

Independent Study Midterm Self Reflection: Spencer Wilson

Assignment Description

Self Evaluation

For each deliverable Spencer will write up a retrospective of their completed work and a grade recommendation. This will be reviewed by Evan with Spencer present for an in person meeting and will host a discussion about the work completed and the accuracy of the self assessment from Evan's perspective. Evan is ultimately responsible for setting a final grade and can certainly reject Spencer's self-assessment, and this warrants a discussion about Spencer's performance.

At the midterm Spencer's self assessment should include a discussion of Spencer's grade goals, current success in meeting those goals and any corrective action needed to meet and exceed these goals. This will be a part of the evaluation discussion with Evan.

Course Components

- 0% meetings
- 35% lab notebooks
- 25% midterm
- 30% final delivery
- 10% self evaluation ← 1 of 2

Submission

As we complete the midterm, I have solidified my research question on how use of peer interview grading with self reflection could be used in place of the current interview grading mechanism in the project based version of the Principles of Programming Languages to provide a better student experience. I expect this will improve student confidence and allow staff to re-allocate time to helping students rather than grading students. In review of my midterm paper, it feels under-resourced and lacking a good experiment which is further highlighted in the following discussion on my midterm presentation. In providing my presentation, it appears that I understand the topic well enough to convey it to a semi-lay-audience, evident by the

constructive feedback provided. Upon review of the midterm presentation, I see the following as key points to improve upon in my project:

1. The lecture based course is a distraction to the story of improving the project based course, I believe that I can better establish the scene and value of this experiment by removing the discussion of the lecture based course.
2. The matrix effectiveness measure is unclear as presented and needs to be reworked to match my own picture of the process. I picture that number of students should be the horizontal axis, while the vertical axis is the students' highest ability to reach confidently in the bloom's taxonomy. This inverts the graphs but better demonstrates input and output and aligns better to the bloom taxonomy.
3. I have not yet identified a way that we would actually measure the matrix points in an experiment with control group and test group. I need to continue to explore how this experiment would be planned, executed and measured. I know that in practice, this cannot be measured not on students' performance 5 years out. Perhaps I can instead measure the student and staff self-reported experience within the two frameworks

As I move forward the rest of the semester, I have two goals to achieve

1. Reach at least a proficient level of understanding around the breadth of what it means to provide effective instructions (within reason for a single semester of reading on pedagogy)
2. Reach an advanced understanding of my own proposal to change the interview process, defining the framework for a repeatable experiment with simulated results and analysis.

As for my current progress toward these goals, I believe that I have a proficient understanding of effective teaching methods, but I recognize that more reading on the breadth will be important to reaching this latter goal. I identify myself as approaching the goal of designing my experiment. I believe this insufficient progress is due in part by my lack of hours working on the project reaching about 71 hours vs the expected 90 hours. More precisely, I took longer than is ideal to center my research question on interview grading. Accordingly, my experiment design and simulated results are lacking and my background research is not as targeted as it could be. I don't regret the time spent in reading more breadth of papers and practicing writing sample syllabi for different upgrading methods of the course, but I do identify these as inefficiencies in my research process.

One aspect of the independent study that I have somewhat ignored and now feels out of place, is the requirement to engage a member of the education faculty in the project. What is the purpose of this? Is this still something that I need for independent study to be successful? I believe it was introduced as a way to allow for a thesis on the topic. As I am not currently pursuing a thesis, should I still pursue this? What are the impacts of this not being done? While I'd enjoy speaking with an education expert on reflective ungrading, it feels like I'll just be bothering a member of their faculty in order to "check a box" for this project. I'd like further guidance on this from Evan.

One important note found during reflection is that my current lab notebook often fails to meet the initial expectation to include an explanation of my decision process so that it could be easily reviewed by others. To help ensure this in the future, I have added this to my daily template to use moving forward. I find that writing out those reflections is key to improving my own understanding of the topic and focus on what is important in my deliverables.

Recommendation to my future ideal self: start earlier, do more work more consistently and reflect deeply as you go. Build additional interim deadlines into the independent study proposal to keep yourself on track.

