

13 December 2019

To Whom It May Concern,

We are the Ghanaian Teaching and Learning Materials WPI Interactive Project Group. We have been preparing in Worcester, Massachusetts for the past fourteen weeks. We will be traveling to Akyem Dwenase, Ghana to complete our project. Currently, Ghanaian teachers are mostly certified in major cities and use a set of Teaching and Learning Materials (TLMs) to aid their classrooms. However, in rural communities, these materials are not as available. Thus, we will be working with the teachers to co-design TLMs that will enhance the educational experience of primary school students. We are going to ensure that these materials are sustainable by using locally available materials. Over the course of the past semester, we have written three papers that showcase what we have learned from our research, as well as our preliminary planning for the work we will complete with the Ghanaian community in Dwenase.

In our first paper, we focus on cultural context and the design process. We review the history of colonizing nations that have imposed their own methods of design and development on African communities, causing many failed development projects. Afterwards, we outline our own design process. Our design process employs human centered design, ensuring that we fully engage the community in problem definitions and solutions to produce the best possible results.

In the second paper, we discuss the more technical aspects of our project. We describe general building practices and safety requirements. We also explain how to conduct structured and unstructured interviews with teachers to gain the most information about the problems they face. Finally, we discuss what makes ideas likeable and useful, and how that applies to the physical learning tools that we will co-design.

In our third paper, we provide background on ethnography, along with a logistical outline of our schedule. Ethnography is a method of study and development from the perspective of a philosopher. We relate this to our project and use it to create a set of best practices for

conducting research and development. Finally, we cover a weekly schedule of logistic information for when we are in Ghana.

By researching and writing these three papers, we are more prepared to co-design the best possible teaching and learning materials, and ensure that these materials will be long lasting and have a meaningful impact on the education of primary school students.

Sincerely,

Haley Hauptfeld, Sonia Litovchick, Linda Puzey, and Megan Throlson.