

STRATEGIC HR MANAGEMENT

STUDENT WORKBOOK



SHRMTM

SOCIETY FOR HUMAN
RESOURCE MANAGEMENT

MacroEnterprises, Inc.— A case study in three parts

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and James Bartlett III, Ph.D.*

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Case Overview

The MacroEnterprises, Inc. case study takes you into the real world of human resource (HR) consulting. You assume the role of an HR consultant in order to help a fictitious company improve its performance. You should have prior knowledge about HR's role in organizations before working on the case.

Three different HR consulting challenges comprise the MacroEnterprises case. We call the different challenges “lines of inquiry” because they offer you a diverse learning experience to solve three different HR issues. Each line of inquiry can be used as a stand-alone case study or be offered as a single assignment. Your instructor may assign the case to three separate groups who each work on a different line of the case. The three lines of inquiry are:

1. ***Becoming a strategic HR partner*** (SHRM category: Internal HR Consulting).
2. ***Developing collaborations with external training providers*** (SHRM category: Workforce Development and Talent Management).
3. ***Integrating evaluation into standard operating procedures*** (SHRM category: Performance Appraisal and Feedback).

Each line of inquiry contains five learning components and follows a parallel structure outlined below.

Table 1: MacroEnterprises, Inc. Learning Components and Descriptions	
Learning Component	Description
Learning Objectives	The goals of the learning experience: What you should be able to do (say) upon completing the scenario.
Scenario Details	Additional MacroEnterprises, Inc. narrative information. This information can include company information, transcription of dialog or interviews, worksheets, lists of possible guiding questions or anything else that is used to solve the case.
Assignment Instructions:	Specific instructions.
Deliverables:	Detailed list of deliverables.
Resource List	Specific list of resources required and/or supplemental to the case study.

The three lines of inquiry are designed to be internally consistent and illustrate the deeper connections between HR, performance and workforce development. You are given an opportunity to develop skills in data analysis and evaluation, and in HR areas including recruiting and retention, organizational communication, and strategic planning.

MACROENTERPRISES, INC. BACKGROUND INFORMATION

MacroEnterprises, Inc. is the maker of carburetors for the outboard powerboat industry. Their annual gross revenue is approximately \$10 million. They are a small, regional company located in Rockford, Illinois. MacroEnterprises's main clients are a local manufacturing division of a Fortune 500 outboard motor manufacturer and a privately-owned company in the next county that uses MacroEnterprises carburetors in their lawnmowers. The outboard motor plant comprises about 30 percent of their sales and the lawnmower company 20 percent. The majority of the other 50 percent are small lot orders for a variety of industries. In all, MacroEnterprises makes five different carburetor models. Last year, the outboard motor manufacturer moved two of its manufacturing facilities from Florida to the Rockford area. At that time, MacroEnterprises received word that orders for outboard motor carburetors would triple. In response to this news, MacroEnterprises added another 125 people to its existing 300-person manufacturing staff. In addition, the company created a new human resource (HR) director position which was recently filled. The company now employs 500 people. Approximately 425 employees work on the manufacturing floor and the remaining 75 in various support functions including marketing and sales; finance; inventory control and distribution; plant management; and HR.

Everything seemed to go smoothly for the first six months of the transition. Two months ago, though, MacroEnterprises started hearing about problems with the carburetors in several of the newer-model outboard motors. After a thorough quality control investigation, the problem was found in the manufacturing of the carburetors. Random checks of carburetors for the past six months found that the housing screws were tightened to only half the tightness described in the MacroEnterprises carburetor production specifications. Further studies revealed that the problems stemmed from several issues:

1. Performance:

- a. The hydraulic bolt drivers used to tighten the carburetor bolts were not accurately calibrated.
- b. Employees were not following the standard operating procedures (SOPs) of checking the bolt drivers' torque prior to using them.
- c. Employees did not know how to calibrate the bolt drivers.
- d. Employees were using bolt tightening specifications for carburetors manufactured in 2001; they were supposed to be using specifications updated for each client last year.

2. Culture and work environment:

- a. There were communication problems between shifts and between functions.
- b. There was inconsistent application of SOPs due to different interpretations of the SOPs.
- c. Continually integrating new employees into the organization presented challenges.
- d. The company needed to become a learning organization.

MacroEnterprises, Inc.

Case #2

DEVELOPING EXTERNAL COLLABORATIONS FOR EMPLOYEE TRAINING AND DEVELOPMENT

This line of inquiry allows you to explore a variety of partnerships and external collaborations that have been used in other organizations in the community. You have the opportunity to formulate collaborations for the needs of the organization, its employees, and its stakeholders.

LEARNING OBJECTIVES

After completing this case study, you will be able to:

1. Identify basic employee skills training opportunities available in a rural area that will meet employee needs in alternative settings, and how training can be used to create a strategic advantage.
2. Identify retention and recruitment techniques that can be used in partnership with community colleges.
3. Identify long-term partnership outcomes.
4. Create presentations to motivate employers and employees to participate in employee training and development.

