Trip Report

New Paradigm for Discovery-Based Learning: Implementing Bottom-up Development by Listening to Farmers' Needs Using Participatory Processes and Holistic Thinking.

USDA CSREES Higher Education Challenge Grant Program

Keriba COULIBALY

Mali Agribusiness Center Participant Plant Scientist at IER (National Agricultural Research Institute)

Regional Research Center of Sikasso - MALI

Portion of US visit to assist faculty with planning for the program, provide training for students and complete manuscript writing regarding the participatory process of discovery based learning.

3 March to 4 April 2011

Executive Summary

I spent 30 days in the USA mentoring and advising students with their specific projects, which are initiated to help and assist people in need in Mali and in other parts of the world using participatory processes and holistic ways of thinking. To fulfill this mission, I worked intensively with many people such as Dr Florence Dunkel, the Principal Investigator of Mali projects affiliated with Montana State University (MSU), Dr Ada Giusti, French professor at MSU, Dr Cliff Montagne, MSU soil scientist and specialist in Holistic Management. I worked on peerrefereed manuscripts with these faculty and a graduate student. I mentored students in Dr Florence Dunkel's PSPP 465 R class, a University Research Core course in Health, Agriculture, and Poverty: Concepts and Action Research. Dr. Dunkel is being assisted in teaching this class by Dr. Ada Giusti. I gave a presentation to Dr Giusti's French Language class. I met with students of Dr. Dunkel's BIOO 162 CS Insects and Human Societies course, each large group meeting, each laboratory, and conducted many individual interviews. At Belgrade Middle School, I also made a presentation and answered questions from 60 students in Denise Dahl's Social Studies class. Denise Dahl is a former USDA Mali exchange teacher. I also interacted with elders, current faculty and students at Chief Dull Knife College, and former Mali externs on the Northern Cheyenne reservation in Lame Deer, MT. I made a presentation on Mali in an MSU International Studies class that covered the geography, population, economy, and the cultural identity of Mali. I worked intensively in all cultural aspects of the typical Malian village and Bambara language training with an undergraduate student who is going to Mali this June to help with a project that contributes to overcoming the ravages of kwashiorkor in children in Sanambele, a subsistence farming village in Mali of about 1,200 Bambara-speaking people. I contributed to individual students, and to students in small and large groups, in general mentoring of the PSPP 465 students working on projects concerning Mali, and I will continue mentoring in a continuing, ongoing process via e-mail and Skype. Various discussions took place with these students who are willing to put in practice the participatory processes and holistic thinking for the solutions to problems of the materially-poor but culturally-rich subsistence farmers throughout the world.

TABLE OF CONTENTS

Executive summary	2
Objectives of Visit	.4
Accomplishments of Objectives	5
Daily log of activities	.6
List of persons met	••
Visit-Specific Appendices	•••
Professional items given and received1	7

Objectives of visit

I had the following objectives for this visit:

- 1. To meet with students and faculty members and exchange with them in the sense of improving together the project activities that are being planned or in process of execution. These include students' projects in Mali and on the Northern Cheyenne reservation.
- 2. To review and complete with co-authors the writing for peer refereed journal articles.
- 3. Mentoring and interacting with students in classes, with individual students, and in group sessions about practical case studies such as in the fields of agricultural and biological sciences, appropriate technologies for subsistence farmers, and cultural awareness and education relative to the people of Mali.
- 4. Assist and participate the sponsoring of a student who is planning to go to Mali by cultural preparation, technical feasibility of the project, and some basic learning and practicing of the Bamana (Bambara) language.

