

List of Responsibilities of an Industrial Maintenance Mechanic: work.chron.com/list-responsibilities-industrial-maintenance-mechanic-29456.html

What does an Industrial Maintenance Mechanic do? www.sokanu.com/careers/industrial-machinery-mechanic

Pipefitter

Videos:

Pipefitter (WorkBC-Episode 56): www.youtube.com/watch?v=UYZ_QP0nFxQ

Reading:

6 Reasons to Consider a Pipefitter Career: www.weldingschool.com/blog/pipefitting/6-reasons-to-consider-a-pipefitter-career

What do Pipefitters and Steamfitters do?

www.owlguru.com/career/pipe-fitters-and-steamfitters/job-description

Ironworker

Videos:

Ironworker (WorkBC-Episode 54): www.youtube.com/watch?v=Xhgi6kVXNVQ

Readings:

What does an Ironworker do? www.yourfreecareertest.com/ironworker/

Factory Food Processing

Videos:

Employment in the Food Manufacturing Industry – Midwest Food Processors Association:

www.youtube.com/watch?v=WbOhvHE8JcI

Reading:

Food Process Worker Resume Samples: www.jobhero.com/resume-samples/food-process-worker#

Quality Assurance

Videos:

BMW Quality Management: www.youtube.com/watch?v=TiuaFwzJ4FU

5 Ways Control Inspectors Use QC Checklist: www.youtube.com/watch?v=ZdIHHAeqXg

Readings:

Advanced Manufacturing Director of Quality Assurance:

cocareeractiontools.com/job/director-quality-assurance

Manufacturing Marketing and Sales

Videos:

Hot Job #4 – Sales Representative, Wholesale and Manufacturing:

www.youtube.com/watch?v=9G6Dc6ZY1IE

VP of Quality Assurance

Videos:

Meet a Manufacturing Engineer: www.youtube.com/watch?v=ypZiSguq4jM

Week 5, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Continue Research and Conduct Panel Discussions on Findings

Class to be held in the Technology Lab



Students do research on the ccc.edu Career Finder, prepare, and present their research to the class.

MATERIALS

For Activity #1:

- Handout (attached): Make two copies for each student.
CCC.edu Research: Career Finder

TEACHER PREPARATION: Prior to this lesson, prepare to demonstrate how to use the ccc.edu Career Finder using the instructions on the attached research sheet.

ACTIVITY #1: Continued Research – 90 minutes

- Tell students they are going to complete their research on manufacturing jobs using CCC's Manufacturing Career Pathway Programs. They will be able to provide basic information to their classmates on all the jobs on their assigned Manufacturing Career Pathway certificate or degree.
 - Tell students they may use this time to complete what was assigned during last class and to complete an additional research assignment.
 - Pass out the CCC.edu Research: Career Finder.
 - Project the CCC.edu Career Finder overhead.
 - Go over the instructions on the handout and demonstrate how to use the site to get the key information they will need to fill out the handout.
-

Break – 10 minutes

ACTIVITY #2: Give Reports – 70 minutes

- Tell students they are now going to prepare to report on their Manufacturing Career Pathway certificate or degree so they can share basic information on the jobs they researched.

Groups Organize their Reports

- Tell students that their group is responsible for presenting on all or most of the jobs listed under their certification or degree on the CCC Manufacturing Career Pathway.
- Write the following questions on the board:
 - What are some of the most important features of the job you are presenting?
 - Select O*NET and CCC.edu notes to answer this question.
 - Describe what they think it would be like to have this job.

- Select notes from the videos and reading you did to answer this question.
- Put students back in their groups and have them:
 - Organize their research notes in preparation for their talk.

Prepare for Reports

- Remind students not to just read notes, but to talk to their classmates about what is most attractive about this job and what they learned from their research.
- Ask the class: What information do you most want to learn from your classmates about the jobs they researched??
 - List student answers on the board.

Give Reports

- Instruct the first group to sit facing the class as if they were a panel.
- Have students take turns presenting a job from their research.
 - Have the class take notes on the jobs that sound interesting to them.
- When the group is finished, instruct the class to ask questions about the jobs they reported on.
- Repeat this process for each group Basic, Advanced, Associates, or Bachelors).
- Lastly, ask:
 - Are there jobs that you want to learn more about?
 - Which sound interesting or appealing to you? Why?

Break – 10 minutes sometime during this time period

HOMEWORK



WRITE: Have students journal in response to the following prompt:

Based on what you have learned from you classmates, what career or job seems most interesting to you? Based on the City Colleges of Chicago Manufacturing Career Pathways Chart, what certification or degree do you need to complete to prepare for that job? Do you have the time that it takes to earn that certification or degree? What challenges do you expect to encounter along the way? Explain.

Teacher Preparation Note: In preparation for the next lesson:

- Prepare a Talk to the Text presentation for the first two paragraphs of Part 1 of the article, Busy – how to thrive in a world of too much.
- Watch the stress management videos for Activity #3 in the next lesson and choose the one you want to show in class.

CCC.EDU RESEARCH: CAREER FINDER

To complete your research, you will be working in Career Finder to look at the two jobs you have already researched and others of interest. Use Career Finder by following the following instructions:

- Go to ccc.edu, and on the home page, click on “Student Tools” and then scroll down to click on “Career Finder”.
- Scroll down to “Explore by Focus Area” and click on “Manufacturing”.
- Scroll down to “Explore Manufacturing Careers” and pick the one you are researching and click on it.
- Write down the salary and the certificate or degree required.
- Go back to the “Manufacturing Focus Area” page and scroll down “Degree and Certificate Programs”. Click on the appropriate certificate or degree in right career pathway you are researching. Write down the total number of credits for that certificate or degree and two classes in the list that look interesting to you.

JOB TITLE #1:			
Certificate or Degree	Salary	Total Credit Hours for Certificate or Degree	Two Interesting Course Titles in the List
JOB TITLE #2:			
Certificate or Degree	Salary	Total Credit Hours for Certificate or Degree	Two Interesting Course Titles in the List
JOB TITLE #3:			
Certificate or Degree	Salary	Total Credit Hours for Certificate or Degree	Two Interesting Course Titles in the List

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Week 6, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Strategies to Meet Academic Challenges

Students identify their college goals, the challenges they may face completing those goals, and strategies to address those challenges. Students will read, annotate, and discuss an article on busyness. Next, they will watch videos to identify new strategies for coping with increasing levels of responsibility.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
Goals, Challenges, and Strategies Worksheet
- Handout (attached): Make one copy for each student.
Peer Interview: Goals, Challenges, and Strategies Worksheet

For Activity #2:

- Handout (attached): Make one copy for each student.
Busy – how to thrive in a world of too much – Part 1

For Activity #3:

Select one of the following videos to show in class:

- Video: Stress Management: Ways to Unwind (running time: 05:05)
<https://www.youtube.com/watch?v=OfL-pn8Os-c>
- Video: 7 Simple Tips on Reducing Stress (running time: 03:04)
<https://www.youtube.com/watch?v=IDecu0ME1Zo>

Homework:

- Handout (attached): Make one copy for each student.
HSE Questions for Part 1
- Teacher Resource for use next class (attached): One copy for yourself.
HSE Questions for Part 1 – Answer Key

TEACHER PREPARATION: Prior to this lesson, prepare a Talk to the Text presentation for the first two paragraphs of Part 1 of the article, *Busy – how to thrive in a world of too much*. Also, watch the stress management videos for Activity #3 and choose the one you want to show in class.

ACTIVITY #1: Identify Goals and Challenges - Now and in the Future – 60 minutes

Check-In About Journaling

- Ask students:
 - How did their journaling assignment go?
 - Was it easy or difficult to write two pages? Why or why not?
 - What college goal or goals did you choose?
 - What challenges do you expect to encounter along the way?
 - Write these on the board.

- Explain.

Introduce the Goals, Challenges, and Strategies Worksheet

- Tell students they are going to spend the next two classes focusing on their goals, potential challenges, and strategies to address current challenges. They will also identify new challenges they expect to have once they reach are in college. The question is: what strategies will they use in order to meet their college goals?
- Put two columns on the board with the following headings: Challenges and Strategies
- Ask:
 - What is a strategy? What does the word mean?
 - What strategies do you use to get to class on time?
 - Write “get to class on time” in the “Challenges” column.
 - List student strategy suggestions in the “Strategies” column.
 - What strategies did you use in doing your career research?
 - Write “career research” in the challenges column.
 - List student strategies in the appropriate column.
- Pass out the *Goals, Challenges, and Strategies Worksheet* and have students look at the “Complete the Bridge” section. Ask:
 - What challenges might a student have when completing the Bridge?
 - Write down student answers.
 - What are some possible strategies you could use to overcome these challenges?
 - List the possible strategies next to the challenges.
- Tell students to fill in the challenges they have now or expect to have during the two semesters of the Bridge. Tell them the more detailed they are, the more useful this exercise will be.
- Ask a student for an example of something they are struggling with now.
 - Write that on the board.
- Have students to come up with some specific strategies to meet the student’s challenge.
 - Write these suggestions on the board

Fill in Goals and Challenges Worksheet

- Have a student read the instructions.
- Go round robin and ask students what is a personal goal they have.
 - Tell them to write that goal in the “Personal Goal #1” space.
- Have students to complete the worksheet independently.

Share List of Challenges and Strategies

- Put students into pairs and have them:
 - Describe how they filled out one goal, set of challenges, and strategies.
 - The listener should ask questions and offer suggestions that the author can write down on their worksheet.
 - Take turns describing each goal, set of challenges, and strategies.
 - Choose a goal from each of their worksheets to share with the class.
- Pass out the *Peer Interview: Goals, Challenges, and Strategies Worksheet*.
- Have a student read the instructions on the worksheet.
- Have each student interview three other students.
- Come together as a class and ask: What are some examples of challenges and strategies classmates shared that you think would be particularly effective?
 - Write these examples on the board.

Break – 10 minutes

ACTIVITY #2: Reading on Resilience – 50 minutes



Short Prediction Exercise

- Students will read an article on resilience with strategies on how to address busyness
- Pass out Part 1 of the article, the *Busy – how to thrive in a world of too much*.
- Read the title and ask:
 - What do you think this article is about?
 - What does “thrive” mean?
 - What do you think the author means by “world of too much”?
 - What kind of strategies do you think the article might recommend?

✓ Talk to the Text Demonstration

- Project a double-spaced version of the first page of the reading, leaving space to make notes between lines and in the margins.
- Review the kinds of questions and reading strategies students have practiced so far with Think Alouds (Think Aloud instructions are in Week 3, Lesson 1, Activity #1) including:
 - Predictions
 - Responses
 - Questions
 - Connections to experiences outside the text
 - Identifying transition words that show shifts in meaning or how the piece is organized.
 - Getting clues to the meaning of words from the context.
- Explain that Talking to the Text is a written Think Aloud. By practicing Talking to the Text, they will get into the habit of talking to the text *in their heads*, something good readers do to help them stay engaged and interested in the text.
- Model the Think Aloud process. This time, write out your questions and comments on the projected reading.
 - Invite students’ observations and questions as you work through the two paragraphs.
- Tell students to read silently and annotate the rest on their own using the Talk to the Text techniques.

Pair Work

- Put students into pairs to share their Talk to the Text marks, identify places where their comprehension broke down, and what strategies they used.
- Come together as a class, project Part 1 on the overhead and go through it paragraph by paragraph or sentence by sentence, as appropriate. Ask different students:
 - What did you write on the text? Questions? Comments? Other?
 - Did you clear up any comprehension roadblocks? How?
 - How did this help your reading?
 - How did working with a partner help?
- Lastly, ask:
 - Do you think busyness is addictive? In what way(s)?
 - What is good quality thinking?
 - Do you agree with this author’s ideas?
 - Why or why not?

Break – 10 minutes

ACTIVITY #3: Watch Videos to Identify Stress - Coping Strategies and Write a Journal Entry – 50 minutes

Watch Videos to Identify More Coping Strategies

- Have students watch one of the videos that provide scientifically proven strategies to reduce stress. Students should take notes on the new strategies presented in the videos.
 - Tell students to make a list in their notebooks.
- After the video, go round robin and ask: What is one new strategy that was recommended to reduce stress?
 - Write these on the board.



Journal Writing

- Have students get out their journals.
 - Write the following journal prompt on the board:
 - How do you usually keep yourself motivated?
 - Describe a challenge in your life when you used your own strategies to overcome the challenge. Why were these strategies effective?
 - Give students at least 15 minutes for journal writing.
-

HOMEWORK

COMPLETE: Have students complete *HSE Questions for Part 1*. After completing the questions, students should choose one question they think they got right and write down the process they went through to get the right answer.

GOALS, CHALLENGES, AND STRATEGIES

Think through the goals you have, the challenges you face to reach those goals, and some strategies you could use overcome the challenges.

GOALS	CHALLENGES	STRATEGIES
Complete the Bridge		
Pass the HSE Exam		
Complete homework		
Take college-level courses		

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PEER INTERVIEWS FOR GOALS, CHALLENGES, AND STRATEGIES

Talk to three classmates and ask them to share a goal. What new information did they include under challenges and strategies? Take notes on this worksheet to capture what you learned.

GOALS DISCUSSED	CHALLENGES DISCUSSED	NEW STRATEGIES SUGGESTED
Classmate #1:		
Classmate #2:		
Classmate #3:		

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Busy – how to thrive in a world of too much – Part 1

Adapted and paraphrased from original source: <http://personalresilience.com/thriving-in-a-busy-world/>

Original author: QED Resilience

Introduction

Tony Crabbe is a consultant who has written a really useful book “Busy” – how to thrive in a world of too much. It’s become one of the top three leadership books in 2016 and been a best seller in a number of countries. Many people have a clear sense of what we want to do and where we want to go – but things derail us or get in the way and Tony has some really useful insights on this.

Tony became curious about the word “busy” when he was on the train in London and within a few minutes he heard seven different people use that word. Busy has become some sort of brand – when we meet people they may ask how you are and we respond with this word busy. We try and convince people quite how busy we are.

Busy can mean a few things – a state of constant alertness, constant activity, racing, rushing, cramming and juggling that spans so much of our life. Tony thinks that the opposite of busyness isn’t necessarily relaxation on a beach, but the ability to focus attention onto the people or problems that matter most to you.

IBM estimated that while the complete knowledge of the world used to double every 100 years it will soon be doubling every 11 hrs. If you add that to our daily demands and all the communication demanded of us, we all get really busy. Busy is a natural response to this crazy information overload – but is it the right response? the smart response? is it the only response?

Some Research

There is some great research where scientists put people in a room where they have nothing to do for 50 minutes, apart from being able to give themselves an electric shock. Because we are so used to this world of so much stimulation and activity, most people choose to electrocute themselves even though it was painful, rather than be left alone with their brains.

Being alone with our brain is so important – it is when we reflect on our lives and our values, make sense of the world, and grow. But, for most of us, busyness is easier than the just being with yourself and a form of avoiding more important activities.

Busyness is addictive but we need to remove busyness to focus on deeper, clearer and better quality thinking.

Busy – How to thrive in a world of too much – Part 1 HSE Questions

1. What does “busy” mean?
 - a. Constant alertness and activity, racing, rushing, cramming and juggling that spans much of our life
 - b. Constantly working without ever taking anytime off and working overtime
 - c. Being constantly overloaded with the crazy amount of information we receive each day without time for anything else
 - d. Pretending to work so you can tell your peers how overwhelmed you are
2. What is “busy” a natural response to?
 - a. The information overload brought on by growing knowledge of the world
 - b. Having too much work to do and not having enough down time
 - c. The internet, news media, and social media
 - d. Being bored and not having enough to do in one’s life
3. What does Tony Crabbe mean by saying “busy has become some sort of brand”?
 - a. It has become a way that we describe ourselves to other people
 - b. Busy is a type of clothing brand for people who work a lot
 - c. People use the word busy to describe their lives so that they don’t seem lazy to others
 - d. People use the busy as a brand so that their lives seem impressive to their peers
4. How quickly is complete knowledge of the world expected to double in the near future?
 - a. Every 100 years
 - b. Every 11 months
 - c. Every 100 hours
 - d. Every 11 hours
5. Why is being alone with our brains important?
 - a. It helps us think about the things we have to do next and how best to get them done
 - b. It helps us become more addicted to being busy
 - c. It helps us reflect, make sense of the world, and grow
 - d. It helps us reflect on our lives and decide if we want to quit our jobs and move

6. What can being busy be an excuse for?
 - a. Avoiding being with yourself and putting off more important activities
 - b. Facing any problems, you might have in your personal life
 - c. Avoiding making time for your family and friends
 - d. Talking to people
7. Why might people not want to be left alone with their brains?
 - a. Because if we are, we might realize we are boring and have no original thoughts
 - b. Because we do not want to face the important things we have been avoiding
 - c. Because spending time on yourself and reflecting on your thoughts is a waste of time
 - d. Because constantly being involved in different tasks helps us grow more as a person
8. What is causing knowledge of the world to double at a such a fast pace?
 - a. Social media and the sharing of breaking news stories
 - b. The constant advancement of technology and the internet
 - c. The amount of research that is being done at universities around the world
 - d. The ease at which the government can now access personal information
9. Why do we try to convince people that we are busy?
 - a. We use it as an excuse to make us seem important
 - b. Because work takes up so much of our live that we do not know how else to describe ourselves
 - c. Because we really are busy
 - d. Because we are overwhelmed with multiple parts of our lives and do not have a clear focus

Busy – How to thrive in a world of too much – Part 1 Answer Key

1. What does “busy” mean? **Right there question**
 - a. Constant alertness and activity, racing, rushing, cramming and juggling that spans much of our life**
 - b. Constantly working without ever taking anytime off and working overtime
 - c. Being constantly overloaded with the crazy amount of information we receive each day without time for anything else
 - d. Pretending to work so you can tell your peers how overwhelmed you are
2. What is “busy” a natural response to? **Pulling it together question**
 - a. The information overload brought on by growing knowledge of the world**
 - b. Having too much work to do and not having enough down time
 - c. The internet, news media, and social media
 - d. Being bored and not having enough to do in one’s life
3. What does Tony Crabbe mean by saying “busy has become some sort of brand”? **Pulling it together question**
 - a. It has become a way that we describe ourselves to other people**
 - b. Busy is a type of clothing brand for people who work a lot
 - c. People use the word busy to describe their lives so that they don’t seem lazy to others
 - d. People use the busy as a brand so that their lives seem impressive to their peers
4. How quickly is complete knowledge of the world expected to double in the near future? **Right there question**
 - a. Every 100 years
 - b. Every 11 months
 - c. Every 100 hours
 - d. Every 11 hours**
5. Why is being alone with our brains important? **Right there question**
 - a. It helps us think about the things we have to do next and how best to get them done
 - b. It helps us become more addicted to being busy
 - c. It helps us reflect, make sense of the world, and grow**
 - d. It helps us reflect on our lives and decide if we want to quit our jobs and move

6. What can being busy be an excuse for? **Author and me question**
- a. Avoiding being with yourself and putting off more important activities**
 - b. Facing any problems, you might have in your personal life
 - c. Avoiding making time for your family and friends
 - d. Talking to people
7. Why might people not want to be left alone with their brains? **On my own question**
- a. Because if we are, we might realize we are boring and have no original thoughts
 - b. Because we do not want to face the important things we have been avoiding**
 - c. Because spending time on yourself and reflecting on your thoughts is a waste of time
 - d. Because constantly being involved in different tasks helps us grow more as a person
8. What is causing knowledge of the world to double at a such a fast pace? **On my own question**
- a. Social media and the sharing of breaking news stories
 - b. The constant advancement of technology and the internet**
 - c. The amount of research that is being done at universities around the world
 - d. The ease at which the government can now access personal information
9. Why do we try to convince people that we are busy? **Author and me question**
- a. We use it as an excuse to make us seem important
 - b. Because work takes up so much of our live that we do not know how else to describe ourselves
 - c. Because we really are busy
 - d. Because we are overwhelmed with multiple parts of our lives and do not have a clear focus**

Week 6, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Strategies to Meet Academic Challenges

Students read, annotate, and discuss Part 2 of the reading on busyness. Next, they will write a summary and commentary on the piece and review each other's written work.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
Busy – how to thrive in a world of too much – Part 2
- Handout (attached): Make one copy for each student.
Busy – how to thrive in a world of too much – Part 2 – HSE Questions
- Handout (attached): Make one copy for each student.
Busy – how to thrive in a world of too much – Part 2 – Answer Key

For Activity #2:

- Handout (attached): Make two copies for each student.
Reader Comment Page

ACTIVITY #1: Talk-to- the-Text Part 2 – 60 minutes

Check-in on HSE Questions Homework

- Ask students: How were the HiSET-type questions? Difficult? Easy? Why?
 - List numbers on the board for each of the HiSET-type questions
 - Ask who wrote about which question?
 - Put the names of who wrote about which question next to the appropriate number.
- Project the HSE Questions overhead:
 - Call on students to talk through how they answered the question.
 - After each explanation, ask the class:
 - Is this the right answer?
 - Was the process they described clear? Useful?
 - Did you use another process for answering this question?
 - For questions not covered above, give the answers, and ask:
 - Who got this right?
 - How did you get to this answer?

✓ Read, Annotate, and Discuss – Part 2

- Tell students they will do another Talk to the Text annotation approach to Part 2 of the reading.
- Pass out Part 2 of the article, *Busy – how to thrive in a world of too much*
- Ask:
 - How do you do a Talk to the Text annotation?
 - Why is this reading double-spaced?
- Have students read and annotate on their own.
- Put students into pairs to share their Talk to the Text marks and identify which roadblocks they cleared up and what strategies they used.

- Come together as a class. Project Part 2 on the overhead and go paragraph by paragraph or sentence by sentence, as appropriate, to ask individual students:
 - What did you write on the text? Questions? Comments? Other?
 - Did you clear up any comprehension roadblocks? How? (You, the teacher, can use this question to identify where students' comprehension broke down and/or things became unclear.)
 - How did this help your understanding of the reading?
 - How did working with a partner go?
 - Lastly, ask:
 - What are the author's strategy recommendations?
 - Do you agree with the author's ideas?
 - Why or why not?
-

Break – 10 minutes

ACTIVITY #2: Write a Summary and Response – 50 minutes

Plan an Effective Summary

- Tell students to write a summary and response to the reading on busyness. Remind them that a good summary:
 - Contains the most important ideas.
 - Is written in their own words.
 - Is shorter than the original article or text.
- Students should pretend that their audience is someone who has not read the article but is interested in the topic. The goal is to write a summary in their own words, using language that is clear and concise.
- Put students into pairs to read their summaries to each other and to ask questions for clarity and more information.
 - Have students put the article away, and then explain to their partners what the article is about. Students should explain as much as they can so that their partners can understand the meaning of the article.
 - Students should then get out their notebooks and make changes to their summaries based on their partner's suggestions.
- Tell students to read their summaries aloud.
- After each summary, ask:
 - What worked about this summary?
 - Write those comments that help describe what a good summary is on the board.
 - Which summaries worked were effective? Why?
 - Take additional notes on the board based on these comments.

Plan Your Response to the Reading and Write!

- Students will now write a response to the reading.
 - Write the following questions on the board:
 - Did you agree with the author?
 - What are your reasons?
 - How could the author's suggestions be useful to you?
 - Put students into new pairs to talk through their answers to these questions.
 - Give students time to rewrite their summaries as needed and then write their responses.
 - Tell students to make a new paragraph for each answer to the questions on the board.
-

Break – 10 minutes

ACTIVITY #3: Peer Review Student Writing – 50 minutes



Peer Review

- Students will provide feedback on each other's written work. They should be supportive and offer constructive feedback to make their partner's work clearer and more interesting.
- Put students into groups of three.
- Have students take their summaries out of their notebooks to use in the peer review.
- Pass out two copies of the *Reader Comment Page* to each student. Explain that they are going to:
 - Read the paragraphs written by the other two people in their group.
 - Fill out one *Reader Comment Page* for each of written pieces they read.
 - They are NOT to comment on grammar or spelling yet. However, if they are not sure what something says, they can ask the writer for clarification.
 - They should be encouraging and helpful. Specific and thoughtful comments on their partner's work will help them when they have to re-write their work.
- After students have evaluated the first student's written work, they should pass it to their left and evaluate a new work.
- After students have completed two *Reader Comment Pages*, they should give their evaluations to the writers, and the writers should read the comments.

Talk About the Reader Comments as a Class

- Ask the class as a whole:
 - Did your evaluators say the same or different things?
 - Did your evaluators say things that gave you ideas for how to make your paragraphs better?
 - What are they?
 - Did your evaluators confuse you? Ask for clarification when you are back in your group.
- Put students back in their groups to talk through differences and to get clarification.

TEACHER NOTE: Evaluate the student summaries by filling out a copy of the *Reader Comment Page* for each. You will need to read both the essays, and the student comments on those essays, to see what the student input was. Your comments should either reflect specific suggestions or offer a different way to evaluate their essays that you think might be more helpful. Additionally, DO NOT correct surface issues in students' drafts. Instead, ask students questions that will help them develop their draft further. In your comments, indicate a due date for rewrites of the drafts.

HOMEWORK

COMPLETE: Have students complete the HSE Questions for the second reading. After completing the questions, students should choose one question they think they got right and write down the process they went through to get the right answer.

Teacher Preparation Note: Before the next class, put together a clear presentation on how to use PowerPoint. Provide students with instruction on the basics they will need to do their presentation (for example, how to add a new slide, how to insert a picture).

Also, write out six index cards with one of the following sentences on each:

- The HiSET test is important for students' futures. They will find better jobs once they pass the test.

- Students have to juggle many things to fit school schedules into their other schedules. Family and work responsibilities can be very demanding.
- Homework is not always easy. Students need to put aside more time for doing homework.
- Many young students live with their parents. They don't have to worry about bills.
- Michelle Obama didn't mind leaving the White House. She wouldn't mind moving out of Washington either.
- Not all Republicans love Trump. They voted for Trump anyway.

Busy – how to thrive in a world of too much – Part 2

Adapted and paraphrased from original source: <http://personalresilience.com/thriving-in-a-busy-world/>

Original author: QED Resilience

What can we do about it all?

People are busy because there is too much to do – I have to do this, there is nothing I can do about it. But we can focus on our what we can choose- yes there is too much to do and therefore the choices we make become really important. How do I still focus on the stuff that I know is going to make a difference– despite having too much to do?

Part of the trick is to say – I am going to be a bit sloppy in certain areas in order to be really good over here. Perfection and trying to do everything is the enemy of greatness. People often work to a false standard that is far too high for what is required.

Becoming more aware of time actually makes us busier, which is not the solution to busyness. When we focus on time we split it into smaller slices so things get chaotic and disorganized.

Tony feels that it is time for attention. Managing our attention better.

- 1) Decide which of the things coming up is the best use of my attention.
- 2) When people are given the choice of doing a task that is small and dull rather than big/difficult but interesting, they will choose the small and dull. So you go to work with good intentions, check emails and then get caught up in other things. So we need to make better use of our brain at the right times.
- 3) It takes an amount of time to get into a flow state, to really concentrate. Switch e-mail, Facebook, and Twitter off –so you can work temptation free and be focused.

Tony talks of Warren Buffett, who asked a pilot, “What are your goals in life?” The pilot wrote 20 down. Buffett then said – choose your top 5, then look really carefully at your next 15 and do everything you can do to avoid doing those because those are the things that will actually distract you from having the life you want to have. Part of success and satisfaction is being able to choose wisely.

Say NO to great ideas in order to put enormous energy behind the things that we choose – that is the secret.

Busy is the standard response to the environment we are in now – if you are distracted you can only offer shallow thinking. But it’s not the only choice. We need to recognize that we are human and our brains are incredible pieces of kit, but at the same time they are vulnerable. We need to put simple practices in place that allow us to move from being reactive, to more intentional and create environments that allow us to do our best thinking and be creative.

Busy – How to thrive in a world of too much – Part 2 HSE Questions

1. Why are people busy?
 - a. Because there is too much to do and it seems like there is nothing we can do about it
 - b. Because having time for ourselves is overrated, and we should try to fit as many things into one day as possible
 - c. Because work and making money should always be the priority, especially if you have a family to provide for
 - d. Because the fast-paced environment of today's world doesn't include having downtime
2. What is perfection?
 - a. Perfection is achievable and should be the standard to which we all set ourselves to
 - b. A false standard that is the enemy of greatness
 - c. The enemy of greatness that we should try to achieve at all costs
 - d. Greatness that is impossible to achieve
3. What happens when people become more aware of time?
 - a. It becomes easier to manage our schedules
 - b. We tend to waste more time, avoiding doing the important things
 - c. We actually become busier
 - d. We become worried that we will not be able to complete all of our tasks
4. Complete the sentence with the correct answer: "Part of success and satisfaction is being able to _____."
 - a. Make as much money as possible
 - b. Set and achieve as many life goals as possible
 - c. Choose your goals and what you want in life wisely
 - d. Refrain from setting goals so you never actually fail
5. Why should we say no to great ideas?
 - a. Great ideas require a lot of work, and if we say no to them, we won't be as busy
 - b. So we can put enormous energy behind the things and goals we have chosen
 - c. Because great ideas rarely work out, and we would just be wasting our time saying yes
 - d. We shouldn't say no to great ideas. Always saying yes increases our chances of success

6. What is one way we can manage our attention better?
 - a. Evenly divide your attention between your upcoming tasks and activities
 - b. Constantly check your email, but limit the amount of time you spend on Facebook and Twitter
 - c. Make better use of your brain at the right times to avoid getting caught up in other things
 - d. Decide what things coming up could use the best of your attention and save the best for last
7. When given the choice, why will people choose to do small and dull tasks rather than a big/difficult, but interesting task?
 - a. Smaller tasks are easier and you don't have to put as much deep thought into them
 - b. Small tasks can be done perfectly and larger tasks are more complex and error prone
 - c. Because it is not as easy to divide our attention between large, interesting tasks
 - d. Because most people are not qualified to do large, interesting tasks
8. What is the benefit of having only five goals in life instead of 20?
 - a. You don't have to put as much time effort into what you set out to do in life
 - b. You have more time to focus on the goals you have deemed most important
 - c. You have more time to complete other, smaller tasks
 - d. Having only five goals allows you to complete them quicker and more efficiently
9. Why does Tony Crabbe mean when he says, "If you are distracted, you can only offer shallow thinking"?
 - a. If your attention is divided, then you cannot put deep thinking into any of your thoughts or decisions
 - b. If you are distracted, you can only offer superficial and smallminded thoughts and feedback
 - c. If you are distracted by other tasks, your thoughts are usually profound and reflective
 - d. Crabbe is wrong, shallow thinking is not the only result of being distracted
10. Why do people often work to a false standard of perfection that is far too high for what is required in the first place?
 - a. Because they want to be the best, and being perfect is the only way to do that
 - b. Because it is engrained in our culture and society has brainwashed people into thinking that perfection is realistic
 - c. Because working toward perfection is proof that you are working hard
 - d. We expect from ourselves, what we expect from others and that is perfection whether we realize it or not

Busy – How to thrive in a world of too much – Part 2 Answer Key

1. Why are people busy? **Right there question**
 - a. Because there is too much to do and it seems like there is nothing we can do about it**
 - b. Because having time for ourselves is overrated, and we should try to fit as many things into one day as possible
 - c. Because work and making money should always be the priority, especially if you have a family to provide for
 - d. Because the fast-paced environment of today's world doesn't include having downtime
2. What is perfection? **Pulling it together question**
 - a. Perfection is achievable and should be the standard to which we all set ourselves to
 - b. A false standard that is the enemy of greatness**
 - c. The enemy of greatness that we should try to achieve at all costs
 - d. Greatness that is impossible to achieve
3. What happens when people become more aware of time? **Right there question**
 - a. It becomes easier to manage our schedules
 - b. We tend to waste more time, avoiding doing the important things
 - c. We actually become busier**
 - d. We become worried that we will not be able to complete all of our tasks
4. Complete the sentence with the correct answer: "Part of success and satisfaction is being able to _____." **Right there question**
 - a. Make as much money as possible
 - b. Set and achieve as many life goals as possible
 - c. Choose your goals and what you want in life wisely**
 - d. Refrain from setting goals so you never actually fail
5. Why should we say no to great ideas? **Right there question**
 - a. Great ideas require a lot of work, and if we say no to them, we won't be as busy
 - b. So we can put enormous energy behind the things and goals we have chosen**
 - c. Because great ideas rarely work out, and we would just be wasting our time saying yes
 - d. We shouldn't say no to great ideas. Always saying yes increases our chances of success
6. What is one way we can manage our attention better? **Pulling it together question**
 - a. Evenly divide your attention between your upcoming tasks and activities
 - b. Constantly check your email, but limit the amount of time you spend on Facebook and Twitter
 - c. Make better use of your brain at the right times to avoid getting caught up in other things**
 - d. Decide what things coming up could use the best of your attention and save the best for last

7. When given the choice, why will people choose to do small and dull tasks rather than a big/difficult, but interesting task? **Author and me question**
- a. Smaller tasks are easier and you don't have to put as much deep thought into them
 - b. Small tasks can be done perfectly and larger tasks are more complex and error prone
 - c. Because it is not as easy to divide our attention between large, interesting tasks**
 - d. Because most people are not qualified to do large, interesting tasks
8. What is the benefit of having only five goals in life instead of 20? **Author and me question**
- a. You don't have to put as much time effort into what you set out to do in life
 - b. You have more time to focus on the goals you have deemed most important**
 - c. You have more time to complete other, smaller tasks
 - d. Having only five goals allows you to complete them quicker and more efficiently
9. Why does Tony Crabbe mean when he says "if you are distracted, you can only offer shallow thinking"? **On my own question**
- a. If your attention is divided, then you cannot put deep thinking into any of your thoughts or decisions**
 - b. If you are distracted, you can only offer superficial and smallminded thoughts and feedback
 - c. If you are distracted by other tasks, your thoughts are usually profound and reflective
 - d. Crabbe is wrong, shallow thinking is not the only result of being distracted
10. Why do people often work to a false standard of perfection that is far too high for what is required in the first place? **On my own question**
- a. Because they want to be the best, and being perfect is the only way to do that
 - b. Because it is engrained in our culture and society has brainwashed people into thinking that perfection is realistic**
 - c. Because working toward perfection is proof that you are working hard
 - d. We expect from ourselves, what we expect from others and that is perfection whether we realize it or not.

