

General Advice on Co-op Reports

A report written during a co-op work term represents an opportunity for a student to learn and to give back to the employer. The learning aspect should be obvious and, because a student comes from a different background with different expectations, a work term report offers a real opportunity for a student to notice what people with many more years of experience overlook. This Advice specifies details on expectations for the graded portion of the work term while offering some suggestions for working with employers.

The Co-operative Education and Career Services office has a two page handout which can be used to judge a work term report in any discipline. It is not a bad place to start but you should be aware that, in essence, that handout identifies different dimensions of two essential criteria: your report should look professional and the content should display insight. The following comments offer advice, moving from the very specific to some suggestions on how to approach a topic. The final page indicates some differences between a “Poor” report and an “Excellent” report. I hope that it is a more constructive and precise guide to grading. You can always contact me for questions or clarification.

Format

Please use a standard font with 10- 12 pt size and one inch margins. Number the pages.

The cover page is to include an Executive Summary with about 200 words, single spaced. That Summary should include one thing which you found surprising about the topic (i.e. to attract the reader’s attention) plus the most important “take-away” from your report (since a Summary is written for a reader who has little time).

The cover letter included after the cover page should display a proper business style, as discussed in various communication classes on campus, not as an email style. It should be single spaced.

Do not use a Table of Contents if the report is short. In many cases, it is a waste of space and kills trees. If the report is written well enough and if you can create a flow to the logic then the section headings alone should be sufficient guidance for a reader. In particular, this sentence means that the second half of your introductory section should lay out the logic to be discussed. The concluding section should be more insightful than a thing which is at the end the report; it should tie everything together.

Bibliography and Research

Please provide *two* distinct sections of the bibliography, which differ according to the quality of the content. The first section (“Leading Ideas”) would include the better quality sources: e.g. academic research, government reports, reports issued by the research departments of larger industry organizations, better trade journals, books (including textbooks!), ... This list could also include any structured interviews with company or outside experts which you conduct. (Information interviews are also a good way for you to extend your network.) The second section (“Other”) would include any other sources that you cite: such as media reports (including even high quality business media such as *Forbes* or *Canadian Business*), blog postings, and so on.

The difference between the bibliographies is instructive. It is possible to create a long bibliography by using Google on a Friday night. Creating a *good* bibliography and integrating it into the

body of the report takes more time. You should also be learning to critically evaluate what you read. Items in the second bibliography may be written carefully and have useful facts but their “half-life” is a couple of days or maybe a month. After that time, most people read the next issue and ignore the last issue. You should be learning to ignore some of it too. The first section contains stuff that has more lasting value.

The difference is also evident in the ability of a source to pass the CRAAP test (<http://library.sait.ca/evaluatinginformation.asp>):

Current (i.e. avoid old references; please note that media references may be new but fail other parts of the test)

Relevance (i.e. does it talk about your issue directly or is its focus only “related to” your issue? is the evidence closely connected to your conclusion or is something missing?)

Authority (i.e. you should be learning that not all references are equally authoritative)

Accurate (i.e. beyond the conclusion: what evidence is presented? how is it selected? what methodology is used to analyse the facts? can you think of counter-examples which might suggest that the conclusion is not very precise or overlooks something which may be relevant?)

Purpose (i.e. is the source biased? does it have a conclusion that, regardless of the facts, the author wants you to believe? Note: sources which are known to be biased can be useful if you can recognize the direction of bias and can use your research skills to compensate).

The CRAAP test reveals specific weaknesses of some co-op reports. For example, some reports cite papers which I know use techniques which are beyond the level of most undergraduate students. And, their connection to the focus of the report is weak: in other words, these papers are very authoritative but not necessarily relevant. Some reports display a more serious problem concern: they cite a (i.e. *one*) source which offers conclusion X. That source may make the writer comfortable with saying “X is true because Dr. Y said so” in a report. If the writer were, instead, to look more deeply they might find that Dr. Y is a wacko, that her Ph.D. is from a mail order university and that all of the work on this topic done by other experts says that X is not true.¹ It is bad practice to rely on one source without investigating it. In school, your risk is limited to the cost of saying something silly but, when you are called upon to make a decision after you graduate, the fact that Dr. Y said it was a good idea is not going to prevent you being fired for making a bad decision. Being aware of the debate is a necessary first step to participate in it.