Accomplishments of Objectives

All the objectives assigned above were achieved:

- 1. I had intensive interaction with all of the people I worked with
- 2. Many presentations were given to classes
- 3. Many individual and groups mentoring were completed
- 4. One peer-refereed article was completed and a second is in process
- 5. The undergraduate student who is going to Mali in June 2011 received extensive language and cultural preparation

Daily log of activities

Thursday, March 3, 2011

At 8 pm I went to the Airport International of Bamako Senou even though my flight was not until 11:30 pm; as I didn't check in my luggage in the morning at Air France. This couldn't be done before I got my passport with the visa from the US Embassy which appointment was at 4 pm. We flew from Bamako at 11:30 pm to Paris and from Paris on March 4 to Atlanta where the connecting flight was delayed almost for an hour. Because of this delayed time, I was about to miss the Bozeman connection plane in Minnesota. Fortunately, I got on this connection plane flying to Bozeman. We landed in Gallatin Field Airport in Bozeman at 11:30 as planned. I was met by Bob Diggs, Ky Phuong Luong, and the Weeden family (Cathy and Norm) who drove me to their home where I was hosted for my month-long visit. There, I was lodged in a comfortable apartment where I got everything I needed such as a cell phone, an Internet connection, food, and especially, kindness.

Saturday, March 5, 2011.

Bob Diggs sent me by email five international calling cards and the first week's activities schedule. This schedule is as follow:

- Monday, 7 March, 2-3 PM to attend Dr. Florence Dunkel's BIOO 162 Insects and Society class in Room 103, Reid Hall, Ky Phuong will pick me up at Weeden's at 1:30 PM.
- Tuesday, 8 March, Megan Sullivan, <u>megan.sullivan4@msu.montana.edu</u> (no phone # available from MSU Student Directory) meets with Keriba about Sanambele books, The

Hare and The Hyena, and The King and Two Orphans.

Kartluke, <u>kelley.kartluke@msu.montana.edu</u> PSPP 465 student and another person (Tammy, last name Hedveldt?) will want to be included, may meet in Marsh Lab Conference room IF RESERVED (see door to conference room for instructions on reserving this room). Megan Sullivan/Ky Phoung to make all arrangements (Florence does not arrive until 11:15 Tuesday night from Atlanta).

- Wednesday, 9 March, 2-3 PM in Room 103 Reid Hall, Ky Phuong will pick Keriba up at Weeden's at 1:30 PM.
- Thursday, 10 March, Florence will pick up Keriba at 6:45 AM at Weeden's and travel to Northern Cheyenne Reservation, returning at about 6:00 PM Saturday.
- March 14-18 No classes, work on publications and/or student interviews each day, probably Marsh Labs Conference Room. Be sure room is reserved.

On Sunday night, I deliver to Ada the handicraft items from the Sanambele Women's' Association. These items had been ordered and paid with a Moneygram sent to Bourama Coulibaly by Ada.

Monday, March 7, 2011.

2 to 3 pm: Ky Phuong picked me up at 1:30 pm as planned and we met with Florence's Insect and Human Society class (BIOO 162) in Reed Hall. After some explanations provided by Ky Phuong to the students related the last exam, he introduced me to the students. Then, I introduce myself so that they can have more ideas on my person. The session was dedicated to general questions about Mali and Africa that I answered. After this class, Ada Giusti introduced me to Alexandria (Alex) Davis, a PSPP 465 class student who is writing a project proposal to train two Sanambéléans residents as caregivers. Alex didn't know that Sanambele just got a healthcare giver whose wife is also the midwife according to Bourama (Ada got the information from me after I met with Bourama in Bamako). In fact, Alex thought her project would be outdated because Sanambele already had two caregivers. After discussing with her, we find out that the same project can be redirected to perform other activities that can provide health management sustainability in the Sanambele village. One of the strategies we come up with together was to provide training for the couple health worker and training to two villagers who are likely willing to educate and train the population in health issues, and why not serves as substitutes when the tenured caregivers are away or prevented somehow. All of us agreed that in a community, the very elementary health management resources should exist in the village.

Tuesday, March 8, 2011.

As planned by Florence, I would meet with Megan about the story translation that aims to complete the Sanambélé story telling book. Unfortunately, Megan was on trip and I waited in the hope to have her email or phone call. But on Wednesday, she sent me an email telling that I can translate the story and send to herself or Tammi, the graphic designer for the storybook. As I had to go to Lame Deer until Saturday, the translation is been delayed until the coming week which was the spring break week.