READER COMMENT PAGE

WRITER _____ READER _____

1. What is clear and interesting to you about this piece of writing? Help the writer by being as specific as you can.
2. As the reader, what would you like to be clearer or easier to understand? What would you like to hear more about?
3. Do you have additional comments or suggestions?

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Week 7, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Create Your Career Pathway PowerPoint Presentation

Students focus on a grammar lesson, are introduced to the final PowerPoint assignment, and are shown a demonstration on how to use PowerPoint.

MATERIALS

For Activity #1:

- Classroom Resource: Six index cards with one of the following sentences written on each:
 - The HiSET test is important for students' futures. They will find better jobs once they pass the test.
 - Students have to juggle many things to fit school schedules into their other schedules. Family and work responsibilities can be very demanding.
 - Homework is not always easy. Students need to put aside more time for doing homework.
 - Many young students live with their parents. They don't have to worry about bills.
 - Michelle Obama didn't mind leaving the White House. She wouldn't mind moving out of Washington either.
 - Not all Republicans love Trump. They voted for Trump anyway.
- Handout (attached): Make one copy for each student.
And, But, So Worksheet – Practicing with Sentence Structure Packet – page 7

For Activity #2:

- Handout (attached): Make one copy for each student.
PowerPoint Assignment: My Manufacturing Career Plan
- Handout (attached): Make one copy for each student.
Presentation Planning Assistant

TEACHER PREPARATION: Prior to this lesson, put together the six index cards with a sentence referred to above on each. Also, put together a clear presentation on how to use PowerPoint. Provide students with instruction on the basics they will need to do their presentation (for example, how to add a new slide, how to insert a picture).

ACTIVITY #1: Combining Two Sentences into One – 60 minutes

- Tell students this comma rule is for when you need to combine two sentences into one.
- Put the following words on the board:
 - And
 - But
 - Yet
 - Or
 - Nor
 - For
 - So
- Write the following sentence on the board:
 - Sometimes students love to do grammar. Sometimes they find grammar boring.
- Ask:

- Are both of these statements sentences? (Answer: Yes.)
 - How do you know? (Answer: *They both have subjects and verbs.*)
 - What is the subject of the first sentence? (Answer: *Students.*)
 - What is the subject of the second sentence? (Answer: *They.*)
 - Explain how pronouns are substitutes for nouns that have already been mentioned.
 - Ask:
 - Which of the smaller words on the board can connect the two sentences so they make sense?
 - What punctuation is needed between the two sentences? (Answer: *A comma.*)
 - Where does it go? (Answer: *Right after the first sentence and before the word that joins two sentences.*)
 - As a reader, what does the comma tell you? (Answer: *"This is the end of the first sentence and here comes another sentence that has been added to it."*)
 - Put students into pairs and hand out the index cards. Tell students to:
 - Discuss the small word or words that will connect the two sentences.
 - Write the new sentence down in their notebooks with the correct punctuation.
 - Next, have the pairs pass their index card to the right and repeat the group work above.
 - Repeat this full process until all the students have written down the six new sentences in their notebooks.
 - Go round robin to have each group read their original sentence. Tell students to:
 - Say "comma" where the comma goes.
 - Say the linking word very loud.
 - Ask: What is the comma rule for joining two sentences together? (Answer: *Put a comma after the first sentence before the right joining word.*)
 - Pass out the *And, But, So* worksheet for additional practice.
-

Break – 10 minutes

ACTIVITY #2: Introduce PowerPoint Presentation – 50 minutes

Look at the PowerPoint Assignment

- Tell students they will create a PowerPoint presentation on their career pathway and will use their readings and writings from the course to put this together. The presentation should address the questions listed on the Manufacturing Career Plan handout with at least one slide per question. However, the questions themselves should not be included on the slides.
- Pass out *PowerPoint Assignment: My Manufacturing Career Plan*.
- Read the instructions on the handout.
- Go round robin with each student reading one question aloud.
- Answer students' questions about the project.
- Tell students to consider:
 - Who is your audience for this PowerPoint presentation? Classmates? Teachers? Staff? Family? Employers? Others?
 - Why is it important to consider your audience when creating a presentation? Why will your audience be interested in your Manufacturing Career Pathway presentation?
- After students understand the assignment, discuss who they want to invite to these presentations, if appropriate.

Learn to Use the Presentation Planning Assistant

- Pass out the *Presentation Planning Assistant*. It is designed to help them answer one question at a time by:
 - Reviewing relevant readings and their written work to get ideas about what they want to present. They can jot down these ideas in the second column.
 - Make a list using bullet points of information they want to include on their slide.
 - As far as pacing, students will have two days when they can work on their assignment in class. They should plan to complete the prep and the PowerPoint slides for four questions in the first class period and four during the second.
-

Break – 10 minutes

ACTIVITY #3: Demonstrate the Use of PowerPoint – 50 minutes

- Demonstrate how to create a PowerPoint slideshow. Show students how to choose slide types, fill them in, add a slide, subtract a slide, insert a picture from a website into a slide(s).
 - Create a slide for question one: What is your presentation going to be about? Ask:
 - What are suggestions for a title of this slide (other than using the question)?
 - Type in a suggestion for a title slide.
 - Show students how to use bullets.
 - Ask: What is the presentation going to be about?
 - Fill in some suggestions from the class.
 - Make sure students understand that a PowerPoint contains clear notes that they can talk about, but not all the text they would put in a written paper. Suggestions for students might be:
 - Include at least three visuals as part of the presentation.
 - Include at least one chart or graph.
 - Limit the number of words per slide to 50.
-

HOMEWORK

COMPLETE: Have students complete the first four questions on the *Presentation Planning Assistant*.

Teacher Preparation Note: Before the next class, prepare to demonstrate how to find images online and how to insert those images into a PowerPoint slide.

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And, But, So

Combine the following sentences using *and*, *but*, or *so*. You will have to eliminate some words. Then, look at the sentences you combined using *so*. Rewrite those sentences using *because* instead of *so*. You will have to change the word order.

1. Our friends make us feel happier. Our friends make us feel healthier.
2. CUNY courses are inexpensive. CUNY courses are not free.
3. The stock market crashed. Thousands of people lost their jobs.
4. The mayor is highly intelligent. Unfortunately, the mayor is corrupt.
5. My brother was too ill to go to work. He called in sick.
6. Michael Jackson was a uniquely talented person. He was very troubled.
7. Students go to college to prepare for their future careers. They also go to college to open their minds.
8. People with friends tend to feel better. They also live longer.
9. She is a fluent speaker of Chinese and Vietnamese. She also speaks English fluently.

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PowerPoint Assignment: My Manufacturing Career Plan

This PowerPoint presentation will draw upon the readings and writings from the course up until this point. The presentation should address the questions listed below. Each answer should be on a separate slide, but the questions should not be included in the presentation.

1. What is your PowerPoint presentation going to be about? Think of this like a table of contents in a book—what information will the audience learn about?
2. What kinds of training for Manufacturing careers are available through City Colleges of Chicago?
3. Which Manufacturing career pathway are you most interested in?
4. What is the Manufacturing job you are most interested in?
 - Which credential or degree in that Pathway do you need to get that job? This will be your college goal?
5. What skills and experiences make you a good fit for this career?
6. Do you have other reasons for making this selection?
7. What challenges do you anticipate could get in the way of your achieving your goal?
8. What strategies will you use to keep yourself motivated to overcome these challenges and achieve your goal?

Additional Presentation Requirements:

- Include at least three visuals as part of the presentation
- Include at least one chart or graph
- Limit the number of words per slide to 50

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PRESENTATION PLANNING ASSISTANT

Use the following set of pages to organize your notes and plan what you want to put on each slide

PowerPoint Question	Notes From your Readings and Writings	Bullet Points for your PowerPoint
1. What is your PowerPoint presentation about?	You do not need to look through your readings and writings to fill in this box.	
2. What kinds of training for Manufacturing careers are available through City Colleges of Chicago?		
3. Which Manufacturing jobs are you most interested in?		
4. Which credential or degree in that Pathway do you need? This will be your college goal?		

PowerPoint Question	Notes From your Readings and Writings	Bullet Points for your PowerPoint
5. What are your reasons for making this selection?		
6. What challenges do you anticipate could get in the way of achieving your goal?		
7. What strategies will you use to keep yourself motivated to overcome these challenges and achieve your goal?		

Week 7, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Write Your Career Pathway PowerPoint Presentation



Class to be held in the Technology Lab

Students create four PowerPoint slides and incorporate at least one visual into their presentation.

TEACHER PREPARATION: Before class, prepare to demonstrate how to find images online and how to insert those images into a PowerPoint slide.



ACTIVITY #1: Peer Review of the Outline for the First Four Questions – 30 minutes

- Have students get into pairs to review the four questions they outlined and ask each other for clarification and more information, as necessary.

Two Breaks as Needed – 10 minutes each

ACTIVITY #2: Create Four PowerPoint Slides – 65 minutes

- Students need to find at least one visual for their PowerPoint during this class period. Ask:
 - Where can you find visuals?
 - Show students how to do a Google image search. They can scroll through search results, make a selection, click on the image to copy it, and insert it into a PowerPoint slide.
- Create a group of less experienced students with fewer computer skills and walk them through the use of PowerPoint and the writing in their outlines. You can have this group follow your instruction step by step. For example, have everyone go to the first slide and type in the title for the first slide.
- Meanwhile, put more experienced students into pairs so they can ask questions as they put their PowerPoint presentations together.

ACTIVITY #3: Complete Four PowerPoint Slides – 65 minutes

- Have students who have completed all four questions and put at least one visual in their presentation begin their outlines for the last four questions on their *Presentation Planning Assistant*.

HOMEWORK

PREPARE: Have student prepare questions 4-8 on the *Presentation Planning Assistant*.

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Week 8, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Write Your Career Pathway PowerPoint Presentation

Class to be held in the Technology Lab



Students define criteria for a good presentation. Then, they finish remaining work on their PowerPoint presentations.

MATERIALS

For Activity #1:

- Video: Bad Presentation (running time: 04:03)
<https://www.youtube.com/watch?v=W0dT49IG4t4>
- Teacher Preparation Sheet for Next Class (attached):
Class Criteria for Effective Presentations

ACTIVITY #1: Create Criteria for a Good PowerPoint Presentation – 40 minutes

- Tell students that in addition to creating and presenting their own PowerPoint, they are going to provide feedback on their classmates' presentations. It is important that this feedback is be useful to student presenters.
- Tell students to think of a presentation they have seen that was particularly interesting, memorable or engaging.
 - Ask: What made the presentation so interesting, memorable or engaging?
 - Write students' responses on the board.
- To get new ideas for what makes a good presentation, tell student they will watch a video of an ineffective presentation. They should take notes on what makes this presentation ineffective.
- After the video, ask:
 - Why was this presentation so ineffective? Write the reasons on the board.
 - How can you use these ineffective presentation techniques to define an effective presentation? For example, an effective/interesting/engaging presentation has _____ (fill in the blank) _____.
 - Create a list of criteria for what makes a presentation strong/engaging/effective.
- Review the list and have students add anything additional that would help the class understand how to prepare to present their PowerPoint slides.
- Lastly, ask students:
 - Of all the criteria on the board, which four do you think are the most important?
 - Why did you select these?
- Come to consensus about the four that will be used as the criteria for their presentations.

Teacher Note: Before the next class, use the attached *Class Criteria for Effective Presentations* and fill in the four primary criteria that students list during this exercise. You will need copies of this sheet as it will be used when students give their presentations during the next class.

Break – 10 minutes

Activity #2: Complete Four PowerPoint Slides – 120 minutes

- Students need to find two more visuals for their PowerPoint during this class period.
 - Create a group of less experienced students with fewer computer skills and walk them through the use of PowerPoint and the writing in their outlines. Have this group do things at the same time with your instruction. For example, have everyone go to the next slide, put in the statement for the first slide, etc.
 - Meanwhile, put more experienced students into pairs so they can ask questions as they put their PowerPoint presentations together.
-

Break as Needed – 10 minutes

HOMEWORK

PREPARE: Have student prepare their final presentation.

CLASS CRITERIA FOR EFFECTIVE PRESENTATIONS

Check off the criteria that you think the presenter met while giving their presentation, then answer the question below.

Class Criteria for Effective Presentations	Check if you think the presenter did well in this area.
1.	
2.	
3.	
4.	

1

What was strong about this presentation?

What did the presenter do that worked well?

What was most engaging?

What part of the presentation needs more clarification or more information?

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Week 8, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Give Your Career Pathway PowerPoint Presentations

Students present their PowerPoint presentations. Their classmates will give presenters feedback based on the class criteria.

MATERIALS

For Activity #1:

- Handout (attached to Week 8, Lesson 1): Make three copies of the filled-in sheet for each student.
Class Criteria for Effective Presentations

ACTIVITY #1: Students Give Their PowerPoint Presentations – 160 minutes

- Pass out the *Class Criteria for Effective Presentations* from Week 8, Lesson 1 - one to each student.
- Review the instructions on the sheet.
- Tell students you will assign 2-3 students to do written reviews of each presentation.
- After each presentation, conduct a discussion by asking:
 - What questions do you have for the presenter about his/her career?
 - What really worked in the presentation?
 - What needs further clarification or more information?
 - Any additional questions for the presenter?
- Collect the written reviews and give them to each presenter after he/she is finished.
- Assign the next set of 2-3 students to do written reviews of the next presenter and pass out additional *Class Criteria* as needed.
- Repeat this process for each presenter.

Two Breaks as Needed – 10 minutes each

Teacher Preparation Note: Prior to this lesson, make sure that you are able to answer the questions on the *Global Supply Chain and Manufacturing Processes Treasure Hunt* by being familiar with the video and article for Activity #1.

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Week 9, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Manufacturing Processes

Students will be introduced to the role of manufacturing within global supply chains. They will complete a Treasure Hunt that includes questions on a video on global supply chains and an article on four types of manufacturing processes. Students will then write about the kind of manufacturing process they think might be the most interesting.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
Global Supply Chain and Manufacturing Processes Treasure Hunt
- Video: Keeping The Global Supply Chain Moving (running time: 06:07)
<https://www.youtube.com/watch?v=OVYcxilrDgE>
- Handout (attached): Make one copy for each student.
Graphic #1: A Complex Manufacturing Supply Chain
- Handout (attached): Make one copy for each student.
Graphic #2: Unbundling the Automobile

For Activity #2:

- Handout (attached): Make one copy for each student.
Manufacturing Process

TEACHER PREPARATION: Prior to this lesson, make sure that you are able to answer the questions on the *Global Supply Chain and Manufacturing Processes Treasure Hunt* by being familiar with the video and article for Activity #1.

ACTIVITY #1: Manufacturing Within Global Supply Chains – 60 minutes

- Introduce the next four-week unit on manufacturing within global supply chains. Tell students they will start by looking at global supply chains to see how manufacturing fits within the world's production and distribution systems. In this unit, students will look at manufacturing processes, roles in manufacturing, what can go wrong in the manufacturing process, and how Lean Manufacturing tries to address these problems. Students will also get a sense about how these issues are important to manufacturing customers, production workers, and the bottom line.



Prediction Exercise: What is a Global Supply Chain?

- Tell students they will begin by making predictions about the scope of manufacturing and global supply chains.
- Ask:
 - What do we see around us that we think was made by a manufacturer?
 - List these items on the board.

- Is there anything that was NOT made by a manufacturer?
 - Put these items in a separate list on the board.
 - Can you think of items in your home that were NOT made by a manufacturer?
 - Add these to the second list.
- Next, put students into pairs and ask:
 - What is a global supply chain?
 - Tell pairs to come up with a definition and an example of how the global supply chain might work. They can make something up if they are not sure.
- Come back together as a class and use the following process:
 - Ask: What is a global supply chain?
 - Go to the first pair and ask for their definition.
 - Take notes on this definition on the board.
 - Go from pair to pair to ask if there is something they would like to change or add to the definition on the board.
 - Continue taking notes on the board.
 - Next, go around from pair to pair for an example of what they think a global supply chain might look like.
 - Ask volunteers to tell you what to draw to represent their idea of a supply chain. Tell students they must get their product from raw material to a product they can buy in a store. Ask questions like:
 - What is your supply chain making and delivering? (Write the name of the product on the board.)
 - Where does your supply chain start? (Draw that.)
 - What happens to the product there? (Take a note on what is happening.)
 - Then where does the resource or product go? (Draw an arrow to the next place in the supply chain.)
 - Repeat these questions until you get the product to the store.

Watch a Video on the Global Supply Chain

- Tell students they are going to watch a video that illustrates a good example of a global supply chain and reasons why the government wants to keep it running well.
- Pass out *Global Supply Chain and Manufacturing Processes Treasure Hunt*.
- Put students in new pairs and assign questions 2-7 on the first page of the *Treasure Hunt* between the pairs.
- Before watching the video, tell pairs that they are to take notes on their assigned question only.
- Watch the video and give pairs time to:
 - Answer question #1.
 - Talk about their answer to the question assigned to them
 - Write their answers into their *Treasure Hunt* handout.
- Tell students to go around and talk to other pairs to get answers to questions that were not assigned to them
 - They should ask questions so they understand the answers and write them in the *Treasure Hunt* handout in their own words.
- Go over the questions as a class and encourage students to add or make changes to answers given.

Interpret Two Graphics on Global Supply Chains

- Tell students they are going to look at two graphics that they can interpret using their new knowledge of global supply chains.
- Project and pass out Graphic #1: *A Complex Manufacturing Supply Chain*.
- Ask:
 - What is being made in this process? (Answer: Cars.) How do you know?

- How many kinds of manufacturers are in this process? (Answer: Three.)
 - Which are they? (Answer: Dashboard, transmission, and engine manufacturers.)
- How many assemblers? (Answer: Three – interior, power train, and final.)
- How many of these manufacturers need raw materials? (Answer: Three, the manufacturers.)
- Where does the finished product go? (Answer: To the dealers.)
- Where does the customer go to buy the product? (Answer: To the dealers.)
- Lastly, ask:
 - What does this chart tell you about all that goes into making a car?
 - How many companies do you think might be involved in making a car?
 - Write students' guesses on the board.
 - Why do you think that many companies are involved?
- Project and pass out Graphic #2: *Unbundling the Automobile*.
- Ask:
 - Are you surprised at how many companies are involved in making a car?
 - What kinds of parts would you guess the different companies are making?
 - How do you think this level of complexity affects the supply chain?
 - What could cause headaches for companies that assemble cars?
 - Write students' answers on the board.

Break – 10 minutes

ACTIVITY #2: Different Production Processes – 60 minutes

- Tell students they will now read about different production processes and decide what kind of process would be most interesting to them as production workers.



Predict Different Production Processes

- Write the following words on the board: airplane, pencil, engine parts.
- Then, write the following question on the board:
 - What process do you think a manufacturer would use to make each of these?
- Put students in three groups and assign each group one of the items named on the board.
 - Tell the group to try to give their prediction about what kind of manufacturing process would be used.
- Have each group present their prediction.
 - Take notes for each product on the board.
- Ask: Based on these predictions, does the class think the process for making each product is very different or basically the same?

Play Request

- Tell students that the next article is going to help them see if their predictions are accurate.
- Pass out the *Manufacturing Process* article.
- Tell students that before they read, they will need to define two short words: pro and con.
- Ask: What does the word “pro” mean?
 - Write their definition on the board.
- Repeat for the word “con.”
- Tell students they will read this article and do specific annotations related to the words pro and con. Have students:
 - Read about the four manufacturing processes in this article and, for each process:

- Underline the portions that describe the pros and write Pro next to those underlined portions.
 - Put a squiggly line under the portions that describe the cons, and write Con next to them.
 - When students have finished their annotations, put students into pairs to:
 - Identify the pros and cons for each manufacturing process and fill in the second page of the *Treasure Hunt*.
 - Write five questions about manufacturing they know the answers to. They will use these questions to quiz other students.
 - Explain how to play Request:
 - Ask: Which pair wants to be the first lead? Then tell students to follow this pattern:
 - The lead asks a question he/she knows the answer to.
 - Those who know the answer raise their hands.
 - The lead chooses someone to answer the question.
 - If the answer is correct, that person becomes the new lead and starts this process over again.
 - If the answer is incorrect, the lead chooses a new student to answer the question until someone gets the answer.
 - Repeat this pattern until students are out of questions.
 - Lastly, return students' predictions about airplane, pencil, and engine parts, and ask:
 - How accurate were your predictions about the manufacturing processes for these products?
 - What additions or changes would you like to make?
-

Break – 10 minutes

ACTIVITY #3: Write About the Production Processes – 40 minutes

- Tell students they are going to write their answers to the following question:
 - If you were to go get a job in manufacturing right now, which manufacturing process would you most like to work with? Why?
- Write the four types of manufacturing processes on the board:
 - Production Line
 - Continuous Flow
 - Custom Manufacturing
 - Fixed Position
- Write the following questions on the board:
 - If you were a worker in a manufacturing plant, which kind of manufacturing process appeals to you most?
 - What are your reasons for this choice?
- Tell students to think about their answers to the question on the board.
- Go round robin and ask the first question:
 - Write students' name next to the type of manufacturing process they favor.
- Put students with the same answer in pairs or small groups.
- Have pairs:
 - Talk about the reasons they made their choice.
 - Give explanations and examples to make their explanations clear.
- Tell students to write their answer to the question in their notebooks.
 - Make sure students write only about the reasons they would choose the manufacturing process they have chosen.

HOMEWORK

READ: Have students find an article in a newspaper, magazine, or online that tells more about the different departments in a manufacturing plant. Write down the name of the article, read the article, and then write down the different departments the article presents.

Teacher Preparation Note: Prior to the next lesson, create index cards with one of the following written on each:

- Machine maintenance
- Production planning
- Product design
- Promotion in the media
- Creating advertisements and brochures
- Inventory
- Wrapping product on a pallet to be put on a truck
- Testing of raw materials
- Testing of finished products
- Finding out if the customer was pleased with the shipped product
- Finding out if the customer wants changes to the product
- Calling potential customers to see if they are interested in your product
- Visiting the potential customer to talk about their order

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GLOBAL SUPPLY CHAIN AND MANUFACTURING PROCESSES TREASURE HUNT

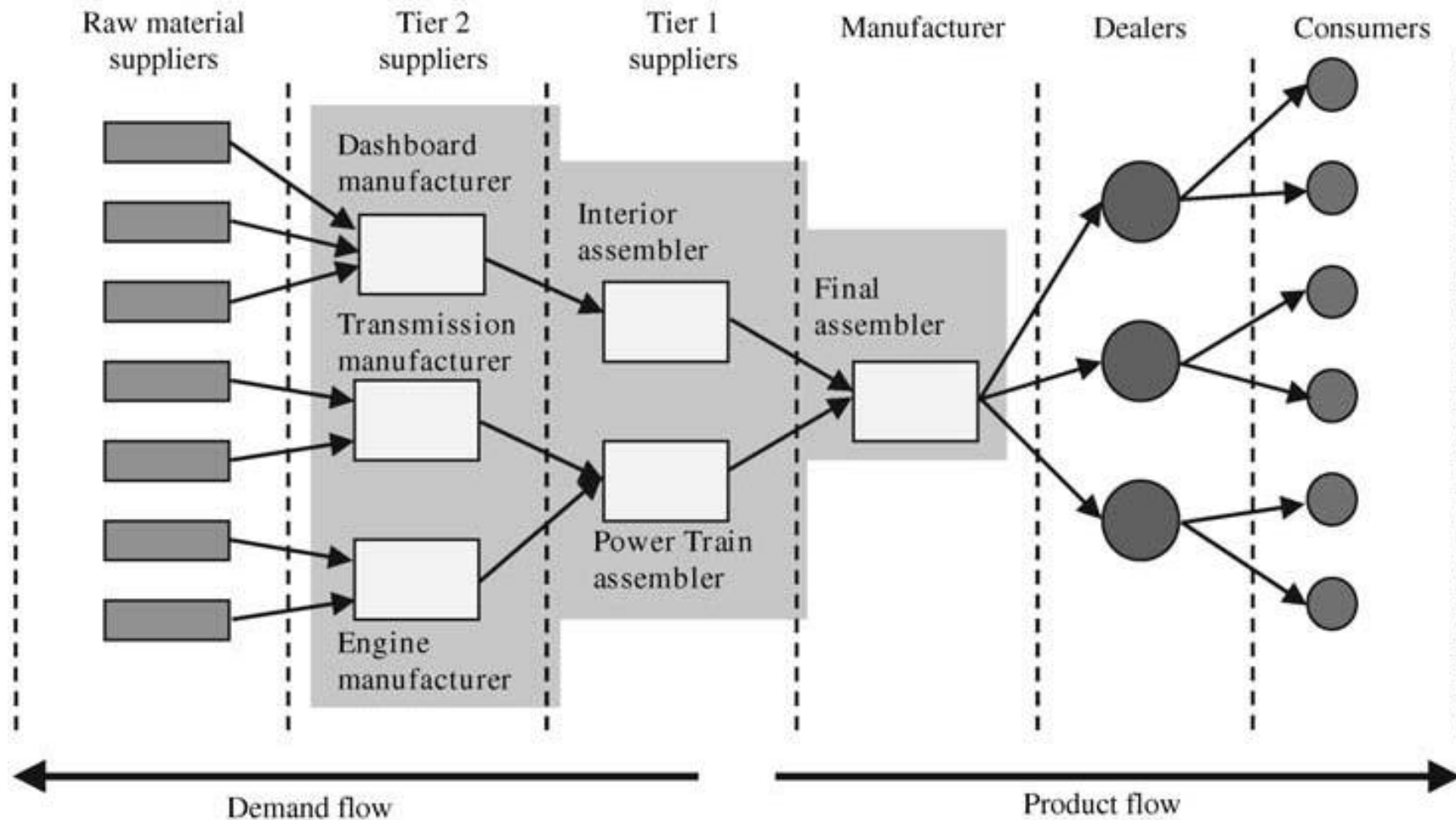
Video: Keeping the Global Supply Chain Moving

1. What is a global supply chain?	
2. What is the role of raw materials in supply chains? Can you give a non-shoe example?	
3. What is the role of manufacturing in global supply chains?	
4. What does Justine need from the global supply chain?	
5. What do Justine's customers need from the global supply chain?	
6. How do distribution centers help Justine and her customers get their product quickly?	
7. What does the government want to do for the global supply chain? Why?	

Reading: Manufacturing Processes

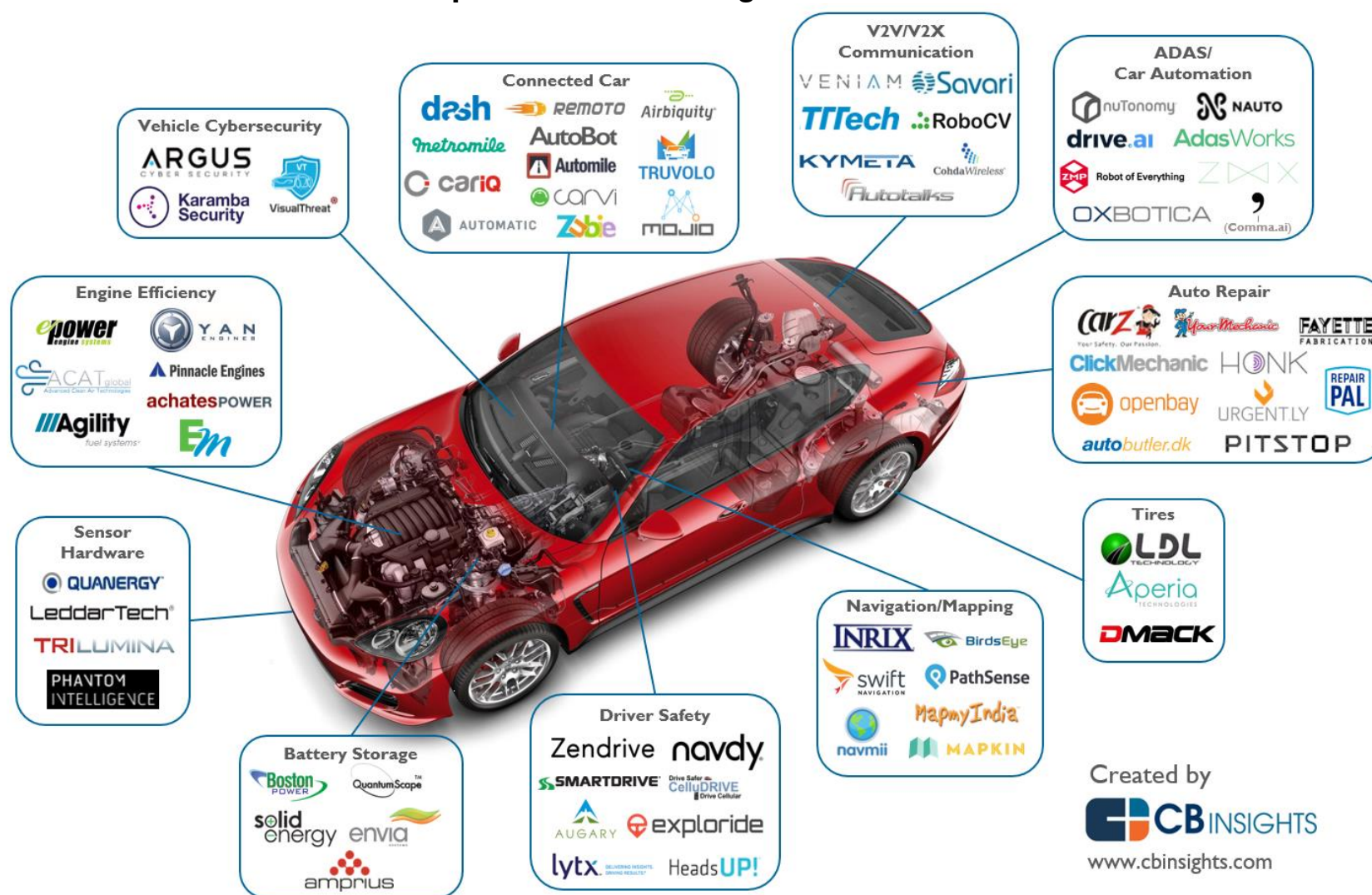
	Pros	Cons
8. What are the pros and cons of the production line process?		
9. What are the pros and cons of the continuous flow process?		
10. What are the pros and cons of custom manufacturing?		
11. What are the pros and cons of fixed position manufacturing?		

Graphic #1: A Complex Manufacturing Supply Chain



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Graphic #2: Unbundling the Automobile



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Manufacturing Process

Adapted and paraphrased from original source: <https://www.thebalance.com/manufacturing-process-2221376>

Original Author: Martin Murray

Introduction

When a manufacturing company begins production of a new product, it has to choose which manufacturing process it should use. The type of process depends on the kind of facility, the type of staff, and the information systems the company has available. Each process has its advantages, but some are best at certain tasks. Some examples include: large batches of finished goods for a supplier or small numbers of custom items for a store. When the decision is being considered about which manufacturing process to use, there are a number of questions that should be asked: how much needs to be produced, what are the requirements to make the product, and does the company already manufacture a similar product?

Here are some descriptions of the types of manufacturing processes manufacturers can select from: production line, continuous flow, custom manufacturing, and fixed position manufacturing.

Production Line

A production line is the traditional manufacturing process. The production line is arranged so that the product is moved along a work line and stops at work centers along the line where workers perform specific operations before the product moves along. The item may move along some kind of conveyor, or be moved manually by staff or forklifts. For example,

operations along the production line could include assembly, painting, drying, testing, and packaging. If needed, some parts can be removed from the production line and stored as semi-finished goods.

The production line manufacturing process is very suited to high volume manufacturing of a single product or product group. For example, a production line may be used to manufacture a range of vacuum cleaners, where the only difference between the models is the color of the plastic assembly and the attachments that are included in the final product.

There are disadvantages to using the production line manufacturing process. The fact that the production line manufactures a single product or similar products limits its ability to manufacture anything else. For example, if the company manufacturing vacuums wanted to make kitchen mops, it would not be able to use the same production line.

The second issue with production lines is that there is a high cost involved in the initial setup of the production line, and it requires a large volume of goods to be produced to justify the investment.

Continuous Flow

The continuous flow manufacturing process is similar to the production line, but the products that are manufactured cannot be removed from the production line and stored before completing the whole process. For example, materials that are suited to continuous flow include chemicals, pharmaceuticals, and plastics. In this process, the product is either done or it isn't and so is less flexible than the production line. However, like the production

line, continuous flow does not allow for other materials to be produced on the line without significant changes and new costs involved.

Custom Manufacturing

If a company manufactures a wide range of products that can be modified based on the customers' requirements, then a custom manufacturing process is a good fit. The custom manufacturing facility has a number of skilled employees and a range of equipment that can be used to manufacture and modify a wide range of items. The facility should be set up with a number of dedicated areas such as a welding area, lathe shop, paint spray area, and packaging area.

The custom manufacturing facility is not designed for high volume products but is ideal for customized products.

Fixed Position Manufacturing

Fixed position manufacturing is different from other manufacturing processes as it involves the finished product not moving from its fixed position from the beginning to the end of the process. This is the method used in large-scale manufacturing such as the manufacture of an aircraft or ship but is also used for products that are being constructed in place for the customer, such as a conveyor system.

