Abstract
The following report evaluates a seminar provided by Walsh through the Bethesda Lutheran Church Tanzanian ministry organization on teaching strategies and conversational English provided at Evangelical Lutheran Church of Tanzania (ELCT) secondary schools in the Pare region of Tanzania, Africa. The staff development included training and support in the use of computer technology available at the schools, donated from the Evangelical Lutheran Church of Mecklenburg, Germany. The staff development was a follow-up to earlier training sessions provided at the schools in 2006 and 2008. Description of the seminar planning procedures, curriculum guide, subjects, methodology and project evaluation is presented, along with discussion about the use of technology with participants at the schools. Recommendations for future delivery and use of the project materials is also discussed. The seminar curriculum materials were designed to provide Tanzania teachers, with limited resources and teaching methodologies, to engage students more actively in learning and developing problem-solving skills. It is the intent the seminar experience will provide support for more organizations (e.g., student university internships and church-based sister congregations) as they come on board to support the African Tanzanian communities. The staff development was provided to teachers at secondary schools representing the Muslim, Maasai, and Christian faiths and cultures.
Providing Staff Development in Teaching and English Language at an Evangelical Lutheran Church of Tanzania

Introduction
A problem facing many teachers and schools in Tanzania is supporting teachers in developing their English teaching skills and adequate resources to support delivery of instruction. English teaching is generally delivered to students in English classes and through other course content subjects beginning at the secondary level (i.e., Form I - IV or after seven years of primary school) in Tanzania (see Figure 1). If teachers are providing course content instruction they usually are given a single textbook copy with chalk and chalkboard. Instruction is then provided to all students using the “chalk-talk” presentation method or involving students copying notes off the chalkboard written by the teacher from the textbook. This style of teaching was perpetuated by a teacher shortage in the country that resulted in the recruitment of teachers to the dioceses schools who only competed their secondary education without any formal teacher preparation or training. The teacher shortage was created in part by ELCT dioceses staff and on-site teacher anecdotal reports that these dioceses teachers seek higher paying government school positions, leave for university degree programs, and government policy resulting in the addition of secondary schools in each ward of the country. Some of these inexperienced teachers also have limited English skills, which is required in their teaching at this level.

Figure 1. The Tanzania Educational System and Exam Protocol

<table>
<thead>
<tr>
<th>Preparation (Kindergarten)</th>
<th>One year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard I – VII (Primary)</td>
<td>Seven years with exam after Standard 7</td>
</tr>
<tr>
<td>Form I – IV (Secondary)</td>
<td>Four years with exam after Form 4</td>
</tr>
<tr>
<td>Form V – VI (College)</td>
<td>Two years with exam after Form 6</td>
</tr>
<tr>
<td>University</td>
<td>Three to five years with diploma (Teaching diploma in three years)</td>
</tr>
</tbody>
</table>

*National Exams are given over a period of one week (Standard 7) to two weeks in length (Form 4 and 6).

**If you attend another university outside of Tanzania (e.g., U.S. or Europe) a national exam must be completed to enter industry or government positions (Foreign Credits, Inc. 2011).

Given these teaching circumstances, it was determined by the Southeast Iowa synod dioceses that a site based staff development experience was needed for teachers to develop their English skills and provide various methodologies and techniques to deliver information in a problem-solving format, which engages students thinking skills. A third seminar was provided by Walsh in 2011 using revised curriculum project materials used previously for staff development. Walsh provided this training experience 2006 and then again in 2008 with Kittelson. The staff development provided in 2008 and 2011 included teacher training in the use of computers located at the schools, donated through funding and ongoing technology support from Germany. See Walsh (2008) for additional background on previous seminars.

The following paper discusses the specific goals of the project, preparation, scheduling the ELCT schools, seminar subjects, development and use of curriculum guide, and delivery of the staff development. The use and evaluation of technology with teachers is discussed, including evaluation and recommendations for future teacher training experiences. Implementation of teaching strategies based on seminar participation is evaluated. The
recommendations along with some final thoughts provide some additional considerations for organizations (e.g., student university internships outside of Tanzania and church-based sister congregations) as they come on board to support the Tanzanian schools.

**Project Goal and Scheduling**
The primary goal of the project was to provide an 8-hour or longer seminar on teaching strategies and conversational English to secondary teachers at four ELCT school sites in the Pare Mountains of northern Tanzania during a four to six day period. The length of time spent at each school depended on time required for transporation between schools in the North and South Pare, and the presence of Sunday when classes were not scheduled. The seminar provided technology instruction during or in addition to the 8-hour period, depending of the scheduling arrangement at each school, computer usage, and electricity availability.

