During their time at Messiah, alum Dena Steiner and Jo Larson took on a research project designed to improve conditions for children with disabilities at the Center for the Advancement of the Handicapped (CAH) in remote Mahadaga, Burkina Faso. These students worked to evaluate the effectiveness of the physical therapy techniques used in order to provide concrete data supporting the center’s work.

The study tracked the ability of children with cerebral palsy to perform functional movements over the course of a year. Their progress was compared to a similar group of children in Mali who did not have access to rehabilitative programs. The Burkinabe case workers at CAH developed therapy programs mainly based on the “tried and true” techniques and programs they saw used over the years. With only one formally trained Burkinabe physical therapist for the whole center serving over 2,000 people, they largely operate without the input of trained medical personnel and do not have access to any of the latest research or developments in their field.

In an area where children with disabilities are ignored, hidden, and neglected, clinics like the CAH are integral in developing a social environment and training necessary to integrate these people into the community. By providing rehabilitative services at a fraction of the cost, or free in many cases, the center empowers the children to grow up capable of contributing to their family’s work and to their community.
Jo and Dena developed a curriculum for training the physical therapists in basic and low-tech therapeutic techniques. They tested whether the current therapies were effective and, if they were, to ensure that all physical therapists were trained properly. This supported and enhanced the CAH’s program and enabled more rehabilitation centers to open in the surrounding areas and eventually throughout the region. They spent their summer in Africa developing relationships with the therapists in Mahadaga and testing of children who were receiving treatment. They taught the therapists there how to do the testing, and they gathered data on what techniques were being used. Their hope was that their project would serve as a catalyst to improve the lives of many children who would otherwise be left to suffer alone.

**About Cerebral Palsy:**

Most of the patients treated by the CAH have cerebral palsy, a condition that describes the motor and occasional intellectual disabilities that arise from a permanent brain lesion occurring at birth or early childhood. Typically, the disuse of the affected body parts inhibits normal development so that after several years, functionality gains in children unengaged in a therapy program are rare, leaving them permanently disabled. It is important that these children suffering with cerebral palsy receive therapy in order to retain and possibly improve some of their under-developed motor skills. If not, these individuals, especially in the Sub-Saharan West African cultures, are often

**Where are they now?**

Dena Steiner is currently in medical school, and Jo Larson is in PT school at Thomas Jefferson University.