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Week 9, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Manufacturing Processes

Students will read about various departments in the manufacturing process and look at a graphic of three core manufacturing processes within all manufacturing organizations. Students will then use what they learn from the reading to create and present their own process flow chart.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
Manufacturing roles

For Activity #2:

- Handout (attached): Make one copy for each student
Three Core Process Flows
- Teacher Resource: Index cards with one of the following written on each:
 - Machine maintenance
 - Production planning
 - Product design
 - Promotion in the media
 - Creating advertisements and brochures
 - Inventory
 - Wrapping product on a pallet to be put on a truck
 - Testing of raw materials
 - Testing of finished products
 - Finding out if the customer was pleased with the shipped product
 - Finding out if the customer wants changes to the product
 - Calling potential customers to see if they are interested in your product
 - Visiting the potential customer to talk about their order

For Activity #3:

- Classroom Resources: Flip chart paper and markers.

TEACHER PREPARATION: Prior to this lesson, create index cards ready for the Activity #2 with the words from the Materials list printed on them.

ACTIVITY #1: Read About Manufacturing Roles – 60 minutes

- Tell students now that they have looked at different kinds of production processes, they are going to look at the processes for the whole manufacturing plant.

Homework Check-In

- Ask students:
 - What departments did you find out about?

- List these on the board.
 - What do these departments do?
 - Take notes on their function on the board.
 - What was the name of the article or resource you used to find this information?
- Ask the class:
 - Can you think of other departments not listed on the board that are part of a manufacturing organization?
 - Do you have any predictions about how these departments might relate to each other?
 - Note students' responses on the board.

* Read, Annotate, Discuss

- Tell students they will now read descriptions of departments or, as it is referred to in the article, “roles” that different departments play in the manufacturing organization.
- Pass out the *Manufacturing Roles* article.
- Tell students to use their Annotation Key to annotate this article as they read.
- When students have completed their annotations, ask:
 - Of those things you underlined, what were the most important points brought up in the article?
 - What was surprising or interesting?
 - What was hard to understand or confusing?
 - When students identify words they did not understand, write them on the board and ask if they can define the words based on the context. If not, give the definition as needed.
 - Were there aspects of this article you agreed with? Disagreed with?

Play Request

- Tell students they will play Request again. Once they are comfortable with this game, the class will learn an additional part to Request that will help them prepare for doing well on the HiSET exam.
- Put students into pairs and have them come up with at least five questions they know the answers to that they can use to quiz their classmates.
- Explain how to play Request:
 - Ask: Which pair wants to be the first lead? Then tell students to follow this pattern:
 - The lead asks a question he/she knows the answer to.
 - Those who know the answer raise their hands.
 - The lead chooses someone to answer the question.
 - If the answer is correct, that person becomes the new lead and starts this process over again.
 - If the answer is incorrect, the lead chooses a new student to answer the question until someone gets the answer.
- Repeat this pattern until students are out of questions.

Break – 10 minutes

ACTIVITY #2: Read a Process Flow Graphic and Improve It – 50 minutes

- Tell students they will now look at a graphic that shows three different basic processes for any manufacturing organization. They will then use what they have learned in this lesson to expand on the graphic.

Start to Define Relationships Between Manufacturing Departments

- To set up for this activity, write the following departments/roles from the reading as headings for columns on the board:
 - Research and Development
 - Production
 - Quality Control
 - Shipping
 - Customer Support
 - Marketing
 - Sales
- Ask: What are the functions of each of these departments?
 - Take notes on students answer in the appropriate column.
- To add to their knowledge of what each department does, put students into pairs, shuffle the deck of index cards, and go from pair to pair to have each pair pick one card.
 - If there are more cards than pairs, keep going around until all the cards have been picked.
- Tell pairs to predict which department/role the function on their index card goes into and to prepare to explain why.
- Below are the right answers for each of the cards.
 - Machine maintenance (*Answer: Production*)
 - Production planning (*Answer: Production*)
 - Product design (*Answer: Research and Development*)
 - Promotion in the media (*Answer: Marketing*)
 - Creating advertisements and brochures (*Answer: Marketing*)
 - Inventory (*Answer: Shipping*)
 - Wrapping product on a pallet to be put on a truck (*Answer: Shipping*)
 - Testing of raw materials that have been shipped to the company (*Answer: Quality Control*)
 - Testing of finished products (*Answer: Quality Control*)
 - Finding out if the customer was pleased with the shipped product (*Answer: Customer Support*)
 - Finding out if the customer wants changes to the product (*Answer: Customer Support*)
 - Calling potential customers to see if they are interested in your product (*Answer: Sales*)
 - Visiting the potential customer to talk about their order (*Answer: Sales*)
- Next, ask:
 - What do you think are the relationships between these different departments?
 - How does Research and Development influence Production? (*Answer: R&D develops new products that need to be produced by the company.*)
 - How does Quality Control support Production? (*Answer: It makes sure the product meets quality standards and, therefore, customers' standards.*)
 - What is the role of Shipping after Quality Control has been completed? (*Answer: To prepare finished products for shipping to the customer.*)
 - Why would a company need Customer Support after the product has been shipped? (*Answer: To make sure the product meets customer expectations and to follow up on additional needs.*)
 - How would Marketing attract new customers? (*Answer: Media, advertisements, and events.*)
 - How does Sales turn interested, potential customers into customers? (*Answer: Following up on leads with phone calls and meetings in pursuit of a contract.*)
- Write the following departments on the board in the following order:
 - R&D, Production, Quality Control, Shipping, Customer Support, Marketing, Sales.
- Tell students that these departments in this order describe a process.
- Ask:
 - How does R&D lead to Production? (*Answer: The new product that R&D develops is produced through the company's production processes.*)

- How does Production lead to Quality Control? (Answer: After the product is made, it is tested for quality.)
- How does Quality Control lead to Shipping? (Answer: After the product passes inspection, it is shipped to the customer.)
- How does Shipping lead to Customer Support? (Answer: After the customer receives the product, Customer Support calls to see if the product meets the customers' expectation.)
- How does Customer Support lead to Marketing? (Answer: Customer Support informs Marketing about customer requirements.)
- How does Marketing and Sales? (Answer: Marketing works on promotional materials and Sales uses these to get contracts for the company.)

Reading a Process Flow Chart

- Project and pass out *Three Core Process Flows*.
- Ask the following questions to help students read the chart.
 - What three core process flows are illustrated in this chart? (Answer: Cash, Manufacturing, Design.)
 - What two boxes are outside of the company? (Answer: Supplier and Customer.)
 - What is the manufacturing process flow? Follow the blue lines.
 - Where does it start and then what are the processes along the way?
 - Repeat these questions for cash flow and then design flow.
 - For the cash flow process, ask:
 - What is "accounts receivable"? (Answer: Money owed to a company by a person or another company.)
 - What does "accounts payable" do? What is its relationship to the supplier? (Answer: It must pay the supplier for the order that will be shipped.)
- Add a column to the chart of departments on the board called "Accounting" and put "accounts receivable" and "accounts payable" in that column.

Discuss What Needs to be Added

- Tell students that there is something funny about the *Three Core Process Flows* chart. What departments from our original list are missing? (Answer: Research and Development, Quality Control, Shipping, Customer Support, Marketing.)
 - Point out these departments on the board as students answer this question.
- Next, put students into pairs and assign half the pairs to look closely at "Manufacturing Flow" and the other half to the "Design Flow" on the flow chart.
- Tell pairs to:
 - Decide which missing departments need to be part of the process flow.
 - Decide where they go in the process flow.
 - Sketch out a process flow that they think is more accurate and detailed than the one on the chart.
 - Be able to narrate the process flow with all the new departments included.

Break – 10 minutes

ACTIVITY #3: Draw and Present a Complete Manufacturing Process – 50 minutes

Prepare for a Presentation

- Pass out flip chart paper and markers to each pair and have them:
 - Draw their process flow, including the departments they added.
 - Decide who will present which portion of the process flow.

- Both partners must be included in the presentation.

Give the Presentations

- Have each pair give their presentations. After each presentation, ask:
 - Does anyone have questions for these presenters?
 - Is this flowchart the same or different than others that have been presented?
 - Does anyone have anything they would add or change to the description of the flow?
-

HOMEWORK



JOURNAL WRITING: Have student write two journal pages in response to the following prompt:

- Choose a department that you think is critical to the successful operation of a company and describe that department and explain your reasons for why it is so important.
- **Teacher Preparation Note:** Before the next lesson, create 12 index cards with one of the following written on each:
 - the bottom line
 - good benefits
 - product completed on-time.
 - workers have the right skills to do their job
 - suppliers deliver the right product on time
 - long-term, good-paying work opportunities
 - customers that want to re-order the product
 - equipment that works properly
 - management that is fair and respectful
 - there is good communication between the company and customer even when there are difficulties
 - work that is laid out efficiently
 - workers that are highly productive

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Manufacturing roles

Adapted and paraphrased from original source: <https://www.dougsguides.com/manufacturing>

Original Author: Douglas Kalish

Whether they're building a car or a smartphone app, companies that make stuff tend to have the same kinds of roles, split between inventing the stuff, producing the stuff, and selling the stuff. In some companies each of these roles is a separate department; other companies might combine Production and Quality Control or Marketing and Sales, for example.

Research and Development: These are the engineering types who are typically hired for their technical skills. They love to make stuff, they like challenges, and are fond of solutions that don't just work, but work elegantly (meaning they're clever and efficient). Some companies split pure Research (finding a solution to a technical problem) from Development (making the Research solutions into buildable, sellable products). A good R&D department needs input from customers (either directly or through Marketing) to understand what the real problems are. A bad R&D department elegantly solves really tough technical problems that no one cares about.

Production (Manufacturing): The Production or Manufacturing department obviously makes the stuff that the company sells. But it has to work closely with Development and Research to make sure that what comes out is something that can be built, tested, and maintained at a profit. Good production people are very process oriented; they want to do things according to the book with no deviations, and they pay attention to the details.

Quality Control (Testing): It's the job of the Quality Control (QC) folks to make sure that what comes out of Production actually works. In a company that manufactures stuff, they will devise tests that every product (or a sample from a production batch) has to pass before it is shipped. In a software company, QC usually works with the developers to find bugs (although many companies are letting their customers take on the QC task).

Shipping: Big companies and those that deal with big or delicate or expensive or huge numbers of items will have a separate department devoted to packaging and shipping the stuff quickly and efficiently. Sometimes figuring out the fastest and cheapest way to deliver the stuff becomes very complicated and is called **Logistics**.

Customer Support: Once the product is in the customer's hot little hands, they'll contact Customer Support if they have questions or anything goes wrong. Companies want to spend as little on customer support (CS) as possible, so they should invest a lot of time in building reliable, robust and easy to understand products. But they can also cut costs by **outsourcing** CS and putting up online support forums so customers can help each other.

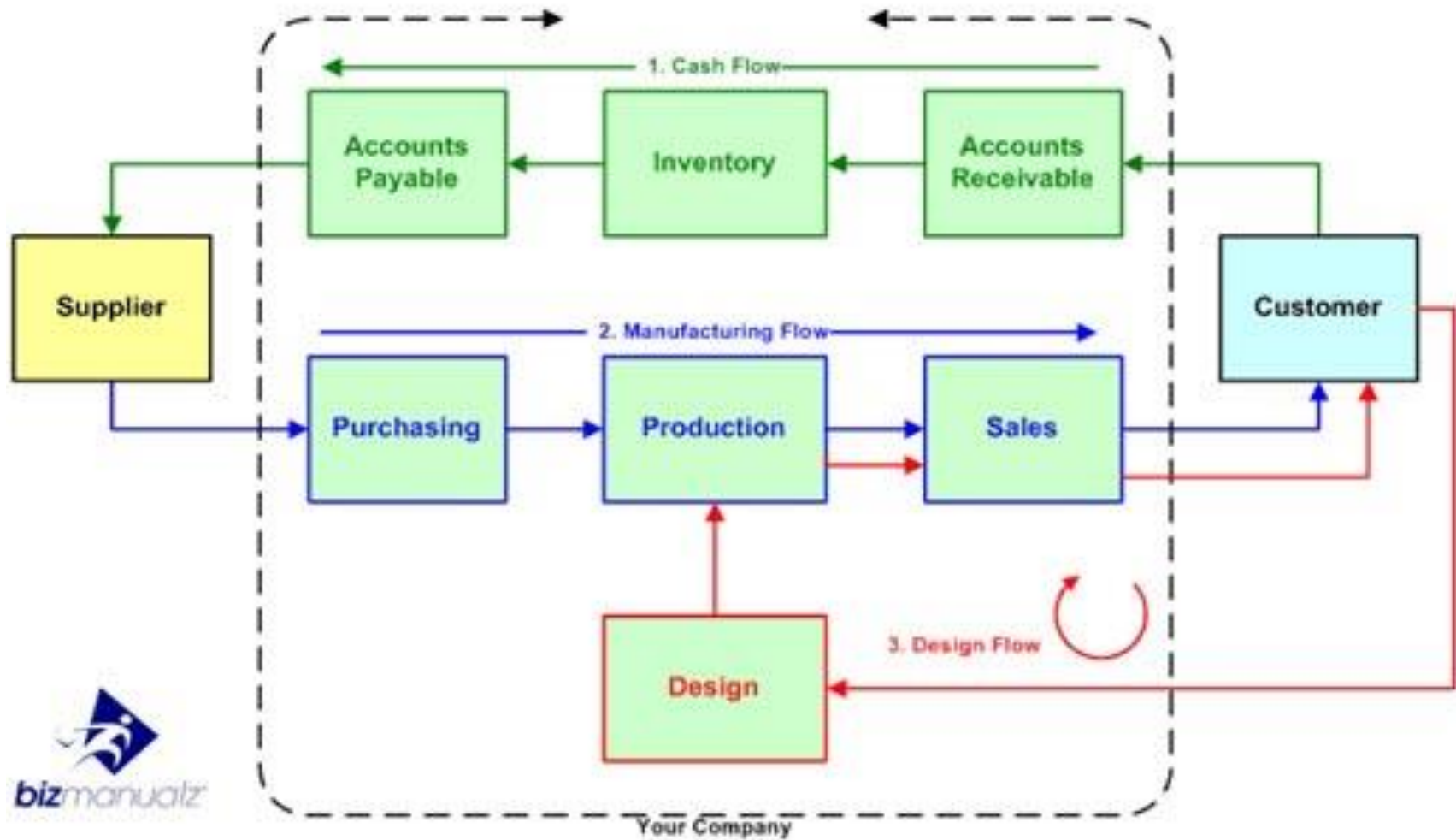
Marketing: It's Marketing's job to understand what customers need and will pay for (these are two different things). This can be a challenge because sometimes the customers themselves don't know. There are two kinds of Marketers: the Listeners and the Talkers. The Listeners try to understand what people want by figuring out what their problems are

and finding out what solutions will work. The Talkers tell people what their problems are and show them how the company can solve them. Both can be successful.

Sales: The Sales department is the connection to the outside world. The job of Sales is finding people who have problems that the company's products can solve at a price they can afford. You'd like to think that Sales is a rational process of evaluating customer needs and demonstrating the value (cost vs. benefit) of the product as a solution. In practice, emotions and personalities can play a large part in Sales and really good salespeople know when to use an argument and when to use emotion. Good salespeople are special folks: they are competitive, compassionate, and each lost sale makes them try harder on the next one.

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Three Core Process Flows



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Week 10, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Improving the Manufacturing Process

Students will explore what employers, employees, and customers do and don't want from manufacturing processes. They will read articles on what can go wrong in manufacturing processes and on what makes employees happy. Students will also learn the Question Around game.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
Treasure Hunt on What Can Go Wrong in the Manufacturing Process
- Teacher resource (attached):
Treasure Hunt on What Can Go Wrong in the Manufacturing Process (Answers)
- Classroom Resource: Flip chart paper and markers.
- Teacher Resource: 12 index cards with one of the following written on each:
 - the bottom line
 - good benefits
 - product completed on-time.
 - workers have the right skills to do their job
 - suppliers deliver the right product on time
 - long-term, good-paying work opportunities
 - customers that want to re-order the product
 - equipment that works properly
 - management that is fair and respectful
 - there is good communication between the company and customer even when there are difficulties
 - work that is laid out efficiently
 - workers that are highly productive

For Activity #2:

- Handout (attached): Make one copy for each student.
What Factors Can Affect the Manufacturing Process?

For Activity #3:

- Handout (attached): Make one copy for each student.
Why Happy Employees are 12% More Productive
- Handout (attached): Make one copy for each student.
Prepare for Question Around

Homework:

- Handout (attached): Make one copy for each student.
HSE Questions for Why Happy Employees are 12% More Productive

- Teacher Resource (attached): Answer Key- *HSE Questions for Why Happy Employees are 12% More Productive*
-

TEACHER PREPARATION: Before class, have the index cards ready for Activity #1.

ACTIVITY #1: Explore What Key Players in the Manufacturing Process Want – 60 minutes

Homework Check-In

- Ask students:
 - What department did they choose to write about in their journal homework?
 - What were the reasons they gave for that department being so important?

Describe What Employers, Workers, and Customers Want

- Tell students that they have done a lot of work already to understand a range of manufacturing processes and how they work together. During this lesson, they will look at what can go wrong with these processes and how they can impact three major players that care a lot about the manufacturing processes.
 - Create three columns on the board with the following headings:
 - What employers want
 - What employees want
 - What customers want
 - Have students count off by three and get into three groups with the following assignments:
 - Group #1: Employers
 - Group #2: Employees
 - Group #3: Customers
 - Give each group a piece of flip chart paper and markers.
 - Pass out *Treasure Hunt on What Can Go Wrong in the Manufacturing Process*.
 - Tell groups to:
 - Make a list on the *Treasure Hunt* handout for what their assigned group of people cares about in the manufacturing process.
 - Put their final list on the flip chart paper and put it up on the wall.
 - Have each group get up and present their list.
 - After each group finishes, ask the class: Any ideas for additions or changes?
 - Add or change the list as needed.
 - To see if they can add to these lists, tell students that you have some additional list items for them to sort through. Shuffle the deck of index cards, and go from group to group to have them pick one card. Keep going around until all the cards have been picked.
 - Go from group to group and have them:
 - Read one of their cards.
 - Choose the category or categories they think the phrase on the card belongs in.
 - Ask the class: Do you think this is right?
 - Add any new information in the columns on the board as needed.
 - Go around until all the new information has been added. Have students add all this information to their *Treasure Hunt* handout.
-

Break – 10 minutes

ACTIVITY #2: Reading on What Can Go Wrong – 50 minutes

Describe What Employers, Workers, and Customers Do Not Want

- Tell students they will read an article on the things that can go wrong with the production process, but first, they will predict what some of those things might be.
- Tell groups to fill in the second row on their *Treasure Hunt* handout of what various people do NOT want to happen during the manufacturing process. This time groups should fill in all three columns for employers, employees, and customers.
- Make three columns on the board with the following headings:
 - What employers do NOT want to happen.
 - What employees do NOT want to happen.
 - What customers do NOT want to happen.
- Go round robin asking each group to:
 - Give one new item from their list for employers.
 - Write their item on the board in the employers column.
 - Continue until you have recorded them all.
- Repeat this process to fill up the two other columns.

* Read, Annotate, Discuss

- Pass out *What Factors Can Affect the Manufacturing Process?*
 - Tell students to make the following annotations as they read:
 - In each section, underline the phrases that clearly explain what can go wrong.
 - After students have annotated the reading, ask:
 - In the first section, what can go wrong with “Supplies?”
 - Who does NOT want this to happen most? Why?
 - Add the problem in the first section to the employer, employee, and customer categories, if it is not already listed.
 - Repeat this process for all the other sections of the article.
 - Lastly, ask:
 - What have we learned about what can affect the manufacturing process?
 - Who do you think is affected most by these problems? What are the reasons for your answer?
-

Break – 10 minutes

ACTIVITY #3: Employee Happiness and Productivity – 50 minutes

- Tell students they will now look more carefully at production workers and what they need to perform well in the manufacturing process.

* Explore What Makes Employees Happy

- Tell students they will now read an article on what makes workers happy in the workplace. They will read and annotate as usual, and they will also play a new game called Question Around that will help them ask more difficult questions, as they do on the high school equivalency (HSE) exam. For homework, they will also get HiSET questions on the reading, so they can practice test-taking.
- Pass out *Why Happy Employees are 12% More Productive*.
- Tell students to use their Annotation Keys to annotate the article.
- When students have completed their annotations, ask:
 - Of those things you underlined, what were the most important points brought up in the article?
 - What was surprising or interesting?

- What was hard to understand or confusing?
 - If students identify words that are confusing or hard to understand, write them on the board and ask if students can define them based on the context. If not, give the definition as needed.
- Were there aspects of this article you agreed with? That you disagreed with?

? **Introduce the Question Around Activity**

- Write the following types of questions on the board:
 - Right there: The answer is right there in the text.
 - Pulling-it-together: The answer can be gathered from information in many parts of the text.
 - Author and me: The text has part of the answer, and the reader has part of the answer.
 - On my own: The text raises the question but does not answer it.
- Tell students that these are the four kinds of questions they are going to focus on and will help them become good at answering HSE test questions.
- Go through each type of question and probe for some examples that are relevant to this text.
 - Write student answers on the board.
 - Use and explain the following examples, as needed:
 - Right there: What is the percent increase in productivity for happy employees?
 - Pulling-it-together: What are the factors that improve employee happiness?
 - Author and me: What would be good questions to ask prospective employees to find out if they are currently happy in own lives?
 - On my own: What would you do to improve productivity at your plant?

? **Conduct the Question Around Activity**

- Pass out *Prepare for Question Around* and have a student read the instructions.
- Put students in pairs to write at least four questions as described in the handout.
- Once students have created their questions, ask: Who wants to be the first lead? Then tell students to follow this pattern:
 - The lead asks a question he/she knows the answer to.
 - Those who know the answer raise their hands.
 - The lead chooses someone to answer two questions:
 - What is the answer to the question that was just asked?
 - What type of question is it?
 - If the answer is correct and the student can identify the kind of question it is, that person becomes the new lead and starts this process over again.
 - If the answer is incorrect, the lead chooses a new student to answer the question until someone gets the answer.
 - Allow students to discuss the answers to come to a common understanding, as needed.
- Repeat this pattern until students are out of questions.

HOMEWORK

COMPLETE: Have students complete the HSE Questions for *Why Happy Employees are 12% More Productive*.

- Assign students each a question or two. After answering the questions, students are to choose one of their assigned questions they think they got right and write out the process they went through to get the right answer.

READ: Have students find an article in a newspaper, magazine, or online that helps define Kaizen. They should write down the name of the article, read the article, and then write the essential facts they think are most important to bring to the next class.

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TREASURE HUNT ON WHAT CAN GO WRONG IN THE MANUFACTURING PROCESS

Please make a list of things that your assigned group cares about most.		
What does an EMPLOYER care about most?	What does an EMPLOYEE care about most?	What does the CUSTOMER care about most?
What does EMPLOYER <u>not</u> want to have happen in production?	What does an EMPLOYEE <u>not</u> want to have happen in production?	What does the CUSTOMER <u>not</u> want to have happen in production?

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TREASURE HUNT ON WHAT CAN GO WRONG IN THE MANUFACTURING PROCESS (answers)

<p>Please make a list of things that your assigned group cares about most.</p>		
<p>1.</p>		
<p>What does an EMPLOYER care about most?</p>	<p>What does an EMPLOYEE care about most?</p>	<p>What does the CUSTOMER care about most?</p>
<ul style="list-style-type: none"> the bottom line workers have the right skills to do the job suppliers deliver the right product on-time customers that want to re-order the product equipment that works properly workers are highly productive 	<ul style="list-style-type: none"> good benefits long-term, good-paying opportunities management that is fair and respectful work that is laid out efficiently 	<ul style="list-style-type: none"> product completed on-time product is high quality there is good communication between the company and the customer when there are unexpected difficulties the company responds to
<p>What does an EMPLOYER <u>not</u> want to have happen in production?</p>	<p>What does an EMPLOYEE <u>not</u> want to have happen in production?</p>	<p>What does the CUSTOMER <u>not</u> want to have happen in production?</p>

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What Factors Can Affect the Manufacturing Process?

Adapted and paraphrased from original source: <http://smallbusiness.chron.com/factors-can-affect-manufacturing-process-25326.html>

Original Author: Vicki A. Bengé

The manufacturing process is complex and can be impacted by many factors: supplies, equipment, factory overhead, the need for special parts, and the people who work at all points in the process. The more variables there are, the greater the possibility of disruption to the smooth operations of a factory. Management styles can also have a positive or negative impact on this process.

Supplies

Many manufacturers depend on raw materials supplied from outside sources. Some of the factors that can delay or interfere with a regular delivery schedule include a problem at the site of a supply source, problems with transportation or bad weather. If supplies do not arrive when needed, a potential shutdown or a major slowdown in the manufacturing process can result. However, when everything works out right, a smooth supply and a well-managed inventory will promote production as scheduled.

Equipment

When a manufacturing process involves complex machines to complete production, a temporary malfunction or a breakdown in a piece of equipment can affect the whole manufacturing process. Identifying means of improving efficiency of all working parts of production promotes a continual and more efficient operation. Positioning of equipment and the personnel required to operate machines can also affect production. Quite often, machines interrupt manufacturing processes where they fail to function properly due to lack of regular cleaning and regular maintenance.

Factory Overhead

Manufacturers depend on utilities to power machines, cool equipment and light the workspace in their factories. Even a temporary shutdown of the power supply or lack of a steady water source can impact production, thus affecting the manufacturing process.

Special Parts

One definition of quality is "conformance to specifications" or making sure that the product fits the blueprint requirements exactly. However, when an unexpected change in made-to-order parts from a supplier can have a significant impact on the manufacturing process, especially if the parts are shipped over long distances. Differences in quality may require

multiple orders from the same company, resulting in delays and temporary slowdowns or shutdowns of the manufacturing process.

People

The workforce, especially "touch labor," the workers directly involved in the manufacturing process, can affect that process in many ways. For example, sick days and vacations taken by key personnel must be figured into production to prevent a negative impact on manufacturing. Human error is another factor that affects the manufacturing process and always must be dealt with after the fact.

However, human insight into a manufacturing process leading to more labor-efficient and cost-effective methods of production can affect the manufacturing process in a positive way. In addition, flexibility is a key strategy in improving the manufacturing process. This involves being able to manufacture different products in the same plant at the same time.

Management Style

Management style can have a significant impact on production in both negative and positive ways. Managers need to stay flexible and adaptive to make sure their teams can respond to issues quickly and easily and in real time.

Why Happy Employees Are 12% More Productive

Adapted and paraphrased from original source: <https://www.fastcompany.com/3048751/happy-employees-are-12-more-productive-at-work>

Original Author: Jonha Revesencio

New research suggests we work more effectively, creatively, and collaboratively when we're happy at work.

A recent study by economists at the University of Warwick found that happiness led to a 12% spike in productivity, while unhappy workers proved 10% less productive. As the research team put it, "We find that human happiness has large and positive causal effects on productivity. Positive emotions appear to invigorate human beings."

Financial incentives aren't enough to make for highly productive employees.

Professor Andrew Oswald, one of three researchers who led the study, said companies that invest in employee support and satisfaction tend to succeed in generating happier workers. At Google, employee satisfaction rose 37% as a result of those initiatives—suggesting that financial incentives aren't enough to make for highly productive employees.

Shawn Achor, author of *The Happiness Advantage*, has found that the brain works much better when a person is feeling positive. At those times, individuals tend to be more creative and better at solving problems. And additional research has shown that when workers are happy they're more effective collaborators working toward common goals. As Achor sees it, the incentive for organizations is clear-cut—"happiness leads to greater levels of profits" for companies that take the right steps.

Relationships and mindfulness matter—especially early on.

But the burden for improving workers' satisfaction needn't rest with companies alone. Research suggests there are some simple ways employees can boost their own happiness, like helping out co-workers, meditating for at least two minutes every day, and reflecting on three things to be grateful for at work.

In other words, relationships and mindfulness matter—especially early on. Harvard researchers Phil Stone and Tal Ben-Shahar have found that students with strong social support, both at school and at home, tended to be happier and better at dealing with stress. As those students become adults, they take those skills with them into the workplace. Workers with strong relationships with co-workers are likewise better at staying engaged and performing under stress.

That's led some to argue that happier employees also make better leaders. According to Alexander Kjerulf, founder of Woohoo Inc. and the organization's "chief happiness

officer,” happiness is the “ultimate productivity booster.” Happy employees, in his view, make better decisions, excel at managing their time, and possess other crucial leadership skills.

From the looks of it, there’s certainly room to improve on the happiness factor. A recent Gallup survey found only 13% of employees are engaged at work, meaning the vast majority of working adults doesn’t enjoy their work. By one recent measure, this costs US companies roughly \$450–\$550 billion annually. Looked at another way, though, poor worker engagement is an opportunity for companies to boost their productivity by investing in employees’ welfare and workplace happiness.

PREPARE FOR QUESTION AROUND

Talk to your partner and come up with at least one question in each category.

THE 4 QUESTION TYPES	YOUR QUESTIONS
Right there is a question whose answer is right there in the text; all the reader has to do is copy it down or repeat it.	
Pulling-it-together is a question whose answer is in the text, but the reader has to pull it together from different parts of the text; he or she cannot simply copy it from one place.	
Author and me is a question whose answer is not in the text. The reader has to use the information in the text and his or her own knowledge to figure out the answer. In other words, the author provides some of the information, but does not provide the answer itself.	
On my own is a question whose answer is not in the text. The reader has to read the text, however, to make an informed answer on his or her own.	

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HSE Questions for Why Happy Employees are 12% More Productive

1. What is the key to employee productivity?
 - a. Financial incentives
 - b. Stability
 - c. Coworker relatability
 - d. Happiness
2. What does happiness do for human productivity?
 - a. It is proven to temporarily increase productivity
 - b. It is proven to decrease productivity, and increase procrastination
 - c. It is proven to increase productivity
 - d. It is proven to cure procrastination
3. How effective are financial incentives to employees?
 - a. They are the most effect method of improving a worker's happiness
 - b. Somewhat effective, but not the key motivator for productive workers
 - c. Not effective at all, most employees don't care about how much they are paid
 - d. Financial incentives are not related to productivity
4. What happens to an individual's brain when a person is feeling positive?
 - a. The brain becomes more creative, but individuals are not able to problem solve as well
 - b. Nothing changes, the brain activity remains exactly the same
 - c. The individual becomes invigorated and less focused
 - d. Individuals become more creative and better at solving problems
5. What is one way that workers can boost their own happiness?
 - a. Asking for a raise
 - b. Taking on a leadership role
 - c. Meditating everyday
 - d. Quitting their job

6. What are some positive side effects of having happy employees?
 - a. More effective collaborators, better leaders, more engaged workers
 - b. Increased financial incentives, higher productivity, less time spent working
 - c. Increased job satisfaction for workers, decreased supervision by management
 - d. Reflection, mediation exercises, helping out coworkers
7. What are the consequences when employees don't enjoy their work?
 - a. Lost money on paying unproductive employees
 - b. More competition for leadership positions leading to animosity between coworkers
 - c. A decrease in productivity, larger employee turnover, a loss in profits
 - d. Employee walk-outs, protests, and boycotts
8. How does creativity affect productivity?
 - a. Creativity disrupts productivity
 - b. Creativity allows for new ideas and innovative thinking to spread throughout a business
 - c. Creativity lets workers deal with the same tasks time and time again, as efficiently as possible
 - d. Creativity cuts down on communication resulting in increased productivity

Answer Key - HSE Questions for Why Happy Employees are 12% More Productive

1. What is the key to employee productivity? – pulling it together/right there
 - a. Financial incentives
 - b. Stability
 - c. Coworker relatability
 - d. Happiness
2. What does happiness do for human productivity? – right there
 - a. It is proven to temporarily increase productivity
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 - a. Asking for a raise
 - b. Taking on a leadership role
 - c. Meditating everyday
 - d. Quitting their job

6. What are some positive side effects of having happy employees? – Pulling it together
- a. More effective collaborators, better leaders, more engaged workers
 - b. Increased financial incentives, higher productivity, less time spent working
 - c. Increased job satisfaction for workers, decreased supervision by management
 - d. Reflection, mediation exercises, helping out coworkers
7. What are the consequences when employees don't enjoy their work? – Author and me
- a. Lost money on paying unproductive employees
 - b. More competition for leadership positions leading to animosity between coworkers
 - c. A decrease in productivity, larger employee turnover, a loss in profits
 - d. Employee walk-outs, protests, and boycotts
8. How does creativity affect productivity? – on my own
- a. Creativity disrupts productivity
 - b. Creativity allows for new ideas and innovative thinking to spread throughout a business
 - c. Creativity lets workers deal with the same tasks time and time again, as efficiently as possible
 - d. Creativity cuts down on communication resulting in increased productivity

Week 10, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Improving the Manufacturing Process

Students will watch a video on the Kaizen approach to manufacturing and read an article on the seven wastes of lean manufacturing. Students will then apply the idea from the article to a video of a particular process for making toast. Lastly, students will begin to prepare for an essay assignment.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
Treasure Hunt for Kaizen and Lean Manufacturing
- Video: What is Kaizen? (running time: 02:56)
<https://www.youtube.com/watch?v=poh0SCFTZb0>
- Handout (attached): Make one copy for each student.
7 Wastes of Lean Manufacturing

For Activity #2:

- Video: GBMP Lean Training DVD: Toast Kaizen – Introduction to Lean Manufacturing Preview (running time: 05:11)
<https://www.youtube.com/watch?v=3N89JJ991pE&t=11s>
- Video: Waste Example: Making Toast in the Office (running time: 04:53)
<https://www.youtube.com/watch?v=jxBdig6Fenw>

For Activity #3:

- Handout (attached): Make one copy for each student.
Essay Planning Assistant

ACTIVITY #1: Define Kaizen and Identify the Seven Kinds of Waste – 60 minutes

Check-In on HSE Questions Homework

- Ask students:
 - How did you feel about the homework, answering HSE-type questions?
 - Number the HSE-type questions on the board.
 - Who wrote about which question?
 - Put the names of who wrote about which question next to the appropriate number.
 - Call on students to talk through how they got to what they think is the right question.
 - After each explanation, ask:
 - Is this student right?
 - What would you change?
- For those questions with no student writing, give the answers, and ask:
 - Who got this right?
 - How did you get to the right answer?

