

# UNIVERSITY OF HOUSTON - CLEAR LAKE COOPERATIVE EDUCATION TECHNICAL REPORT FORMAT

These guidelines are offered to assist the student who is writing the required technical report for Cooperative Education course credit. Specific guidelines may vary across programs, so check with your instructor before you write your report.

## 1.0 GENERAL GUIDELINES

A technical report, an employer's evaluation and a self evaluation are required during each cooperative education work period to receive academic credit for that work period. The technical report may be either a research paper related to your academic major or a work experience paper. Your report preparation, whether a research paper or a work experience paper, is intended to give you experience with independent work and with the organization and writing of technical reports.

Please understand that your grade (one credit hour per work term) is based on your technical report. You should arrange with your advisor at the beginning of the work experience exactly what the form and substance of your report should be.

## 2.0 TYPES OF TECHNICAL REPORTS

2.1 Research Paper - The research paper gives you experience in performing and documenting research on a topic of technical interest. Select an interesting subject that is related to your academic major. The topic of the research paper does not have to be directly related to your co-op job assignment, though it may be useful for you to research a topic in which your increased knowledge would be of benefit to your employer. Consult your job supervisor or your faculty advisor for suggestions if you are having difficulty choosing a subject. Choose an idea early to have ample time to perform the research and prepare the report according to the "Technical Report Format" described in these guidelines.

2.2 Work Experience - The three objectives of the work experience paper are: (1) to document the nature and extent of knowledge derived by the co-op student during the work period; (2) to educate the reader concerning the type of work involvement and demonstrate that the student benefited from the experience; and (3) to provide a forum for the writer to learn and to improve upon his or her communicative skills through the exercise of technical report preparation. It should be clearly understood that a work experience paper - as opposed to a research paper - in no way excuses you from performing an in-depth study and analysis of the work experience topic selected. You may wish to consult your job supervisor or faculty advisor for suggestions if you have difficulty deciding upon a single work topic to report in detail.

The work experience paper should contain the elements presented below and be written according to the "Technical Report Format" described below. Failure to adequately address both elements will automatically result in lowering of the report grade. The elements are:

2.2.1 Work Term Description - Write a narrative of specific jobs performed, in good English style, in terms known to a general reader not acquainted with the specific details of the job and in sufficient detail to give a clear understanding of the writer's involvement in each job.

2.2.2 Job Amplification - One specific job assignment should be analyzed in a clear narrative style, using proper English, and be sufficiently comprehensive to demonstrate your understanding of the assignment. Amplification of a job assignment should include examples of output from that assignment. Supplement all work examples with explanations including the purpose and data gathering techniques. Be sure that proprietary company information is not released. If you have any doubts, check with your supervisor. The use of concise language is expected with sufficient depth to demonstrate understanding of the assignment.

### 3.0 TECHNICAL REPORT FORMAT

While a standard format is not required, the following format is suggested:

3.1 General Format - All papers should be (1) typewritten, double spaced on one side only using standard 8-1/2 by 11 inch paper; (2) one-inch margin on all sides except for the left-hand margin, which should be 1-1/2 inches; (3) numbered consecutively (starting with the introduction) and stapled or bonded securely.

The main portion of the paper (introduction through body and conclusions, plus tables and figures) should not exceed 15 pages. The entire paper (title page through appendices) should not exceed 25 pages.

3.2 Title Page - The title page should list the title of the paper, your name, your employer's name, and the date submitted. This page should also contain the department at the University of Houston-Clear Lake, the number of the work term, the student's classification, the semester of the work term and the signature of the supervisor to indicate approval of the report.

3.3 Abstract - The abstract is a brief summary of the entire paper on separate sheet of paper. The abstract should give a brief statement of the objective of the paper or the problem addressed in the paper. A concise summary of the results or conclusions should also be provided, touching upon methods or other details that are unique or of particular significance. The abstract should be 100 words or less.

3.4 Introduction - The introduction should lead the reader into the development of the subject and provide the reader with a clear understanding of the significance of the paper. Indicate the subject of the paper and give the background leading up to the information provided in the body of the paper. Emphasize the purpose, thesis, problems and significant questions you will address.

3.5 Body of Paper - Explicate the main argument or purpose of the paper in the body, complete with pertinent theory and supporting data. The argument should proceed in a logical sequence. Appropriate headings and subheadings should be used to distinguish among complete thoughts as they are presented.

3.6 Conclusions - The conclusions, often considered the most important part of the paper, should be stated in a separate section at the end of the paper. The conclusions should follow logically from the material presented in the body of the paper and should not require "new" information for clarification or additional support.

3.7 Figures and Tables - Place figures and tables on the same page that they are referenced or on the page immediately following the page of reference. All figures and tables should appear professional and have a descriptive title.

Number figures consecutively using Arabic numerals, and give each figure a descriptive title, for example: "Figure 1. Variation of Flow Rate with Ambient Temperature." The figure number and title should be placed at the bottom of the illustration. Use captions to clarify the illustration.

Number tables consecutively using Roman numerals, and give each table a descriptive title, for example: "Table I. Mean Annual Rainfall of the 15 Most Populace Cities." Place the table number and title at the top of the table.

### 3.8 References

You and your advisor should agree on a reference guide. Stay strictly within the guidelines.

### 4.0 SUBMISSION OF REPORTS

You should prepare at least three copies of your reports and distribute them as follows:

1. one copy to your employer
2. one copy to your advisor including student and employer evaluations.
3. one copy each of the student and employer evaluations to the Career Services Office.
4. one copy to yourself

Report and Evaluation Due Date: August 1, 2000

Faculty Co-op Advisor Dr. Sadegh Davari UHCL Box 76

Phone (281 ) 283 - 3865