This guide, part of a series of workplace-developed materials for retraining factory workers, provides teaching materials for a workplace course in writing accurate, sequential, and clear instructions. The course covers identifying the goal and purpose of the instructions, deciding the best method for presenting the instructions, using clear and consistent sequence, and using concise language. It includes sample applications using instructions common in the work force. The introductory materials include course objectives, a topical outline, teaching methods, materials needed, and evaluation methods. Lesson plans for three sessions are provided. The session materials include teaching notes, information sheets, exercises, and worksheets. (KC)
P.R.I.D.E.

PEOPLE RETRAINING for INDUSTRY EXCELLENCE

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Writing Clear Instructions

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Mercer County Community College thanks Lorna Burt, Senior Education Specialist/Curriculum Developer for creating this manual. Through her valuable contributions employees in manufacturing and service industries learned concepts relevant to their existing jobs and strategies for learning other tasks if that opportunity should arise.
A factory or service center creates a classroom that is very different from the one we are used to seeing in colleges and adult schools, so it only follows that our approach to teaching in the factory should also differ.

Our goal is to teach employees skills that they need in order to be functional and successful in their work environment, and encourage them to apply those skills on the job and at home. For example, we motivate students to do the following:

- work more efficiently and more safely
- make fewer mistakes
- solve problems working interactively
- take greater responsibility for their jobs
- recognize the interconnectedness of the various jobs in their workplace
- be better communicators in the workplace

Company needs are revealed through a needs assessment. At that time, we also determine the basic skills needs of the employees. We are learner centered, as the individual employee’s needs are considered alongside those of the company.

Once we have determined those needs, we develop curricula that incorporate basic skills, using the workplace literature (e.g. forms, applications, codes, abbreviations, charts and tables, handbooks, regulations, procedures, policies, memos, letters) of the company. Because each company is different, the needs and literature are also different; hence, we develop new materials for every company in which we teach. By utilizing these workplace items, we help students transfer and apply their skills directly to their jobs.

We rely on the classroom techniques of problem solving, cooperative learning, and group discussion. Our overall approach is concept based, with the emphasis on application, such as in role plays, dialogues, and group work. Despite the specific course titles, we incorporate the elements of math, English, and communication skills into all of our sessions.

In terms of students evaluation, after initial testing we give a pre-test and post-test in order to determine comprehension. Students receive feedback throughout the course from the instructor, as well as from fellow students as we sincerely believe in the powerful positive reinforcement of peer critiques and cooperative exchanges.

In essence, we believe that although we make the materials for the students with which to work, it is the students who truly make the class.
COURSE OUTLINE:

Writing clear instructions is one of the most valuable skills any employee can bring to a company. Without clear, concise, accurate instructions, errors and reworks reduce productivity. This course will enable the employee to write instructions that are accurate, sequential and clear.

OBJECTIVES:

Upon completion of this course the student will be able to do the following:

- identify goal and purpose
- identify the best method for presenting the instructions
- use clear consistent sequence
- use concise language

TOPICS:

- goal and purpose
- active vs. passive voice
- modifiers
- clear instructions
- clear sequence
- verb use
- pronouns

METHOD:

- class discussion
- individual work on worksheets
- pair work
EVALUATION:

At the end of these sessions, students will be competent in these areas:

- determining the purpose and goal of instructions
- writing in clear sequence
- using concise language
- generating instructions for a work task

MATERIALS:

- worksheets
- student generated instructions

OTHER:

- 6 hours
- .6 CEU
GOALS OF WRITING CLEAR INSTRUCTIONS

- to write effective instructions so that the user does not make mistakes
- to write in the most efficient sequence
- to write so that the document can be read from the first word to the last. The user must follow each step in order to complete the procedure
- to write in a clear, concise manner: using readily understood vocabulary and short sentences, taking into account the reading levels and experience of the users
- to be flexible so that the instructions can easily be updated or adapted
REASONS FOR COMMUNICATING IN WRITING

1. Written communications serve as permanent records.

2. Written communications (including graphics) are more effective than oral ones for presenting complex information and numerical data.

3. Written communications give the writer time to think about the best way of saying what he/she wants to say.

4. Written communications are more convenient for the recipient than oral ones, as they give the reader time to fully understand key points and think about the appropriate response.