Collect Homework Definitions and Details about Kaizen

- Tell students they will look into Kaizen and the principles of lean manufacturing to get ideas about how to improve manufacturing processes. Kaizen and lean manufacturing, which are most often used together, are the cutting edge for making improvements that satisfy customers, employers, and workers.
- Ask students:
 - What did you find out about Kaizen in your online research?
 - Take notes on their findings on the board.
 - Based on these findings, what is your guess about:
 - How Kaizen could make customers happier?
 - Employers?
 - Production workers?
- Tell students they will watch a video on Kaizen and read about the seven wastes identified in lean manufacturing so they can help improve the process of making toast.

Watch the Video on Kaizen

- Pass out *Treasure Hunt for Kaizen and Lean Manufacturing*.
- Read the questions out loud.
- Tell students they will watch the video two times:
 - The first time they can watch, listen, and take notes after the video is finished.
 - The second time they can take notes while they are listening.
- Watch the video.
- Give students time to fill in their *Treasure Hunt*.
- Watch the video again and give students time to finish their notes.
- As a class, go through the questions together.

Read about the Seven Wastes in Production as Identified by Lean Manufacturing Practices

- Tell students they are now going to read about the seven wastes.
 - Pass out the *7 Wastes of Lean Manufacturing* article.
 - Have students read the article and underline the important aspects of each section.
 - When students have finished, put students in groups and assign each group at least one of the wastes listed in the article. Ask groups to come up with:
 - A good clear definition of their assigned waste in their own words.
 - At least one example of what their assigned waste might look like on a production line.
 - What an improvement would look like for their example.
 - Go around and have the groups present their definitions and examples.
-

Break – 10 minutes

ACTIVITY #2: Use a Quality Circle to Improve the Process for Making Toast – 50 minutes

- Tell students they will now apply their knowledge of the seven wastes to a very wasteful way of making toast. They will look at a video that talks about how one can apply the seven wastes to making toast and then watch a second of someone actually making toast. Their task will be to meet in a Kaizen Quality Circle, identify the seven wastes, and recommend process improvements.

Watch the Introductory Video

- Watch the introductory video: *GBMP Lean Training DVD: Toast Kaizen – Introduction to Lean Manufacturing Preview*.
- After the video, ask:
 - What were some of the ways the seven wastes were hinted at in this introduction?
 - How was the kitchen set up in the beginning?
 - How was the kitchen set up by the end?
 - What kinds of wastes do you think were addressed in the video?
 - Take notes on student answers on the board.

Watch the Video: Making Toast in the Office

- Tell students to look at the second page of their *Treasure Hunt*. Explain that, while they watch, they should:
 - Take notes of a waste they see the woman doing in the video by:
 - Noting what she is doing in one of the categories on the *Treasure Hunt*.
 - Numbering their notes as they take them, regardless of which category the notes goes into. (In this way, they will be able to reconstruct the process presented by following what went wrong.)
 - Putting in a new note each time something goes wrong, even if the errors are repetitive.
- Tell students they will be watching the video only once, so they need to take clear and careful notes as they go.
- Watch the video: *Waste Example: Making Toast in the Office*.
- Put students in pairs to go over their notes in order to make sure they can remember all the things that went wrong in the video and put them in the right order.

Create a Quality Circle and Recommend Improvements

- Have the class sit in a circle and tell them they are the employees of a toast making company. What the woman in the video demonstrated was the usual way they make toast. The class will go through the toast making process and make recommendations for improvements.
- Create two columns on the board with the following headings:
 - Wastes
 - Recommendations
- Use the following process for filling in the columns on the board. Ask:
 - What was the first waste the woman demonstrated?
 - Make sure that everyone agrees on the first waste. Number it and write it on the board.
 - What is your recommendation for eliminating the first waste?
 - Take notes on the recommendation on the board.
 - Continue this process until you have identified all the wastes and gathered all the recommendations.
- When this process has been finished, ask: What overall recommendations would you make for this process?
- Put three new columns on the board with the following headings: Customers, Employers, Production Workers.
- Next, ask the following questions and take notes on student answers in the appropriate columns.
 - How would the customer benefit from these recommendations?
 - How would the employer benefit from these recommendations?
 - How would production workers benefit from being part of a Quality Circle and making recommendations for the company to implement?
 - Who do you think benefits the most? Why?
 - Be sure to have students give reasons why each group might benefit the most.

Break – 10 minutes

ACTIVITY #3: Introduce the Essay Writing Prompts and Complete the Essay Planning Assistant – 50 minutes

Introduce the Essay Writing Prompt

- Tell students they will now prepare for work over the next two weeks to write an essay on Kaizen and lean manufacturing.
- Write the following essay prompts on the board.
 - Introduce your chosen point of view (employer, employee, or customer), then answer: What do you want out of the manufacturing process?
 - What are the 7 Wastes of Lean Manufacturing?
 - What are the specific reasons you think the 7 Wastes will help manufacturers make improvements?
 - How will these improvements in manufacturing strengthen your relationship to the company?
- Tell students that in order to write their essay, they must choose a point of view to write from. They should choose to be a manufacturing customer, an employer, or a production worker.

Complete Essay Planning Assistant

- Pass out the *Essay Planning Assistant* and go over the questions listed.
- Have students review their summaries and the readings and take notes on how they want to respond to these questions.
- Have students spend some time reviewing and filling out the *Essay Planning Assistant*.

Pairs Do a Talk Through

- Put students in pairs to do a Talk Through, letting one student complete a Talk Through of their essay before the other begins.
 - Speakers should allow their partner to ask questions after each question.
 - They can ask for clarification or more information.
 - Speakers can also take further notes in their *Essay Planning Assistant*. This will help them when they begin writing during the next lesson.

HOMEWORK

COMPLETE: Have students continue to fill in the *Essay Planning Assistant* as needed.

WRITE: Have students write drafts of the first two questions. Students should bring hard copies of drafts to the next class.

Teacher Preparation Notes: Before the next lesson, prepare to coach students through the Writer/Audience Situation in Activity #1 as well as through the role plays dialogues in Activity #2.

Also, prepare six index cards with the following written on them:

- A Newspaper Editor
- Best Friend
- Fellow Student
- The Teacher⁵⁴
- GHSE Test Audience
- A Family Member

TREASURE HUNT FOR KAIZEN AND LEAN MANUFACTURING

Video: What is Kaizen?

1. What does Kaizen mean?	
2. Who are the best people to work on company improvements? Why?	
3. What are Quality Circles?	
4. How do Quality Circles help the company save money?	
5. What do workers get out of Quality Circles?	

Watch the video on making toast and take notes on what the toast maker does to create different kinds of waste.

Waiting	Over Production	Rejects	Excess Motion	Over Processing	Excess Inventory	Transportation

7 Wastes of Lean Manufacturing

Adapted and paraphrased from original source: <http://www.leanprocess.net/7-wastes-of-lean-manufacturing/>

Original Author: Lean Process

What Is Waste?

There are 7 wastes of lean manufacturing. But what do we mean by the term “waste”? Waste can be defined as any activity that consumes resources but creates no value for the customer. It is an activity that the customer is not willing to pay for.

Reducing the number of these wasteful activities represents a significant opportunity for businesses to improve their performance. Elimination of the 7 wastes of lean manufacturing can reduce costs, increase profits, improve employee engagement, reduce rework and improve delivery time.

The lean process of “plan, do a check, and act” is what is needed to eliminate “muda”. Here is a useful definition:

Muda. It’s the one word of Japanese you might really know. It sounds awful as it rolls off your tongue and it should, because muda means “waste”; waste through the kind of human activity that uses up resources but doesn’t create any value. Examples include:

- production of items no one wants so that inventory pile up
- processing steps which aren’t actually needed
- movement of employees and goods from one place to another without any purpose
- groups of workers in a “downstream” activity standing around waiting because an upstream activity has not been completed or delivered on time
- goods and services which don’t meet the needs of the customer.

The 7 Wastes of Lean Manufacturing

Waiting

Waiting is perhaps the most obvious of the 7 wastes of lean manufacturing. It is easily identifiable as lost time due to poor flow: parts shortages, bottlenecks, and equipment breakdowns. In an office-based environment, this may take the form of slow software loading times or waiting for an important phone call. This is also frustrating for the employees involved, which can lead to reduced morale.

Over Production

Over production is the most important of the 7 types of waste. It is building more of a product than the customer ordered or wanted. Remembering that waste is anything that the customer is not willing to pay for, it is easy to see why over production is a waste.

However, over production actually drives all of the other six types of waste as well. The excess product now has to be stored somewhere which means excess motion, transportation, and inventory. Also, over production means that if a reject is found, there will be more units that need to be reworked.

Rejects

Parts that do not comply with the specifications of the customer lead to rework. Worse still they can lead to scrap and the necessary production of new parts. Usually, rejects have to be sent back down the production line again to be put right. This consumes valuable production time. Sometimes a separate rework area is required, which increases labor and duplicates tooling.

Excess Motion

This is wasted movement that is made while working. It could take the form of having to walk to another area to collect a tool, part, or document. It also covers searching for things in a messy environment. A classic example is sorting through piles of paperwork to find the one form required at that moment to complete the job.

Over Processing

This is work that adds no value for the customer or business. This usually takes the form of over engineering a product: unnecessary features that the customer does not use, but that increase the cost to the business. This could be maintaining strict specification that the customer doesn't need. Another example is building a product that will last five years when the customer is going to replace it after two.

Excess Inventory

Excess inventory represents cash tied up in the form of material, which is difficult to turn into cash quickly. Inventory also takes up space. It has to be managed, stored and can become obsolete, which leads to scrap. The quality of inventory can deteriorate over a period of time, especially perishable items such as food or rubber seals.

Transportation

Unlike excess motion, which is wasted movement of people, transportation is excess motion of work in process. Excess transportation can be having machines too far apart so that parts need to be moved by forklift instead of by hand. In addition, excess transport can be moving different finished parts or components between facilities separately when they could all be put together for one trip.

How to remember the 7 Wastes of Lean Manufacturing

There is a simple way to remember the 7 wastes of lean manufacturing: simply remember the rather silly acronym **WORMPIT**!

- **W**aiting
- **O**ver production
- **R**ejects
- **M**otion (Excess)
- **P**rocessing (Over)
- **I**nventory
- **T**ransportation

If you can remember **WORMPIT**, you can easily use each letter to recall the 7 wastes of lean manufacturing.

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ESSAY PLANNING ASSISTANT

Use this chart to organize your notes and plan how you want to write your essay.

Essay Prompts	Notes from your readings and writings
1. Introduce your chosen point of view (employer, employee, or customer), then answer: What do you want out of the manufacturing process?	
2. What are the 7 Wastes of Lean Manufacturing?	

Notes from your readings and writings	
<p>3. What are the specific reasons you think the 7 Wastes will help manufacturers make improvements?</p> <p>(Provide one reason with explanations or examples per paragraph.)</p>	
<p>4. For your conclusion answer: How will these improvements in manufacturing strengthen your relationship to the company?</p>	

Week 11, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Writing the Introduction

Students are introduced to the writer/audience relationship and role play some ways to get an audience interested in what the writer has to say. Students will rewrite their homework paragraph using some of the new audience engagement strategies. Finally, they will review each other's work.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
The Writer/Audience Situation
- Classroom Resource: Six index cards with the following on them:
 - A Newspaper Editor
 - Best Friend
 - Fellow Student
 - The Teacher
 - HSE Test Audience
 - A Family Member
- Student Work: Students should bring hard copies of their homework writing assignments.

For Activity #2:

- Handout (attached): Make one copy for each student.
Introduction Role Play Dialogue

For Activity #3:

- Handout (attached): Make two copies per student.
Reader Comment Page

TEACHER PREPARATION

Before class, prepare to coach students through the Writer/Audience Situation in Activity #1 as well as through the role plays dialogues in Activity #2.

Also, take time to create the index cards for Activity #1.

ACTIVITY #1: Introduction to Introductions – 60 minutes

Determine Audiences You Are Comfortable Writing To

- Tell students that today the class will focus on giving students reader or audience feedback on paragraphs they brought in today. Audience feedback will be focused on giving them good ideas for improving their written work.
- Start by asking:
 - Who is your audience when you write? Write student answers on the board.

- Would knowing the audience affect the way you write?
- Pass out *The Writer/Audience Situation* graphic and ask:
 - What is going on in this picture?
 - What is the writer trying to do? (Answer: The writer is trying to communicate something of interest to an audience.)
 - What is the audience trying to do? (Answer: Listen/read and understand.)
 - What kinds of writing situations would make the writer more comfortable than others?
 - What kinds of writing make you feel comfortable?
 - What does the reader need from the writer? (Answer: Good clear writing that is interesting and informative.)
- Put students in pairs and have them pick one of the prepared index cards.
- Go round robin and have each pair read their card.
 - Write the names of the different audiences on the board as students read them off the cards.
- Write the following on the board:
 - Describe the audience in detail.
 - Describe how writing to this audience would affect your writing.
 - Would this audience be easy or hard to write for?
 - Why or why not?
- Have each pair come up with at least two reasons for their answers and make sure that each member of the pair has at least one reason to report back to the class.
- After each presentation, ask: Is this an audience that would be easy or hard to write for? Why?
 - Note whether presenters say “easy” or “hard” next to the name of the audience type.
- Tell students to assume that they are writing to an audience they are comfortable with, even if they are turning the writing into a teacher or a test grader. If they do, their writing will be more relaxed, conversational, and interesting to read.

Come Up With Criteria for a Good Introduction

- Write the following questions on the board to solicit criteria for introductory paragraphs. Ask:
 - What would make an audience interested in reading your written work?
 - What would make an audience not interested in reading your written work?
 - What does an audience need at the beginning of the essay to get involved in reading?
 - Take notes on students’ answers on the board.
- Ask:
 - What must a good introductory paragraph do? (Answer: Get the audience interested in reading your essay.)
 - What are some ways you can do this?
- Tell students to write this criteria for introductory paragraphs in their notebooks for use in this class during other writing assignments.

Teacher Note: You too should take notes on the criteria as it will be used again in Week 15, Lesson 1.

Break – 10 minutes

ACTIVITY #2: Role Play Introductions – 50 minutes

- Write the first essay prompt on the board:
 - Introduce your chosen point of view, then answer: What do you want out of the manufacturing process?
- Tell students they will practice introductory paragraphs by doing a role-playing activity.
- Project and pass out the *Introduction Role Play Dialogue* and put students into pairs.

Introduction Role Play Dialogue:

Writer: I have to do some writing for my Bridge class about ways to improve manufacturing processes that I want to tell you about. I will be talking about manufacturing processes from a(n) employer's/employee's/customer's point of view. (Name only the one you have chosen.) I will be introducing the 7 Wastes of Lean Manufacturing as great ways of making improvements.

Audience: That's cool, but why should I be interested in hearing about how to improve manufacturing processes and what are the 7 Wastes of Lean Manufacturing?

Writer: _____ (Student should respond by sharing their point of view) _____

- To prepare students for this dialogue, allow pairs time to:
 - Make a list of questions they would ask this writer to get information for their introductory paragraph. Prompt them by asking: What would get their interest? What would make them want to read more?
 - Decide what each of them would say if they were the writer.
 - Practice what they would say if they were the writer in this role play situation.
- Have two people come up in front of the class and act out the role play:
 - Have one person volunteer to be the writer and read that part from the role play overhead: loudly, clearly, and with expression!
 - Have one person volunteer to be the audience and read the middle line: loudly, clearly, and with expression!
 - Then, have the writer talk about the topic and share their point of view in order to get the audience interested.
 - The student playing the role of the audience can ask additional questions to get more information from the writer as needed.
 - Coach students to be supportive and constructive through this process.
 - Coach students to come up with different ways to get their audience interested in what they have to say.
 - After the pair is finished with the role play, allow the class to ask questions for clarity or more information.
- Repeat this process with a number of pairs.
 - Encourage new and creative ways to engage with the audience.
 - Take notes on these strategies of audience engagement on the board.

Break – 10 minutes

ACTIVITY #3: Rewrite and Peer Review Introductions – 50 minutes

Rewrite Your Answer to the First Prompt

- Tell students to get out their homework. Have them think about the strategies they have used to write introductory paragraphs, be creative, and rewrite their paragraph thinking about their audience.



Peer Review

- Tell students they will now provide constructive feedback on each other's introductory paragraphs. They are to remember they must remain the audience that the writer is happy and comfortable with, meaning that the audience simply wants to understand what the paragraph is trying to say and to offer good suggestions for making the written work more interesting.
- Put students into groups of three.
- Pass out two copies of the *Reader Comment Page* to each student. Explain that they are going to:
 - Read the paragraph written by the other two people in their group.
 - Fill out one *Reader Comment Page* for each of the paragraphs they read.
 - They are NOT to comment on grammar or spelling yet. However, if they are not sure what something says, they can ask the writer for clarification.
 - They are to be friendly, encouraging, and genuinely helpful. Good comments on their classmate's work will help them when they have to rewrite their paragraphs.
- Have students pass their paragraph to the left.
- After students have evaluated the first paragraph, they should pass the paragraph they have worked on to their left and evaluate a new paragraph.
- After students have evaluated two paragraphs from two classmates, they should give their evaluations to the writers, and the writers should read the comments.

Writers Get Clarification from their Readers

- Ask the class as a whole:
 - Did your evaluators say the same or different things?
 - Did your evaluators say things that gave you ideas for how to make your paragraph better?
 - Did your evaluators confuse you? If so, ask for clarification when back in your group.
- Put students back in their groups to talk through differences and to get clarification.

Students Volunteer Examples of Successful Paragraphs

- Have groups decide which paragraph should be read aloud as a good example of an introduction.
 - Have the writers read the selected paragraph from each group loudly, clearly, and with expression.
 - After each paragraph is read, ask:
 - What worked about the paragraph you just heard?
 - Are you satisfied or do you want to know more?
 - What are your questions?

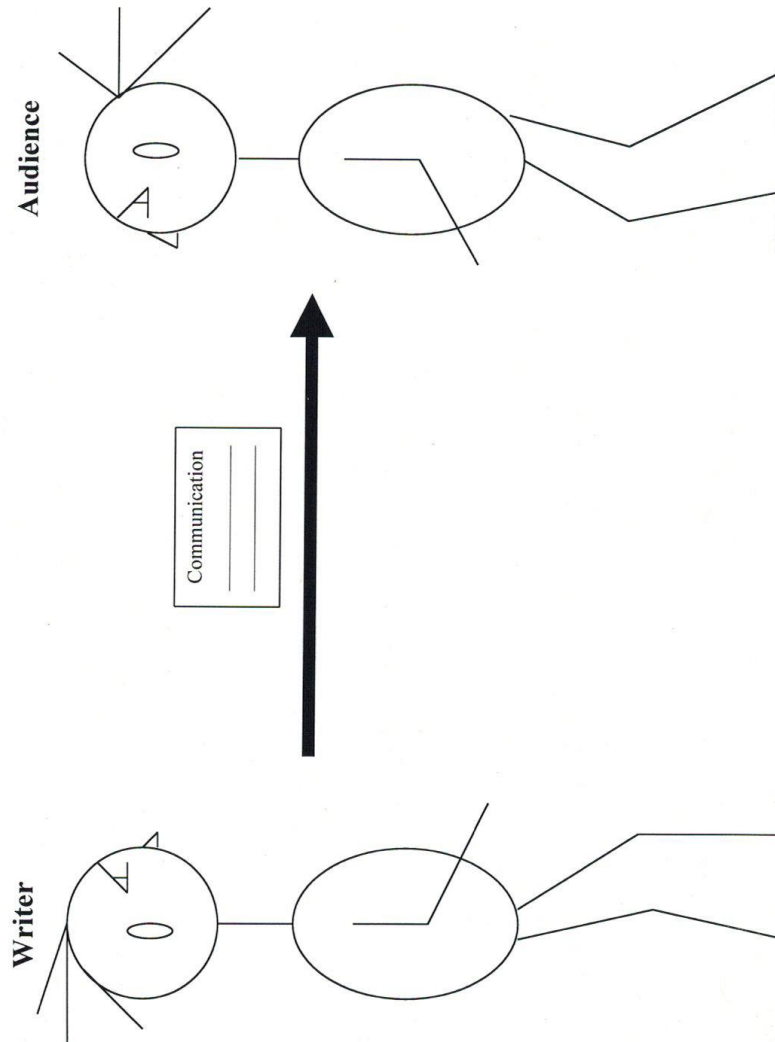
HOMEWORK

WRITE: Have students write drafts of three body paragraphs using clear explanations and examples in each paragraph. Use the following writing prompt for each paragraph:

- What are the 7 Wastes of Lean Manufacturing?

Students should bring a hard copy of their drafts of three paragraphs to the next class.

The Writer/ Audience Situation



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Introductory Role Play Dialogue:

Writer: I have to do some writing for my Bridge class about ways to improve manufacturing processes that I want to tell you about. I will be talking about manufacturing processes from a(n) employer's/employee's/customer's point of view. (Name only the one you have chosen.) I will be introducing the 7 Wastes of Lean Manufacturing as great ways of making improvements.

Audience: That's cool, but why should I be interested in hearing about how to improve manufacturing processes and what are the 7 Wastes of Lean Manufacturing?

Writer: _____ (Student should respond by sharing their point of view) _____

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READER COMMENT PAGE

WRITER _____ **READER** _____

1. What is clear and interesting to you about this piece of writing? Help the writer by being as specific as you can.
2. As the reader, what is not clear or not easy to understand? What would you like to hear more about?
3. Do you have additional comments or suggestions?

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Week 11, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Writing the Body Paragraphs

Students talk through what makes good body paragraphs, role play three different questions from the writing prompt, and rewrite their body paragraphs for peer review.

MATERIALS

For Activity #2:

- Handout (attached): Make one copy for each student.
Body Paragraph Role Play Dialogue

For Activity #3:

- Handout (attached Week 11, Lesson 1): Make two copies per student.
Reader Comment Page
- Student Work: Students bring hard copies of their body paragraphs to class.

ACTIVITY #1: Introduction to Body Paragraphs – 50 minutes

- Tell students they will use the role play dialogues to help them write good body paragraphs for their essays. But first, they need to set up their criteria.
- Write the following questions on the board to solicit the beginnings of a criteria for good body paragraphs:
 - What would make an audience interested in reading your writing?
 - What did the audience learn in the introductory paragraph?
 - What is the purpose of introducing the topic of each paragraph?
 - Why are explanations and examples so important to use in your writing?
 - What makes a good explanation?
 - What makes a really good example?
- Put students in pairs to come up with answers to these questions.
- As a class, answer each of the questions and take notes on student answers on the board. Communicate to them that a good explanation is clear and detailed enough so that it is easy to understand. A good example demonstrates the idea and is clear and specific.
- Tell students to write the criteria for good body paragraphs in their notebooks for use in this class during other writing assignments.

Teacher Note: You too should take notes on the criteria as it will be used again in Week 15, Lesson 2.

Break – 10 minutes

ACTIVITY #2: Role Play for Body Paragraphs – 60 minutes

- Write the following essay prompt on the board:

- What are the specific reasons you think Kaizen and the Seven Wastes of Lean Manufacturing will help you?
- Instruct students to use one reason with explanations or examples per paragraph.
- Tell students they will practice body paragraphs out loud by role playing. One student will play the role of the writer and one student will play the role of the audience.
- Pass out and project the *Body Paragraph Role Play Dialogue* and put students into pairs.

Writer: Remember we talked about my writing assignment for the Bridge the other day - the one about improving manufacturing processes using the 7 Wastes of Lean Manufacturing? Well, now I am supposed to give some explanations and examples about specific ways I think these approaches might help.

Audience: Cool! You got me interested in improving manufacturing the 7 Wastes last time; so now I want to hear how you think these approaches will help you.

Writer: _____ (Student should respond by sharing their explanations and example)

- After the “writer” reads the last prompt, he/she is to
- To prepare students for this dialogue, allow pairs time to:
 - Make a list of questions they would ask this writer to get information for their introductory paragraph. Prompt them by asking: What would get their interest? What would make them want to read more?
 - Decide what each of them would say if they were the writer.
 - Practice what they would say if they were the writer in this role play situation.
- Have two people come up in front of the class and act out the role play:
 - Have one person volunteer to be the writer and read that part from the role play overhead: loudly, clearly, and with expression!
 - Have one person volunteer to be the audience and read the middle line: loudly, clearly, and with expression!
 - Then, have the writer talk through a whole paragraph using one explanation or example in order to get the audience interested.
 - The student playing the role of the audience can ask additional questions to get more information from the writer as needed.
 - Coach students to be supportive and constructive through this process.
 - Coach students to come up with different ways to get their audience interested in what they have to say.
 - After the pair is finished with the role play, allow the class to ask questions for clarity or more information.
- Repeat this role play process for the second and third paragraphs.

Break – 10 minutes

ACTIVITY #3: Rewrite and Peer Review the Body Paragraphs – 50 minutes

Rewrite Their Answers to the Prompt

- Tell students to get out their homework, consider the strategies for good examples in body paragraphs, and rewrite their paragraphs while considering their audience.

Peer Review

- Tell students they will now provide constructive feedback on each other's body paragraphs.
- Put students into groups of three.
- Pass out two copies of the *Reader Comment Page* to each student. Explain that students are to focus on what the writer is trying to say and not on other technical issues in the writing.
- Have students pass their paragraphs to the left.
- After students have evaluated the first student's paragraphs, they should pass them to their left and evaluate a new set of paragraphs.
- After students have evaluated two paragraph sets from two classmates, they should give their evaluations to the writers, and the writers should read the comments.

Writers Get Clarification from their Readers

- Ask the class as a whole:
 - Did your evaluators say the same or different things?
 - Did your evaluators say things that gave you ideas for how to make your paragraphs better?
 - What are they?
 - Did your evaluators confuse you? Ask for clarification when you are back in your group.
- Put students back in their groups to talk through differences and to get clarification.

Students Volunteer Examples of Successful Paragraphs

- Have groups decide which paragraph should be read aloud; this should be a strong paragraph.
 - Have the writers read the selected paragraph from each group loudly, clearly, and with expression.
 - After each paragraph is read, ask:
 - What worked about the paragraph you just heard?
 - Are you satisfied with the information presented or do you want to know more?
 - What are your questions?

HOMEWORK

WRITE: Have students write a concluding paragraph. Use the following writing prompt for this paragraph and bring a hard copy to the next class:

- For your conclusion, answer: Would you recommend Kaizen and use of the 7 Wastes of Lean Manufacturing to other manufacturing plants? Why?

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Body Paragraph Role Play Dialogue:

Writer: Remember we talked about my writing assignment for the Bridge the other day - the one about improving manufacturing processes using the 7 Wastes of Lean Manufacturing? Well, now I am supposed to give some explanations and examples about specific ways I think these approaches might help.

Audience: Cool! You got me interested in improving manufacturing the 7 Wastes last time; so now I want to hear how you think these approaches will help you.

Writer: _____(Student should respond by sharing their explanations and example) _____

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Week 12, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Writing the Conclusion

Students set criteria for good conclusions, role-play their conclusion ideas, and rewrite their conclusions for peer review.

MATERIALS

For Activity #2:

- Handout (attached): Make one copy for each student.
Conclusion Role Play Dialogue

For Activity #3:

- Handout (attached Week 11, Lesson 1): Make two copies per student.
Reader Comment Page
- Student Work: Students bring a hard copy of their concluding paragraph to class.

ACTIVITY #1: Introduction to the Conclusion – 50 minutes

- Tell students they will discuss conclusions today. Conclusions tell the reader what they can take away from the experience of reading your written work or leave the reader with a new idea to consider.
- Write the following questions on the board to solicit criteria for a concluding paragraph:
 - For your conclusion, answer: How will these improvements in manufacturing strengthen your relationship to the company?
- Put students in pairs to come up with answers to these questions.
- As a class, answer each of the questions and take notes on student answers on the board.
- Ask the class and continue to take notes on the board:
 - Do you think the audience would be interested in these ideas in your conclusion? Why?
 - What do you think audiences expect from a conclusion?
 - Why do you think audiences need something to take away from your essay to continue to think about?
 - Why would your thoughts, ideas, or recommendations be interesting to a reader after you have given him/her the facts on the topic?
- Tell students to write the criteria for good conclusions in their notebooks for use in this class during other writing assignments.

Teacher Note: You too should take notes on the criteria as it will be used again in Week 16, Lesson 1.

Break – 10 minutes

ACTIVITY #2: Role Play for Concluding Paragraphs – 60 minutes

- Tell students they will practice concluding paragraphs out loud in role plays.

- Put students into pairs and display the role play dialogue below:

Conclusion Role Play Dialogue:

Writer: Remember we talked about my writing assignment for the Bridge? Well, now I want to tell you about how improvement in the company's processes will strengthen my relationship to the company.

Audience: Cool! It seems you have hit on a good approach to solving manufacturing problems and I want to hear about the impact of this kind of work on you and the company.

Writer: _____ (Student should respond by sharing their recommendations and conclusions)

- To prepare students for this dialogue, allow pairs time to:
 - Make a list of questions they would ask this writer to get information about their conclusions and recommendations.
 - Decide what each of them would say if they were the writer, i.e., what are their conclusions and recommendations?
 - Practice what they would say if they were the writer in this role play situation.
- Have two people come up in front of the class and act out the role play as before.
 - Coach students to keep acting like old friends through this process.
 - Coach the student playing the role of the audience to ask for clarification or more information.
 - Applaud good explanations and examples.
- After the students doing the role play have finished, allow others in the class to ask questions of the writer.

Break – 10 minutes

ACTIVITY #3: Rewrite and Peer Review the Concluding Paragraphs – 50 minutes

Rewrite Their Answers to the Last Writing Prompt Question

- Tell students to get out their homework, consider the strategies for strong conclusions and rewrite their paragraph.

Peer Review

- Tell students they will now provide constructive feedback on each other's concluding paragraphs.
- Put students into groups of three.
- Have students take out their new concluding paragraph.
- Pass out two copies of the *Reader Comment Page* to each student. Explain that students are to focus on what the writer is trying to say and not on grammar, spelling, or other technical issues in the writing.
- Have students pass their paragraphs to the left.
- After students have evaluated the first student's paragraphs, they should pass them to their left and evaluate a new set of paragraphs.
- After students have evaluated paragraphs from two partners, they should give their evaluations to the writers, and the writers should read the comments.

Writers Get Clarification from their Readers

- Ask the class as a whole:
 - Did your evaluators say the same or different things?
 - Did your evaluators say things that gave you ideas for how to make your paragraph better?
 - What are they?
 - Did your evaluators confuse you? Ask for clarification when they are back in their group.
- Put students back in their groups to talk through differences and to get clarification.

Students Volunteer Examples of Successful Paragraphs

- Have groups decide which paragraph should be read aloud as a strong example for one of a concluding paragraph.
 - Tell the writers to read the selected paragraphs from each group loudly, clearly, and with expression.
 - After each paragraph is read, ask:
 - What worked about the paragraph you just heard?
 - Are you satisfied or do you want to know more?
 - What are your questions?
-

HOMEWORK

REWRITE: Instruct students to rewrite the entire essay on the computer for peer review in the next class.

Teacher Preparation Note: Choose two paragraphs from student writings that demonstrate the kinds of grammar and spelling errors students are making. Type up this paragraph with the mistakes intact. You will need one double-sided copy per student for the next lesson.

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Conclusion Role Play Dialogue:

Writer: Remember we talked about my writing assignment for the Bridge? Well, now I want to tell you about how improvement in the company's processes will strengthen my relationship to the company.

Audience: Cool! It seems you have hit on a good approach to solving manufacturing problems and I want to hear about the impact of this kind of work on you and the company.

Writer: _____(Student should respond by sharing their recommendations and conclusions)

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Week 12, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Peer Review and Peer Editing

Students learn about comma rules for adding information to sentences, practice editing through the grammar game, and do peer review and editing on finished essays.

MATERIALS

For Activity #3:

- Handout (attached to Week 11, Lesson 1): Make two copies per student.
Reader Comment Page
- Student Work: Students bring a hard copy of their essay to class.

For Homework:

- Handout (attached): Make one copy for each student.
Blank World Map

TEACHER PREPARATION

Choose two paragraphs from student writings that demonstrate the kinds of grammar and spelling errors students are making. Type up this paragraph with the mistakes intact. You will need one double-sided copy per student.

ACTIVITY #1: Comma Rules for Adding Information to Sentences – 60 minutes

- Ask students:
 - When do you use a comma? What are the rules?
 - Write student answers on the board.
- Explain that commas most often separate phrases that add information to the main sentence. If students can distinguish main sentences from additional information, they will be good at placing commas.
- Write, “She fell asleep on the couch.” on the board.
- Have the class suggest phrases that add information to the front of the sentence. List them on the board and show where the commas go for each one.
 - Suggest beginning phrases like: “Finally” or “Around midnight” or “Last night”
 - Encourage students to add imaginative phrases to the beginning of the sentence.
- After there is a healthy list on the board, ask:
 - What is the primary sentence? (*Answer: She fell asleep on the couch.*)
 - What is the additional information? (*Answer: The phrase added at the beginning.*)
 - Where does the comma go? (*Answer: After the phrase at the beginning.*)
 - Why? (*Answer: To tell the reader that this added information is not necessary to have a sentence.*)
- Put another simple sentence on the board: “Gus lives in Chicago.”
- Have the class suggest phrases that add information to the end of the sentence. List them on the board and show where the commas go for each one.