SCENARIO DETAILS



Note

You are presented with details relevant to this scenario which include much of the needed information. To complete the case, some online research should be conducted. Many of the resources provide examples of successful programs. While there are others, these resources will save time in the students' exploration processes.

A list of deliverables is presented in the next section. Your instructor may ask you to complete all or part of the deliverables to fit within the time frame of the course or module. It takes approximately 4 weeks to complete the case. Most work will be done outside the classroom, with discussions and group reporting scheduled at the instructor's discretion.

Overview and Framework of MacroEnterprises, Inc.

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2. Culture and work environment:

- a. There were communication problems between shifts and between functions.
- b. There was inconsistent application of SOPs due to different interpretations of the SOPs.
- c. Continually integrating new employees into the organization presented challenges.
- d. The company needed to become a learning organization.

BACKGROUND OF SITUATION

The new HR director, Pat, has determined through analysis and evaluation that employee training and development is needed to create a workforce to meet the organization's goals. It is evident to Pat that the skilled labor supply is not going to meet the organization's growth. Currently, many employees lack the basic reading, writing and mathematic skills needed to complete their jobs effectively. Furthermore, the organization has had a difficult time hiring and retaining line managers, and many workers within the organization lack the knowledge and skills needed to be effective managers.

COMMUNITY CONNECTIONS

Pat shared these concerns during a lunch meeting of local HR professionals. A fellow HR professional advised Pat that the local community college had, in the past, created excellent partnerships with local employers to develop basic, manager, and technical level skills for their employees.

After much thought, research and discussion, Pat decided that it would be useful to explore a partnership. The local community college, The Peoples Resource Community College (TPRCC), had developed a program to partner with community employers to provide educational opportunities to develop high performance skills, such as communication (oral, written, and interpersonal); teamwork; problem solving; creative thinking; and computation.

The program links two related courses offered in sequence one night per week, allowing students to earn an Associate's degree in less than four years while attending school only one evening per week. The courses are integrated and connected to the rest of the curriculum, ensuring that students engage in a coherent and progressively rigorous learning experience. Students gain a sense of mutual support by moving through the curriculum together. The program was designed for adults who are employed full-time in the local community college district. Participants' educational background vary widely; many had never finished high school. The average age of the program's participants is 40. TPRCC has used alternative delivery methods, such as distance education and off-site cohorts.

SITUATION

TPRCC currently offers a manufacturing management program to prepare students for the workplace of the future. The program seeks to create a foundation for those aspiring to become managers within the manufacturing industry. The organization is challenged to hire, retain and promote employees who are motivated, prepared and productive, as well as skilled in manufacturing. This TPRCC program may meet the

needs of the organization in terms of the skills needed, employees' family demands, and community needs.

ASSIGNMENT

1. After the meeting, you decide to explore the idea of partnerships and whether such a partnership would be advantageous for your organization. To guide you, here are some questions that must be answered:

- How could this type of program help the organization strategically and help HR to be regarded as a strategic partner?
- What types of skills do you feel a community college partnership could help address for the employer to gain a competitive advantage?
- What are the advantages of creating a partnership with a community college versus conducting training internally or even outsourcing to another private training provider?

2. You decide to find out how other organizations are leveraging community college partnerships. You plan to explore literature and the Internet to gain more knowledge in the following areas:

- Identify and provide an overview of relevant programs at community colleges that have partnered with employers and that could serve as a role model for this company.

3. Once other programs are identified, it is important to see if they fit with your organization:

- Describe how you would conduct an evaluation to identify the goals of a community college partnership program and the needs of your organization.
- Explain how you could conduct a gap analysis to accurately examine if the program's goals align with the needs of your organization.
- Explore the components needed to form a partnership with a local community college.

4. Communicating the need for this type of program is essential to gain the support of all involved.

- Develop a compelling argument to form a community college partnership with your organization and present it in a short memo report.
- Create an electronic presentation to employers and employees to market the program.

DELIVERABLES

1. Create a chart that aligns organizational mission and goals and illustrates how the program will help the organization strategically meet these goals.
2. Develop a list of possible programs, partnerships, and outcomes. Describe other programs that could be used as a model. Use the human performance technology (HPT) model to show the gap in desired versus actual work performance. Create a list of the skills that will be improved and how they are addressed in a partnership.
3. Describe an analysis process used to align goals, needs and programs.
4. Create a focused and compelling executive summary (the argument from above) of why the organization should form a program or partnership.
5. Design a professional presentation materials that describe the reasons to create a partnership. (Include notes that could be used during a presentation in lieu of actually giving the presentation.)
6. Design professional materials that recruit employees to participate in a partnership.



Note

Your instructor can select specific items from the deliverables to tailor the assignment for the course and/or to meet learning needs.

RESOURCES

Computer with Internet access, PowerPoint presentation capability, and, if charts or graphs are used, Excel capability.

Drury, R. (2001). The Entrepreneurial Community College: Bringing Workforce, Economic and Community Development to Virginia Communities. *Inquiry*, Volume 6, Number 1, Spring 2001.

