

WYDOT's Response to: **“Issues Related to the Preparation and Delivery of High-Quality Research Reports by University-based Researchers to Sponsors”**

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First and foremost: **There is absolutely no excuse for sloppy report writing. None!** The person proposing the research is most likely a Ph.D., and has his P.E., and is employed by a college or university; often with a full teaching load. If a proposer is not connected with a college or university, he still will probably have his Ph.D. and P.E.

Technically a DOT contracts with the institute of higher learning where the PI is employed, but in actuality the WYDOT research center works closely with the PI. A WYDOT representative or sponsor who has some knowledge of the problem will be the sponsor of the research and will work hand in hand with the PI to shepherd the project to fruition. The WYDOT Rep has a vested interest in the outcome of the study. This partnership is necessary to keep the PI from veering off scope which is quite easy to do in research, as there are many ways to look at a research problem. The WYDOT Rep. therefore has the responsibility to make sure that the ultimate problem researched is the one the PI and the WYDOT Rep. have agreed upon and which the DOT funded. Within WYDOT no research using SP&R funding may come before the RAC unless it has a WYDOT Rep.

The responsibility for the draft final report and the completed final report always lies with the professor who proposed the project in the first place. If a student's command of the English language is not up to par then it is the professor's responsibility to smooth out the language

glitches. It is also the professor's responsibility to make sure the student working on the project has the research report guidelines in front of him as he is quite likely the one writing the report. It is the DOT's responsibility for providing those guidelines to all researchers. In some cases it may mean including the guidelines as an attachment to the initial contract or MOU.

Quarterly and Interim report are a requirement of every project. This is mentioned in the contract. Reports are due in October, January, April, and July. If a report is not forthcoming then the PI is notified that all future payments will cease until the reports are in. Not paying invoices on time will assure a call from the contract and grants office of the university. Mentioning that payments will resume just as soon the professor abides by the contract language will most often necessitate a call to him from the grants office.

It appears there is nothing a college or university professor dislikes more than having the head of his department or the dean of his college notified that he is not living up to the conditions of the contract. Professors do not like to be looked upon with dissatisfaction by their dean.

Contract language is necessary to ensure that projects are completed on time. WYDOT'S contract language makes clear that all reports, findings and deliverables are due upon the contract completion date.

Professors and private contract PIs need to know what is expected of them in the writing of a final report. Frankly they need to be trained. New faculty at the University of Wyoming almost

always present their first draft final report in a form unsuitable for publication, even when they have been sent the guidelines.

As research manager I edit every research report sponsored by the research office and in doing so complete an errata sheet. (Errata meaning a correction of a book or article.) It's not unusual for an errata sheet to contain over 200 suggestions for changes; noun, verb agreement – he are, they is; missing words, “I to the store.” Suggested change: “I went to the store.” These are arranged by page number, paragraph number and line number within the paragraph, for example: pg. 54, paragraph 3, line 4; “...although wydot’s classification....” Suggest WYDOT be capitalized.

Editing a manuscript can take anywhere from three full days to a week. This type of detail has to be done to educate the writer about what you expect. After the first draft final report is sent back for revision from a first time PI with WYDOT, sloppy or inaccurate writing does not seem to reoccur. Oh there maybe slips, forgetting a word here or using a possible misunderstood word there, but all in all the quality of report writing increases dramatically. The research manager focuses also on formatting and relies heavily on the report guidelines citing page and the citation for a requested format change.

The WYDOT Rep. is responsible for editing the draft final report dealing only with the technical aspect of the research. Have any physics laws been violated? Is the research technically accurate?

Sometimes a professor will finish the study but will not turn in a final report, if such is a deliverable. To keep that from happening the WYDOT contract language includes a passage that

says that final payment will be withheld until all deliverables have been approved by the research office. This can be 10% - 20% or more depending on what will get the attention of the offending party. As mentioned above, if a significant part of a contract or MOU is not paid the contracts and grants office will want to know why and they will push the issue until the situation is resolved. Another avenue is to refuse to accept any new proposals for two years from a professor with a history of not completing the work or taking two to three years to turn in a final report after the due date. Research is a business. If a supplier can't provide the product on time and on budget, then WYDOT will find a supplier that will.

Accepting a student written manuscript that is not up to professional standards does nothing but harm the student. Outside the Ivy League walls lies "real life." Real life deals with professionally written proposals, professionally written interim reports and professionally written final project reports. Without the graduate student understanding the scientific method and accurate report writing he will leave the college or university unprepared. It is up to you and the professor to mentor his writing until it is the best it can possibly be done. Researchers for WYDOT are told that their report is going to look good whether they want it to or not. Their name will be on it as well as WYDOTs, and at the end of the study that report will be sent or made available to every State DOT in the country as well as internationally. Once a student knows this, the report writing rises from the realm of a class project to Real Life.

WYDOT and especially the WYDOT Research Center enjoy a wonderful partnership with the University of Wyoming, the above notwithstanding. Part of that partnership is the ability to trust one another. It's important to trust your researchers to do what is in the best interest of the

research and it's important for the PIs to know that when you ask for changes in a final report it is because the changes will create a better product.

The above paragraphs are extreme cases and constitute less than 1% of research studies. They are useful if the situation warrants it. Sometimes someone will make a big mistake and not include a known variable or a piece of test equipment breaks down at the worst possible moment. In some cases a personal crisis arises such as a death in the family or sudden surgery of a child takes the PI away from the study for a while. How you react to these very human scenarios will determine how much partnership you will develop with your researchers. If a contract end date needs to be extended for a legitimate reason then use your best judgment and grant the extension, and remember that we are all human and humans do make mistakes.