5. Written communications are more cost effective for reaching large numbers of people or transmitting information over longer distances.
Wasted Time:

- Incomplete information requires the reader to waste time asking for clarification before he/she can respond.

- Difficult subject matter, poor organization and style wastes the reader's time trying to understand the message.

- Bad writing may need to be rewritten.

- Bad writing may obscure ideas so that discussions and decisions are needlessly drawn out.

Wasted Efforts:

- If people have to guess the writer's intentions, they may respond incorrectly, or choose not to do what the message asks.

Loss of Goodwill:

- Careless spelling, poor organization and unclear messages show the reader that he/she is not worth the time it takes to do the job properly.

- Even if the words give correct information, if the style and tone are inappropriate or disrespectful they will undermine the image the reader has of the writer.
GENERAL INSTRUCTIONS FOR WRITING INSTRUCTIONS

When we write instructions, we must remember that our primary goal is *to instruct!* To do that, we must use the following:

- active voice
- clear sequence
- strong and clear verbs
- consistent verb tenses
- correctly placed modifiers
- clear pronouns
- clear time words or other directives
- specific number amount
Nothing is more frustrating than trying to read steps that are out of order. We have to use chronological order and be consistent in our sequence if we expect our audience to succeed.

Look at these steps. What are the instructions for? What would the title be? Put the steps into the correct order.

**HOW TO**

- insert paper into copier tray
- remove protective wrap from paper ream
- take paper tray out of copier
- press tray release button
- put paper tray back into position in copier
- hit the reset button
- make sure paper is placed correctly in tray (portrait, not landscape)
- press copy button to resume copying
The Passive Voice that includes a form of the verb TO BE and a past tense of the verb. The Active Voice is just what it says – more active, for it has a clear subject and a regular verb form.

**Passive:** The gun is turned on by the assembler.

**Active:** The assembler turns on the gun.

The Passive Voice is messy, wordy, and difficult to understand if you are looking for steps and directives. Look at this sentence and consider its problems.

**PASSIVE:**

The gun must be turned on, after it has been plugged in, and then it can be started by pressing the trigger, but not before the screw has been inserted into the hole by the user.

The ACTIVE form is much shorter, easier to read and much easier to understand.

After you plug in the gun and turn it on, insert the screw in the hole and then press the trigger.
Determine if these sentences are active or passive. If they are passive, make them active.

1. The supervisor opened the supply drawer and took out the parts.

2. The machine was designed by a XYZ Company executive, but it was adapted by our company for its own use.

3. After the work-order is read, the hardware should be brought by the assembler.

4. The wheel must be screwed into the flat side of the shaft and the blue key must be used.

5. Using the green gun, tighten the nut onto the screw in front of the cushion mount inside the housing.

6. The fan blade must be attached to the motor and the set screw must be on the flat part of the shaft.
When we tell someone to do something, we want to make sure that the thing we want to tell them to do is clear and unambiguous. Got that?

In order words, don't use verbs that are unclear or imprecise.

**Example 1**: Put the fan blade on the shaft.

What does *put* mean? Does it mean just rest it on? Or attach it with a screw?

To avoid such confusion, think of the specific action that you want the person to do, and tell him/her to do just that.

**Revision**: Screw the fan blade onto the shaft, using...

**Example 2**: See the blueprint.

What does *see* mean? What do you want your reader to do with the blueprint? Don't assume that he/she will know exactly what you mean or how to do it!

**Revision**: Look carefully at diag. 1 on the blueprint to check...
When you give directions, use **commands** when appropriate – that means you don’t need to have a subject, just a verb. Commands are clear, concise, and easy to interpret.

**Example:**

*Sentence:* You have to put the correct wheel onto the shaft.
*Command:* Put the correct wheel onto the shaft.

In general, avoid using the unnecessary third person – that is, don’t talk about what “the assembler” must do when in fact your audience is made up of assemblers. Just use simple commands.

If you do use subjects, make sure that your verb tenses are consistent – that means all the same, or in similar time frames.

**Example:**

Ø The fan blade has two sides. Position the fan on the shaft so that the collar will be facing up.