Maurrasse, D. (2001). *Beyond the campus: How colleges and universities form partnerships with their communities*. New York: Routledge.

Bzdak, M. (2007). The Johnson & Johnson bridge to employment initiative: building sustainable community education partnerships. *Corporate Governance*, 7(4), 486 – 492.

Perkins, T., Doyle, Wisniewski, J., Kaiser, S., Vosler, L. and Amoo, J. (2007). Great business training is just enough, just in time, and just for me. *Community College Journal of Research and Practice*, 31(6), 537 – 539.

Gardner, J. (2007). Innovative technology in automotive technology. *Community College Journal of Research and Practice*, 31(6), 525 – 527.

Zinser, R., and Lawrenz, F. (2004). New roles to meet industry needs: a look at the advanced technological education program. *Journal of Vocational Education Research*, 29(2). Available at <http://scholar.lib.vt.edu/ejournals/JVER/v29n2/zinser.html>

Brooks, B., Joss, K., and Newsome, B. (1997). North Carolina's community colleges: the connection to the workforce. *Community College Journal of Research and Practice*, 21(4), 387 – 396.

ISPI (2004). Human performance technology (hpt) model. Available at <http://www.ispi.org/services/whatshtmodel.pdf>.

Illinois Community College Trustees Association. (2006). ICCTA Business/ Industry Partnership Award 2006 Nominees. Available at <http://www.communitycolleges.org/biz2001.html>.

Illinois Community College Trustees Association. (2005). ICCTA Business/ Industry Partnership Award 2005 Nominees. Available at <http://www.communitycolleges.org/biz2001.html>.

Illinois Community College Trustees Association. (2004). ICCTA Business/ Industry Partnership Award 2004 Nominees. Available at <http://www.communitycolleges.org/biz2001.html>.

Illinois Community College Trustees Association. (2003). ICCTA Business/ Industry Partnership Award 2003 Nominees. Available at <http://www.communitycolleges.org/biz2001.html>.

Illinois Community College Trustees Association. (2002). ICCTA Business/ Industry Partnership Award 2002 Nominees. Available at <http://www.communitycolleges.org/biz2001.html>.

Illinois Community College Trustees Association. (2001). ICCTA Business/ Industry Partnership Award 2001 Nominees. Available at <http://www.communitycolleges.org/biz2001.html>.

MacroEnterprises, Inc. Case #3

INTEGRATING EVALUATION INTO STANDARD OPERATING PROCEDURES

This line of inquiry offers you an opportunity to explore a variety of evaluation strategies for both summative and formative assessment. Formulate a comprehensive evaluation strategy that considers the needs of the organization, its employees and its stakeholders.

LEARNING OBJECTIVES

After completing this case study, you will be able to:

1. Apply evaluation methodologies that address evaluation at the levels of reaction, learning, behavior and results (individual, process and organizational levels).
2. Develop an evaluation plan to support organizational initiatives and goals.
3. Develop communication strategies to maximize evaluation effectiveness.

A list of deliverables is presented in the next section. Your instructor will ask you to complete all three deliverables or select one or two deliverables from the list. It takes approximately four weeks to complete the case.

SCENARIO DETAILS

As a part of the solution to the production problems discovered by the quality control investigation, MacroEnterprises developed a partnership with the local community college to develop some basic and new technical skills, including care, maintenance, and calibration of torque guns; how to read manufacturing specifications; and proper use of the bolt driver. In addition, the consultant group hired by the new HR director, Pat, recommended that evaluation processes and policies be integrated into the company's standard operating procedures (SOPs).

After reviewing all of the documentation, the HR director and CEO agree that evaluation is sorely lacking in the way MacroEnterprises conducts their business. They want to embrace evaluation as a part of their daily business operations. Both feel that this will result in more consistent quality, and better paper trails should future problems arise.

The HR department makes arrangements for the training to be designed and delivered to employees through the local community college. The training will begin next month. Each employee will be enrolled in the following courses: (1) Equipment Calibration, (2) Reading Technical Drawings, (3) Care and Maintenance of Hand Tools, and (4) Math for Machinists. Employees will attend courses for two hours twice a week for 12 weeks. Each course will last 3 weeks.



Note

You are presented with the following details relevant to this scenario. These details include background about the issue and a transcript of a meeting between the consulting team and organizational stakeholders. In addition, you have additional resources available to you, including a list of questions that the stakeholders want answered; several job descriptions for manufacturing positions; a sample training record; samples of observation checklists from the shadow training program; results of new employee math and reading tests (TABE tests); and a description of the current training protocol for manufacturing employees. All items are included in the student instructions (with the exception of the TABE results, which are included in an Excel file provided by your instructor).

The HR director has hired your consulting team to identify the evaluation processes to embed in daily business operations and how to embed them. Using the supplied information, your team will present the HR director and CEO with a plan to embed evaluation processes within the company's SOPs.

