Appendix A

Science, Health, and Engineering Notebook Assignment Description and Rubric

*Goal:* The teacher candidate will utilize and complete a Science, Health, and Engineering Notebook during class in order to facilitate their own learning and to explore it as a tool for use in future teaching.

*Purpose and Description*: The purpose of Science, Health, and Engineering Notebook in this methods course is to allow you to **explore if and how** you will use this tool **as a teacher** in your own science, health, and engineering instruction. You will use it both as a learner and as a teacher this semester. As a learner, you will experience the Notebook in order to gain insights into how your elementary students can/will use notebooks. As a teacher, you will examine elements of the notebook that you would like to implement in your future classroom. For this reason, you will use one side of your notebook when you have your “student hat” on, and you will use the other side of your notebook when you have your “teacher hat” on (Young, 2012):

Teacher

Student

 

This is **your** notebook, so have fun with it! ☺ For example, you may cut things out from magazines or collect interesting artifacts in your notebook, or you can take notes from your readings. Be creative and use it as you wish (as long as it pertains to science, health, and/or engineering and is appropriate). I will share with you the minimum expectations of the Notebook, but feel free to explore and experiment with it in order to gauge how you will use them in your future classroom. You can also bring it to your field placement to take notes. Please note that if you take photographs in your field placement, you must receive the proper permissions from your host teacher to do so.

Your Science, Health, and Engineering Notebook may be either a binder or a composition book. At the end of the semester, your Notebook will be assessed for use, depth of thought, and organization/design. However, **I would like for you to see this as an exploratory tool and not a course assignment**- it is worth 50 points to recognize your effort with your notebook throughout the semester. You may request formative feedback (either written or verbal) on your Notebook from me at any time throughout the semester, and I will announce/offer one or two opportunities to submit your notebook for formative feedback.

If you want to achieve a score of *Highly Developed*, you are expected to include components of the notebook in addition to the minimum expectations explained in class. It is also your responsibility to ensure you obtain the information and materials you miss if you are absent or late to class. **You are expected to bring your notebook to every class and to have a notebook entry for every class period unless otherwise indicated in class.**

|  |
| --- |
| ***Minimum requirements*:** Table of Contents, Entries (with “student side” and “teacher side”), Reflections (can be embedded in “teacher side”), and Glossary |

*Optional components:* Lines of Learning, Questions, Resources, Index, Notes from Field Placement, photos (again be sure to have the proper permissions and exclude students’ faces), newspaper stories about science, health, and/or engineering tactile objects (e.g., dried leaves), additional in-class notes, etc.

**Science, Health, and Engineering Notebook Scoring Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Highly Developed | Developed | Partially Developed | Basic |
| **Use of Notebook** | You brought your Notebook to every class session and used it to record ideas, observations, reflections, etc.You demonstrated use of your Notebook outside of class to collect additional information and ideas about science, health and/or engineering.**15 points** | You brought your Notebook to every class session and used it to record ideas, observations, reflections, etc.Notebook contains all required components, but you did not demonstrate use outside of our course.**12 points** | You did not fully utilize or complete your Notebook (i.e., did not bring Notebook to every class session, one missing or incomplete entry).**9 points** | You have more than one missing or incomplete Notebook entry.**6 points** |
| **Depth of Thought/****Reflection** | Ideas, observations, and inferences (explanations) are highly detailed and specific. Reflections are profound. **25 points** | Ideas, observations, and inferences (explanations) are detailed and specific. Reflections are thoughtful.**20 points** | Ideas, observations, and inferences (explanations) are somewhat detailed and specific. Reflections are somewhat general. **15 points** | Ideas, observations, and inferences (explanations) are not detailed and specific. Reflections are very general and/or one or more reflections are missing**10 points** |
| **Organization and Design**  | Notebook is organized into sections and all information in notebook is in the correct section. Notebook design is creative.**10 points** | Notebook is organized into sections and all information in notebook is in the correct section.**8 points** | Notebook is organized into sections but some information in your notebook is not in the correct section.**6 points** | Notebook is not organized into sections or a lot of information is not in the correct section.**4 points** |