TO: Drs. Gabauer, Midkiff, and Thompson

FROM: BU ProPANE Team

RE: Project Status

DATE: October 5, 2012

The purpose of this memo is to present the progress on the BU ProPANE project as well as summarize relevant information from the initial panel.

From the initial panel, both third-party panel members were able to understand the high-level goals for the project from reading the technical specifications and background document. The first part of the panel discussion focused on the Microsoft research paper. It was suggested that we contact Microsoft in the hopes of gaining access to the code that the paper is based off of. The second segment of discussion focused on the capture device and how parameters in the user manual will fall out of the capture device specifications. It is clear that some sort of trade analysis will have to be performed on numerous different products to determine the optimal capture device for this project.

One of the problems brought up during the panel was Dr. Watkins's comment about professors not being comfortable using Linux and that the technical specifications indicate that the analysis system will be running on a Linux computer. Since professors will not want to use Linux, the interface for the analysis system will have to be compatible with OS X and Windows 7/XP. This raises the question of whether the interface should be part of the system or not. Another issue that was raised was the minimum number of pixels required for each square inch of board space. Based on the Microsoft research paper (published in 2002) utilizing a 4 MP camera, resolution was not a problem and the camera distance to board is roughly equivalent to what the BU ProPANE team expects. This research indicates that using a modern capture system will not produce problems with legibility due to low resolution.

Based on the feedback from the initial panel and realizations during the research phase, the BU ProPANE group has generated the following list of tasks for the next work period.

- Finish technical specifications document (Phil)
- Complete research portion of background document (Colin)
- Complete related technologies portion of background document (Griffin)
- Perform trade analysis to determine optimal capture system (Colin/Phil/Griffin)
- Begin research on image processing services (Phil/Griffin)
- Contact Microsoft in hopes of obtaining source code (Colin)