MEETING WITH HR DIRECTOR AND CEO

To get a better idea of the expectations and outcomes desired, your team meets with the HR director and CEO of MacroEnterprises. The following discussion occurs during the meeting.

HR director: We appreciate your consulting firm taking on this task. From your previous work and client references, we feel that you can come up with a plan that will help us achieve our goals.

CEO: I agree! Not only that, your firm seems to have a broad view of evaluation, one that looks at more than the satisfaction of those who attend a training class or program. We need to have measurements that really mean something in the attainment of our goals.

Member of your team: Speaking of goals, we know you want to see evaluation embedded into your daily business activities. What goals are you hoping to achieve by doing this?

CEO: There are several things that I want. First, I want to make sure that we are continuously improving. I want us to learn from our mistakes and build upon that knowledge. I want to know that our employees are adequately trained to do the jobs we require of them. If they cannot do the job, I want to know why. I also want to look at data on an ongoing basis about our training and learning. From there, I want to be able to anticipate problem areas and approach them strategically rather than running around putting out fires.

I want numbers. Data that I can point to that show we are keeping track of what we do and how we do it. For example, when I am asked how HR contributes to MacroEnterprises's bottom line, I want to have an answer. I know that it cannot always be put into monetary figures, but I want to at least have idea of the perceived benefits.

Member of your team: So, you are saying that you not only want to know if your training is working, but also how it benefits your organization?

CEO: Yes! But I don't want to focus all our time on collecting new data. We have a company to run, and we don't have time to add a lot of extra work to our jobs without any immediate payback.

HR director: I have only three employees in the HR department. They can barely manage to keep up with the benefits, payroll and safety issues. That's why it's important that these evaluation and measurement procedures be a regular part of the way we do business.

CEO: Remember Pat, we do already collect a wealth of data. Some is utilized better than others, though.

HR director: Yes. I can get your team a list of the data we currently collect. We also have orientation and safety training programs. I'll get you some information about those programs too.

Member of your team: Thank you. That information will be useful. Also, do you have any job descriptions? They may be helpful to see what tasks employees already do.

HR director: Yes, we can get you a sampling of job descriptions and the checklist that the employee must go through when completing their shadow training program.

CEO: I have a meeting in about 10 minutes. Is there any other information that I can provide before I leave?

Member of your team: Yes. Who do you consider the stakeholders of this evaluation integration project?

CEO: Well, ultimately it's our customers. They are the ones I really want to keep happy. These end-user problems cost us money and reputation. If we could catch the problems earlier and rectify them before they leave this building, it could save us millions. A carburetor that gets scrapped in this building may cost us \$20, but a carburetor that fails in the field costs us well over \$100. That's not including the bad press and customer service issues.

Thanks and good luck. I'm off to my meeting now. Just let Pat know if you need any other information.

<CEO leaves>

HR director: I want to add to your stakeholder question. I think this project also has to be mindful of my needs and that of our CEO. In addition, our employees will be affected by this project, especially if they are going to have to do things differently. They need to see some benefit to themselves or the organization or both.

Member of your team: I see. How much are your employees involved in the decisions and problem solving in the manufacturing process?

HR director: We try to involve them when we can, especially if we think that it will affect them in some way. Most of the decisions about the way we implement changes, though, come from our engineering department. So, there is not much input there. As far as problem solving goes... when there is a problem, we try to get information about the problem from at least one employee (where the problem is located) and the supervisor. We usually do not have a lot of time. I have found that they like to have input, but many times when we ask it ends up being a complaint session about their supervisor or their pay... information that does not really help us to resolve the issue.

Member of your team: When issues or mistakes occur, what happens? How are they reported and how do people learn from them?

HR director: Great questions. Well, problems can be caught in several areas. They can be caught by the machine operator when something won't fit like it is supposed to. Many of our worksites use gauges to measure critical dimensions. Problems are also caught through random quality control inspections. A carburetor is pulled from every manufactured lot and thoroughly measured and tested. We have many lines of operation, though. The latest problem was not caught by the random inspection.

Member of your team: How is new technology introduced into the manufacturing environment? For example, who decides when the technology is implemented? Who conducts the training? Who is trained?

HR director: Decisions about what and when to implement new technologies are made by our management team. This includes me; the CEO; the plant manager; and managers from engineering, quality control, materials and production.

My department is responsible for all training. If the technology is something we do not have experience in, we usually contract with an outside training vendor or the technology vendor to train the employees. Because of the cost, only employees who have direct use of the technology get trained. We figure that once they know the technology, they can train anyone else who needs to know through our shadow training program.

Member of your team: One final question. Can you describe your shadow training program?

HR director: Yes. Once hired and after a full-day orientation, each employee gets assigned to a production line. The supervisor then assigns that employee to a workstation. The new employee shadows a more experienced operator on that workstation until the supervisor feels the employee can do the job on their own. It's our own form of apprenticeship training, although it seldom lasts more than a week. Our new employees tend to catch on quickly. Plus, they know that their pay goes up a dollar an hour once they are working on their own.

Member of your team: Do you have any way to document that the employee has learned the job?