- Ask:
 - What is the primary sentence? (*Answer: Gus lives in Chicago.*)
 - What is the additional information? (*Answer: The phrase added on at the end.*)
 - Where do the commas go? (*Answer: Before the phrase.*)
 - Why? (*Answer: To tell the reader that this added information is not necessary to have a sentence.*)
- Put the following sentences on the board: “The Chicago skyline is full of old and new buildings.” and “The dictator ate a five-course lunch.”
- Put student in pairs and tell them to come up with phrases that would add information to the middle and to the end of each sentence. Pairs need to make sure they:
 - Put commas on either side of new information that they put in the middle of a sentence.
 - Encourage students to use “which” and “who” in the appropriate sentences.
 - Put a comma before the new information that they put at the end of the sentence.
- Go round robin to have students give one of their sentences with new information in the middle of the sentence.
 - Repeat this process for new information at the end of the sentence.
- Finally, ask: What are the rules about commas we have learned so far? (*Answer: Separate out additional phrases from the primary sentence with commas, whether the new phrases come at the beginning, middle, or end of the sentence.*)

Break – 10 minutes

ACTIVITY #2: Play the Editing Game – 50 minutes

The First Paragraph

- Pass out typed copies of the two paragraphs of student writing you selected before class with the grammar and spelling mistakes intact.
- Have students read one of the paragraphs and underline the grammar and spelling issues they find. While students are doing that, copy the paragraph on the board with all the mistakes intact.
- Put students into three or four teams and have them compare the mistakes they have identified and talk about what the problems are for each of the underlined items.
- Choose a member from one team to come up to the board, underline a problem, and correct it.
- Ask the student who made the correction: What is the grammar or spelling rule that you are applying?
- Ask the class:
 - Is the underline in the right place?
 - Is this the right correction?
 - If yes, give one point to the team that made the correction; give the team a second point if they correctly identified the grammar or spelling rule that they applied.
- Go around to all the teams and have a different student come to the board and repeat the process.
- Keep team scores on the board until all the issues in the paragraph have been corrected.

The Second Paragraph

- Repeat this process for the second paragraph of student work.

Break – 10 minutes

ACTIVITY #3: Peer Review – 50 minutes

Peer Review

- Tell students they will now provide constructive feedback on each other's essays.
- Put students into groups of three.
- Have students take out their final essay.
- Pass out two copies of the *Reader Comment Page* to each student. Explain that students are to focus on what the writer is trying to say and not on grammar, spelling, or other technical issues in the writing.
- Have students pass their essays to the left.
- After students have evaluated the first essay, they should pass it to their left and evaluate a second essay.

Peer Editing

- Ask students: What grammar have we studied so far?
 - Write these answers on the board:
 - What a sentence is.
 - Use of proper nouns.
 - How and why to create new paragraphs.
 - How to find and correct sentence fragments.
 - How to combine and punctuate sentences with words like: but, and, so, yet, nor, or, for.
 - How to add information to sentences with proper punctuation.
- Put students into pairs and tell them to:
 - Read each other's work.
 - Put a small underline under the word, phrase, or sentence where there is one of the issues listed on the board. Leave any other issues alone.
 - Give the draft back to the writer and have the writer make the changes they can.
- Allow students to ask questions about issues they are not sure of.
- Collect student essays, Reader Comment Pages, and congratulate them on their first formal essay.

TEACHER NOTE: Evaluate the student essays using a copy of the *Reader Comment Page*. You will need to read the essays and the student comments on those essays, in order to see if the reviewers' comments will help the student improve their written work. Your comments should include suggestions on how better to develop the piece of writing. You can reinforce feedback from other reviewers and/or steer the writer to consider other important issues. Additionally, only correct grammar errors that have been studied in class and were not picked up in the peer editing session.

HOMEWORK

COMPLETE: Fill in the attached blank world map with as many country names as possible.

Teacher Preparation Note: Before the next class, become familiar with the map student are using for homework. Also, watch the two videos in Activity #1 and Activity #2 of the next lesson so that you are prepared to help students answer the questions in the Treasure Hunt activities for both.

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Week 13, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Industrial Revolution #1

Students will watch two videos and complete a *Treasure Hunt* on the first two industrial revolutions. Students will then put the significant dates they learned about in the videos on a timeline. Lastly, students will read and analyze an article on how life changed as a result of the Industrial Revolution.

MATERIALS

For Activity #1:

- Handout: Students should have brought their copies to class. Teachers may wish to have extra copies on hand.
Blank World Map (attached to Week 12, Lesson 2)
- Handout (attached): Make one copy for each student.
Treasure Hunt for the First Two Revolutions in Human Society
- Teacher Resource (attached):
Treasure Hunt for the First Two Revolutions in Human Society (answers)
- Video: The History of Us: Humanity from Space (running time: 11:20)
<http://www.pbslearningmedia.org/resource/f01a4502-b972-4a39-8021-e0f046dfba42/the-history-of-us-humanity-from-space/>
- Handout (attached): Make one copy for each student.
Timeline of Human History
- Teacher Resource: *Timeline of Human History: Answers*

For Activity #2:

- Video: Urbanization: Humanity from Space (running time: 11:58)
<http://www.pbslearningmedia.org/resource/20301442-51b6-47bf-a305-0da9b2f139eb/urbanization-humanity-from-space/>

For Activity #3:

- Handout (attached): Make one copy per student.
Life before and after Industrial Revolution
- Handout (attached): Make one copy per student.
Analyzing Agrarian vs. Industrialized Society During the First Industrial Revolution

For Homework:

- Handout (attached): Make one copy per student.
How did the Industrial Revolution of the 19th century lead to the scramble for Africa?

TEACHER PREPARATION

Prior to class, watch the two videos in Activity #1 and Activity #2 so that you are prepared to help students answer the Treasure Hunt questions for both.

ACTIVITY #1: Watch a Video on Agriculture – 60 minutes

- Tell students they are now going to learn about revolutions within human societies, focusing on the Industrial Revolution. They should know there are four Industrial Revolutions and they will be looking at the first two during this unit. The other two will be examined next semester.

Fill in the World Maps

- Tell students that before focusing on history, they will need to be comfortable reading a map. They will watch two videos that feature events across the globe, and they will get more out of them if they understand more about geography.
- Have students to get their homework maps out.
- In order to fill in more country names on their map, students will do a “speed dating” type of activity where they will have 90 seconds to gather additional country names from classmates.
- Start by having students approach a classmate for additional information that they could use on their map. After 90 seconds, call out “Snowball” or some word you choose to signal that students should approach another classmate. Repeat this process at least five times so that students get to speak with a number of classmates.
- When they are done, ask:
 - Did you find out the names of more countries from your classmates?
 - What parts of the world do you still need to fill in?



Predict the First Revolution in Human History

- Put two columns on the board with the following headings:
 - First Revolution
 - Second Revolution
- Have students predict human history using the following prompts. Take notes on student answers in the appropriate column on the board.
 - What have humans been doing for most of their time on the earth? (Answer: *Hunting and gathering.*)
 - What was the first major revolution in human society?
 - How did human society change because of this revolution?
 - How long did people live in this new type of society?

Watch the First Video and Go Over Treasure Hunt Questions

- Tell students that they will now watch a video on the first revolution.
- Pass out the *Treasure Hunt for the First Two Revolutions in Human Society*
- Go round robin to have students read the questions out loud for the first video.
- Tell students that the answers are short answers, so they will be able to jot them down as the video goes along. They will also get the opportunity to work with a partner to get the answers they didn't catch, as they will only watch this video once.
- Watch the video: *The History of Us: Humanity from Space*.
- Put students into pairs to see if their partner has answers to any questions they missed.
- As a class, ask:
 - Is there an answer you and your partner missed?
 - Have that pair ask their question.
 - Have students with the answer to that question provide it to the class.

- Go over the answers for the first video by using the following process:
 - Pose the question and allow students to answer it.
 - Ask the class: Is that the right answer?
 - If it is not the right answer, say so and ask for another answer.
 - Move on to the next question when the right answer has been given.

Break – 10 minutes

ACTIVITY #2: Watch a Video on the Industrial Revolution – 50 minutes



Predict the Impact of the Industrial Revolution

- Have students predict human history using the following prompts. Take notes on student answers in the appropriate column on the board:
 - What was the second major revolution in human society?
 - What change caused this revolution?
 - How did human society change as a result of this revolution?
 - How long ago did it take place?
- Encourage students to guess if they don't know.

Watch the Second Video and Go Over Treasure Hunt Questions

- Tell students that they are now going to watch a video on the second revolution.
- Have students to turn to the second page of the *Treasure Hunt for the First Two Revolutions in Human Society*.
- Go round robin to have students read the questions out loud for the second video.
- Tell students that the answers are short answers, so they will be able to jot them down as the video goes along. They will also get the opportunity to work with a partner to get the answers they didn't catch, as they will be only watching this video once.
- Watch the video: *Urbanization: Humanity from Space*.
- Put students into pairs to see if their partner has answers to any questions they missed.
- As a class, ask:
 - Is there an answer you and your partner missed?
 - Have that pair ask their question.
 - Ask students with the answer to that question provide it to the class.
- Go over the answers for the second video by using the following process:
 - Ask the question.
 - Get a volunteer student's answer.
 - Ask: Is that the right answer?
 - If it is not the right answer, say so and ask for another answer.
 - Move on to the next question when the right answer has been given.

Fill in a Preliminary Timeline of Human History



- Put students into new pairs.
- Project and pass out the *Timeline of Human History*, one to each pair.
- Have the pairs fill in the timeline with what they now know about human history.
- When the pairs have finished, ask: What information can you put into this timeline?
- Go from pair to pair to ask for one item. After each pair gives an item, ask:
 - Is this new information correct?
 - If it is correct, put it on the timeline.

- If it is not correct, ask if another pair thinks it has the right answer.
- Fill in the timeline with correct information.

Break – 10 minutes

ACTIVITY #3: Read About the Industrial Revolution and Do a “Before and After” Analysis – 50 minutes

Read the Article

- Tell students they are now going to read an article that summarizes the changes that happened by describing how people lived before and after the Industrial Revolution in Great Britain.
-  Have students make predictions about the article by asking: What do you think were the major changes for ordinary people living through the Industrial Revolution?
 - List student answers on the board.
- Pass out *Life before and after Industrial Revolution*.
-  Tell students you want them to do a particular kind of annotation for this reading.
 - Ask: Do you remember the definitions of pro and con?
 - Have students define these words and put the definitions on the board.
 - Tell students you want them to:
 - Underline phrases or sentences that are pro and write Pro next to that underline.
 - Put a squiggly line under phrases or sentences that are con and write Con next to the squiggly line.
 - Be aware that they will be pros and cons for two subjects: life before the Industrial Revolution and life after the industrial revolution.
 - Tell students not to worry about which period they are annotating just yet, they will be sorting out all the pros and cons in the next exercise.
- When students finish reading and annotating, ask: Based on the reading, what would you like to add or change about the predictions made about major changes people had to make because of the coming of the Industrial Revolution?
 - Make students’ additions and changes to their predictions on the board.

Fill out the Analysis

- Tell students they will now organize their notes so they can clearly record the significant changes that took place over 250 years.
- Pass out *Analyzing Agrarian vs. Industrialized Society During the First Industrial Revolution*.
- Write the following words on the board. Have students define the words in based on their understanding of the reading:
 - Agrarian
 - Rural
 - Industrialized
 - Urbanized
- Write students’ definitions by each of the words.
- Have students:
 - Go through their underlined Pro annotations and take notes in the appropriate column on the handout.
 - Go back over the squiggly lines with Con annotations and take notes in the appropriate column on the handout.
- Put students into pairs to talk about their answers and make additions or subtractions on their handout.
- Replicate the handout on the board while pairs are talking.

- Go from pair to pair to fill in the first column by asking for one new item at a time until the list is complete.
 - Take notes on these items in the appropriate column on the board.
 - When the list is complete, ask:
 - In your own words, what would you say is worthwhile about living in an Agrarian/ Rural society?
 - Have a number of students respond to this question.
 - Repeat this process for each of the columns.
 - When all the columns are filled, ask: Based on what you know now, do you think the Industrial Revolution made life better or worse for people living through the changes? Provide and explain the reasons for your opinion.
 - Tell students to give their opinions in their own words based on their analysis.
-

HOMEWORK

WRITE: Have students write their response to this same question you asked at the end of this lesson:

- Based on what you know now, do you think the industrial revolution made life better or worse for people living through the changes? Provide and explain the reasons for your opinion.

*** READ:** Have the students read *How did the Industrial Revolution of the 19th century lead to the scramble for Africa?*

- Tell students to use their Annotation Key to annotate this short article.

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TREASURE HUNT FOR THE FIRST TWO REVOLUTIONS IN HUMAN SOCIETY

Video #1: Humanity From Space: The Agricultural Revolution

Introduction	
1. How does our interconnected global society impact human population?	
2. How many people does world have to plan to feed?	
3. What is positive about seeing the world as one whole?	
Feature	
4. How many years ago did agriculture begin?	
5. How many people where on earth then?	
6. For hundreds of millions of years, how did people live?	
7. Where were the first agricultural communities started?	
8. How long is human history?	
9. What changes did agriculture make on the way humans lived? (Many answers.)	
10. How old is the oldest city?	
11. How many people could live in a city with agriculture as the source of wealth?	

Video #2: Humanity From Space: The Industrial Revolution

Introduction	
12. How many people do the biggest cities have today?	
13. Today, how many people live in the biggest metropolises?	
14. How long ago did cities start growing?	
Feature	
15. Where did the new revolution start?	
16. What invention did James Watt improve?	
17. What are the 3 big leaps forward in human history?	
18. What change triggered a huge shift in the labor force?	
19. What other revolution got people to the cities?	
20. What was the world's first industrialized city?	
21. In what year?	
22. What happened in 2006?	

TREASURE HUNT FOR THE FIRST TWO HUMAN REVOLUTIONS (answers)

Video #1: Humanity From Space: The Agricultural Revolution

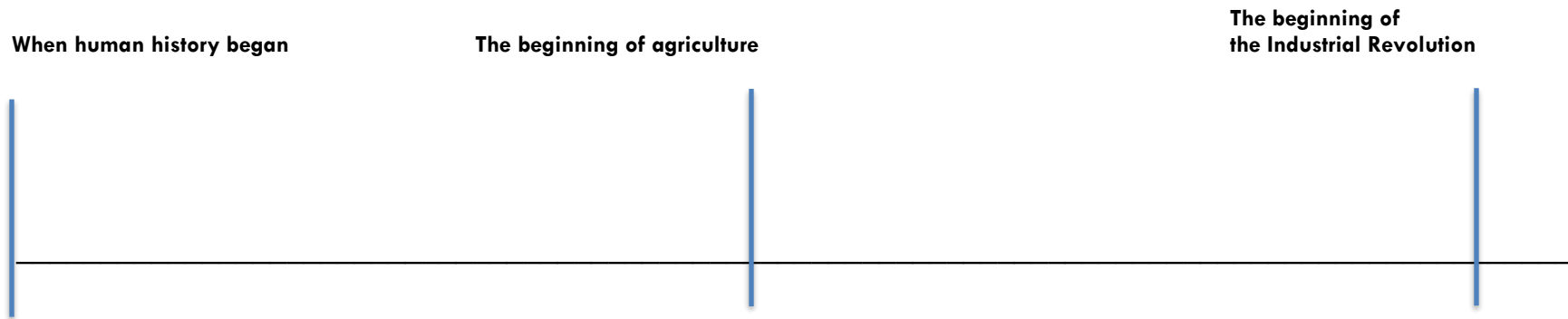
Introduction	
1. How does our interconnected global society impact human population?	It grows - a lot
2. How many people does world have to plan to feed?	9 billion
3. What is positive about seeing the world as one whole?	We are all interconnected.
Feature	
4. How many years ago did agriculture begin?	12 million years
5. How many people where on earth then?	5 million
6. For hundreds of millions of years, how did people live?	In small tribes as hunter gatherers.
7. Where were the first agricultural communities started?	The Fertile Crescent
8. How long is human history?	200 million years
9. What changes did agriculture make on the way humans lived? (Many answers.)	They created a surplus; stayed in one place; cooperated with one another; came up with new ideas; built cities and new civilizations.
10. How old is the oldest city?	11,000 years old
11. How many people could live in a city with agriculture as the source of wealth?	1 million

Video #2: Humanity From Space: The Industrial Revolution

Introduction	
12. How many people do the biggest cities have today?	20 million
13. Today, how many people live in the biggest metropolises?	50 million
14. How long ago did cities start growing?	250 years
Feature	
15. Where did the new revolution start?	Great Britain
16. What invention did James Watt improve?	The Steam Engine
17. What are the 3 big leaps forward in human history?	Fire, Farming, Harnessing Steam
18. What change triggered a huge shift in the labor force?	Factories powered by steam.
19. What other revolution got people to the cities?	Trains powered by steam.
20. What was the world's first industrialized city?	Manchester, England
21. In what year?	1770
22. What happened in 2006?	There were more people in cities than in the countryside.

TIMELINE OF HUMAN HISTORY

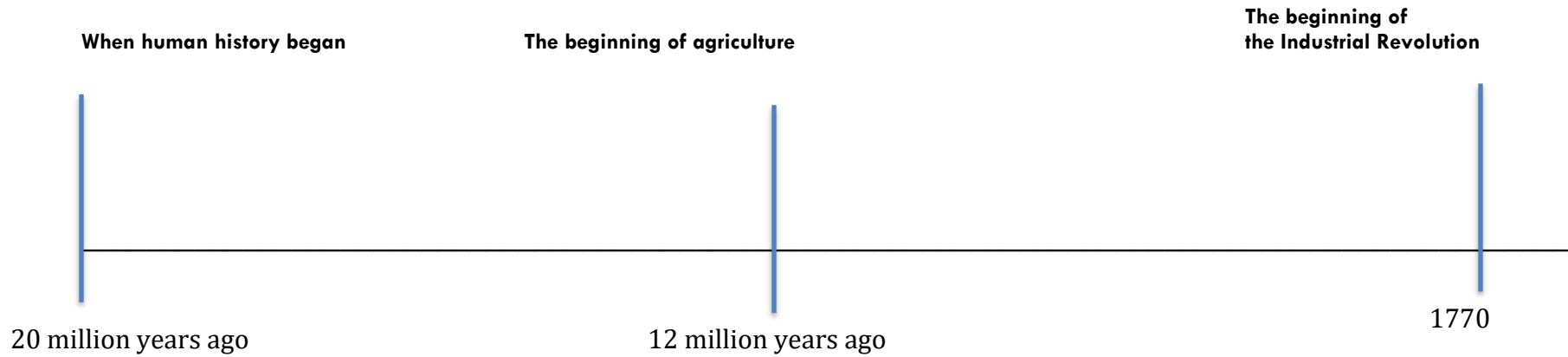
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TIMELINE OF HUMAN HISTORY: ANSWERS

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Life before and after Industrial Revolution

Adapted and paraphrased from original source: <https://lawaspect.com/life-industrial-revolution-2/>

Original Author: Lawaspect.com

The Industrial Revolution, which took place from the 18th to 19th centuries, was a period when most people who lived in the countryside on farms Europe and America became workers in factories in the city.

Before the Industrial Revolution, which began in Britain in the late 1700s, manufacturing was often done in people's homes, with people using hand tools or basic machines. Industrialization marked a shift to powered, special-purpose machinery, factories and mass production. The iron and textile (clothing) industries, along with the development of the steam engine, played central roles in the Industrial Revolution, which also saw huge changes in transportation, communication, and banking.

While industrialization brought about increased amounts and varieties of manufactured goods as well as an improved standard of living for some, it also resulted in often grim working and living conditions for the poor and working classes. With the arrival of the Industrial Revolution, the world experienced significant changes not only in the textile industry, but in power systems, farming systems, and transportation and communication systems.

Life on the farm was very hard, as everything was produced by hand: clothing was made from locally-found material such as animal hides and furs, nylon was not an option and cotton was not imported from other countries in large quantities. People's main source of power was from wood, which people used to warm themselves and for cooking. Most everyone lived in small towns and relied on what their farms produced, basic tools and their own strength to plow their farms with the help of farm animals to make a living.

Additionally, it was hard for people to travel from one place to another. The only transportation means were horses or simple ships and it took people days or even months to get anywhere. The roads were small and rough, there were no cars or trains, and communication was very difficult. Back then, news was only spread by travelers and goods were only sold in their local areas.

However, in late 18th century, for the first time the power of streams and rivers was used to mechanize the textile industry and, suddenly, mills and factories were mass-producing textiles and clothing. Soon factories were not just making textiles but furniture and other everyday items. The invention of the steam engine brought in a new source of power by using coal. The steam engine used fire to heat water and produce steam, which was used to drive machines. Eventually steam-driven machines were used to run factories, which made work much easier.

By the end of 18th century, great numbers of people began leaving their farms and moving to the cities to work in factories. England and America moved from being agrarian or rural societies to being industrial and urbanized societies.

Another big innovation was the assembly line production process, which enabled the factories to mass-produce their goods very quickly and efficiently. In turn, this pushed prices down while making work dangerous and tiresome for factory workers.

The assembly line enabled factory owners to employ unskilled labors women, men and even children, whom they treated miserably. Besides all that negative impact of industrialization on poor working families, improvements were made in the society. In 1820, a British engineer set up the world's first railroad line powered by a steam-driven locomotive. Additionally, new roads, helped people travel easily to other parts of the country and helped business owners to move their goods to markets more quickly, The railroad building also created thousands of jobs in several different industries. As a result, the British and American economies were boosted and the overall life improved for some people.

ANALYZING AGRARIAN VS INDUSTRIALIZED SOCIETY DURING THE FIRST INDUSTRIAL REVOLUTION

Please read and annotate the article, *Life before and after Industrial Revolution*, and then fill in this chart to help sort out the positive and negative changes that came about because of the Industrial Revolution.

AGRARIAN/ RURAL SOCIETY		INDUSTRIALIZED / URBANIZED SOCIETY	
PROS	CONS	PROS	CONS

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How did the Industrial Revolution of the 19th century lead to the scramble for Africa?

Adapted and paraphrased from original source:: <https://www.enotes.com/homework-help/how-did-industrial-revolution-19th-century-lead-624352>

Original Author: TeacherSage

By the late 19th century industrialism had widened the technological gap between Africa and the West. Due to advances in military technology, such as the development of the rapid fire machine gun, the repeating rifle, and light-weight artillery, Europeans could control a territory with fewer troops, making African conquest very affordable. For example, in 1898, at the Battle of Omdurman the British killed 10,000 Sudanese while losing only a few dozen men. Industrialism also enabled Europeans and the United States to produce more weapons at a lower cost per weapon, which further decreased the cost of combat and occupation.

Industrialism also led to medical advancements, including the development of vaccines and medicines, that allowed Europeans to survive more easily in tropical climates because they could protect themselves against tropical diseases. In 1857 industrial developments such as the telegraph and railroads helped the British overcome a rebellion in India, thus encouraging both England and other industrialized nations to believe they could successfully conquer and control rather than simply trade with African nations.

Finally, industrialism led to a greater need for a secure and steady supply of raw materials, which Africa had in abundance, and an increased desire for foreign goods in their markets. Controlling a country as a colony provided both a reliable flow of raw materials and foreign products making conquest desirable.

If you find this all cold-blooded, you would be right, but the West also developed an ideology of racial superiority that argued that it was actually an act of kindness as well as the "white man's burden" to bring a supposedly superior Western civilization to Africa.

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Week 13, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Industrial Revolution #1

Students work with a timeline on the first Industrial Revolutions as they look at the impacts of colonialism on Africa and read an interview of a child laborer. Students will then look at a number of graphics that show the rapid growth of urbanization and read about the second Industrial Revolution to find out what was causing it. Lastly, students write about how they think these two Industrial Revolutions impacted ordinary people and what their responses might have been.

MATERIALS

For Activity #1:

- Handout: Students should have brought their copies to class. Teachers may wish to have extra copies on hand.
How did the Industrial Revolution of the 19th century lead to the scramble for Africa? (attached to Week 13, Lesson 1)
- Handout (attached): Make one copy for each student.
Graphic #1: Colonial Map of Africa: 1880-1913
- Handout (attached): Make one copy for each student.
Timeline of Industrial Revolutions 1 & 2
- Teacher Resource: *Timeline of Industrial Revolutions 1 & 2*
- Handout (attached): Make one copy for each student.
Michael Sadler, interview with former child laborer Michael Crabtree, 1832

For Activity #2:

- Handout (attached): Make one copy for each student.
Graphic #2: The Extension of the Railway System in England and Wales, 1845-1914
- Handout (attached): Make one copy for each student.
Graphic #3: America Becomes Urbanized
- Handout (attached): Make one copy for each student.
Treasure Hunt for the Second Industrial Revolution
- Teacher Resource (attached):
Treasure Hunt for the Second Industrial Revolution (answers)
- Handout (attached): Make one copy for each student.
The Second Industrial Revolution: The Technological Revolution

For Homework:

- Handout (attached): Make one copy for each student.
HSE Questions for the Second Industrial Revolution: The Technological Revolution.

- Teacher Resource (attached): Answer Key - HSE Questions for the *Second Industrial Revolution: The Technological Revolution*.

ACTIVITY #1: Impacts of the Industrial Revolution on Children – 60 minutes

- Tell students they are going to look further into the first Industrial Revolution and then get a sense of what the second Industrial Revolution was about. Together, the two Revolutions resulted in a very high rate of change that continues to this day.

Follow-Up on Homework Reading

- Tell students that one of the changes that took place as a result of the first Industrial Revolution was colonization. Colonization was a force that helped to globalize the world.
- Tell students to get out their homework reading.
- Based on their annotations, ask:
 - Of those things you underlined, what were the most important points brought up in the article?
 - What was surprising or interesting or upsetting?
 - What was hard to understand or was confusing?
 - Include words that students didn't understand. When students identify different words, write them on the board and ask if students can define them based on the context. If not, give the definition as needed.
 - Were there aspects of this article you agreed with? Disagreed with?
 - Why?
- Project and pass out *Timeline of Industrial Revolutions 1 & 2*.
- Ask:
 - What dates do we already know that we can put on the timeline? (Answer: 1770 was when the first Industrial Revolution began.)
 - Put students in pairs and have them number their timelines by 10 years per line on the timeline.
- Have students tell you the numbers to put on the timeline on the projector.
- Pass out *Colonial Map of Africa: 1880-1913*.
- Ask:
 - What dates can we add to this timeline based on the map?
 - Have students tell you where to put the dates on your timeline; they should also be copying these dates onto their own timelines.
- Have students look at the two maps and ask:
 - What did Africa look like in 1880?
 - What took up more space, populated areas of Africa or open space?
 - How many years later was it that the whole of Africa colonized? (Answer: 33 years.)
 - What European country held the most land?
 - Which had the next largest amount of land?
 - Continue this line of questioning until all the European countries have been named.
 - Which two African countries were never colonized? (Answer: Liberia and Ethiopia.)
- Lastly, ask:
 - What is the connection you would make between industrialization in Europe and the colonization of Africa?
 - What do you think the impact of colonization on Africans might have been?

Read and Discuss the Article About Michael Sadler as a Class

- Tell students they are now going to take a closer look at other people who suffered as a result of the first Industrial Revolution—children.
- Pass out *Michael Sadler, interview with former child laborer Michael Crabtree, 1832*.

- Ask:
 - What additional date can we put on our timeline based on this interview?
 - Have students put it on their timeline and give you instructions on where to put the number on the overhead timeline.
- Select two students to be readers Have them sit together and take on the roles of Michael Sadler, the interviewer, and Michael Crabtree, the child laborer. They should then read the interview as if it was happening right there in the classroom.
- Let the readers know that some of the language is different because the interview took place a long time ago and language changes. In addition, because this interview took place in England we can expect this different culture to have different language customs we might not recognize.
- Ask the two readers to read the two parts: loud, clear, and with feeling!

Discuss Your Opinions

- Re-read the writing prompt that students had for homework:
 - Based on what you know now, do you think the industrial revolution made life better or worse for people living through the changes? Provide and explain the reasons for your opinion.
- Ask students:
 - What opinion did you write about: better or worse?
 - Take notes on student opinions.
 - What were your reasons?
 - Note student reasons for their opinions.
 - How do you think people were affected by the first Industrial Revolution over the long term?
 - What ideas do you think they might have had?
 - What actions do you think they might have eventually taken?

Break – 10 minutes

ACTIVITY #2: Information about the 2nd Industrial Revolution – 60 minutes

- Tell students they are now going to look closely at the inventions and changes the second Industrial Revolution had on the world. These changes are every bit as powerful as the changes that rocked people's lives during the first Industrial Revolution.

Read 2 Graphics

- Project and handout *The Extension of Railway System in England and Wales, 1845-1914*.
- Ask:
 - What does the rail system look like in 1845?
 - 1854? How does it compare to 1845?
 - 1876?
 - 1914?
 - What is the total number of years covered in this graphic?
 - What do you think were the changes happening in England during these time periods?
 - List student ideas on the board.
 - Does anyone know the significance of 1914?
 - If students don't, ask them to look up the dates for World War I.
 - Have students put that date on their timeline.
- Ask:
 - What do you think was going on in America during this time?
 - Was it the same as in England? Or different?

- Project and Pass out *America Becomes Urbanized*.
- Ask:
 - What is going on with the population of rural people in the U.S.?
 - When does it stop growing so much?
 - What is going on with the population of urban people in the U.S.?
 - When does the urban population become greater than rural population?
 - Where do you think all these people, rural and urban, are coming from to make both numbers go higher?
 - List student answers on the board.
 - What changes do you think are happening to make the urban population grow so fast?
 - List student answers on the board.

Complete a Treasure Hunt for a Reading

- Tell students they are now going to get more information on what was going on during those years when cities were growing.
- Pass out *Treasure Hunt for the Second Industrial Revolution*.
- Have a student read the instructions on the sheet out loud.
- Pass out *Second Industrial Revolution: The Technological Revolution*.
- Tell students they are to read the article, underlining the answers, and writing them in their *Treasure Hunt* as they go.
- When students have finished, put them into pairs to go over their answers.

Go Over the Treasure Hunt

- Go from pair to pair asking each a different question. After each pair has given their answer, ask the class: Is that the correct answer?
 - If it is, move on to the next question.
 - If students have a different answer, ask them to read the underline they have where they found the answer.
 - Have the class decide on the right answer.
 - Use this process for all the answers.
- Ask students: What new information can we put on our timelines?
 - Have them update their timelines and have them tell you how to updates the timeline on the overhead.

Break – 10 minutes

ACTIVITY #3: Write a Response to a Writing Prompt – 40 minutes

- Tell students they are now going to have the opportunity to write about what they think are the impacts of all the changes that happened during the first and second Industrial Revolutions.

Discuss the Writing Prompt

- Tell students they are now going to review the last portion of *The Second Industrial Revolution: The Technological Revolution*: “And the Social Effects...?”
- Go round robin and have each student read a bullet in this section: loudly, clearly, and with feeling!
- Put the writing prompt on the board:
 - What was it like to be a child laborer at the beginning of the Industrial Revolution?
 - How do you think common people responded to the negative impacts of the first and second Industrial Revolutions?

- What ideas do you think they might have had about their conditions?
 - Explain why you think this way.
- What actions do you think they might have taken as a result?
 - Explain why you think this way.
- Put students into new pairs and tell them to talk through their ideas on each of these questions. They are welcome to have different ideas; they just need to hear their own in conversation with someone else.

Respond to the Writing Prompt

- Give students time to respond to these prompts in writing.

HOMEWORK

READ: Find an article in a newspaper, magazine, or online that provides more information on the Labor Movement. Write down the name of the article, read the article, and take notes on the important facts from the era the article is written about and be prepared to talk about it in the next class.

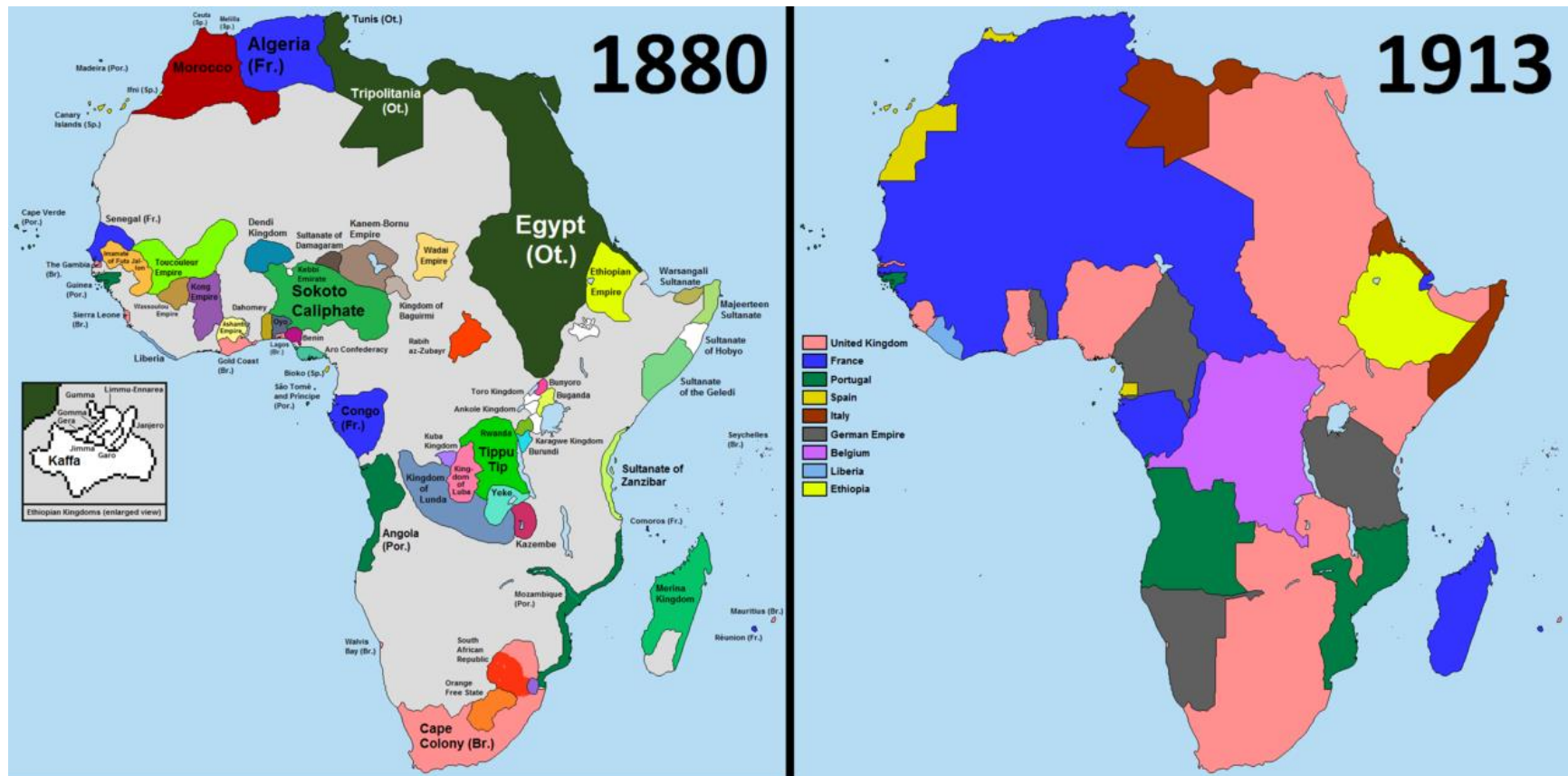
COMPLETE: Have students complete the HSE Questions for the *Second Industrial Revolution: The Technological Revolution*.