Wednesday, March 9, 2011.

From 2 pm, I attended part of the lecture in Florence's Biology 106 class before joining Ada in her office and some students of the BIOLOGY 106 CS, which lecture was about the incidence of aphids and locusts in agriculture. I told how these insects are damaging crops in Mali. Before the class end, I walked to Ada's office where some students of PSPP 465 were waiting to interview me about their projects.

I discussed with those 465 class students whose projects are specifically targeted on issues in the village of Sanambele. Many of these projects are about how to improve nutrition status in children, storytelling, filming for best communication. We found out that communication tools such as filming should paired with all the technology activities that need to be implemented in the village. Therefore, Ian as a filming project initiator promised to meet with me again to have much more insight about it. He then planned to meet with me on Tuesday, March 15.

Thursday March 10 to Saturday 12, 2011:

Florence, Bob and I made the trip to Lame Deer in the Northern Cheyenne Reservation with 8 students of the PSPP 465 class: Health, Agriculture and Poverty. The goal of this trip was to study in deep some of the issues relating the particularity of the Northern Cheyenne daily life. The students proposed strategies participatory processes based - and holistic thinking. During this trip we held a total of three meetings (two in the CDKC: Chief Dull Knife College and one in the hotel after dinner). In the CDKC, we met with some community members, Bob Madsen, the Director of the college, Janelle and Josette. In the hotel, 3 Northern Cheyenne elders (2 men and one elder woman with Janelle and Josette) were present at the meeting and they gave much information and feeling about the Northern Cheyenne Reservation community. Through these different encounters, it has been essential to understand the complexity of the Northern Cheyenne living conditions and the necessity to bring about changes in its daily life. After an analysis of the situation we find out that the main concerns are more about lack of investments, job opportunities, and social crisis including alcohol, crimes, drug, suicide etc, as well. The students come up with specific projects that aim to overcome these difficulties such as: Promoting gardening by using drip irrigation system which this is economical and can suit with the water low pressure context;

To promote efficient energy and cost effective energy constructions;

Improving child educational system with emphasis on family and community partition; Direct learning process on teaching science and technology to more people enabling them to be useful to the community;

Create more jobs and promote summer job opportunities to young people which are the most susceptible to the bad habits;

Promoting sport that is likely to get young people together driving them to forget the bad habits. On Friday and Saturday, we continued these discussions.

Sunday, March 13, 2011.

I spent most of my time, reviewing the malaria article and translating in Bamana the special note about storytelling (the hare and the hyena).

Monday, March 14, 2011.

After we read and made observations and comments on the article, "Use of Neem (*Azadirachta indicia* A. Juss.) Leaf Slurry as a Sustainable Management of the Malaria Vector Anopheles gambiae Gilles s.s. in West African Villages", we (Florence, Ky Phuong and I) met in Marsh

Laboratory. The purpose of this meeting was to harmonize our comments and suggestions on the form and the substance to improve the quality of the draft. It took us almost 5 hours to get through those first corrections. Much useful information contributing to enhance the scientific quality of the document has been provided. Some others needed to be completed such as setting the maps, search of some scientific information specific to Malaria Journal, and get some information in the village by calling Bourama or Hawa or Karim. The next review session has been set for Wednesday 16, at 1:30 pm in Marsh Lab.

Tuesday, March 15, 2011.

I met with Ian Sly, a student in Florence and Ada's 465 class who would like to direct his project on filming as a medium communication to disseminate more efficiently the information needed to be known and done about kwashiorkor, the deficiency of protein in children body. He is concerned about whether Sanambéléans are aware or not the causes and effects of kwashiorkor in child. We discussed and this project should be a filmmaking that teaches the population to sufficiently know about this nutrition deficiency and what to do to overcome. He will work closely with the students who are engaged in the process of improving the nutrition status in the village of Sanambélé. The communication techniques of this filming would be attractive to the recipients without disturbing their customs and culture.

Wednesday, March 16, 2011.