HR director: Yes, we currently have an observation checklist for each workstation. When the supervisor and the more experienced employee feel the new employee has learned the job, the supervisor watches the employee perform the job and then signs off on the observation checklist, which is filed in the employee's personnel folder.

I need to attend to some pressing issues, too. We'll have to wrap this up. Stop by my office on the way out and I'll get you some materials. I also have a list of questions that we want to guide your work.

<End of meeting>

When your team stops by the HR director's office, you meet the three other department members: an HR coordinator, an HR assistant and an HR administrative support person. Pat gives you the following documents:

- Several job descriptions for manufacturing positions.
- A sample training record.
- Samples of observation checklists from the shadow program.
- Results of new employee math and reading tests (TABE tests).
- A description of the current training protocol for manufacturing employees.

Pat also gives you a document with the following questions that she referred to in your meeting:

QUESTIONS ABOUT EMBEDDING EVALUATION INTO SOPS

1. Where should we embed the evaluation procedures?
2. How should we embed the evaluation procedures?
3. Is this something that we should put in our job descriptions? If so, how should we do that?
4. What measurements should we take that we are not already taking?
5. What can we do with the measurements we currently collect to better support our goals?
6. Is there a formula we can use to show how our training affects the success of our organization (something more quantitative)?

ASSIGNMENT

Focusing on the questions given to you by the HR director, your consulting team is asked to find ways that MacroEnterprises can embed evaluation principles and methodologies into their SOPs.

You are given two weeks to put together a presentation to the CEO and HR director about your recommendations for evaluation. You think that some or all of the following questions may need to be answered to give Pat what she is asking for; however, there might be other relevant questions that have not yet been identified.

Upon returning to your offices, your team makes a list of your own questions to guide you through this process:

1. Who has a vested interest in the success or failure of any training program?
2. What are the threats to the success of the new training program?

3. How can existing data sources be used to measure the success of the training program?
4. What new data sources can be developed to measure the success of the training program?
5. What organizational goals will the training program and its intended results likely address?

DELIVERABLES

1. Develop a detailed evaluation plan for MacroEnterprises that includes the four sections listed below. Use the questions listed in each section to guide you in the information that should be included in each section of the paper.

Section 1: How can existing measurements be used to assess the effectiveness of training and organizational learning?

- What are the existing measurements?
- How should they be used by the organization?
- Are there any changes needed in the way the current measurements are collected or recorded?

Section 2: What new measurements must be developed to more accurately measure the effectiveness of training and organizational learning?

- What measurements are needed?
- Why are the measurements needed? Justify each.
- How should these new measurements be used by the organization?
- Who will collect the measurements?
- When will the measurements be collected?

Section 3: Develop a data collection plan (if required) for collecting the new measurements.

- In this section, list:
 - i. Each measurement (data source) you intend to use.
 - ii. Who will collect the data or administer the data collection.
 - iii. How the measurement will be evaluated or analyzed.
 - iv. When the measurement will be taken and how often.
 - v. Who will be involved in the measurement For example, if you suggest giving a test of skills training, who will administer the test? How will the test score be used to evaluate the training? When will the test be given and how often? Who takes the test?

Section 4: Your team concludes that current MacroEnterprises training is not adequately evaluated. Using Kirkpatrick's four-level evaluation framework and Phillips' ROI suggestions, suggest one way that future training might be evaluated at each level (reaction, learning, behavior, results, and ROI).

Section 5: Suggest ways (other than training) that evaluation might be embedded in the MacroEnterprises SOPs.

1. Prepare and submit a focused and compelling executive summary of the above paper. Include information about how all of the measurements you are recommending work together to help MacroEnterprises achieve their goals. You should also focus on how your plan ensures that the evaluation strategies are embedded into SOPs rather than added as a separate data job for the HR department. The audience for your executive summary is the HR director and CEO.
2. Prepare professional presentation materials that describe the process and persuade the CEO and HR director of the need for the recommended plan. Your presentation is to be delivered to the HR director and CEO of MacroEnterprises. The presentation should include all relevant handouts; PowerPoint slides; relevant data analyses (charts, graphs); lists; decision criteria; etc. The purpose of the presentation is to get hired by MacroEnterprises to implement your evaluation plan. (Include notes that could be used during a presentation in lieu of actually giving the presentation.)

RESOURCES

- Case materials (provided above and in the Excel file).
- Russ-Eft, D., and Preskill, H. (2001). *Evaluation in organizations: A systematic approach to enhancing learning, performance, and change*. New York: Perseus Publishing Group. Pages 63-98 and 347-380.
- Kirkpatrick, D.L., and Kirkpatrick, J.D. (2006). *Evaluating training programs: The four levels*. 3rd Ed. San Francisco: Berrett-Koehler Publishers. Chapter 3 – pages 21-26.
- Phillips, J.J. (2003). *Return on investment in Training and Performance Improvement Programs*, 2nd Ed. Newark, NJ: Butterworth-Heinemann. Chapter 2 – pages 32-57.
- PowerPoint presentation capability.
- Excel capability.