- Assign students each a question or two. After answering the questions, students are to choose one of their assigned questions they think they got right and write out the process they went through to get the right answer.

Teacher Preparation Note: Before the next lesson, become familiar with the articles and watch the videos so that you are prepared to help students answer the questions in the *Treasure Hunts*.

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Graphic #1: Colonial Map of Africa: 1880-1913



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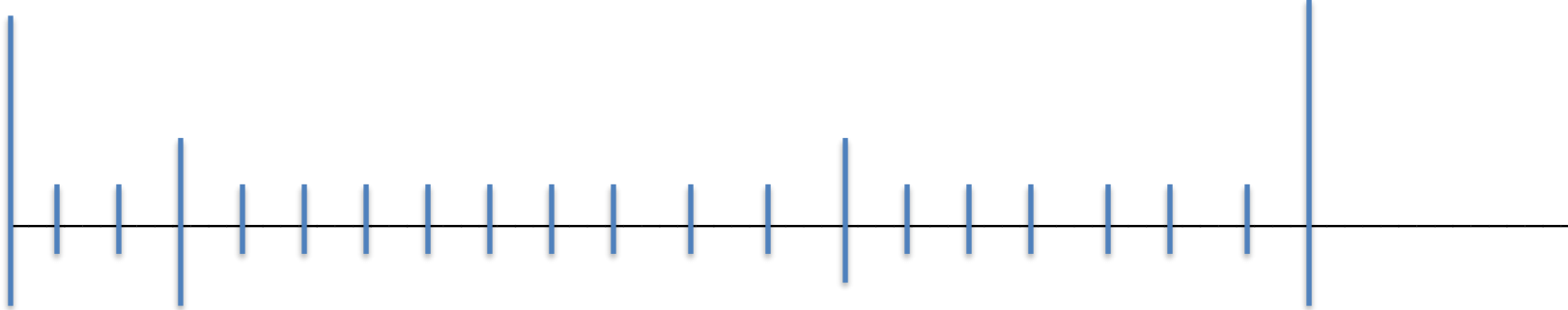
TIMELINE OF INDUSTRIAL REVOLUTIONS 1 & 2

(Note: This timeline is NOT to scale!)

Beginning of the
1st Industrial Revolution

Beginning of the
2nd Industrial Revolution

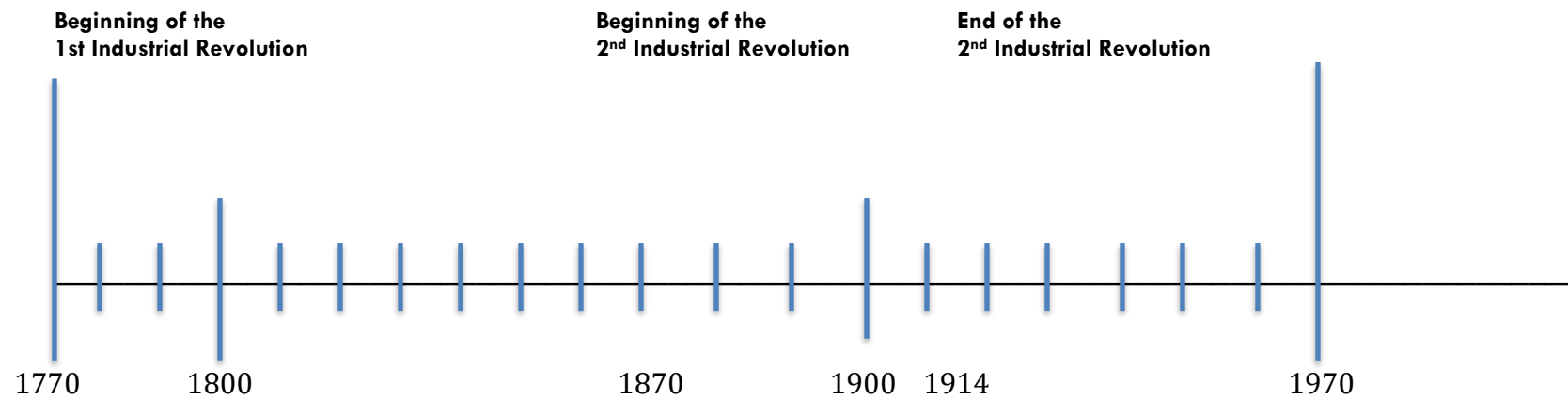
End of the
2nd Industrial Revolution



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TIMELINE OF INDUSTRIAL REVOLUTIONS 1 & 2: ANSWERS

(Note: This timeline is NOT to scale!)



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Michael Sadler, interview with former child laborer Michael Crabtree, 1832

Adapted and paraphrased from original source: http://www.c3teachers.org/wp-content/uploads/2015/09/NewYork_10_Industrialization.pdf

Original Author: New York State Social Studies Resource Toolkit

Question: What age are you? Answer: Twenty-two.

Question: What is your occupation? Answer: A blanket manufacturer.

Question: Have you ever been employed in a factory? Answer: Yes.

Question: At what age did you first go to work in one? Answer: Eight.

Question: How long did you continue in that occupation? Answer: Four years.

Question: Will you state the hours of labor at the period when you first went to the factory, in ordinary times? Answer: From 6 in the morning to 8 at night.

Question: Fourteen hours? Answer: Yes.

Question: With what intervals for refreshment and rest? Answer: An hour at noon.

Question: When trade was brisk, what were your hours? Answer: From 5 in the morning to 9 in the evening.

Question: Sixteen hours? Answer: Yes.

Question: With what intervals at dinner? Answer: An hour.

Question: How far did you live from the mill? Answer: About two miles.

Question: Was there any time allowed for you to get your breakfast in the mill? Answer: No.

Question: Did you take it before you left your home? Answer: Generally.

Question: During those long hours of labor could you be punctual; how did you awake?
Answer: I seldom did awake spontaneously; I was most generally awake or lifted out of bed, sometimes asleep, by my parents.

Question: Were you always in time? Answer: No.

Question: What was the consequence if you had been too late? Answer: I was most commonly beaten.

Question: Severely?

Answer: Very severely, I thought.

Question: In those mills is chastisement towards the latter part of the day going on perpetually? Answer: Perpetually.

Question: So that you can hardly be in a mill without hearing constant crying? Answer: Never an hour, I believe.

Question: Do you think that if the overlooker were naturally a humane person it would still be found necessary for him to beat the children, in order to keep up their attention and vigilance at the termination of those extraordinary days of labor?

Answer: Yes; the machine turns off a regular quantity of cardings, and of course, they must keep as regularly to their work the whole of the day; they must keep with the machine, and therefore however humane the slubber may be, as he must keep up with the machine or be found fault with, he spurs the children to keep up also by various means but that which he commonly resorts to is to strap them when they become drowsy.

Question: At the time when you were beaten for not keeping up with your work, were you anxious to have done it if you possibly could?

Answer: Yes; the dread of being beaten if we could not keep up with our work was a sufficient impulse to keep us to it if we could.

Question: When you got home at night after this labour, did you feel much fatigued?

Answer: Very much so.

Question: Had you any time to be with your parents, and to receive instruction from them?

Answer: No.

Question: What did you do?

Answer: All that we did when we got home was to get the little bit of supper that was provided for us and go to bed immediately. If the supper had not been ready directly, we should have gone to sleep while it was preparing.

Question: Did you not, as a child, feel it a very grievous hardship to be roused so soon in the morning? Answer: I did.

Question: Were the rest of the children similarly circumstanced?

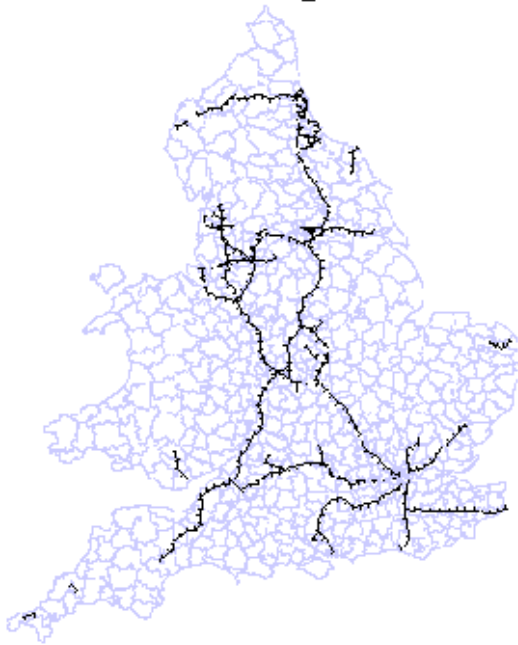
Answer: Yes, all of them; but they were not all of them so far from their work as I was.

Question: And if you had been too late you were under the apprehension of being cruelly beaten?

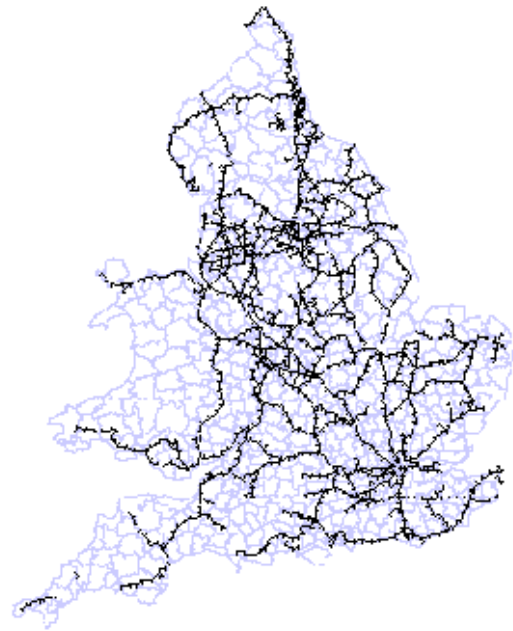
Answer: I generally was beaten when I happened to be too late; and when I got up in the morning the apprehension of that was so great, that I used to run, and cry all the way as I went to the mill.

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The Extension of the Railway System in England and Wales, 1845-1914

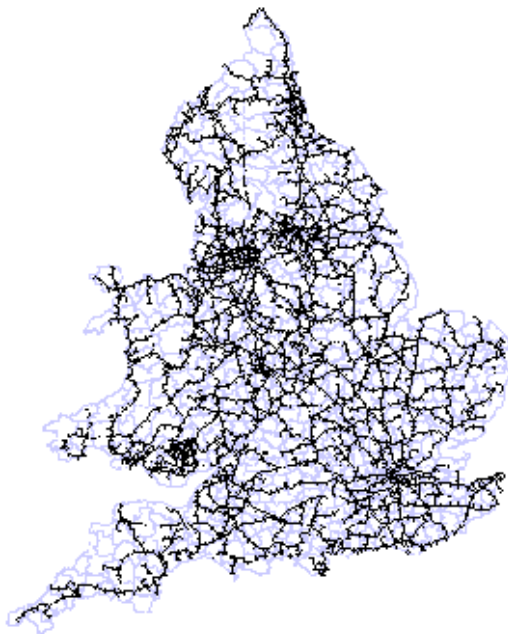


1845

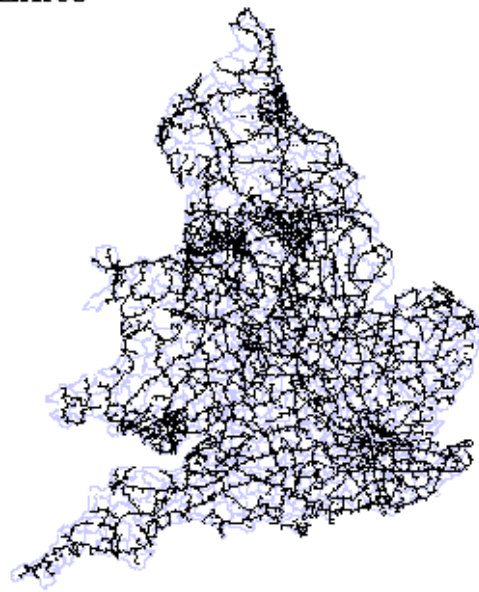


1854

— Rail Lines

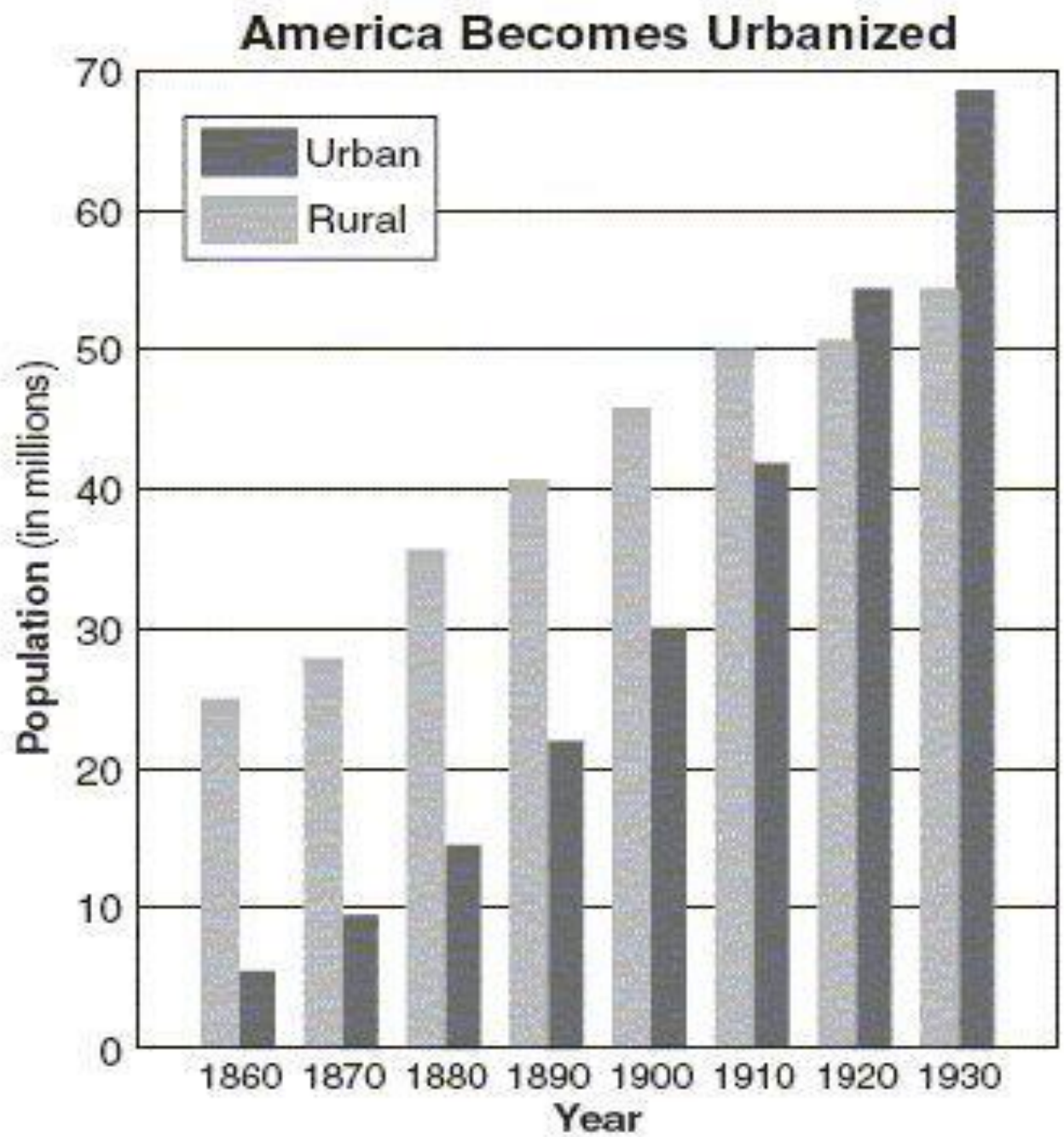


1876



1914

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Source: U. S. Census (adapted)

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TREASURE HUNT FOR THE SECOND INDUSTRIAL REVOLUTION

Use the following reading technique to answer these questions: 1) read the first question; 2) read the article until you find the answer to the question; 3) underline the answer to the question; 4) transfer the answer to this sheet.

1. What are the dates of the second Industrial Revolution?	
2. What were 3 new industries that grew up during the second Industrial Revolution?	
3. What were 2 new technologies that would change the world?	
4. Why was building with steel so much better than building with lead?	
5. What could you build with steel for the first time?	
6. Which 2 men perfected the light bulb?	
7. What other invention made public electricity possible?	
8. Who invented the telephone?	
9. What was Guglielmo Marconi known for?	
10. What happened as a result of the paper machine?	
11. What needed to be invented in order to make airplanes and cars practical for public use?	

12. What were some positive impacts of the second Industrial Revolution? (There are 6.)	
13. What effects were not so positive?	
14. Read the “Social Effect” section. Based on all of the change that happened, was the second Industrial Revolution worth it? Why or why not.	

TREASURE HUNT FOR THE SECOND INDUSTRIAL REVOLUTION (answers)

Use the following reading technique to answer these questions: 1) read the first question, 2) read the reading until you find the answer to the question, 3) underline the answer to the question, 4) transfer the answer to this sheet.

1. What are the dates of the second Industrial Revolution?	1850-1970
2. What were 3 new industries that grew up during the second Industrial Revolution?	Steel, oil, and electricity
3. What were 2 new technologies that would change the world?	Public transportation and planes
4. Why was building with steel so much better than building with lead?	It was stronger and cheaper.
5. What could you build with steel for the first time?	Ships, skyscrapers, and big bridges
6. Which 2 men perfected the light bulb?	Edison and Swan
7. What other invention made public electricity possible?	Commercial electric generators
8. Who invented the telephone?	Alexander Graham Bell
9. What was Guglielmo Marconi known for?	Sending radio waves across the Atlantic Ocean
10. What happened as a result of the paper machine?	Cheap paper and widespread books and newspapers

11. What needed to be invented in order to make airplanes and cars practical for public use?	Liquid fuels like gasoline
12. What were some positive impacts of the second Industrial Revolution? (There are 6.)	<ul style="list-style-type: none"> • Living standards improved. • Prices of goods fell. • Crop failures no longer meant famine or malnutrition because of good transportation. • Public health improved. • Sewage systems were built. • Water quality improved.
13. What effects were not so positive?	<ul style="list-style-type: none"> • Old businesses failed and unemployment increased.

The Second Industrial Revolution: The Technological Revolution

Adapted and paraphrased from original source: <http://richmondvale.org/second-industrial-revolution/>

Original Author: Richmond Vale

The Second Industrial Revolution, which began in the middle of 19th century (1850-1970), was a period of growth for pre-existing industries and expansion of new ones, such as the steel, oil and electricity fields. The development of new technologies led to the introduction of two things that would change the world: public transport and planes.



Photo Credit: Industryweek.com

The Second Industrial Revolution furthered globalization and created a rough draft of our world today. Interesting, right? Let's take a look at what people invented during this period and how it affected mankind.

A REVOLUTION FULL OF INVENTIONS

During the Second Industrial Revolution, the existing manufacturing and production methods were improved. For instance, steel replaced iron in the building business. It was strong and it was cheap, so it made it possible to build rail lines at a competitive cost and resulted in a massive spread transportation. Steel also facilitated the construction of ships, skyscrapers and larger bridges.



Steel displaced iron because it was stronger and cheaper – Photo Credit: [Amazonaws](#)

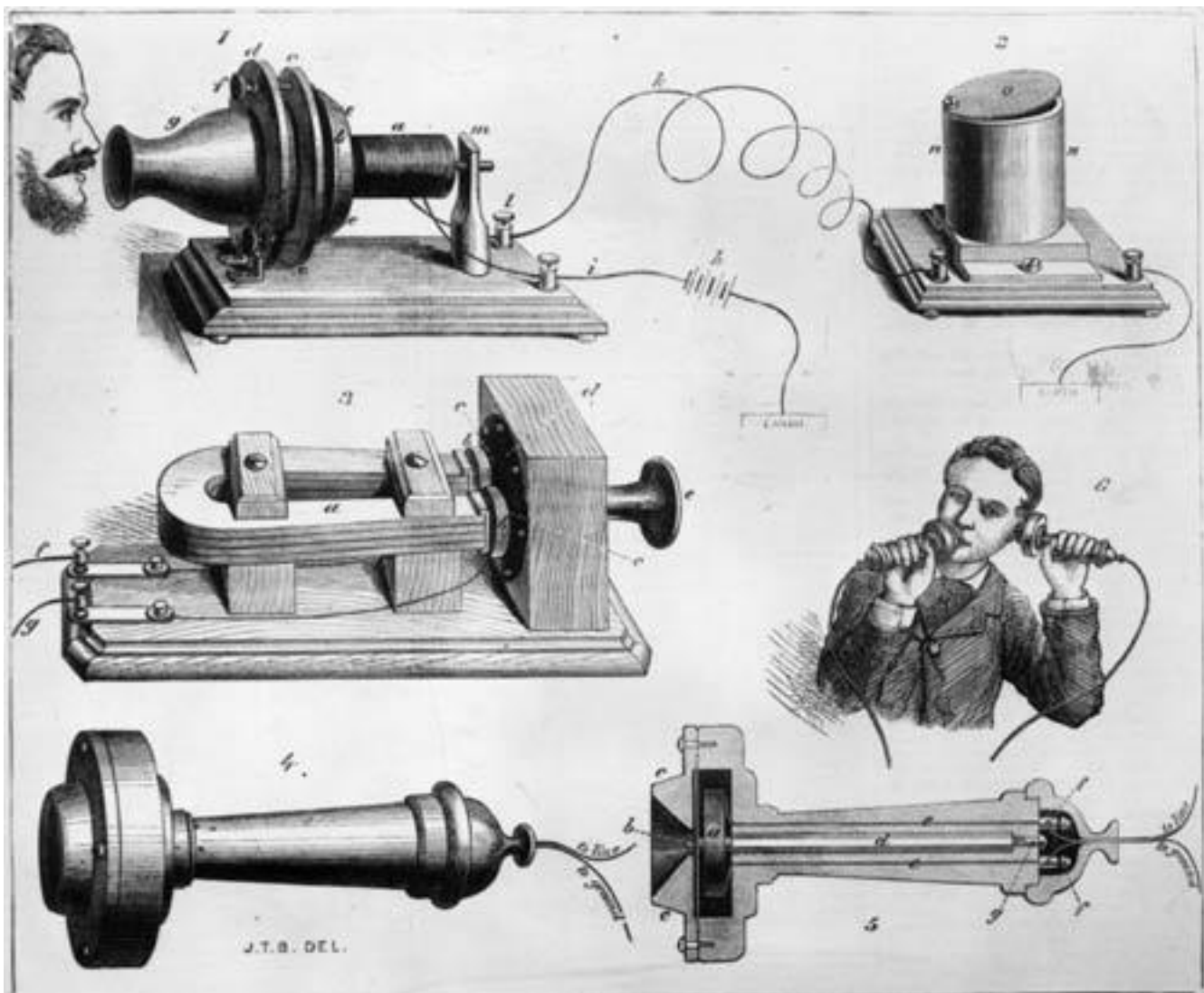
Although the Second Industrial Revolution happened just a few years after the first Industrial Revolution, it was as big of a leap forward. If you are reading this now, surely you can't imagine a world without electricity! But at the beginning of the Second Industrial Revolution, that was the norm.

THE BRILLIANT IDEA OF ELECTRICITY

During this period, Faraday started playing with the idea of electricity and came up with a costly light bulb. Then, a few years later, Edison and Swan perfected their design of a light bulb, which was practical for home use. This, in addition to the appearance of the first efficient commercial electrical generators in the 1870s, made public electricity possible.

MORE AND MORE INVENTIONS IN THE SECOND INDUSTRIAL REVOLUTION!

Without certain inventions from the Second Industrial Revolution, some of the ways we communicate today wouldn't be possible. For instance, in 1876, Alexander Graham Bell invented the telephone. Later on, in 1901, Guglielmo Marconi sent radio waves across the Atlantic Ocean for the first time.



There also were innovations in paper-making. During this period, Charles Fenerty and Friedrich Gottlob Keller invented the current paper machine. This enabled the introduction of cheaper paper, and hence, wider distribution of books and newspapers. The fountain pen, the mass-produced pencil and the steam-driven rotary printing press also appeared during the Second Industrial Revolution.

Transportation also became a whole lot easier! The internal combustion engine, which powers cars today, was invented during the Second Industrial Revolution. This engine used gas and air, which made it impractical for public use. But then liquid fuels, such as gasoline, were invented. Ultimately, without this engine, airplanes and cars wouldn't be here today.

WHAT WERE THE ECONOMIC EFFECTS OF THE SECOND REVOLUTION?

In the period from 1870 to 1890, there was an economic and productivity boom in the industrialized countries. As a consequence, living conditions improved significantly and the prices of goods fell dramatically.

Moreover, crop failures in the fields no longer meant famine and malnutrition as rural areas were connected to large markets through transportation infrastructure. There were also fewer people in the fields. With industrialization, the share of the population that engaged in agriculture dropped drastically while crop yield increased.



Photo Credit:[Gap Year](#)

Public health also improved greatly. This was thanks to the construction of sewage systems in cities. This was accompanied by the passage of laws that regulated filtered water supplies and minimum standards of water quality. These two measures reduced the rates of infections and death from many diseases.



The Second Industrial revolution brought unemployment – Photo Credit: [Wikipedia](#)

But not everything was positive. Electricity brought along increased mechanization. As we mentioned before, the Second Industrial Revolution was a time of quick and continuous progress so new inventions quickly made other ways of doing things obsolete in a short time span. People lost money with all these new changes and the unemployment rate dramatically increased.

AND THE SOCIAL EFFECTS...?

The Second Industrial Revolution transformed society in significant ways. Among the social effects that caused this revolution can include:

- Urbanization increased rapidly. The population moved into hastily built housing in cities to be nearer to the factories.
- Families were separated as the place of work shifted from the farms to factories.
- Work lost its seasonal quality, as workers were required to follow a routine schedule.
- The pace of work, driven by machines, increase dramatically.
- The overall health of the workforce declined because of the harsh and unhealthy conditions of the factories.

- The availability of work became unpredictable as it rose and fell with the demand for goods.
- Gradually, women who had first been drawn into cities to work in the factories lost their manufacturing jobs as machines decreased the demand for labor. So, cut off from their families, many had no other option than prostitution.
- Artisans and craftsmen lost their livelihoods as they were unable to compete with the lower cost of mass-produced goods.
- The traditional impediment to marriage, which was the need for land, disappeared and people began to marry younger.
- A much greater portion of the population could afford factory-made goods.
- Close working and living conditions produced a sense of class-consciousness among the working class.

HSE Questions for Second Industrial Revolution: The Technological Revolution

1. What is an Industrial Revolution?
 - a. A decline in knowledge about pre-technological machinery
 - b. An industrial worker's rights movement
 - c. The rapid development of industry
 - d. A women's rights movement
2. During what century was the first Industrial Revolution
3.
 - a. 16th century
 - b. 20th century
 - c. 19th century
 - d. 18th century
4. What industries experienced a period of expansion during the second Industrial Revolution?
 - a. Steel, oil, and iron
 - b. Oil, electricity, and manufacturing
 - c. Culinary, hospitality, and steel
 - d. Electricity, oil, and steel
5. What is globalization?
 - a. The process of businesses and other organizations developing international influence
 - b. The process of world leaders developing influence over global businesses
 - c. The process of businesses and other organizations developing national influence
 - d. The process of government upheaval on a global scale
6. What happened as a result of replacing steel with iron?
 - a. More workers were hurt on the job
 - b. Steel prices went up
 - c. Massive spread transportation
 - d. Iron became obsolete

7. When were the first efficient commercial electrical generators created?
- a. 1850
 - b. 1970
 - c. 1879
 - d. 1870
8. Who invented the telephone?
- a. Marconi
 - b. Edison
 - c. Bell
 - d. Swan
9. What would be a benefit of radio waves being able to cross the Atlantic Ocean?
- a. People could now listen to radio shows from different countries
 - b. Faster Cross-Atlantic communication
 - c. Sailors could use telephones on their ships
 - d. The radio waves made it easier to predict a storm
10. What happened as a result of the invention of the paper machine?
- a. Wider distribution of books and newspapers
 - b. A decline in newspaper sales
 - c. Paper became more expensive and books became less accessible
 - d. There was an ink shortage due to the inability to keep up with paper production
11. What happened as a result of the economic and productivity boom from 1870 to 1890?
- a. Living conditions declined significantly and the prices of goods fell dramatically
 - b. Living conditions declined significantly and the prices of goods rose dramatically
 - c. Living conditions improved significantly and the prices of goods fell dramatically
 - d. Living conditions improved significantly and the prices of goods rose dramatically

12. What was one of the reasons public health improved greatly during the second industrial revolution?

- a. The invention of electricity allowed for more stable living conditions resulting in a reduced rate of death by diseases
- b. The invention of the telephone allowed people to call for emergency services more easily so that they could be helped in a timely manner
- c. The construction of sewage systems in the cities and passage of laws that regulated filtered water supplies led to reduced rates in deaths from diseases
- d. The massive spread of transportation allowed people to move to cities where there were more jobs, allowing them to raise enough money to take care of themselves

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Answer Key – HSE Questions for Second Industrial Revolution: The Technological Revolution

1. What is an Industrial Revolution? – on my ow
 - a. A decline in knowledge about pre-technological machinery
 - b. An industrial worker's rights movement
 - c. The rapid development of industry
 - d. A women's rights movement
2. During what century was the first Industrial Revolution? – author and me
 - a. 16th century
 - b. 20th century
 - c. 19th century
 - d. 18th century
3. What industries experienced a period of expansion during the second Industrial Revolution? – right there
 - a. Steel, oil, and iron
 - b. Oil, electricity, and manufacturing
 - c. Culinary, hospitality, and steel
 - d. Electricity, oil, and steel
4. What is globalization? – on my own
 - a. The process of businesses and other organizations developing international influence
 - b. The process of world leaders developing influence over global businesses
 - c. The process of businesses and other organizations developing national influence
 - d. The process of government upheaval on a global scale
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Week 14, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: The Labor Movement and Our New Gilded Age

Students read about labor unions and watch two videos to understand what kinds of problems labor unions fixed in the past. Students then read a history of the labor movement, play Question Around to improve comprehension, and write about their opinion on the importance of government regulations in solving social problems.

MATERIALS

For Activity #1:

- Student Work: Students bring completed copies of the HSE Questions for the *Second Industrial Revolution: The Technological Revolution* to class.
- Handout (attached): Make one copy for each student.
Treasure Hunt for the Labor Movement
- Handout (attached): Make one copy for each student.
The Knights of Labor: What is a Union and How Does it Work?
- Video: What if there were no trade unions? (running time: 02:34)
<https://www.youtube.com/watch?v=2YaSPC7Yhbl>
- Video: The Labor Movement in the United States (running time: 02:25)
<https://www.youtube.com/watch?v=ewu-v36szIE&t=45s>

For Activity #2:

- Handout (attached): Make one copy for each student.
The Labor Movement in America
- Handout (attached to Week 10, Lesson 1): Make one copy for each student.
Prepare for Question Around

Homework:

- Video: The American Industrial Revolution (running time: 27:22)
<https://www.youtube.com/watch?v=7Cvofeaj0y0&t=1364s>
- Handout (attached): Make one copy for each student.
Treasure Hunt for The American Industrial Revolution

TEACHER PREPARATION

Before class, become familiar with the articles and watch the videos so that you are prepared to help students answer the questions in the *Treasure Hunts*.

ACTIVITY #1: Definition of the Labor Movement and Key Accomplishments – 60 minutes

Check-In on Homework

- Project the HSE questions overhead.
- Ask students: How did you feel about the homework, answering HSE-type questions?
 - Number the HSE questions on the board.
- Ask who wrote about which question.
 - Put the names of who wrote about which question next to the appropriate number.
 - Call on students to talk through how they got to what they think is the right answer.
 - After each explanation, ask:
 - Is this student right? What would you change, if anything?
 - For those questions with no student writing, give the answers, and ask:
 - Who got this right?
 - How did you get to this answer?

Define the Labor Movement from Research

- Tell students they are now going to turn to the Labor Movement that arose out of the negative impacts of the first two Industrial Revolutions.
- Ask:
 - What did you find doing the homework research?
 - What sources did you use? Can you give me the important facts about the Labor Movement?
 - Note these facts on the board.
 - Probe students for new facts and add them to a list on the board.
- When the list is completed, ask:
 - Does this description of the Labor Movement surprise you?
 - What did you predict during the last class that common people would do as a result of their hardship during the Industrial Revolution?
 - What additional predictions do you have based on these facts?