Early in the morning I connected with Bourama on the phone to get requested information needed for the malaria article. I did get some from the first series of phone calls. Next series will hopefully complete the information. In the afternoon, Florence, Kyfuong and I met again for the second time about the Malaria management article in Marsh Laboratory. This meeting aimed to check that the first series of the corrections are been reported in the draft, add the requested information and verify every single detail required by the Malaria Journal. Other site information got from Bourama in Sanambélé was added with many other details as well. Now Nancy's corrections were needed to be done.

Friday, March 17, 2011.

I wrote the story of the king and the orphans' story in Bambara from the video that I translated it into French.

In the afternoon, Florence, Megan, Tammi, the graphic designer for the storytelling book and I had a meeting about the storytelling book. I was already done with the translation into French and I was committed to complete the Bambara version handwriting however. Another problem to be solved is that Megan's grant is not sufficient to fund all the book publication and the desired copy number, and the supplement is to be found.

Saturday, 19 March, 2011.

Most of that day was devoted to handwrite the story of the king and the orphans, review the French version, and reading some of the PSPP 465 students' papers in the morning. In the afternoon, I met with Florence and Ky Phuong to get though the article: "Use of Neem (*Azadirachta indicia* A. Juss.) Leaf Slurry as a Sustainable Management of the Malaria vector *Anopheles gambiae* Gilles s.s. in West African Villages, after the last review and Nancy's corrections. We updated the article regarding the reviews made so far.

Sunday, March 20, 2011.

From 9 to 11 am, I met with Katie Olson, whose project is about cross cultural awareness. So, she is interested in Malian culture with comparison to Indian culture, specifically in Bengola in India. We spoke about many aspects of the Malian culture in general.

Monday, March 21, 2011.

From 11 to 11:50 am, I show up in Ada's second year level French class. After Ada introduced me, I spoke a little bet about what is my job in Mali and what is the purpose of my visit in MSU. This session has been essentially done by answering students' questions on the cultural, religious and economy aspects of Mali. It covered also how the relationship between Mali and its neighbor countries is. We spoke about the migration aspects of the Malians towards some other African countries such as Ivory Cost, Libya and Gabon. The utmost questions were about the Malian tradition of castes and nobles.

In the afternoon, I met with Heather Lee, a student from SPP 465 class. Heather is translating a book about how the US people understand the Malian culture and tradition. She was interested in understanding some words, expressions in the book. We get through to developing the explanations of these words which were either French academic words or specific expressions related to Malian tradition or culture.

Wednesday, March 23, 2011.

From 2 to 3pm, meeting with students in Insects and Human Society class (Biol 106) taught by Dr Florence Dunkel assisted by Ky Phuong Luong. That class was about organic and synthetic pesticides used by people in the world. We specifically developed the neem tree story that it originated in India and get spread in the African countries. In Mali, it has been used to control desertification and the erosion especially in the Northern Mali, where rainfall is scarce; as the neem develops deep and strong roots, and withstands drought conditions in the Sahel. Now it is largely spreading even southward. Its leaves and seeds are been used today to control numerous insects that cause damages in crops and against mosquitoes.

At the end of the lecture, we did a workshop and we divided the class in 4 small groups. Each group developed a topic telling stories about insects' damages and their usefulness in a human daily life. I have been interviewed by the students about the practical example of Mali. This interview continued after class in Marsh Laboratory conference room. Mainly, we talk about some of the insects causing damages to human (focus on mosquitoes) and crops (aphids hosting viruses and spreading diseases to plants, termites mining plant roots and stems, diverse insects damaging storages, diverse phytophagous insects damaging crops....). As beneficial insects we talk about honey bees providing honey, other numerous insects favoring crops and other plants pollination, insects as part of biological control, part of acting to soil mineralization etc.

