To: <Student who wrote the paper>
From: <Student who is reviewing the paper>
Date: January 7, 2008
Subject: Peer review of <Title of Paper>
Cc: Dr. Trujillo or Dr. Magda, Jennifer Large

Your formal report entitled "Determination of Friction Factors for Pipes and Testing the Flow Visualization Experiment" is reviewed in this memo. As suggested, I have separated my thoughts into three main categories: general considerations, formal report content, and overall evaluation.

1. General Considerations

Overall, the formal report looked crisp and neat. However, there were a few minor issues as to the format of the paper. They are as follows:

a) The figure titles on the report are displayed at the top of the figure. In most reports, the figure title appears at the bottom of the figure, whereas the table's title, or caption, appears at the top.
b) There are two page numbers on the report: one at the top right and one in the bottom middle. These page numbers may be superfluous.

2. Proposal Content

Overall, the content of the paper is well-organized and concise. However, as I read the report, I came upon a few things which were not clear or obvious to the reader. They are summarized as follows:

Executive Summary: All relevant information is included in the executive summary. However, the second sentence of the first paragraph is confusing. I think it is so confusing because of word omissions such as "the" and "was."

Also, I am not exactly sure why this would be a good experiment for children because a detailed description as to why this is a good experiment is not present at any time during the paper. This may be a good addition to the Results and Discussion section.

Technical Background: There were two main suggestions that could improve the validity or clarity of your work. They are as follows:

a) The author repeatedly refers to the Moody diagram. Although I have taken Fluid Mechanics and recognize what the Moody diagram is, it would be beneficial to include this figure in your report as I don't have this figure memorized.

b) The author's assumption that the surface roughness of SP-4 was 0 was of concern to me. I have worked with Drisco pipe, which is significantly smoother than stainless steel. When performing pipe-flow calculations, I used a surface roughness number in the range of 5e-6 inches for this particular type of smooth plastic pipe. I wonder if a more accurate surface roughness number would improve your results for the second pipe.
c) The error analysis appears to be unfinished. A walk-through of how the author obtained the experimental error may be beneficial.
d) I assumed that the experiments were performed at room temperature. Because the friction factor and Reynolds' numbers are functions of temperature, I suggest that the author reference the temperature at which these experiments were performed on every Table or Figure.
e) Also, a general discussion of the differences of the two pipes' results might be helpful in order to more clearly understand the reasons behind the discrepancies.

3. Overall Evaluation

Overall, I felt that this was a very well-written and well-organized report. There were a few minor grammatical errors, which rendered those sentences unclear and somewhat confusing. The grammatical errors are marked on the hard copy that was given to the author.