Read a Definition and Add New Information from Two Videos

- Tell students they are now going to discuss labor Unions so they can better understand the story of the Labor Movement. They will read an article and watch two videos to come up with a definition of a labor union.
- Ask: What do we already know about labor unions?
 - Take notes on the board.
- Pass out *Treasure Hunt for the Labor Movement* and the article, *What is a Union and How Does it Work?*
- As the first Treasure Hunt question is about vocabulary words, use the following process to define the words:
 - Write the four vocabulary words on the board.
 - Tell students to look at the second paragraph in the article.
 - Read the sentence with the first word in it.
 - Tell students to guess the meaning of the word based on the sentence and what they already know about the topic.
 - Take notes on students' answers.
 - Have them look up the word or concept when they get stuck.
 - Repeat this process for each word.
 - Tell students to write the final definitions into their *Treasure Hunt* worksheet.
- Next, have a student read the instructions for the *Treasure Hunt* and the questions about the article.
 - Emphasize that they are to answer the questions in their own words based on the notes they take in their notebook.
- Have students read the article. When they are finished, ask students:
 - What is a union?

- How does it work?
- What is its most powerful tool?
 - How do strikes give workers power?

Watch Two Videos and Complete the Treasure Hunt

- Use the following process for watching the two short videos:
 - Have a student volunteer to read the questions for the video.
 - Watch the video.
 - Ask if the students want to watch the video again for more information.
 - If so, watch the video a second time.
 - Have students complete the questions in the Treasure Hunt in their own words.
 - Go over the questions as a class, taking notes on them on the board.

Break – 10 minutes

ACTIVITY #2: Question Around – 50 minutes

* Read, Annotate, Discuss

- Pass out *The Labor Movement in America* article.
- Have students use their Annotation Key to annotate this article as they read.
- When students have completed their annotations, ask:
 - Of those things you underlined, what were the most important points brought up in the article?
 - What was surprising or interesting?
 - What was hard to understand or was confusing?
 - Include words that students didn't understand. When students identify these words, write them on the board and ask if someone can define them based on the context. If not, give the definition as needed.
 - Were there aspects of this article you agreed with? Disagreed with?

? Prepare for the Question Around Activity

- Pass out *Prepare for Question Around*.
- Have a student read the instructions.
- Put students in pairs to write at least seven questions: four "Right There" questions, and one for each of the other three types of questions.
- When students ask each other their questions, the chosen student must answer:
 - What is the answer to the question?
 - What kind of question is it?

? Conduct the Question Around Activity

- Ask: Who wants to be the first lead? Then tell students to follow this pattern:
 - The lead asks a question he/she knows the answer to.
 - Those who know the answer raise their hands.
 - The lead chooses someone to answer two questions:
 - What is the answer to the question that was just asked?
 - What type of question is it?
 - If the answer is correct and the student can identify the kind of question it is, that person becomes the new lead and starts this process over again.

- If the answer is incorrect, the lead chooses a new student to answer the question until someone gets the answer.
 - Allow students to discuss the different answers to come to a common understanding, as needed.
 - Repeat this pattern until students are out of questions.
-

Break – 10 minutes

ACTIVITY #3: Write a Response to a Prompt on Labor and Regulations – 50 minutes

- Tell students they are now going to express and write their opinions on the importance of government involvement in regulating business practices.

Respond to the Question Prompts

- Write the following prompt on the board:
 - Should government get involved in regulating corporations? Why or why not?
 - Ask:
 - How many of you think it was important for the government to get involved and pass legislation to improve working conditions?
 - What are your reasons for your opinion?
 - Have students use examples and explanations from the reading.
 - Take notes on these.
 - How many of you have reservations about having government get involved in business matters?
 - What are your reasons for your opinion?
 - Take notes on these.
 - Again, have students use examples and explanations from the reading.
 - Write the following questions on the board:
 - What is your opinion on government regulation and your general reason for your opinion?
 - What are your specific reasons for believing this way?
 - They should use examples and explanations from their reading to make their reasons clear, explaining one reason per paragraph. They must, however, make sure they respond in their own words.
 - How would more or less regulations from government make our lives better today?
 - Put students with similar opinions in pairs to talk through and take notes on their ideas for each question.
 - Allow students time to use their outlines to write out their opinion on regulation.
-

HOMEWORK

READ: Find an article in a newspaper, magazine, or online that provides more information on the Gilded Age. Write down the name of the article, read the article, and then write down at least three important facts to bring to the next class.

WATCH (OPTIONAL): Share the following link with students and have them watch the video *The American Industrial Revolution* and take notes on the *Treasure Hunt for The American Industrial Revolution*.
<https://www.youtube.com/watch?v=7Cvofej0y0&t=1364s>

Teacher Preparation Note: Before the next class, watch the optional homework video and fill in the *Treasure Hunt* so you can lead a brief discussion on each section of the video. Also, review the graphs for the next lesson in detail so that you can see the relationship between the graphs clearly.

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TREASURE HUNT FOR THE LABOR MOVEMENT

For the article and the two videos, read the questions first, underline or take notes on the possible answers in your notebook, write up your answers to the questions after you have looked at your notes.

READING: What is a Union and How Does It Work

1. Define the following underlined words in the article based on the context:
 - Industrial capitalism
 - Regulation
 - Monopoly
 - Conspire

2. In your own words, what is a Union?

3. What is a strike and why is it powerful?

Video #1: What if There Were No Trade Unions?

4. What is a collective agreement?

5. What are the benefits of a collective agreement?

Video #2: The Labor Movement in the United States

6. What were the accomplishments of the Labor Movement?

7. What was the date for the Fair Labor Standards Act?

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The Knights of Labor: What is a Union and How Does it Work?

Adapted and paraphrased from original source: <https://www.khanacademy.org/humanities/ap-us-history/period-6/apush-gilded-age/a/the-knights-of-labor>

Original Author: Khan Academy

Modern labor unions arose in the United States in the 1800s as increasing numbers of Americans took jobs in the factories, mines, and mills of the growing industrial economy during the Industrial Revolution. For the first one hundred years of its history, the United States had been a nation composed mainly of small farmers, but by 1880 the American economy had shifted to industry. For the first time in the country's history, more people worked for other people for wages than for themselves as farmers or craftsmen.

In these early years of industrial capitalism, government played little to no role in regulating businesses. Monopolies (single corporations which control an entire industry, eliminating competition) could set prices for goods and services as high as they liked. Likewise, industries could conspire to keep workers' wages low. Wealthy business owners routinely bribed judges and members of Congress to side with them in disputes. With such enormous resources at their disposal, business owners could easily overpower any individual worker who might complain about his or her treatment.

Labor unions attempted to bridge the gap in resources between large businesses and individual workers in order to improve the workers' conditions. Unions are organizations of workers who join together as a group to bargain with the owners of the businesses that employ them. Unions bargain with owners for higher wages, shorter hours, better working conditions, and union recognition.

A union's power lies, in part, in its ability to **strike**. A strike is when workers refuse to work (and prevent others from working in their place if possible), leaving factories and mills idle

and costing businesses valuable production time. Unions are valuable to their members because they protect individual workers' jobs and enforce ongoing labor-management contracts.

Owners, in turn, have a variety of options available to combat strikes. Owners can, for example, fire striking workers and hire new workers, or hire short-term workers for the duration of the strike (known as strikebreakers or scabs).

The Labor Movement in America

Adapted and paraphrased from original source:

<https://www.whatsoproudlywehail.org/curriculum/the-american-calendar/the-labor-movement-in-america>

Original Author: What So Proudly We Hail

Labor Conditions Exposed

In the early 1900s, muckraker journalists and government officials began to expose the terrible working conditions faced by many day-laborers in American factories. Between 1902 and 1907, *The Factory Inspector*—the unofficial journal of the International Association of Factory Inspectors—recorded numerous cases of workers who were burned alive by molten steel or of machinists who lost arms and legs in factory equipment. In a 1907 investigation of the steel industry, writer William B. Hard estimated that roughly 1,200 men—about 10 percent of the steel industry’s workforce—were killed or injured each year on the job. Of these, fewer than 250 of the men or their families were compensated for the loss of life or limb.

Working conditions were often poor for women and children as well. According to a 1906 study by the Association of Neighborhood Workers, more than 130,000 women were working in roughly 39,000 factories in New York City. Although a city law capped the workweek for women at sixty hours (over six days), non-enforcement of the law was the norm, and employers remained confident that any government attempt to limit their employees’ working hours would be held unconstitutional. Women and children frequently reported that if they refused to work overtime when their employer requested, they would be fired. At times, when garment producers received time-sensitive orders for new dresses and other clothing, the seamstresses would be held in the factories until the early morning hours to complete their part of the sewing.

In addition to working in garment mills, children were regularly employed in industrial factories, coal mines, newspapers, and, of course, on farms. By the year 1900, nearly 20 percent of American workers were under the age of 16, and in many southern cotton mills,

a quarter of the workers were below the age of 15—and half of these were younger than 12. In 1904, the *New York Times* estimated that nearly three million children ages 10 to 15 worked for wages every day. The National Child Labor Committee, formed in 1904, sought to raise awareness about the plight of working children. One of their first actions was to hire sociologist Lewis Wickes Hine to photograph child laborers. Hine's heart-wrenching portraits of young children working in coal mines, meatpacking houses, textile mills, and other industries did much to advance the cause of child labor reform and led to the establishment of a Children's Bureau in both the US Department of Commerce and the US Department of Labor.

Tragedy and Reform

In 1909 and 1910, the International Ladies' Garment Workers' Union organized strikes by New York City's garment workers and cloakmakers to protest the sweatshop conditions, long hours, and low pay. These strikes, involving roughly 80,000 workers—mostly immigrant women—were largely successful, and working conditions were set to improve in much of the industry. Although the strikes of 1909 and 1910 were a watershed moment for the labor movement, the new protections were difficult to enforce and many workers continued to labor in dehumanizing and dangerous conditions.

On Saturday, March 25, 1911, the story of the American laborer arguably took its most tragic turn when someone dropped a match or a burning cigarette onto a heap of fabric on the floor of the Triangle Shirtwaist Factory in New York City. Within minutes, the entire building was engulfed in flames. Because many of the doors on the building's eighth and ninth floors were locked, 146 women were either consumed in the fire or jumped from the building to their deaths. Although the owners of the Triangle Waist Company were put on trial and eventually acquitted of wrongdoing (the prosecution was unable to prove they knew the doors were locked), the horrifying memory of the fire and its victims convinced Americans as never before of the need for more vigorous labor reforms.

In 1914, Congress passed the Clayton Antitrust Act, which for the first time specifically provided safety under the law for union activities, including boycotts, peaceful strikes,

picketing, and collective bargaining. Also in 1914, the Ford Motor Company shifted its workers to the eight-hour workday—a decision many of its competitors soon followed. Two years later, in the first federal act legislating hours worked by employees of private companies, Congress passed the Adamson Act, establishing an eight-hour day for all railroad workers. After years of lobbying by the National Child Labor Committee and the National Consumers League, in 1916, Congress passed the Keating-Owen Act, which sought to curtail child labor by prohibiting the interstate commerce of goods made in factories in which children were employed. This act, however, was struck down two years later by the Supreme Court, and it would be another 20 years before the federal government succeeded in limiting child labor.

Following a decline in labor union participation in the 1920s, the Great Depression of the 1930s forced businesses to lay off many workers and curtail the benefits that labor had won for employees. As the Depression dragged on, workers continued to lose confidence in the promises of private employers, and they once again turned to the government for assistance. In the 1930s, President Franklin D. Roosevelt pushed through Congress his New Deal package to provide aid to workers—including the Fair Labor Standards Act of 1938, which for the first time established a national minimum wage, severely limited and regulated many forms of child labor, and guaranteed “time and a half” pay for any time worked beyond the newly-established eight-hour day. It was this act that fulfilled many of the foundational aims that America’s organized labor movements had been working toward since the beginning of the nation’s history.

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TREASURE HUNT FOR THE AMERICAN INDUSTRIAL REVOLUTION

Watch the video using the following instructions: only watch one section at a time and stop the video before going on to the next section so you can have time to write down your notes and thoughts on the section.

Railroads
Steel
Oil
Patents
Agriculture

Mining
Cattlemen
Price of Progress
Impact of an Era

Week 14, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: The Labor Movement and Our New Gilded Age

Students read graphs about the past Gilded Age in relation to our own. Students also read an article on today's labor unions and work on their Essay Planning Assistants to prepare for a formal essay.

MATERIALS

For Activity #1:

- Handout (attached): Make one copy of each graph for each student.
Graphic #1: Wealth Distribution in the Gilded Age
- Handout (attached): Make one copy of each graph for each student.
Graphic #2: The Rich and the Poor in 1890
- Handout (attached): Make one copy of each graph for each student.
Graphic #3: Share of global wealth 2010-2015
- Handout (attached): Make one copy of each graph for each student.
Graphic #4: Top income shares, United States, 1913-2011
- Handout (attached): Make one copy of each graph for each student.
Graphic #5: Unions and Shared Prosperity

For Activity #2:

- Handout: Make one copy for each student.
Today's labor unions give workers the power to improve their jobs and unrig the economy

For Activity #3:

- Handout (attached): Make one copy for each student.
Essay Planning Assistant

TEACHER PREPARATION

Before the class, watch the optional homework video from the previous lesson and fill in the *Treasure Hunt* so you can lead a brief discussion on each section of the video. Also, review the graphs for this lesson in detail so you can see the relationship between the graphs clearly.

ACTIVITY #1: Learn About Two Gilded Ages – 60 minutes

Review Homework on the Video

- Tell students they are to go over their notes on the homework video to see what they got out of it.
- Write the following list on the board:
 - Railroads
 - Steel

- Oil
- Patents
- Agriculture
- Mining
- Cattlemen
- Price of Progress
- Impact of an Era
- Go through each of these items and probe students for their notes on each.
 - Take notes on what they bring up.
- Lastly, ask:
 - What was similar between the American and the European Industrial Revolutions?
 - What was different?

Define the Gilded Age

- Next, you will discuss what students found out about the Gilded Age.
 - Tell students to read the name of their online source out loud and give three significant facts from that source.
 - Take notes on the board.
- Lastly, ask:
 - What do you think was most significant about the Gilded Age?
 - How do you think people responded to the massive income inequities in the Gilded Age?

Read Five Graphs on the Two Gilded Ages

- Tell students they will now look at five graphs about the similarities between the Gilded Age at the beginning of the 1900s and what is being called the Gilded Age of today.

Graph #1: Wealth Distribution in the Gilded Age

- Project and pass out the graph.
- Put students into pairs and have them come up with seven facts and a general statement of what they think the graph tells them about the Gilded Age.
- Go from pair to pair to get new facts and list them on the board.
- Go from pair to pair to get general statements.
- Lastly, ask:
 - How many people were extremely wealthy?
 - How many were Rich?
 - How many people were in the middle class?
 - How many were poor?

Graph #2: The Rich and the Poor in 1890

- Project and pass out the graph.
- Ask the class:
 - How many people were in the wealthy class?
 - Well-to-do?
 - Middle classes?
 - Poorer classes?
 - How much more did a family in the wealthy classes make than those in the poorer classes?
 - How much more did a wealthy family make than those in other classes?
 - What are some general statements they could make about the classes during the Gilded Age?

Graph #3: Share of Global Wealth 2010-2015

- Project and pass out the graph.
- Put students into pairs to figure out what the graph means.

- Ask the pairs:
 - What is the graph trying to tell us?
 - What is your evidence?

Graph #4: Top Income Shares in the United States, 1913-2011

- Project and pass out the graph.
- Tell students that this is a more complex graph that includes both the Gilded Age and now.
- Ask the entire class:
 - What is a top income share? (Answer: A top income share is the percentage of total wealth the richest people have.)
 - In which early years were the top income shares the highest?
 - In which later years were the top income shares highest?
 - In what year were the income shares the very highest?
 - In what year did the top income shares drop the most?
 - How long do the percentages stay low?
- Ask the following questions to predict the next graph:
 - What do you think are the reasons the percentages were high in the early years?
 - Possible answers include:
 - There were monopolies.
 - There were no government regulations.
 - Companies didn't pay workers well.
 - What do you think are the reasons for the percentages dropping during the years indicated? (Primary answer: Labor unions.)
 - What do you think are the reasons that the percentages go up so high in more recent years? (Answer: We don't know yet, but let's take a guess.)

Graph #5: Unions and Shared Prosperity

- Project and pass out the graph.
- Write the following questions on the board:
 - What is the relationship between the red line and Graph #4?
 - What is the relationship between the red and blue line?
 - What does this suggest about the relationship between unions and income inequality?
- Put students in pairs to try and answer these questions.
- Come together as a class and have pairs present their answers.
- Lastly, ask:
 - What conclusions would you draw from this graph about the first Gilded Age? (Primary Answer: Labor unions contributed to the rise of the amount of income share for most of us and a fall for the wealthiest.)
 - And what about our current Gilded Age? (Primary Answer: Loss of labor union strength contributed to the rise of the amount of wealth the wealthiest control.)

Break – 10 minutes

ACTIVITY #2: Read About Labor Unions Today – 50 minutes

- Tell students they will now read an article that will explain where unions are today, what can be accomplished by bringing them back, and the hopes for having them grow in the future.

* Read, Annotate, Discuss

- Pass out *Today's labor unions give workers the power to improve their jobs and unrig the economy*.
- Ask:
 - What do you think the title means?
 - What does it mean to “unrig” the economy?
 - What is a rigged economy?
 - How might our economy be rigged today?
 - What do you predict this article will be about?
 - List the kinds of fact they think they will learn about on the board.
- Tell students to use their Annotation Key to annotate this article as they read.
- When students have completed their annotations, ask:
 - Of those things you underlined, what were the most important points brought up in the article?
 - What was surprising or interesting?
 - What was hard to understand or was confusing?
 - Include words that students didn't understand. When students identify different words, write them on the board and ask if students can define them based on the context. If not, give the definition as needed.
 - Were there aspects of this article you agreed with? Disagreed with?

Play Request

- Tell students they are going to play Request to make sure they focus on the facts of the current situations with unions.
- Put students in new pairs and have them make a list of seven fact questions they know the answers to.
- Explain how to play Request:
 - Ask: Which pair wants to be the first lead? Then tell students to follow this pattern:
 - The lead asks a question he/she knows the answer to.
 - Those who know the answer raise their hands.
 - The lead chooses someone to answer the question.
 - If the answer is correct, that person becomes the new lead and starts this process over again.
 - If the answer is incorrect, the lead chooses a new student to answer the question until someone gets the answer.
- Repeat this pattern until students are out of questions.
- Lastly, ask:
 - Do you think unions are important for creating income equality in the US?
 - What are your reasons for your answer?
 - List student reasons on the board.

Break – 10 minutes

ACTIVITY #3: Prepare for a Formal Essay – 50 minutes

Introduce the Writing Assignment

- Tell students that their final assignment is to write an essay on unions.
- Pass out the *Essay Planning Assistant*.
- Go over the prompts for the assignment and answer questions students have.

Work on Filling In the Essay Planning Assistant

- Give students time to go over their notes and prepare for a Talk Through of what they might want to say in their essay.
 - They should begin to fill in their *Essay Planning Assistant*.
 - When students have filled this out, put them into pairs and have them do a Talk Through of their introductions with each other.
 - The listener should stop the writer after each introduction prompt to ask questions for clarity or more information.
 - The writer should take notes on changes they want to make to their introduction.
-

HOMEWORK

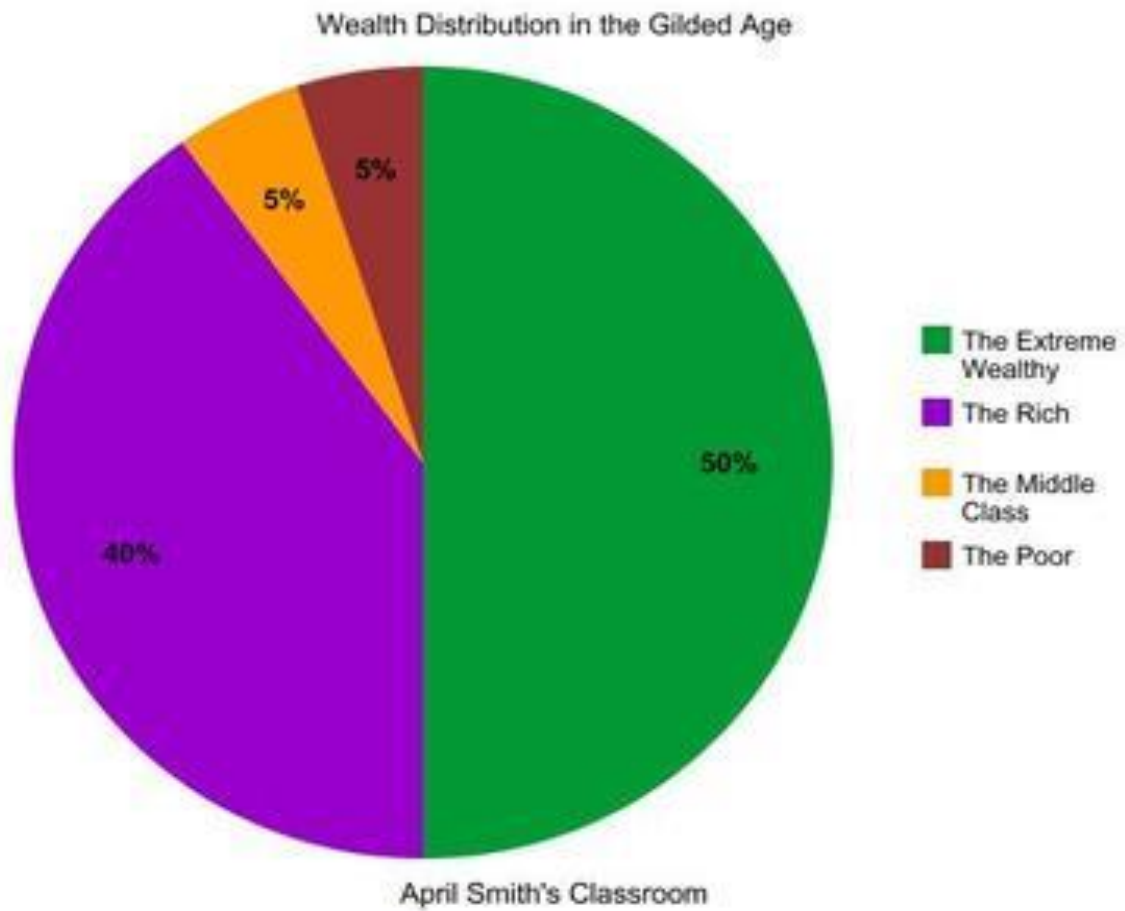
WRITE: Have students write a draft of their introduction for the next class that answers the following questions:

- What were the reasons for the labor movement in the early part of the 1900s?
- Do you think there should be another labor movement today? What basic problems would your idea solve?

Teacher Preparation Note: Before the next class, revisit and bring with you to class your notes from Week 11, Lesson 1 on criteria for a good introduction.

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Graphic #1



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Graphic #2

THE RICH AND THE POOR IN 1890

This table gives an indication of the distribution of wealth and income in 1890, with 1989 values in parentheses.

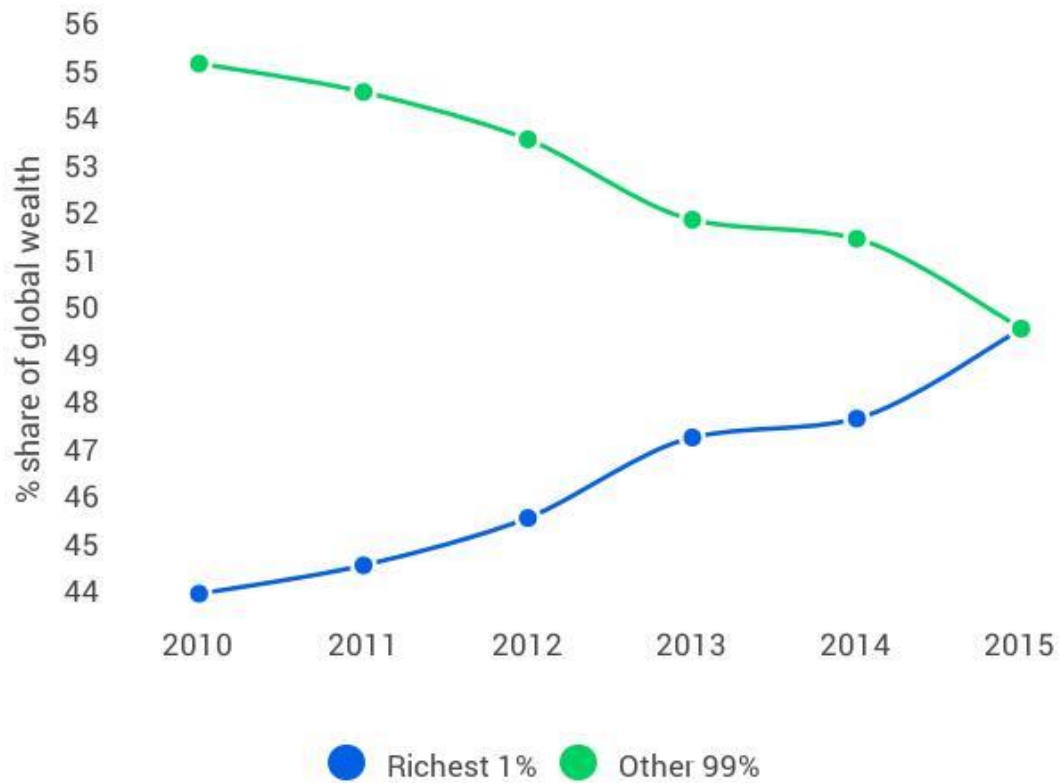
Estates by annual income	Number of families	Aggregate wealth	Average wealth per family
Wealthy classes \$50,000 and over (\$692,000 and over)	125,000	\$33,000,000,000 (\$456,720,000,000)	\$264,000 (\$3,653,760)
Well-to-do classes \$5,000 to \$50,000 (\$69,200–\$692,000)	1,375,000	\$23,000,000,000 (\$318,320,000,000)	\$16,000 (\$221,440)
Middle classes \$500 to \$5,000 (\$6,920–\$69,200)	5,500,000	\$8,200,000,000 (\$113,488,000,000)	\$1,500 (\$20,760)
Poorer classes under \$500 (\$6,920)	5,500,000	\$800,000,000 (\$11,072,000,000)	\$150 (\$2,076)

Basic source: Charles B. Spahr, *An Essay on the Present Distribution of Wealth in the United States* (1896), p. 69.

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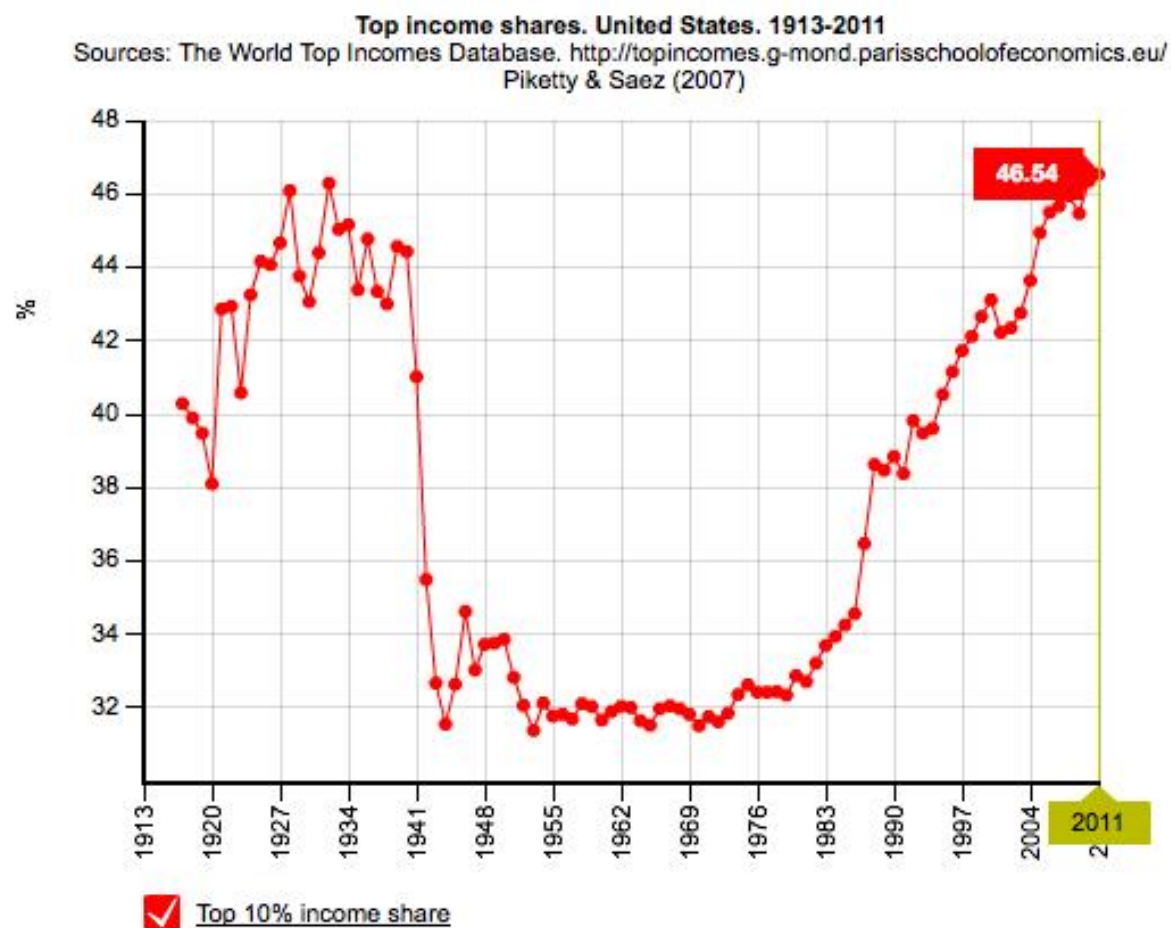
Graphic #3

Share of global wealth 2010-2015



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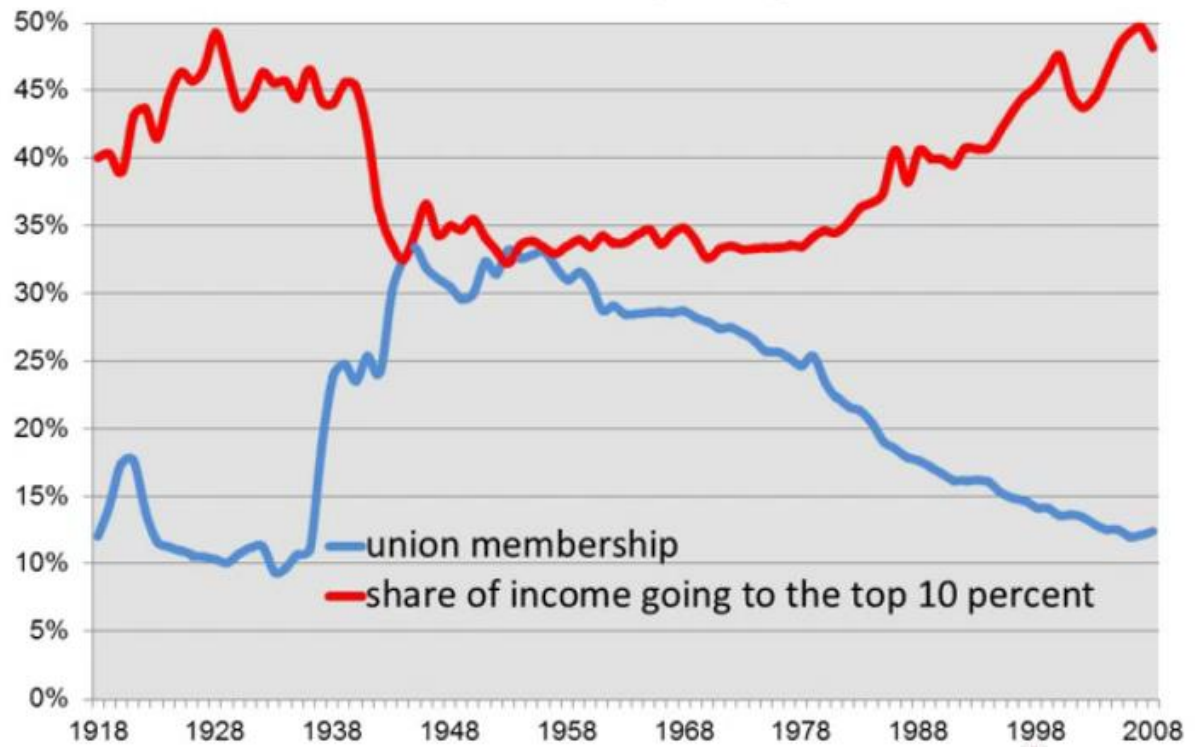
Graphic #4



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Graphic #5

Unions and Shared Prosperity



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Today's labor unions give workers the power to improve their jobs and unrig the economy

Adapted and paraphrased from original source: <https://www.epi.org/press/todays-labor-unions-give-workers-the-power-to-improve-their-jobs-and-unrig-the-economy/>

Original Author: Economic Policy Institute

In a comprehensive new report, *How today's unions help working people*, EPI researchers detail how collective bargaining plays an essential role in today's labor market, by raising working people's wages and supporting a fair and prosperous economy as well as a vibrant democracy—and how workers' freedom to join together and bargain with their employer is under attack.

"Unions raise workers' wages and strengthen their rights at work, but they also give working people a voice in our democracy," said EPI President Lawrence Mishel. "We will never again see consistent robust middle-class wage growth or a healthy democracy without first rebuilding collective bargaining."