Appendix C: Training Protocol, Scenario #3

TRAINING PROTOCOL DESCRIPTION

Name: _____

Work Location: _____

Supervisor: _____

Hire Date: _____

Item	Date Completed	Verified By
Employee Hired		
Orientation Training: 1/2 day		
Safety Training		
Shadow Training		
Assigned to Job		

TRAINING PROTOCOL:

Once a manufacturing person is hired, they will attend a half-day training session about the company (the agenda for the session is attached). Upon completion of the orientation, employees are assigned to a work area and meet their supervisor. The supervisor will assign the employee to a work station and have them train (shadow) on a job with a more experienced employee until the supervisor feels the new hire can perform the job independently.

At some point during the first three months of employment, each employee must attend a half-day safety training program (agenda attached). A test is given at the end of the safety training. Employees must get at least an 80 percent on the test or attend the safety training again until they pass the test.

Appendix D: Agenda and Protocol for Orientation, Scenario #3

AGENDA FOR ORIENTATION SESSION

Time	Topic	Method	Presenter
8:00 – 8:45 a.m.	Introductions Icebreaker activity Session objectives		HR Coordinator
8:45 – 9:30 a.m.	The Company History Mission and goals Locations and management Organizational chart		HR Administrator
9:30 – 10:30 a.m.	Working at MacroEnterprises Work hours, shifts and overtime Time clocks Paychecks		HR Administrator
10:30 – 10:45 a.m.	Break		
10:45 – 11:45 a.m.	Policies and Rules Drug-free workplace Sexual harassment ADA Accident reporting		HR Coordinator
11:45 a.m. – 1:00 p.m.	Lunch		
1:00 – 2:30 p.m.	Benefits Vacation and sick days Health and dental care Vision Leave (family, medical, personal) Employee assistance program Stock purchase		HR Assistant Coordinator
2:30 – 2:45 p.m.	Break		

2:45 – 3:45 p.m.	Retirement Service awards Retirement options 401K		HR Administrator
3:45 – 4:00 p.m.	Conclusion Resources and contacts Questions		All

Appendix E: Agenda and Protocol for Safety Program, Scenario #3

AGENDA FOR SAFETY TRAINING PROGRAM

Time	Topic	Presenter
8:00 – 8:45 a.m.	Introductions Session objectives	HR Coordinator
8:45 – 9:15 a.m.	Forklift safety movie	HR Administrator
9:30 – 10:00 a.m.	Discussion of forklift safety	HR Coordinator
10:00 – 10:30 a.m.	Machine safety and lockout/tagout procedures movie	HR Administrator
10:30 – 11:00 a.m.	Discussion of machine safety and MacroEnterprises's lockout/tagout procedures	HR Coordinator
11:00 – 11:30 a.m.	Review and conclusion	HR Coordinator
11:30 a.m. – Noon	Safety training completion test	HR Administrator

Appendix F: TABE Test Information, Scenario 3

TABE TEST RESULTS

Last year, the company started giving all new employees the “Test of Basic Adult Education” (TABE) (http://www.ctb.com/products/product_summary.jsp) before their first day of work. The TABE test is an academic test that measures a person’s grade level in reading, mathematics and language, although the language section of the test was not used for MacroEnterprises employees.

In the TABE test, a score of 6.9 in reading indicates that the test-taker can read at a 6.9 grade level. A score of 12.9 is the highest score that can be reached on either scale. For example, a 12.9 math score indicates that the test-taker can perform mathematical calculations at a 12th grade level or above. It was thought that the test might identify people in need of remedial math and reading courses, but the test results have not yet been used. The Excel file named *tabe_manufacturing.xls* shows the TABE reading and mathematics scores for 125 of the company’s 300-person manufacturing staff. Ten members of the office and management staff were also given the TABE test to use as a comparison group. The results of the manager and staff TABE tests for reading and math are displayed the Excel file named *tabe_staff.xls* provided by your instructor.

Appropriate use of the TABE 9&10 Locator Test; <http://www.ctb.com/media/articles/pdfs/AdultEducation/TABE9-10LocatorTestWhitePaperAug07.pdf>

Appendix G: Sampling of MacroEnterprises Manufacturing Job Descriptions, Scenario #3

JOB DESCRIPTION

PAY GRADE:

TITLE: EAGLE MASCO TURRETS

DATE PREPARED: 8-12-2004

LOCATION:

DEPARTMENT: EAGLE

MACHINING

JOB OBJECTIVES:

To continuously improve the machining of the eagle masco turret operations. To set up and operate all work cell machinery. To gage and inspect operations as required.

ESSENTIAL FUNCTIONS:

1. Clean block mating face and lift block with hoist into turret.
2. Clamp part, close doors and cycle machine.
3. After cycle, remove part from turret and blow off fixture.
4. Using hoist, place part in other turret.
5. Clamp part, close doors and cycle machine.
6. After cycle, remove part to deburr bench.
7. Drain fluid from part and deburr.
8. Wipe down faces and visually inspect part.
9. Gage 100% with reed box gage.
10. Gage part with all remaining functional gages per the process sheet.
11. Move part to conveyor.