The same afternoon, I met with Kalli Wedlake, a former 465 student who is planning to go to Mali next June. Her project is about how to eradicate kwashiorkor in Sanambele by using cow milk in the 36 months and younger children's diet. Kwashiorkor is a disease of severe malnutrition in children due to a lack of protein in the diet. It usually occurs at the time of weaning from the mother. This implies that the children diet at this age needs to supplemented by essential amino acid that are lacking in the children diet in Sanambele which components are mostly carbohydrates from the flour of millet or sorghum or maize. In her research she found that milk is a good solution as a preventative source of complete protein and has the capabilities of preventing kwashiorkor from developing. So, by consuming only 2 cups of milk a day the threat of kwashiorkor would no longer exist in the village. Knowing the number of children in the range of 36 months, she thinks that two dairy cows can be enough to eradicate kwashiorkor in the village. To solve the problem, it could be through the purchase of dairy cows or use of cows already present in Sanambele. The big issues are:

- Most of family cannot afford purchasing a dairy cow, then what can be done to have at least two comminatory dairy cows (funding, taking care of them, feeding....).
- The traditional cows can scarcely produce 2 liters per day.

_

We think that it could be necessary to do a quick survey to learn more about the kwashiorkor in Sanambélé. Next, the demonstrations are necessary to develop the awareness of local population, especially women, men and students at school. Afterwards, we may discuss with the villagers how to put the plan in practice.

Thursday, March 24, 2011.

At 9 am I met with Whitley Crow, a student of PSPP 465 whose project is on how to solve the aflatoxin issue in peanuts and other storage grains in Africa. She is working on this problem, because peanut and the grains of cereals are often combined to improve the children's diets. So, such a food should be aflatoxin free. From her researches, she find out that there are simple low-tech measures, such as improving the drying and storage of food, that can reduce the exposure to mycotoxins among subsistence farmers in Africa. In fact, she showed me some efficient structure

sample made with local materials suitable to avoid water stress, minimizing insect infestation. These samples were improved traditional bins developed in Benin and improved cribs that storage in airtight containers.

From 4 to 7 pm was the meeting in the PSPP 465 class taught by Ada and Florence. After Florence, Ada and the students welcomed me in that class, I gave my comments which were directed on how it has been useful to initiate such course in the US. Applying participatory processes and holistic thinking, the course can significantly influence the student views and perspectives to other countries in a positives and productive way. The class is divided in Sanambele and Cheyenne group projects. Each of the students has a specific project either on issues in Sanambele or in Northern Cheyenne Reservation, or even a cross research done by a student. The Sanambele team did a presentation on what need to understand the details about kwashiorkor and what need to be done to avoid it. All was about reviewing the normal diet and supplementing it with essential amino acids that are missing in children diet in rural areas in Mali in general and specially in Sanambele. As methianine is missing in most of cereal grain used in Mali, this amino acid is mostly present in animal products and peanuts. The Cheyenne group also summarized the results of the trip done in the Northern Cheyenne Reservation. For more information see the part on the trip to Lame Deer, Northern Cheyenne Reservation. The class ended with three small group workshops to explain some aspects of writing a project paper such as literature review, materials and methods and how to conduct a survey.

Friday, 25 March, 2011.

From 12 to 1pm, I met with Kalli Wedlake for the second time. This meeting was about learning how to speak the local language spoken in Sanambele that is Bamana. Bamanankan is spoken by about 80% of Malians. We started by the first expressions such as greetings, introducing, and few preliminary expressions.

After my meeting with Kalli, I joined Florence and Ky Phuong, her teaching assistant to attend the lab with the students of Insects and Human Society class in the Entomology Lab in the Plant Growth Center. The students were divided in two groups, one from 12 to 2pm and another from 2 to 4pm. The first group was divided in 2 sub-groups, but the second wasn't because of there were only 3 students who attended the session. The workshop was about to initiate and prepare a debate that will be held on April, 26 2011. The resolution is the following statement: "The US Federal Prison System should substitute insect protein for mammal, fish, and bird protein in their menus for prisoners." At first, the 2 questions were, what do they think and how would they vote on this resolution statement as a good topic to explore and if they have strong objections. The information's sources should be relevant such as pier refereed journal, government or university websites, books, interviews, websites and magazines.