All five secondary Pare dioceses schools were provided the staff development experience. The seminar days were scheduled with the Pare dioceses in advance of arrival to Tanzania. The schedule was then modified prior to starting the seminar at the first school site in Mruma. The Pare dioceses supported the scheduling time period for the month of June, when schools are on holiday break. In 2006 and 2008 the seminar was scheduled in July, when the schools were in session with students.

**ELCT Schools and Subjects**
Five secondary Pare Diocese schools participated in the project and included travel to Muruma, Dindimo, Manka and Shighetini in Tanzania, Africa. Teachers at Usange Girl’s School traveled to nearby Shighetini by Toyota truck to attend the seminar and were provided a stipend of $2,000 TSH ($1.33 USD) per day for travel expenses.

**Figure 2. The Teacher’s Subject Content Area for Teaching (n = 41 subject area responses)**

<table>
<thead>
<tr>
<th>Humanities</th>
<th>History and Geography</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (n = 4)</td>
<td>History &amp; K-Swahili (n = 3)</td>
</tr>
<tr>
<td>English &amp; History (n = 2)</td>
<td>History (n = 2)</td>
</tr>
<tr>
<td>English &amp; Geography (n = 1)</td>
<td>History &amp; Geography (n = 1)</td>
</tr>
<tr>
<td>Composition (n = 1)</td>
<td>Geography (n = 1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Science</th>
<th>Mathematics and Computer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics (n = 5)</td>
<td>Mathematics (n = 3)</td>
</tr>
<tr>
<td>Biology (n = 4)</td>
<td>Mathematics &amp; Geography (n = 1)</td>
</tr>
<tr>
<td>Chemistry (n = 3)</td>
<td>Computer &amp; K-Swahili (n = 1)</td>
</tr>
<tr>
<td>Physics &amp; Chemistry (n = 1)</td>
<td>Computer (n = 1)</td>
</tr>
<tr>
<td>Chemistry &amp; Biology (n = 1)</td>
<td></td>
</tr>
<tr>
<td>Chemistry, Biology &amp; Geography (n = 1)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Civics</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civics &amp; Geography (n = 1)</td>
<td>Headmaster (n = 2)</td>
</tr>
<tr>
<td>Civics &amp; English (n = 1)</td>
<td>Agriculture - local farmer (n = 1)</td>
</tr>
</tbody>
</table>
Based on the Pare Dioceses scheduling arrangements, four to six days was spent at each secondary school. Dindimo included teachers who were also instructors at the teacher's college, which opened in March of 2006. Most participants in 2011 were content subject teachers at the schools, shown in Figure 2, and taught at the secondary school. Seminars in 2006 and 2008 were also primarily teachers, but included some participants who were not teachers in attendance. Shighitini had two subjects who were teacher education students at the University of Dar Salaam on holiday between semesters. Shighitini subjects also included a school secretary and matron who were primarily interested in practicing conversation and activities to improve English skills. In 2011 one participant at Shighatini was a local farmer raising crops around their home plots for subsistence and selling to local markets. In addition, headmasters at Manka and Didimo were able to attend part of the seminar sessions.

Most participants tended to be beginning male teachers who had completed form four (secondary school), form six (college) or had a diploma from the university. Only four participants in 2011 were women in attendance. Women in the seminar were also usually assigned the responsibility to prepare tea (chai) and a snack (e.g., peanuts or donut) during scheduled morning tea breaks.

Figure 3. Teacher’s Reported Number of Years Teaching (n = 26 total teachers reporting)

<table>
<thead>
<tr>
<th>Mean = 11 years</th>
<th>Mode = 4 years</th>
<th>Median = 4 years</th>
<th>Range = less than 1 year to 46 years</th>
</tr>
</thead>
</table>

Teaching Experience – Less Than Six Years (n=18) = 69%

Teachers at these schools tended to be inexperienced and lack educational training in teaching methodology for their respective content subjects as reflected in Figure 3. In 2008 only seven teachers reported five or more years of teaching experience. This was substantiated in 2011 based on the fact a new generation of teachers was found at the schools in the seminar, who were not present in 2008. However, while most teachers reported less than six years of teaching experience (18 out of 26) in 2011, there were a significant number of teachers reporting more than 18 years of teaching experience (n=8), with two staff members having taught for over 40 years. In 2008 only seven teachers reported five or more years of teaching experience. The novice level of subjects at the Pare secondary schools may be due to the teachers seeking employment in higher paying government schools, entering other higher paying occupations or leaving to pursue higher education. However, two teachers and the headmaster at Shighetini reported in 2008 pay to be comparable at the Pare and government schools, with monthly salaries starting at $120,000 TSH ($96 USD). One teacher at Mruma reported monthly pay at $200,000 TSH ($133 USD) in 2011. Subjects at the Pare schools included students representing the Muslim, Maasai, and Christian faiths or cultures.