When citing sources in a bibliography, it is common to include weblinks but please include only links which go to the source directly. Anything which includes “....proquest...” or which mentions Scholars Portal or Academic OneFile is not sufficient. By using improper links, some of the information may not be accessible to people outside of a university. Hence, you limit your audience.

Content

The content of a report varies from person to person for so many reasons that it is difficult to offer useful advice on selecting a topic. The range of topics that would be interesting to you is larger than I can imagine. I am available if you want some advice or want to talk about something different. Once a general topic has been selected, it is easier to give advice on the content.

¹ Searching for the work of others who also used a source that you liked is why you should learn how to use bibliographic search features which enable you to search *forward* in time. Or talk with a librarian about how to do so. The fact that media reports rarely show up in such searches confirms my earlier comment about the short half-life of certain types of sources.

The Big Question: *How much should I write?* The question should not be about the volume of writing but the depth and insight contained in that writing. For example, a weak report can be long because it contains many platitudes and generalizations about the importance of motherhood and apple pie. A shorter, more insightful report might note that such things are true in some cases and could focus on exceptional cases where something different is appropriate. While there may be a minimum page limit, you should also be aware that many long books have been written about any important topic that you might choose. After you graduate, you will be expected to squeeze more content into less space; so why not start practicing now?

A reason for you to explore the sensibility of a source's conclusion is that, in the past, many co-op reports have been simplistic and seem to rely on repeating "motherhood" statements. For example: "It is important to work hard." (It is looks better than the alternative, but ...²) "The cap rate is 5% and the NOI is \$50,000. Excel says that the answer is \$1,234,567.89." (Okay, but ...³)

"Leasing agents working on behalf of owners try to negotiate the highest net effective rents." "Good brokers try to sell for the highest price." (Yes, but ...⁴) Similarly, I am surprised at the number of reports which seem unaware of the concept of "competitive advantage" even though this concept is discussed in many classes offered by many departments.

In my opinion, motherhood statements focus on what is generally true without considering exceptions to the rule. They can be deceptive to a writer because the statements are not "obviously wrong". That does not make them "correct". I encourage you to ask:

is this way really the best way in this situation? Is there a better way? This "way" may be the way that it has always been done, but is it always the best way? And, by the way, what is "the situation"? Is there some special case where some other way would be better? Asking these questions demonstrates thought (an aspect of problem solving), initiative (i.e. not merely following orders), and an opportunity to learn. Sometimes, the answer to the first question will be "Yes, it is the best way in this situation" but not always.⁵

Don't be boring

Reports full of "vaguely true" and "not incorrect" statements tend to be boring. It is difficult for me to judge whether a report was boring because the writer had no opportunities to choose a more interesting topic or because the writer did not take advantage of an opportunity that was offered *but not recognized*. A direct bit of advice to writers may combine the ideas expressed in the last two

² As representatives of the University of Guelph and this program, we hope that you look good. Still, there are always alternatives worth considering. For example, I have heard that soldiers prefer to be led by a smart lazy lieutenant than by a hard-working stupid lieutenant, and that generals are told to search for the former (while the latter is considered to be dangerous!). So, do you know why *both* adjectives are relevant?

Similarly, the term "work hard" is ambiguous in a way which a good report would clarify, for two reasons. Do you mean "long hours", "mentally tired" or "physically tired"? Do you and your supervisor agree on the meaning?

³ Excel is stupid. It does what it is told to do and does not receive a salary. So, did *you* ask the right question?

⁴ 1/ You may have spent the last four months living with these concepts but your writing should always be aimed at an audience. Including even one sentence to describe an important piece of jargon can make a difference.

2/ The distinction between what somebody tries to do and what they actually do is relevant. In this case, the missing perspective is that of the tenant or the buyer: what are the effects of *their* motives to accept a high price?

⁵ As a specific and maybe-memorable example, some people seem to think that we live in a black-and-white world. In such a situation and even if you did not know the answer, you could ask: Is "white" the opposite of "black"?

paragraphs and reduce the chances of writing something boring: make comparisons. Doing so enables you to see if something is always true or not. Making comparisons with numbers is often an essential part of many decision analyses since the numbers convey a sense of whether the costs or benefits of an action are big or small. Practice enables you to develop your sense of judgment about the difference between “important” vs. “trivial”.