After the lab session, I continued have been interviewed by Florence 106 class student who didn't make it so far. As before, these interviews were about damages caused by insects and benefit provided by insects in Mali.

During the same afternoon, Florence, Megan and I met to discuss the current step of the story book. After the French and Bamana versions got ready, Megan did the English translation that we revised together and will be revised by Ada for more precision.

Saturday, 26 March, 2011.

At noon I continued teaching Kalli, how to speak Bamana. We got through the review of the previous words and phrases.

Sunday, March 27, 2011.

In the morning, I got to meet with Katie Olson. We continued to talk about some Malian cultural aspects such as society and marriage.

Monday, 28 March, 2011.

By 10 am I met with Ben Weber whose project in on the culture chock. Our conversation encompassed Malians' lifestyle, the rural conditions, and the language barrier. Language barrier seems to be one of the most important barriers when an American goes to Mali or a Malian goes to the US, as America is English speaking country and Mali a French speaking country. So, culture chock is obvious for being in an environment where you cannot communicate clearly with people. Knowing the basic language learning should be one of the utmost tools attempting to cross the bridge into a new and exciting culture. Making friends among the local population is another important tool.

From 2 to 3 pm I attended the Biol 106 class taught by Dr Florence Dunkel, and assisted by her TA Ky Phuong and me.

At 5 pm, was the meeting with Kalli. When we got through the review of the previous lessons, found out that Kalli is learning fast Bamana and she seems able to make significant progress before I leave the US.

From 6 to 8 pm, Florence, Ky Phuong and I met to finalize the malaria article. We covered the last few things which were setting the position of the village map; the literature review concordance with the citations in the text, the calculations of the neem leaves quantities necessary to treat the village pool during the dry season. We discussed about the feasibility of realizing this task as, it can require roughly 1 hour of 20 people pounding the necessary quantity of neem leaves (82 kg) for one treatment of the pool.

Tuesday, March 29, 2011.

At 9 am, I met with Kalli. This meeting was aiming to get through the review of the whole material we have been done so far in the Bamana language learning. I noticed that Kalli is making significant progress in learning Bamana.

At 10, I met with Kelly Kartluke for the second time whose project is about storytelling. She is illustrating the story of the hare and the hyena. We discussed how the design can be attractive to children. I translated the story into Bamanankan.

At 11 am, was the turn for Ben Weber, a student in PSPP 465, who to meet with. We went on continuing the conversation we had the week before, about culture chock in a foreign country. We talked about how people eat, what quality is food, and how to take a bath and use the restroom. Religious practices are not constraints to foreign people in Sanambele. At noon Bob drove me to Belgrade secondary school where I gave presentation on Mali to Denise's 7th grade students. There were 3 classes of around 20 students each. Many questions have been asked by the children, and I answered them.

At 5, Denis drove me to Mash Lab where I met with Florence about the very rough draft of the second article on the holistic malaria management process.

Wednesday, 30 March, 2011.

At 9, Ada and I gave a PowerPoint presentation to the International Studies class on Mali with focus on the cultural identity of Mali. The presentation encompassed Mali physical aspect, economy and culture/traditions. So, it took almost 50 minutes. On request of the student we will focus next Friday session on the diseases (especially malaria), marriage, traditions and politics in Mali.

At 10, I met with Michael Seeman, a student of PSPP 465. Michael's project is about discussing Amadou Hampaté Ba's response to a European who asked what they (Europeans) can learn from Africa: "A certain human dimension, which modern technological civilization is in the process of erasing". We discussed about the meaning of this assertion: human dimension and technological civilization erasing this. After a long conversation, we agree with the fact that during the children education process, bad behavior that is banned in a society shouldn't be taught to children; as there are so many bad sides and good sides of social technology.

At 12, I met with Kalli: New phrases, words and expressions were taught.

At 2 pm, I attended the Biol 106, Insects and Human Society.

Thursday, March 31, 2011.

At 9, was my meeting with Kalli. We continued our Bamanankan training with new words, expressions and phrases.