**Note:** “has” is the present tense, but “will be” is the future. There is no good reason to jump tenses, so stay in the present tense.

**Revision:**

✓ The fan blade has two sides. Position the fan on the shaft so that the collar is facing up.
Modifiers are words or phrases that give more information about the subject, verb, or object in a clause. A modifier **dangles** when the word it modifies is not actually in the sentence, or is **misplaced** when it seems to modify another part of the sentence than the writer intended. The result leads to confusion.

Discuss the following sentences. How can you rewrite them to make them clearer?

1. Unless completely rewired, nobody should handle the faulty equipment.

2. The accident report should be filed by the Human Resources Manager in the folder.

3. The janitor put the trash into the dumpster with his helper.

4. We need to have a meeting to discuss the new system that will be put into effect by January 10th.

5. Cracked and falling apart, Steve put the broken motor into a box.
A pronoun is a word that replaces a noun. If you have more than one noun followed by a single pronoun, the reference can be unclear or confusing.

*Example:*

Ø Keep the Check List with the manual for easy reference and make sure it is updated regularly.

**Note:** what does the “it” refer to? How can you rewrite this sentence to make your idea clear?

- Pronouns must agree in number with the noun they refer to. Be especially careful if there are modifying phrases.

*Example:*

Ø The bottle of aspirins is in the cabinet where they belong.

**Note:** the bottle is singular, but they is plural. Why did this mistake occur? How can you fix it?

- Pronouns that replace people must be correct in gender. Although “he” is stylistically correct, consider your audience and be gender sensitive.

*Example:*

Ø After the supervisor finds the error, he/she must fill out a rework form.

- Indefinite pronouns are always singular, so be careful of possessives that refer to them. Indefinite pronouns are these: everyone, someone, no one, everybody, somebody, nobody, anyone, anybody.

*Example:*

Ø Everyone has the opportunity to correct their mistakes.

**Note:** Everyone is singular, but their is plural. How would you correct this error?
Rewrite these sentences and correct the pronoun errors.

1. Shipping must obtain the correct form and receipt and put it in an envelope with the other documents.

2. Everyone who starts work must be sure to punch in their names at the front door.

3. The assemblers make 3500's, 1RB65's and sub-assemblies: Then inspectors will QC them and send them to the warehouse.

4. After typing the file of reports, the secretary gave them to her boss.

5. The line leader takes time to check for errors, record the information and enter them on the PSDR.
CLEAR TIME WORDS AND SPECIFIC AMOUNTS

- When you tell someone where to put something, how much to do something, how long to do something, or at what time to do something, you must give exact information.

✓ What’s wrong with these sentences?

Example 1:

Let the paint dry for a little bit before you touch it and then use the other color:

How long is “a little bit” and which color am I to use? These words are unclear. How could you be more precise?

Example 2:

Turn the nut a few times and let the glue dry for a while.

✓ How many times is a few times? 3 or 6 times? How long should the glue take to dry? 10 seconds or 10 minutes? Be precise!

- When you give directions, make sure you specify exactly where and give reference points.

Example 1:

Place the Company Logo near the corner.

✓ What does near mean? Next to? How far from? Which corner? How can you make this directive more clear?
**CLEAR TIME WORDS AND SPECIFIC AMOUNTS (cont')**

Example 2:

Check the wheels are on the **right** side.

- **✓** Do you mean “right/left” or correct?

  - Be sure to give **complete directions** in case of a “crisis.” Don’t ever lose your readers or leave them stranded – make sure they know not only what to expect, but what to do in case the unexpected occurs. Also, that “should” is not very comforting – take a firm stand and be confident that your directions will work.

  - **Note:** If you use the “if...then...” construction, make sure that it is not a backwards construction.

  **Backwards:** Press the CLEAR RESET key if you want to erase everything on the hard drive.

  **Forwards:** If you want to erase everything on the hard drive, press the CLEAR RESET key.
INSTRUCTIONS

Write a set of instructions for something that you do everyday on the job. Make it a manageable task – no more than 10 steps – and be sure to apply the information given in these worksheets. Number the steps (to be very clear).

When you are finished, we will use peer review to critique your work.