Grade recommendation: Proficient, solid B. It is still possible to reach an Advanced Understanding (A), but I need to put in consistent effort beyond what I had typically been previously putting toward this project each week.

Not really part of the retrospective but an important question while I have your attention: When should I do the final presentation? Reading day Dec 15? Or back on Dec 8th? Or perhaps a different venue or some time during finals week? Don't need to decide today.

Discussion notes

- The following are summary notes of the discussion held during the midterm reflection discussion between Spencer and Evan
- Need better emphasis on the lab notebook to document your research. The first dialog is you and yourself in whatever modality you need: paper, slides, whiteboard, you are trying to tell the story to someone and you start by telling it to yourself. One advantage of writing is that it is honest and avoids the sales pitch aspects that come with a presentation. In science this honest dialog in writing is very important to keep the science objective. The lab notebook should go beyond bullets and be some degree of edited and polished submission. The first draft can exist and be in the document, but some level of summary and good presentation is important. The ideal goal is that if I drop of the planet and someone finds interest in my research, they can read the lab notebook to know what I was working on and get started with the work themselves, picking up where I left off and knowing what I did and did not explore and why - finding their own new directions with the work.
- It is important to not simply pull another reference to "spend my time". Often the real research is doing the abstract stuff and the potential applications of the ideas. For many people this is the "hard" stuff. This drives the writing and often those important "ah-ha" moments more that reading does. The best researchers today are constantly producing artifacts that others can read and engage with. These are polished works that express the writers intentions and results clearly.

- A vlog or blog can be very valuable. Find the form of information distillation that is helpful to you and do it. You can choose what to keep private, but generally you should consider sharing your findings publicly and professionally so that anyone in the world could pick up this work and provide a scientific contribution based on what you have attempted and tried. My summaries should be less for Evan, but for the scientific community.
- As for meetings, it's less about talking with Evan and having Evan give me research directions and feedback, but rather to show Evan something awesome and get his time and thoughts on the matter. If I make 3 artifacts in a week, I can select the one that I find most interesting and use this as the driving artifact for discussion at our 1:1. Doesn't need to be with Evan either, it can be with other people in the lab and beyond. The goal long term is to build that network of researchers that can't wait to see the next thing you produce and potentially collaborate with you on something awesome. You have to find that balance between being shy and also not wasting people's time. You find things that you both care about and you come armed with enough information to host an intelligent discussion on the topic.
- From a faculty perspective, consider the 40/40/20 nature of the work. 1 day is for service. 2 days are spent teaching (meaning 1 day for lecture and 1 day for advisor rolls). 2 days are for their own research and some portion of that is spent on their own original work as well as the work of their advisees. The advisee work needs to be so awesome to encourage the advisor to spend time on the student's work rather than their own personal project. There exists a way to do this respectfully and get value that supports both the student and their advisor.
- While I personally found the discussion hard, it's important to note that Evan did decide to work with me and has confidence in my ability to do this work well to the highest standard of excellence. Evan has high expectations for the "the zone of approximate development" and will hold me accountable to this expectation. It is on me to decide if and how I will approach reaching this zone.
- As for bringing in a member of the EDUC department, my goal is to get to the point that I am excited to invite an expert on the teaching side to attend the final presentation. There are challenges in getting over imposter syndrome and accurately measuring my own expertise in the topic so that I can engage in effective discourse on the topic. Note that people are often more excited and interested in your work than you may think and it's often a high relief to a current member of faculty when someone reaches out and states "hey, I read this thing you published and think it's great. I have some questions for you on it...". While it's "good enough" to have a 30 minute meeting with this member of the faculty, the goal is to host some continuing discussion and potentially get them to spend some of their 40% research time on this project as well. Trying to get them to stay over in a meeting/schedule a new meeting to talk further. It would be great to have a paragraph abstract of the work when you reach out and relate it to their work
- Finally, we discussed the nature of learning to do research as the center of this work. We agreed that I will update the syllabus in some way for this and we note the potential to use this syllabus as a sample for future students and future IS to have higher MS IS performance in the department in the future with this as some kind of template or example to scaffold their IS setup.