University of Namibia Visit Summary

Visit Background
- Seattle visit by VC and PVC
  - iTech meeting
  - Visit to CSE
- Email correspondence with Dr. Mbale
- iTech discussions
  - Meeting with Ann Downer
  - Presentation to iTech staff in Seattle
  - Meetings with Lina Rothman

University context
- University of Namibia international efforts
- UW-iTtech-UNam collaboration
  - MPH Program
  - Department of Global Health
    - King Holmes visit in November
  - UW CSE
    - Center for Collaborative Technologies

Visit goals
- Explore potential for collaboration
  - Distance learning programs at UNam
  - Ties with computer science department
  - Broader university ties (science and engineering)
  - Projects with iTech
- Background assessment
  - University of Namibia
  - Distance learning programs
  - Educational Technology use
  - National infrastructure

Visit Program
- Visit scheduling
  - Sept 14 – 19
  - Arranged on short notice
  - Spring break at UNam
- Monday, September 14
  - iTech office, Dega Ali
  - U. Nam. Learning Center
    - Dr. Jameson Mbale, Kauna Mufeti, Johannes Nambili
  - DVC classroom with N. Campus
  - U. Nam. Department of Computer Science
  - Department of External Studies
    - Dr. Trudie Frindt

- Tuesday, September 15th
  - PVC Meeting
  - Dean of Science, Prof. Kiremire
  - Dean of Medicine, Dr. Haoses-Grases
  - Dean of Agriculture at Neudam
    - Discussion of DL experiences
- Wednesday, September 16th
  - DVC Discussion at iTech
  - Namibia Telecom
  - Travel to Oshakati
Visit Program III

- Thursday, September 17th
  - North Campus, Oshakati
  - College of Engineering, Ongwediva
  - College of Agriculture, Ogongo
- Friday
  - Travel by road to Windhoek
- Saturday, September 19th
  - ITech meeting
  - Lunch with PVC
- Sunday, September 20th
  - Dinner with Dega Ali
  - Depart to Seattle (via Johannesburg, Paris)

Initial Impressions

- University of Namibia
  - Good physical facilities
    - College of Engineering in Ongwediva – Wow!
  - Staffing challenges
  - Program growth
  - Teaching load
- National infrastructure
  - Optical fiber backbone
  - Telephone coverage
  - Improving international connections
  - Expensive

Distance learning

- Range of programs
  - Department of external studies
  - Main campus offerings
  - College of Agriculture (UNam, Neudam, Ogongo)
  - College of Engineering
  - Masters in Public Health
- Tremendous potential / need for DL
- Strategies
  - Synchronous
  - Asynchronous
  - Correspondence course

Challenges in DL

- Programs facing common difficulties
  - Networking not reliable
  - Challenge for instructors
  - Failure discourages use
  - Lack of on site technical support
  - Audio and video quality
  - Degradation of quality of local class

Digital Video Conferencing

- ISDN Polycom solution
- Range of hardware at sites
- Aging equipment
- Difficulty in replacement / spare parts
- Advantages of ISDN
  - Relatively low bandwidth
  - Integrated audio
  - Ease of deployment

Internet based video conferencing

- Key issue – network bandwidth
  - Fiber network available, but expensive
  - Will require work with Telecom/ISPs
- Bandwidth requirement for high quality VC: 1mb/s
- Advantages to internet based VC
  - Commodity PC hardware
**Center of Excellence in Multimedia Technologies**
- Strategic area for UNam
  - Meet core needs for distance learning
  - Fits very broadly with university needs
  - Train students in important area
  - Leadership in very significant area for Africa

**Components of DL Center**
- Innovate in technology for distance learning in the context of existing educational programs
  - Technologies
    - Synchronous distance courses
    - Classroom capture and replay
    - Educational materials preparation and distribution
    - Course management
  - Educational issues
    - Innovative pedagogy
    - Instructor training
    - Ensuring student engagement
    - Facilitation
    - Evaluation

**Next steps**
- Identify steps to build the collaboration between UW CSE and University of Namibia
  - Concrete ways of working together that will lead to long term collaboration
  - Action items

**Areas of collaboration**
- Capacity building
  - Look for US based instructors for visiting assignments. [Get some additional info from Unam.]
- Undergraduate student projects
  - Link U Nam, UW student groups for projects
    - Cell phone data collection (Open DataKit)
    - Technology for remote regions course

**Collaboration**
- Road map and DL evaluation
  - Work with Mbale on this
- Video Conferencing
  - Install ConferenceXP at U Nam
  - Network diagnostics
  - Test ConferenceXP with UW
  - UW Lecture for U Nam class
  - Test Conference XP between U Nam sites
- Larger project
  - Identify distance learning pilot project for synchronous and asynchronous technologies
- Project scope documents
- Funding
  - Identify funding options
  - Talk with Microsoft Namibia and Microsoft SA
Potential project

- U Nam Foundation highschool classes
  - Courses to prepare HS grads for UNam
  - Offer HS course between U Nam and learning centers using Conference XP
    - Live offerings via Conference XP
    - Record lessons and make available on DVD / Cell phones
    - Show at learning centers with facilitators
- Requirements
  - Collab with Foundation on arranging class (Math?)
  - ADSL lines to sites (2 Mb/s)
  - Tablet PC and some other equip for U Nam