At 10, I met with Ben Weber. The discussions with Ben uncovered encompassed not only the cultural chock but also the water issue in relation with the diseases in the Sanambele village. The discussion examined even the healing aspect in the village from diseases.

At 2, I met with Alexandra for the second time. Alexandra's project is about getting a grant to train native inhabitants of Sanambele to work as health career in the village. This aims to have health workers who will in their turns teach other young people. Our conversation aimed to have a good choice of such people to respond the characteristics of being efficient, stable in the village and capable to transmit knowledge to other and respect all the agreements established. From 3 to 4, I attended the PSPP 465 class taught by Dr Florence and Dr Ada. The class received for an hour a visiting professor whose name is Dr Bonnie Sachetello-Sawyer of Hopa Mountain regarding the Native Nature Center concept. Dr Bonnie emphasized the idea human to acquire skill that develop individual quality of life and skills that fulfill community welfare.

Friday 1st, April 2011.

From 9 to 10, I gave a presentation in the International Studies class. The focus of this presentation was on diseases (especially malaria), marriage, traditions and political issues. The students ask questions about many domains such as traditions, economy, education, clean water availability and politics.

At 10, I met with Kalli for getting through new words, expressions and phrases in Bamana. From 12 to 4, was the lab session of the Biol 106: Insects and Human Society class. The session was about diagnostic laboratories in medical/veterinary entomology: microscope examination of insects and other arthropod vector and the microorganism they vector.

At 4:30, I met with Kyle Hirsh a student of PSPP 465, who is planning to implement booklets to illustrate the how to prevent malaria, to recognize the symptoms and how to use medicines

against it by villagers in Sanambele. This work stems from Pauline's survey conclusion because most of the surveyed requested a booklet that explains everything about malaria. Kyle is working on some designs that need to be improved and translated in the Bamana language. As my stay is almost over, Kyle will send me the electronic file for translation into Bamanankan.

People met

Name	Function	Address /Email/tel.	
Dr. Florence Dunkel	Associate Professor	Montana State University	
		ueyfd@montana.edu	
		406 451 9343	
Dr. Ada Giusti	Associate Professor	Montana State University	
		umlag@montana.edu	
Ky Phuong Luong	Graduate student		
John Woodenlegs	Elder Native American	Lame Deer, MT	
		Northern Cheyenne	
		Reservation	
Denise Dahl	Global studies, journalism	Belgrade Middle School.	
	teacher	Email:	
		anndenisedahl@gmail.com	
Dr. Bonnie Sachetello-	Professor and Director of	PO box 10892, Bozeman,	
Sawyer	Hopa Mountain, Inc.	MT 59717	
		406.586.2455	
		info@hopamountain.org	
Dr. Patricia	Professor, Global Studies	Montana State University	
Dr. Richard Littlebear	President	Lame Deer, MT	
	Chief Dull Knife College		
Bob Madsen	Biology Instructor	Lame Deer, MT	
	Chief Dull Knife College		
	Mentor for multiple trips		
	with Northern Cheyenne		
	student externs to Mali		

Visit-specific Appendices

Students in PSPP	Week 1	Week 2	Week 3	Week 4	Total
465R	Hours	Hours	Hours	Hours	Hours
Alexandra Davis	1.0			1.0	2.0
Ian Sly		2.0		1.0	3.0
Katie Olson		2.0	2.0		4.0
Heather Lee			1.5		1.5
Michael Seeman				1.5	1.5
Kyle Hirsh	0.5			1.0	1.5
Kathryn Gause	1.0				1.0
Ben Weber			1.0	4.0	5.0
Whitley Crow			1.5		1.5
Kelly Kartluke		0.5		1.0	1.5
Kalli Wedlake			4.0	5.0	9.0

Professional items given and received:

I received a Lenovo ThinkPad laptop computer that was necessary for me to get in order to compose documents, do electronic correspondence, and look up research. My present computer has to be returned to USAID when I return to Mali, as I am going off the USAID project and returning to my IER position.