The report provides updated statistics on who today's unions represent and where they are strongest. The authors point out that labor unions are more diverse than ever before: Union members include dental hygienists, graduate students, and digital journalists, as well as manufacturing workers and public-sector employees. About two-thirds of union workers age 18 to 64 are women or people of color. 14.5 percent of black workers age 18 to 64 are covered by a collective bargaining agreement, compared with 12.5 percent of white workers and 10.1 percent of Hispanic workers.

"Today, more than 1 in 9 workers are represented by a union," said EPI Policy Director Heidi Shierholz. "By exercising their freedom to join together and negotiate their wages and working conditions, workers gain a voice through their union. But that freedom is increasingly under threat. Anyone who supports working people or a healthy democracy should stand up and support unions and collective bargaining."

Collective bargaining is an important force in reducing inequality and ensuring that low- and middle-wage workers are given a fair return on their work. As productivity has risen over the last several decades, wages have remained flat for the majority of working people, while skyrocketing for those at the top. Union decline can explain one-third of the rise in wage inequality among men and one-fifth of the rise in wage inequality among women from 1973 to 2007. Among men, the lessening of collective bargaining has been the largest single factor driving a wedge between the middle class and the top 1 percent.

Working people in unions use their power in numbers to secure a fairer share of the income they create. On average, a worker covered by a union contract earns 13.2 percent more in wages than a peer with similar education, occupation, and experience in a nonunionized workplace in the same sector. But importantly, collective bargaining also

raise wages for nonunion workers—as an economic sector becomes more unionized, nonunion employers pay more to retain qualified workers, and norms of higher pay and better conditions become standard. If union density had remained at its 1979 level, weekly wages of *nonunion* men in the private sector would be 5 percent higher today.

“The lack of collective worker power helps explain why workers’ wages have been stagnant for the past 40 years,” said Mishel, “and why working people are so frustrated—as they have not reaped any of the gains of an improving economy.”

Unions help close racial wage gaps, by creating pay transparency, correcting salary differences, establishing clearer terms for raises and promotions, boosting the wages of lower-wage workers, and helping workers who have been discriminated against achieve equality in wages. Hourly wages for women represented by unions are 9.2 percent higher on average than for nonunionized women, and black and Hispanic workers get a big boost from unionization compared with their white counterparts.

Despite decades of attacks by corporate interests and their political allies, we are seeing a renewed interest in collective bargaining, especially among young people. The report notes that unions are especially appealing to young workers. 55 percent of 18- to 29-year-old workers view unions favorably, compared with 46 percent of workers age 30 and older.

ESSAY PLANNING ASSISTANT

Use the following set of pages to organize your notes and plan how you want to write your essay.

Essay Prompts	Notes From your Readings and Writings
<u>Introduction</u> What were the reasons for the labor movement in the early part of the 1900s?	
<u>Introduction</u> Do you think there should be another labor movement today? What basic problems would your idea solve?	
<u>Body paragraph</u> What is your first reason for your opinion for or against a labor movement today?	

Notes From your Readings and Writings	
<p><u>Body paragraph</u> What is your second reason for your opinion for or against a labor movement today?</p>	
<p><u>Body paragraph</u> What is your third reason for your opinion for or against a labor movement today?</p>	
<p><u>Conclusion</u> How would the U.S. benefit from your ideas?</p>	

Week 15, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Writing the Introduction

Students compile their criteria for effective introduction and role play ways of getting their audience interested in what they have to say. Lastly, students will rewrite their introductory paragraphs using some of these new strategies and peer review each other's work.

MATERIALS

For Activity #2:

- Handout (attached): Make one copy per student.
Introduction Role Play Dialogue

For Activity #3:

- Student Work: Students bring a hard copy of their introduction to class.
- Handout (attached to Week 11, Lesson 1): Make two copies per student.
Reader Comment Page

Teacher Preparation Note: Prior to this class, revisit and bring with you to class your notes from Week 11, Lesson 1 on criteria for a good introduction.

ACTIVITY #1 Introductions – 50 minutes

Describe Your Audience

- Put students in pairs and have them answer:
 - What kind of audience will you be writing to?
 - How should you address this audience?
 - How can you get them to listen to you?
- Come together as a class and answer these questions.

Come Up With Criteria for Good Introductions

- Write the following questions on the board refresh students' minds about criteria for introductory paragraphs created in Week 11, Lesson 1 and ask:
 - What would make an audience interested in reading your written work?
 - What would make an audience really not interested in reading your written work?
 - What does an audience need at the beginning of the essay to get involved in reading?
 - Take notes on students' answers on the board.
 - Ask:
 - What must a good introductory paragraph do? (Answer: *Get the audience interested in reading your essay.*)
 - What are some ways you can do this?
 - Tell students to write this criteria for good introductory paragraphs in their notebooks, along with their previous notes from Week 11, Lesson 1.
-

Break – 10 minutes

ACTIVITY #2: Role Play Introductions – 60 minutes

- Write the introductory paragraph prompts on the board:
 - What were the reasons for the labor movement in the early part of the 1900s?
 - Do you think there should be another labor movement today? What basic problems would your idea solve?
- Tell students they are going to practice introductory paragraphs by using roleplays.
- Project and pass out the *Introduction Role Play Dialogue* and put students into pairs.

Introduction Role Play Dialogue:

Writer: I have to write an essay on the labor movement that took place during the second Industrial Revolution and then explain my opinion on whether or not I think it might be a good idea for another labor movement today.

Audience: Sounds cool, but I don't know much about the first labor movement and have no idea how another one might or might not help us today. Can you tell me the basics?

Writer: _____ (Student should respond by explaining the reasons for the labor movement in the early 1900s and whether they think there should be a new labor movement today.)

- To prepare students for this dialogue, allow pairs time to:
 - Make a list of questions they would ask this writer to get information for their introductory paragraph. Prompt them by asking: What would get their interest? What would make them want to read more?
 - Decide what each of them would say if they were the writer.
 - Practice what they would say if they were the writer in this role play situation.
 - Have two people come up in front of the class and act out the role play:
 - Have one person volunteer to be the writer and read that part from the role play overhead: loudly, clearly, and with expression!
 - Have one person volunteer to be the audience and read the middle line: loudly, clearly, and with expression!
 - Then, have the writer talk about the topic and share their point of view in order to get the audience interested.
 - The student playing the role of the audience can ask additional questions to get more information from the writer as needed.
 - Coach students to be supportive and constructive through this process.
 - Coach students to come up with different ways to get their audience interested in what they have to say.
 - After the pair is finished with the role play, allow the class to ask questions for clarity or more information.
 - Repeat this process with a number of pairs.
 - Encourage new and creative ways to engage with the audience.
 - Take notes on these strategies of audience engagement on the board.
 - **TEACHER NOTE:** The introduction is two paragraphs long, so make sure that students address both questions in their responses.
-

Break – 10 minutes

ACTIVITY #3: Rewrite and Peer Review of Introductions – 50 minutes

Rewrite Their Answer to the First Two Prompts

- Tell students they are to rewrite their answers to the two prompts by using the following process:
 - Review the criteria for good introductions.
 - Think about the strategies different people used in their role plays and select an approach they think will be effective.
 - Allow themselves to think of new ideas of how to address their audience to get his attention and respect.

Peer Review

- Tell students they will now provide constructive feedback on each other's introductory paragraphs. They are to remain the audience that the writer is happy and comfortable with, meaning that the audience simply wants to understand what the paragraphs are trying to say and to offer good suggestions for making the written work more interesting.
- Put students into groups of three.
- Pass out two copies of the *Reader Comment Page* to each student. Explain that they are going to:
 - Read the paragraphs written by the other two people in their group.
 - Fill out one *Reader Comment Page* for each set of paragraphs they read.
 - They are NOT to comment on grammar or spelling yet. However, if they are not sure what something says, they can ask the writer for clarification.
 - They are to be friendly, encouraging, and genuinely helpful. Good comments on their partner's work will help them when they have to rewrite their paragraphs.
- Have students pass their paragraphs to the left.
- After students have evaluated the first set of paragraphs, they should pass the paragraphs to their left and evaluate a new set of paragraphs.
- After students have evaluated paragraphs from two partners, they should give their evaluations to the writers, and the writers should read the comments.

Writers Get Clarification from their Readers

- Ask the class as a whole:
 - Did your evaluators say the same or different things?
 - Did your evaluators say things that gave you ideas for how to make your paragraph better?
 - Did your evaluators confuse you? Ask for clarification when back in your group.
- Put students back in their groups to talk through differences and to get clarification.

Students Volunteer Examples of Successful Paragraphs

- Have groups decide which paragraphs should be read aloud as a good example of an introduction.
 - Have the writers read the selected paragraphs from each group loudly, clearly, and with expression.
 - After each paragraph is read, ask:
 - What worked about the paragraph you just heard?
 - Are you satisfied or do you want to know more?
 - What are your questions?
-

HOMEWORK

WRITE: Have students write three body paragraphs that answer this question:

- What are your first, second, and third reasons for or against a labor movement today?

Tell students to put each of their three reasons in separate body paragraphs and provide explanations or examples to make sure their audience understands what they mean.

Teacher Preparation Note: Prior to the next lesson, revisit and bring with you to class your notes from Week 11, Lesson 2 on criteria for good body paragraphs.

Introduction Role Play Dialogue:

Writer: I have to write an essay on the labor movement that took place during the Second Industrial Revolution and then explain my opinion on whether or not I think it might be a good idea for another labor movement today.

Audience: Sounds cool, but I don't know much about the first labor movement and have no idea how another one might or might not help us today. Can you help me out with the basics here?

Writer: _____ (Student should respond by explaining the reasons for the labor movement in the early 1900s and whether they think there should be a new labor movement today.) _____

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Week 15, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Writing the Body Paragraphs

Students talk through what makes effective body paragraphs. Next, they role-play three different body paragraphs with their peers and rewrite their body paragraphs for peer review.

MATERIALS

For Activity #2:

- Handout (attached): Make one copy per student.
Body Paragraphs Role Play Dialogue

For Activity #3:

- Student Work: Students bring a hard copy of their body paragraphs to class.
- Handout (attached to Week 11, Lesson 1): Make two copies per student.
Reader Comment Page

Teacher Preparation Note: Prior to this class, revisit and bring with you to class your notes from Week 11, Lesson 2 on criteria for good body paragraphs.

ACTIVITY #1: Review Criteria for Body Paragraphs – 50 minutes

- Write the following questions on the board:
 - What would make a reader interested in reading your writing?
 - What did the audience learn in the introductory paragraph?
 - Why should you to tell your audience the topic of each paragraphs?
 - Why are explanations or examples so important for the audience?
 - What makes a good explanation?
 - What makes a really good example?
 - Get students' ideas and then communicate to them that a good explanation is clear and detailed enough so that it is easy to understand. A good example demonstrates the idea and is clear and specific.
 - Tell students to write any new criteria for good body paragraphs in their notebooks for use in this class during other writing assignments.
-

Break – 10 minutes

ACTIVITY #2: Role Play for Body Paragraphs – 60 minutes

- Write the following essay prompt question on the board:
 - What are your first, second, and third reasons for or against a labor movement today?

- Tell students they will practice body paragraphs out loud by role playing. One student will play the role of the writer and one student will play the role of the audience.
- Pass out and project the *Body Paragraph Role Play Dialogue* and put students into pairs.

Body Paragraphs Role Play Dialogue:

Writer: I am still writing my essay in the Manufacturing Bridge class. I already told you what I thought about the importance of having (or not having) increased labor union participation today. Now I want to talk to you about the reasons for my opinion.

Audience: Great, I thought your idea that you told me about before was very interesting, and I am eager to hear the reasons behind your opinion.

Writer: _____ (Student should explain reasons for their opinion)

Start with the First Question

- Tell pairs to:
 - Imagine they are the audience.
 - Make a list of questions they would ask this writer to get more information.
- Next, have pairs imagine they are the writer:
 - What would they have to say in response to the first prompt on the board?
 - Students can discuss and take notes on the strong points.
- Have two people come up in front of the class. Tell them that:
 - The audience is to read the part marked “audience” and the “writer” is to read the part marked “writer.”
 - After the “writer” reads the last prompt, he/she is to talk through a whole paragraph in answer to the “audience’s” question.
 - After the “writer” has completed his/her paragraphs, the “audience” is to ask additional questions to get more information from the writer as needed.
 - Coach students to keep asking questions or provide feedback.
 - Applaud clear explanations and examples.
 - After the pair has finished the exercise, have the class ask different audience questions for clarity or more information.
- Repeat this role play process for the second and third paragraphs.

Break – 10 minutes

ACTIVITY #3: Rewrite and Peer Review the Body Paragraphs – 50 minutes

Rewrite Their Answer to the Three Prompts

- Tell students they are to rewrite their answers to the prompt for body paragraphs by using the following process:
 - Review the criteria for effective body paragraphs.
 - Think about the strategies different people used in their role-plays and select an approach you think will work.
- Give students time to write their paragraphs.

Peer Review

- Tell students they will now provide constructive feedback on each other's body paragraphs.
- Put students into groups of three.
- Pass out two copies of the *Reader Comment Page* to each student. Explain that students are to focus on what the writer is trying to say and not on other technical issues in the writing.
- Have students pass their paragraphs to the left.
- After students have evaluated the first student's paragraphs, they should pass them to their left and evaluate a new set of paragraphs.
- After students have evaluated two paragraph sets from two partners, they should give their evaluations to the writers, and the writers should read the comments.

Writers Get Clarification from their Readers

- Ask the class as a whole:
 - Did your evaluators say the same or different things?
 - Did your evaluators say things that gave you ideas for how to make your paragraphs better?
 - What are they?
 - Did your evaluators confuse you? Ask for clarification when you are back in your group.
- Put students back in their groups to talk through differences and to get clarification.

Students Volunteer Examples of Successful Paragraphs

- Have groups decide which paragraph should be read aloud; this should be a strong paragraph.
 - Have the writers read the selected paragraphs from each group loudly, clearly, and with expression.
 - After each paragraph is read, ask:
 - What worked about the paragraph you just heard?
 - Are you satisfied with the information presented or do you want to know more?
 - What are your questions?

HOMEWORK:

WRITE: Have students write a concluding paragraph that answers this prompt:

- How would the US benefit from your ideas?

Teacher Preparation Note: Before the next class, revisit the criteria for good concluding paragraphs created in Week 12, Lesson 1 and bring it with you to the next class.

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Body Paragraphs Role Play Dialogue:

Writer: I am still writing my essay in the Manufacturing Bridge class. I already told you what I thought about the importance of having (or not having) increased labor union participation today. Now I want to talk to you about the reasons for my opinion.

Audience: Great, I thought your idea that you told me about before was very interesting, and I am eager to hear the reasons behind your opinion.

Writer: _____ (Student should explain reasons for their opinion)

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Week 16, Lesson 1

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Writing the Conclusion

Students re-set criteria for effective and strong conclusions, role-play their conclusion ideas, and rewrite their conclusions for peer review.

MATERIALS

For Activity #2:

- Handout (attached): Make one copy per student.
Conclusion Role Play Dialogue

For Activity #3:

- Student Work: Students bring a hard copy of their conclusion to class.
- Handout (attached to Week 11, Lesson 1): Make two copies per student.
Reader Comment Page

TEACHER PREPARATION

Prior to class, revisit the criteria for good concluding paragraphs created in Week 12, Lesson 1 and bring it with you to class.

ACTIVITY #1: Review Criteria for Conclusions – 50 minutes

- Tell students to get out their criteria for conclusion from their notebooks.
- Write the following questions on the board.
 - How would the US benefit from your ideas?
- Put students in pairs to discuss this question.
- Have students share their answers and take notes on these answers on the board.

Break – 10 minutes

ACTIVITY #2: Role Play for Concluding Paragraphs – 60 minutes

- Write the prompt for conclusions on the board:
 - How would the US benefit from your ideas?
- Tell students they will practice concluding paragraphs out loud using role plays.
- Put students into pairs and display the conclusion dialogue:

Conclusion Role Play Dialogue:

Writer: Now that you know the reasons behind my opinion about labor unions today, I want to give you an idea about the positive impacts my ideas would have on the US.

Audience: Really! You are saying something important. I am all ears!

Writer: _____ (Student shares the positive impacts their ideas would have on the U.S.)

- Tell pairs to:
 - Imagine they are the audience.
 - Make a list of questions they would ask this writer to get more needed information.
- Next, tell pairs to imagine they are the writer:
 - What would they have to say in response to the prompt?
 - Students should practice what they have to say and take notes on good points.
- Have two people come up in front of the class and act out the role play as before.
 - Coach students to keep acting like old friends through this process.
 - Coach the “audience” to ask writers for clarification or more information.
 - Applaud good explanations and examples.

Break – 10 minutes

ACTIVITY #3: Rewrite and Peer Review the Concluding Paragraph – 50 minutes

Rewrite Answer to the Prompt for Concluding Paragraph

- Have students rewrite their answers to the prompt for a concluding paragraph by using the following process:
 - Review the criteria for effective concluding paragraphs.
 - Think about the strategies different people used in their role plays and select an approach they think will work.
 - Allow themselves to think of new ideas on how to leave their audience with a final message that will help him/her understand the importance of their ideas.

Peer Review

- Tell students they will now provide constructive feedback on each other’s concluding paragraphs.
- Put students into groups of three.
- Pass out two copies of the *Reader Comment Page* to each student. Explain that students are to focus on what the writer is trying to say and not on other technical issues in the writing.
- Have students pass their conclusion to the left.
- After students have evaluated the first student’s conclusion, they should pass them to their left and evaluate a new conclusion.
- After students have evaluated two conclusions, they should give their evaluations to the writers, and the writers should read the comments.

Writers Get Clarification from their Readers

- Ask the class as a whole:
 - Did your evaluators say the same or different things?
 - Did your evaluators say things that gave you ideas for how to make your paragraph better?
 - What are they?
 - Did your evaluators confuse you? Ask for clarification when they are back in their group.
- Put students back in their groups to talk through differences and to get clarification.

Students Volunteer Examples of Successful Paragraphs

- Have groups decide which conclusions should be read aloud as a strong example of a concluding paragraph.
 - Tell the writers to read the selected conclusions from each group loudly, clearly, and with expression.
 - After each conclusion is read, ask:
 - What worked about the paragraph you just heard?
 - Are you satisfied or do you want to know more?
 - What are your questions?
-

HOMEWORK:

REWRITE: Have students type and print their essay on the computer for final evaluation in the next class.

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Conclusion Role Play Dialogue:

Writer: Now that you know the reasons behind my opinion about labor unions today, I want to give you an idea about the positive impacts my ideas would have on the US.

Audience: Really! You are saying something important. I am all ears!

Writer: _____ (Student shares the positive impacts their ideas would have on the U.S.)

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Week 16, Lesson 2

Manufacturing Bridge Semester 1: High Intermediate Adult Basic Education (ABE)

THEME: Peer Editing

Students practice correcting fragments and run-on sentences, present their essays to the class, and complete a course evaluation. I

MATERIALS

For Activity #1:

- Handout (attached): Make one copy for each student.
Fragments and Run-Ons
<https://www.dropbox.com/s/678gmuggl3dqjvn/Fragments%20and%20Run-Ons%20-%20Practicing%20with%20Sentence%20Structure.docx?dl=0>

For Activity #2:

- Handout (attached): Make one copy for each student.
Course Evaluation
- Classroom resource: One manila envelope.

ACTIVITY #1: Correcting Fragments and Run-Ons – 60 minutes

- Pass out the worksheets on sentence fragments and run-ons.
- Put students in pairs and have them rewrite the underlined sentences on the first page.
- Make columns on the board, one for each pair. These columns will be used for keeping score.
- Write the two underlined sentences on the board exactly like they are on the page.

Playing the Editing Game for Sentences on the Board

- Choose a member from one team to come up to the board, underline one problem, and correct it.
- Ask the student who made the correction: Why did you make that change?
- Ask the class:
 - Is the underline in the right place?
 - Is this the right correction?
 - If yes, give one point to the team that made the correction; give the team a second point if they correctly identified the grammar or spelling rule that they applied.
- Go around to all the teams and have a different student come to the board and repeat the process.
- Keep team scores on the board until all the issues in the two sentences have been corrected.

Complete Another Fragment and Run-on Worksheet

- Lastly, tell students to do the second page independently and then check out their answers with a partner.
- Project the worksheet overhead and write the following questions on the board:
 - Is this sentence a fragment or a run-on?
 - What punctuation did you use?
 - Why?
- Go from pair to pair to get a different sentence and ask each of the questions on the board.

- Correct the sentence on the overhead as instructed.
 - After each pair's sentence is reflected on the overhead, ask:
 - Is this sentence correct?
 - Why or not?
 - Repeat this process for each of the 10 sentences on page 18.
-

Break – 10 minutes

ACTIVITY #2: Present Your Essays On Labor Unions to the Class – 50 minutes

- Have students present their essays to the class. They should:
 - Talk about the strategies they used to get the audience's attention, what they told the audience in each paragraph, and some of the examples or explanations they used to get their points across.
 - Read one or two paragraphs they think are strong.
 - Give students time to prepare.
 - After each presentation, applaud and ask:
 - What was strong about what they read?
 - Any questions for the writer?
-

Break – 10 minutes

ACTIVITY #3: Evaluation of The Course – 50 minutes

- Pass out the *Course Evaluation*.
 - Read each of the questions out loud to see if students want to share some of their responses.
 - Tell students they do not have to write their name on the page and that they can say what they feel is true. Show students the manila envelope and tell students they can put their evaluations in the envelope so they can stay anonymous.
 - Allow students to fill it out and pass the envelope around as needed.
-

Fragments and Run-ons

Discussion: Every sentence needs a period and a capital letter. But that is not all. Every sentence *must* have at least one _____ and one _____. If you are *missing* one of them, then you have a **fragment** sentence. And if you have *more than one* _____ and *more than one* _____, then you need to put a _____ or a _____ between them. Otherwise, you have a **run-on sentence**.

Directions: In the underlined sentences, replace the commas with periods where needed. Then, re-write the underlined sentences as complete and correct sentences.

I. "The Whole Truth" Response One

The article discusses a young man's decision to tell a lie in order to get a job. The young man, Bob, lies about his education, telling the boss that he is a high school graduate when in fact he is a high school dropout.

After getting the job Bob behaves like an ideal employee. He is enthusiastic, polite and reliable. He wins his boss's approval, his boss is a good man who wants to support Bob by sending him to college, which makes Bob decide to tell the truth and face the consequences, despite his disappointment, his boss doesn't fire him, but he tells Bob to go to school during the week and continue to work for him on weekends.

Even though I don't think lying is ever a good idea, I believe that there are different kinds of lies, some of which are more serious than others. Some people tell lies to do harm or to take advantage of others, politics is a good example of this, politicians lie to the people in order to maintain their power, in my country, Mexico, the government is run by a wealthy man, the media doesn't deal with the hunger and misery that some people face every day. In my opinion, this kind of lying by the government and the media is a crime. However, if an impoverished mother tells a lie in order to feed her child, or a man lies to get a job that he is the best for, then that's another story.

Re-written and corrected sentences:

Continue on the next page, please.

II. *“The Whole Truth” Response Two*

Honesty is one of the most beautiful qualities a person can have. However, in our society lying is quite common. Some people lie in order to get hired, get a visa, or for other advantages and gains. In “The Whole Truth,” Bob, who has lied about his age and education, excels at his job in a parking lot. Because of his good manners and reliability, he manages to impress his boss so much that the boss wants to help him go to college.

People often lie to others when they think that telling the truth is not a good idea. Like Bob, all of us have been in situations where we’ve felt the necessity to lie, I remember when I got my first job, I lied when I was filling out my application, I knew that not having enough experience in the pharmaceutical field would reduce my chances of getting the job, therefore I lied, saying that I had worked as a pharmacist’s assistant in a drugstore, I got the job.

We have to be very careful when we tell lies. I believe that although lying is necessary in some situations, it can be harmful both to ourselves and to others. People can get hurt emotionally and lose trust in us. I remember a story that my niece told me about her ex-boyfriend, his name was Santiago, they had a good relationship based on trust, Santiago liked to tell my niece that he never lied to her, they were planning to get married, my niece found out that Santiago lied to her about his age, he was sixteen years older than she was, even though she was about to marry him, she changed her mind and refused to see him again.

I believe that it’s sometimes acceptable to lie in order to get something material. However, lying to someone because you want to get a benefit in spite of that person’s feelings is a different matter. In Bob’s case, his boss was able to understand and Bob was forgiven, but when you play with someone’s feelings as Santiago did, you probably won’t be forgiven.

Re-written and corrected sentences:

COURSE EVALUATION

Please use the questions in the left-hand box to stimulate your comments in the right-hand box.

QUESTIONS	YOUR COMMENTS
What was the most interesting part of this course for you? Explain what you mean.	
What activities from this course were most useful to you? Why?	
What skills did you improve as a result of this course? Explain.	
In what way(s) did your writing change during the semester? Explain.	
In what way(s) did your reading change during the semester? Explain.	
In what way(s) did your grammar change and punctuation change during the semester? Explain.	
What suggestions do you have for improvement in this course? Explain.	

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Condensed High Intermediate ABE Content Standards for Reading, Writing, Language, Vocabulary and Usage, and Speaking and Listening

CONDENSED READING STANDARDS FOR NRS LEVEL 4

TEXT IDEAS AND DETAILS

- 1. Demonstrate and use a variety of comprehension strategies to obtain key ideas and details from text.**
 - a. Summarize what has been read.
 - b. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
 - c. Identify the implied main idea and supporting details from an instructional level passage.
 - d. Identify cause and effect implied in a paragraph.
 - e. Distinguish among fact, opinion, and reasoned judgment in a text.
 - f. Cite several pieces of textual evidence that most strongly support analysis of what the text says explicitly as well as inferences drawn from the text; predict probable outcomes from knowledge of events obtained from a reading selection.
 - g. Determine the appropriate reading strategy to acquire specific information and to match the purpose of reading (e.g., rereading, skimming, scanning, reading for detail, meaning, or critical analysis).

CRAFT AND STRUCTURE

- 2. Analyze a portion of a text, ranging from sentence, paragraph, chapter, or section, while considering how it fits into the structure of the text, including how the major sections contribute to the whole and to the development of the ideas.**
- 3. Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.**
 - a. Identify the implied main idea and supporting details from an instructional level passage.
 - b. Use Internet resources to assist in separating fact from opinion and to draw conclusions.
- 4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone/mood, including analogies or allusions to other texts.**
- 5. Determine an author's point of view or purpose in a text; explain how it is conveyed in the text; analyze how the author distinguishes his or her position from that of the others; and how the author acknowledges and responds to conflicting evidence or viewpoints.**

CONDENSED READING STANDARDS FOR NRS LEVEL 4 (cont'd.)

INTEGRATION OF KNOWLEDGE AND IDEAS

6. Select and use appropriate computer research tools and resources to obtain information (e.g., search engines).

7. Integrate information from texts, charts, and graphs/different media or formats to:

- a. Draw a conclusion
- b. Develop a coherent understanding of a topic or issue.
- c. Apply information sources to solve occupational and educational tasks.
- d. Compare and contrast different portrayals of the subject.
- e. Evaluate the advantages and disadvantages of using different mediums.

CONDENSED WRITING STANDARDS FOR NRS LEVEL 4

TYPES AND PURPOSES

1. Write arguments to support claims with clear reasons and relevant evidence.

- a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
- b. Support claim(s) with clear and logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.
- c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.
- d. Establish and maintain a formal style.
- e. Provide a concluding statement or section that follows from and supports the argument presented.

2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

- a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., heading), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
- b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. Include tables, graphs, and other visuals as effective.
- c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
- d. Use precise language and domain-specific vocabulary to inform about or explain the topic. Establish and maintain a formal style.
- e. Provide a concluding statement or section that follows from and supports the information or explanation presented.

3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

- a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.
- b. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters.
- c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events.
- d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.
- e. Provide a conclusion that follows from and reflects on the narrated experiences or events.

CONDENSED WRITING STANDARDS FOR NRS LEVEL 4 (cont'd.)

PRODUCTION AND DISTRIBUTION OF WRITING

- 4. Develop and organize clear and coherent writing in a style that is appropriate to task, purpose, and audience. Include tables, graphs, and other visuals as effective.**
- 5. Develop and strengthen writing as needed by planning, brainstorming, and organizing key ideas and supporting them through revising, rewriting, or trying a new approach to strengthen support by editing to improve word choices. Efficiently present the relationships between information and ideas. Know when to seek guidance and support from peers and instructors.**
- 6. Write internal and external business correspondence that conveys and/or obtains information effectively in order to communicate with other employees to clarify objectives and to communicate with customers and employees to foster positive relationships.**
- 7. Use technology, including the Internet, to produce and publish writing, as well as to interact and collaborate with others.**
- 8. Demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.**
 - a. Appropriately link to and cite sources in published written work.
 - b. Write and edit paragraph(s) using a word processing program.
 - c. Create grammatically correct documents with clear, concise meaning that vary from handwritten to word processing.
 - d. Summarize an article obtained from the Internet or a hard copy from a variety of subject matters (e.g., science, geography, economics, and history).

RESEARCH TO BUILD AND PRESENT KNOWLEDGE

- 9. Conduct research projects to answer a question (including a self-generated question), drawing on several sources (including electronic sources) and generating additional related and focused questions that allow for multiple avenues of exploration.**
- 10. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation using word processing to produce a completed professional document.**
 - a. Draw evidence from informational texts to support analysis reflection and research.

CONDENSED WRITING STANDARDS FOR NRS LEVEL 4 (cont'd.)

RANGE OF WRITING

11. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences to include descriptive, narrative, and expository writing while demonstrating the command/mastery of simple, compound, and complex sentences; utilizing all eight parts of speech and correct usage of conventions.

CONDENSED LANGUAGE, VOCABULARY, AND USAGE STANDARDS FOR NRS LEVEL 4

CONVENTIONS OF STANDARD ENGLISH

1. Demonstrate command of the conventions of English grammar and usage when writing.

- a. Ensure that pronouns are in the proper case (subjective, objective, and possessive).
- b. Use intensive pronouns (e.g., myself, ourselves).
- c. Explain the function of phrases and clauses in general and in specific sentences.
- d. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas.
- e. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.
- f. Recognize and correct inappropriate shifts in pronoun number and person.
- g. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).
- h. Recognize variations from Standard English in their own and other's writing and speaking, and identify and use strategies to improve expression in conventional language.
- i. Form and use verbs in the active and passive voice.
- j. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.
- k. Recognize and correct inappropriate shifts in verb voice and mood.
- l. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences.

2. Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.

- a. Use punctuation (commas, parentheses, dashes) to set off non-restrictive/parenthetical elements.
- b. Use a comma to separate coordinate adjectives (e.g., It was a fascinating, enjoyable movie but not He wore an old[,] green shirt).
- c. Use punctuation (comma, ellipsis, dash) to indicate pause or break.
- d. Use an ellipsis to indicate an omission.
- e. Spell correctly.

CONDENSED LANGUAGE, VOCABULARY, AND USAGE STANDARDS FOR NRS LEVEL 4 (cont'd.)

KNOWLEDGE OF LANGUAGE

3. Use knowledge of language and its conventions when writing.

- a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).
- b. Maintain consistency in style and tone.
- c. Vary sentence patterns for meaning, reader/listener interest, and style.
- d. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.

VOCABULARY USAGE

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on level appropriate reading content, choosing flexibly from a range of strategies.

- a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
- b. Use common, level-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible).
- c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
- d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
- e. Recognize and understand clipped and shortened words (e.g., exam-examination).

5. Demonstrate the understanding of figurative language, word relationships, and nuances in word meanings.

- a. Interpret figures of speech (e.g., verbal irony, puns) in context.
- b. Use the relationship between particular words to better understand each of the words.
- c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., bullheaded, willful, firm, persistent, resolute).

6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

CONDENSED SPEAKING AND LISTENING STANDARDS FOR NRS LEVEL 4

COMPREHENSION AND COLLABORATION

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on topics, texts, and issues appropriate to skill level, building on others' ideas and expressing their own clearly.

- a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
- b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.
- c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.
- d. Pose questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.
- e. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.
- f. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.
- g. Acknowledge new information expressed by others and, when warranted, modify their own views.

2. Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.

- a. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.
- b. Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.

3. Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.

4. Demonstrate active listening skills.

- a. Interpret verbal and non-verbal cues and behaviors to enhance communication.

CONDENSED SPEAKING AND LISTENING STANDARDS FOR NRS LEVEL 4 (cont'd.)

5. Comprehend key elements of oral information for:

- a. Cause and effect.
- b. Compare and contrast.
- c. Conclusions.
- d. Context.
- e. Purpose.
- f. Charts, tables, graphs.
- g. Evaluation/critiques.
- h. Mood.
- i. Persuasive text.
- j. Sequence.
- k. Summaries.
- l. Technical subject matter.

6. Identify and evaluate oral information for:

- a. Accuracy.
- b. Adequacy/sufficiency.
- c. Appropriateness/clarity.
- d. Identify and evaluate oral information for conclusions/solutions.
- e. Fact/opinion.
- f. Assumptions.
- g. Propaganda.
- h. Relevancy.
- i. Validity.
- j. Relationship of ideas.

7. Predict potential outcomes and/or solutions based on oral information regarding trends.

CONDENSED SPEAKING AND LISTENING STANDARDS FOR NRS LEVEL 4 (cont'd.)

PRESENTATION OF KNOWLEDGE AND IDEAS

- 8. Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; emphasizing salient points in a focused, coherent manner with pertinent evidence, descriptions, facts, details, and examples, using sound, valid reasoning; use appropriate eye contact, adequate volume, and clear pronunciation.**
- 9. Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.**
- 10. Present formal and informal speeches including discussion, information requests, interpretation, and persuasion.**
- 11. Adapt speech to a variety of contexts, tasks, audiences, and purposes using formal English when appropriate to task and situation.**