More on Using and Finding Sources, including textbooks

Using textbooks should help you. First, a textbook shows what ideas were well-known when the book was written and, hence, should not be considered as a “new” idea. Second, many textbooks provide links to more detailed information and such links lead to the more innovative ideas. Third, since one goal of the work term is to reinforce what you learn on campus, not using a textbook interferes with that reinforcement. Students in their first or second work term may find textbooks are particularly useful sources. More senior students are expected to consider more difficult puzzles. They may find that textbooks can be a useful start to understanding, and that a new or specific puzzle would reveal the limitations of textbook learning. So, for all students, a textbook can be a starting point and you should be learning how to find, interpret and communicate more advanced material.

When discussing a source or a paper, the main text of the report should *not* use its full title or where it is found. Any attempt to be convincing will be much more successful if you write about the contents of the paper (i.e. its conclusion, and why the conclusion does or does not make sense for the situation you consider). In other words, use the answers to the CRAAP test as discussion points. Learning to evaluate conclusions and why they might make sense are important skills both during your time at university and after. For the same reason, you should not have to use the full name of the author; the family name is usually sufficient.

It is a good idea to write about the organization you work for, for a couple of reasons. First, matching a theory to a personal example helps make your report more specific and insightful. Second, you may be able to use an example as a counter-example to simple-minded thinking before showing the advantages of a better idea. This concern should prompt you to think more carefully about the situation. Providing comparisons (either better or worse, especially from other organizations) would be instructive for you and for your supervisor.

Grading

The Co-operative Education and Career Services office has a two page hand-out which can be used to evaluate a Work Term Report for students in any program. I find it hard to work with, when grading, for two reasons. First, because most students are good enough at the mechanics of writing that the criteria offer only a little help when distinguishing better and worse reports: i.e. the criteria are relevant but not sufficient, in my opinion. Second, the more important lesson may be that the criteria used to judge the “Quality of Contents” do not have an additive effect. Scoring 10/10 on the first four criteria and 0/10 on the next three does *not* mean that the score for “Overall Impression” should be 40/70. In fact, the criteria are complementary and the effects are reinforcing. For example, an excellent Literature Search and an excellent Description of Information makes it much easier to analyse and evaluate that information. Being overwhelmed by details or being unable to evaluate the available information means that you cannot live up to the potential of the topic. So, my advice is to start early and exert more effort on the preliminaries. In my opinion, the Table below offers a better rubric when writing your report: I encourage you to be “Excellent” in all aspects and to avoid doing the things listed in the “Poor” category.

Categories for Evaluation

Please note that the importance of the different aspects varies by the work term, with more senior students being expected to offer more insight into the Implications aspect.

Final Document	“Poor”	“Excellent”	Surprising Extras
Spelling and Grammar: Extra Penalty for “Poor”	Lots of mistakes; patterns of mistakes; long unfocused paragraphs; run-on sentences; over-use of passive tense; no distinct beginning, middle or end; inconsistent style/quality	Each step should follow logically from the previous step, or with clear indication of a change; consistent style and quality	Smooth flow; attractive story-telling; clear connections between different sections
Concepts	Used selectively, partially, or accidentally; uses broad generalizations; not using critical thinking skills; misunderstands concepts which were learning objectives in classes; is allergic to numbers or their meaning	Integrates ideas from many classes; acknowledges costs and benefits; reports evidence both for and against (yet able to reach a clear conclusion); concepts used to create a logical flow to argument	See Research; use of concepts not taught in any class
Research	Minimum number of citations; uses unimportant, old, or superficial citations; uses a limited number of perspectives or relies mostly on one source; makes assertions without evidence; not citing sources in main text or in tables	Citations integrated into the writing; uses information obtained by interview; numerical or financial analysis; better quality of sources; 360° perspective on the problem	Use of innovative or unusual evidence or data source
Implications	Vague; could have been deduced without doing the work; non-operational (e.g. focus on desired outcome not on how to make it happen); susceptible to ex post rationalization and “post-diction”; “talking about” or mentioning ideas accidentally (i.e. no logical development)	Specific and detailed; relevant to a specified situation; identifies limitations and risks which could be overcome if given more time or research resources; strategic perspective (as opposed to an isolated or “tactical” perspective on a problem)	Measurable; if a proposal were implemented then it could be used as a key performance indicator affecting pay
Presentation (if relevant)	Reading (e.g. from a prepared text); mumbling; overuse of “umm”; poor organization or sequencing; running over allowed time; unclear conclusion; limited eye contact with audience; low-level clothing (e.g. less than “business casual”; wearing baseball caps)	Emphasizes important “Take-Away Ideas” or operational implications memorably and convincingly in the limited time available	Produces an enthusiastic standing ovation from the audience