NON-ESSENTIAL FUNCTIONS:

JOB SKILLS AND REQUIREMENTS:

1. Set-up and operation of turrets.
2. Ability to read and count.
3. Housekeeping of work area.
4. Ability to pick up and manipulate parts.
5. Ability to read and understand process sheets.
6. Ability to read and understand meters and gages.
7. Ability to assess proper timing of tool changes.
8. Ability to train new operators.

EQUIPMENT USED AND WORKING ENVIRONMENT:

1. Located in well-lit machining area.
2. Exposure to coolant.
3. Exposure to flying and blown metal chips.
4. Turret machines.
5. Various metal-cutting tools.
6. Honing stone.
7. Various gages and fixtures.
8. Deburr grinder.
9. Safety glasses and ear plugs required.

JOB DESCRIPTION

PAY GRADE:

TITLE: EAGLE K&T OPS. 50 & 60

DATE PREPARED: 8-12-2004

LOCATION:

DEPARTMENT: EAGLE

MACHINING

JOB OBJECTIVES:

To continuously improve the machining of the eagle carb block and plates. To set up and operate all work cell machinery. To gage and inspect operations as required.

ESSENTIAL FUNCTIONS:

1. Move block to operation 50 K&T with hoist and locate in fixture.
2. Attach hydraulic hose and clamp.
3. Release hose and cycle machine.
4. Remove part from K&T and move to idle relief drill.
5. Locate in fixture and cycle machine.
6. Remove from idle relief drill and move part to operation 60 K&T.
7. Attach hydraulic hose and clamp.
8. Release hose and cycle machine.
9. Remove part from K&T and move to deburr bench.
10. Deburr all machined surfaces per the process sheets.
11. Gage part with all remaining functional gages per the process sheet.

NON-ESSENTIAL FUNCTIONS:

JOB SKILLS AND REQUIREMENTS:

1. Set-up and operation of both K&T machines.
2. Set-up and operation of idle relief drill.
3. Ability to read and count.
4. Housekeeping of work area.

5. Ability to pick up and manipulate parts.
6. Ability to read and understand process sheets.
7. Ability to read and understand meters and gages.
8. Ability to assess proper timing of tool changes.
9. Ability to train new operators.

EQUIPMENT USED AND WORKING ENVIRONMENT:

1. Located in well-lit machining area.
2. Exposure to coolant.
3. Exposure to flying and blown metal chips.
4. K&T machines.
5. Various metal-cutting tools.
6. Idle relief drill.
7. Various gages and fixtures.
8. Deburr tools.
9. Safety glasses and ear plugs required.

JOB DESCRIPTION

PAY GRADE:

TITLE: EAGLE BORES AND SEALS

LOCATION:

MACHINING

DATE PREPARED: 8-12-2004

DEPARTMENT: EAGLE

JOB OBJECTIVES:

To continuously improve the machining of the eagle journal and seal boring operations. To set-up and operate all work cell machinery. To gage and inspect operations as required.

ESSENTIAL FUNCTIONS:

1. Locate block in journal boring machine.
2. Cycle machine and close covers.
3. Remove part from journal bore machine and move to seal bore machine.
4. Locate in fixture and cycle machine.
5. Remove from seal bore machine and move to deburr bench.
6. Blow off and deburr all machined surfaces.

7. Use hoist to locate block in washer and cycle washer.
8. Gage upper three journal bores.
9. Gage bottom three journal bores.
10. Gage retainer groove width and depth.
11. Gage seal bore diameters.
12. Use dog legs to gage seal bore steps.
13. Send part to next operation.

NON-ESSENTIAL FUNCTIONS:

JOB SKILLS AND REQUIREMENTS:

1. Set-up and operation of journal and seal bore machines.
2. Ability to read and count.
3. Housekeeping of work area.
4. Ability to pick up and manipulate parts with hoist.
5. Ability to read and understand process sheets.
6. Ability to read and understand meters and gages.
7. Ability to assess proper timing of tool changes.
8. Ability to train new operators.

EQUIPMENT USED AND WORKING ENVIRONMENT:

1. Located in well-lit machining area.
2. Exposure to coolant.
3. Exposure to flying and blown metal chips.
4. Journal and seal bore machines.
5. Various metal-cutting tools.
6. Deburr grinder.
7. Various gages and fixtures.
8. Washer.
9. Safety glasses and ear plugs required.

JOB DESCRIPTION

PAY GRADE:

TITLE: EAGLE HONE

LOCATION:

MACHINING

DATE PREPARED: 8-12-2004

DEPARTMENT: EAGLE

JOB OBJECTIVES:

To continuously improve the honing operations of the eagle carb assembly. To set up and operate all work cell machinery. To gage and inspect operations as required.

