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Reflection on the Individualized Education Project (IEP-short version),
“Creating a functional web resource for Chemistry Teachers”

The purpose of my Individualized Education Project (IEP) is to create a functional web resource for Chemistry Teachers. I set three goals that would have to be met in order to fulfill this purpose:

- Redesigning my website (AlanWindhausen.com) to be more intuitive and functional for first-time visitors
- Creating a compendium of links to web resources which is curated and vetted, complete with descriptions of the links to facilitate their use
- Adding web versions of resources I have created, for download and use by other teachers

I went into this project with this general outline, and a basic understanding of what I needed to do for each step to get them all done in 3 weeks. Coming out of the project (at least for the sake of my coursework – the project will continue being developed and refined well into the future), I am most struck by the amount of work and know-how it takes to flesh out design on the web.

I have some experience with building websites in a framework (Wordpress, in this case), but had previously been content to use the ‘drag-and-drop’ model of web production. For this project, I tried to amend code and add certain design elements that I admire on other webpages. This required far more research and hands-on manipulation than I had anticipated. While frustrating at times (i.e. 70-80% of the time, when I was accidentally breaking things all over my website), there were moments of great joy when I realized exactly what was wrong and how to fix it, then seeing the fruit of my labors. Case in point – when I remembered the `<hr>` command, which creates a solid horizontal line in html code and eliminated the need for typing in dashed lines manually, which breaks the page and doesn’t scale!

In one of the classes that I student teach, the teacher assigned the students to create a 'Fakebook' page (<http://www.classtools.net/fb/home/page>) for famous scientists. I thought that creating a [Wordpress.com](#) or [Google Site](#) might be a more professional option for the students who want to present their page to a larger audience. I realize now that if I were to attempt assigning such a project, I would need to limit the students to premade design templates, and require the website's content be entered (and grading primarily be based on the content) before the students deal with the final design. This would also be a larger and more time-intensive project than the Fakebook site, which took 2.5 hours of class time.

As for the compendium, I was surprised with how many resources were well maintained on the web for Chemistry teachers. A number of high school teachers have placed their material on the Internet for others to use, though the quality of these materials varies, and a number of resources with outmoded web design (which a user might be prone to dismiss due to the older styling) are actually among the most frequently updated and better maintained. Unfortunately, many of these sites are mere databases of links and downloads, with little explanation of what the link goes to besides a cursory description. The merits, audience, and potential uses are not provided along with the link. I seek to address this in my own compendium by curating the entries, providing more information for the end user.

The last section of the IEP, creating downloadable web versions of resources I have created, was the section I was least prepared for going into the assignment, and the one I have made the least headway on to this point. I had planned on uploading sample questions, assignments, rubrics, outlines, presentations, etc. – placing everything that I could online. But I neglected one simple fact – I am a student teacher. I haven't *created* very much material yet, and I cannot share anything I do not have. I did go back and update the one assignment/rubric I already had up on the site to include a page on the Alaska State Standards that are addressed in the project (available at the [Multimedia Assignment Rubric](#)). I have sample questions from previous study guides and tests, but I need to go back to add

copyright and state standards information, as well as create .pdf and Google Docs versions of these. As for other materials, I need to them create before adding them online.

Through looking at the web resources currently available for teachers, and developing my site to better address the needs I have as a Chemistry teacher, and trial-and-error, I have learned a lot about how to produce a good online resource. I realize my website is a fledgling in this endeavor, but I have a better understanding of what I need to do to have my goals more fully realized.