ESSENTIAL FUNCTIONS:

1. Move empty rack to workstation.
2. Remove carb block from conveyor and count part.
3. Move block to hone and cycle machine.
4. After honing is complete, drain honing fluid.
5. Gage all bores with functional gages; 2 directions (top and bottom of bore).
6. Move block assembly to rack with hoist.
7. Keep all blocks with their matched covers.
8. Gage dimensions as required per process sheets.
9. Put assembly into rack; move full racks to assembly area.
10. Build up carburetors by honing faces and installing bolts.

NON-ESSENTIAL FUNCTIONS:

JOB SKILLS AND REQUIREMENTS:

1. Set-up and operation of hone.
2. Ability to read and count.
3. Housekeeping of work area.
4. Ability to pick up and manipulate parts with hoist.

5. Ability to read and understand process sheets.
6. Ability to read and understand meters and gages.
7. Ability to assess proper timing of tool changes and adjustments.
8. Ability to train new operators.

EQUIPMENT USED AND WORKING ENVIRONMENT:

1. Located in well-lit machining area.
2. Exposure to honing fluid.
3. Exposure to flying and blown metal chips.
4. Simplex and Mitsui machines.
5. Honing tools.
6. Idle relief drill.
7. Various gages and fixtures.
8. Safety glasses and ear plugs required.

Appendix H: Samples of Observation Checklists from the Shadow Program, Scenario #3

PRACTICAL TEST – EAGLE MACHINING TEAM

Masco Turrets

Name: _____ Date: _____

1. _____ Power up machine.
2. _____ Home out the machine.
3. _____ Call up appropriate program and cycle machine.
4. _____ Remove part and deburr as required.
5. _____ Gage with hole position gages.
6. _____ Gage with all remaining functional gages.
7. _____ Manually index turret and fixture.
8. _____ Change a drill and preset height.
9. _____ Change a tap and preset height.
10. _____ Demonstrate ability to single step through machine cycle.
11. _____ Cycle count machine parameters.
12. _____ Call up individual block of a part program and demonstrate a mid-cycle start.

We agree that the above named person has successfully completed the above tasks and has demonstrated competency in the MASCO TURRETS work cell in the Eagle Machining area.

Eagle Machining Supervisor
Representative

Quality Assurance

Manufacturing Engineer

PRACTICAL TEST – EAGLE MACHINING TEAM

K&T Operations 50 & 60

Name: _____ Date: _____

1. _____ Power up machine.
2. _____ Home out the machine.
3. _____ Call up appropriate program and cycle machine.
4. _____ Single step through machine program.
5. _____ Deburr as required.
6. _____ Gage with all functional gages.
7. _____ Change a mill cutter and preset.
8. _____ Change a drill and preset length.
9. _____ Demonstrate ability to enter offset and preset lengths on controller.
10. _____ Recut (rework) a part dimension.

**** Idle Relief Operation ****

11. _____ Change a drill.
12. _____ Change a bushing.
13. _____ Load part into Idle Relief machine and cycle machine.
14. _____ Gage hole diameter.
15. _____ Deburr as required.

We agree that the above named person has successfully completed the above tasks and has demonstrated competency in the K&T OPS. 50 & 60 work cell in the Eagle Machining area.

Eagle Machining Supervisor

Quality Assurance Representative

Manufacturing Engineer

PRACTICAL TEST – EAGLE MACHINING TEAM

Journal and Seal Bores

Name: _____

Date: _____

1. _____ Power up journal bore machine.
2. _____ Home out the machine.
3. _____ Call up appropriate program and cycle machine.
4. _____ Locate part in seal bore fixture and clamp.
5. _____ Demonstrate starting and stopping machine.
6. _____ Single step through machine program.
7. _____ Change insert and reset cartridge in rougher to proper depth and diameter.
8. _____ Change insert and reset cartridge in finisher to proper depth and diameter.
9. _____ Recut a part dimension.
10. _____ Gage with all functional gages.
11. _____ Move to deburr bench, remove part and deburr.
12. _____ Load part into washer and cycle washer.

We agree that the above named person has successfully completed the above tasks and has demonstrated competency in the JOURNAL AND SEAL BORE work cell in the Eagle Machining area.

Eagle Machining Supervisor
Representative

Quality Assurance

Manufacturing Engineer

PRACTICAL TEST – EAGLE MACHINING TEAM

Hone

Name: _____

Date: _____

1. _____ Visually inspect part for burrs and remove as required.
2. _____ Load part in part transfer system.
3. _____ Demonstrate ability to manually operate brush machine.
4. _____ Change a brush.
5. _____ Operate hone in automatic cycle.
6. _____ Manually shuttle fixture in and out of cutting position.
7. _____ Change tool, adjust retract position and adjust cone angle.
8. _____ Demonstrate ability to set counts and strokes.
9. _____ Demonstrate ability to call up program parameters.
10. _____ Gage with all functional gages.
11. _____ Mate part with its matching cover.

We agree that the above named person has successfully completed the above tasks and has demonstrated competency in the HONE work cell in the Eagle Machining area.

Eagle Machining Supervisor

Quality Assurance Representative

Manufacturing Engineer