Seminar Curriculum Development
Teachers were provided a copy of Strategies to Promote English Language Conversation in Tanzania, Africa (Walsh, 2012) and a pen for participation. In 2011 attendees were provided a 55-page guide of activities, a revised version from the previous seminars. Copies were also
given to each school headmaster. The components of the guide were revised after the 2006 seminar for activities involving cooperative learning, Creating Independence through Student-owned Strategies (CRISS), and the models of teaching. Discussion topics and activities to promote English conversation in the context of cooperative learning were also provided. Cooperative learning strategies were used grouping participants into pairs, triads or quads. Teachers practiced the techniques in the context of lesson activities. CRISS templates were provided in the guide as a methodology to help teachers and students organize information and develop higher level thinking skills. Templates included were organizers to compare and contrast information, question frame starters, problem-solution outline and lesson plan format. The models of teaching strategies using concept attainment and inductive learning involved participants in grouping information into categories or comparing and contrasting two concept ideas.

Further revisions to the guide were made after the 2006 and 2008 seminars provided at the schools. The revised booklet of materials was provided to the secondary teachers with activities added including think alouds (i.e., students thinking and asking questions to evaluate their understanding of their reading comprehension thinking) and anticipation guide questions where students predict answers to focus questions before and after reading text information. Other added strategies included graphic organizers (e.g., time lines, Venn diagrams, sequence maps, semantic and concept maps) for displaying information. These activities were added to support existing teaching practices in which most learning involves teacher’s writing sentences on the chalkboard taken from a teacher’s textbook source and students copying notes in their notebooks (i.e., “chalk-talk” teaching). It was the intent these strategies would provide techniques for teachers to improve their “chalk talk” teaching methods in the context of presenting information in a visual format, integrating concepts to help students make information connections to develop problem solving skills and improve retention of information. The latter skill is most important for teachers to maintain their teaching standing, since national tests are given to students used for promotion to the next level (standard or form) and reviewed by parents in deciding the quality of a school to determine attendance centers for their child to attend. The dioceses schools will receive (or lose) students from (to) Muslim or government schools based on overall test scores of their students.

Information along with research support for the use of cooperative learning (Bennett, Rolheiser-Bennett and Stevahn, 1991), CRISS (Santa, Havens and Valdes, 2004), and the models of teaching (Joyce and Showers, 1991) is provided in the literature. The revised activity guide Strategies to Promote English Language Conversation in Tanzania, Africa (Walsh, 2012) provides additional information and references on these teaching strategies, used with seminar teachers in 2011.

The seminar was conducted with the author of the curriculum materials originally in 2006 and then again in 2008 sharing the teaching assignment with a former teacher colleague Kittelson. Kittelson provided instruction at the North and South Pare respectively including Mruma and Manka, while Walsh taught on location at Shighetini and Dindimo. Teachers at Usange took the Dali Dali bus in 2008 to the seminar given at Shighetini. Instruction using computers was provided at the schools starting in 2008 based on the schedule of the teachers. Computer instruction was determined by the availability of usable computers, software, and electricity for use. The use of the curriculum materials and technology by Kittelson provided
additional insight and feedback for the seminar experience. Program revisions to curriculum use and technology provided support for Walsh to conduct the seminar for a third time in 2011.

**Seminar Instructional Plan and Use of Technology**

Participants at the schools were provided the seminar based on their information and activities provided in the student guide, *Strategies to Promote English Language Conversation in Tanzania, Africa*. A typical lesson sequence provided at the schools included:

- **Introduction Activity:** Completion of the class list and sharing information about the participating teacher. Option to complete the People Bingo “ice breaking” activity to find out more about teaching peers.
- **Present Seminar Goals:** 1) Provide a variety of teaching strategies and tools for classroom instruction; 2) Informally practice English speaking; and 3) Use and integrate technology with your teaching.
- **Confirming Schedule and Expectations:** Establish plans to meet at a scheduled time and establish expectations for participants to attend all seminar sessions. Share a lesson plan in the teacher’s content area using one or more strategies of learning, including technology.
- **Pose Introductory Question for Discussion:** How do you deliver and provide most of your teaching to students?
- **Graphic Organizers:** Complete anticipation guide and read about different types of graphic organizers for presenting information. Use cooperative pair-sharing discussing which guide would be useful for classroom use.
- **Maasai Reading:** In a jigsaw base group assign students to read two or three pages about the Maasai and use selective underlining to highlight important information and facts. Participants then select one activity to complete in their study groups based on their reading (e.g., problem-solution graphic, compare and contrast, or illustrator). When returning to base groups each person shares major ideas about the Maasai and their selected activity.
- **Maasai Inductive Data Set:** In cooperative pairs students group facts about the Maasai in categories to share with the class. Show other examples of inductive teaching in the guide. Discuss how inductive teaching could be used in the teacher’s classroom.
- **Concept Attainment Geography Lesson:** Share an example of a concept attainment lesson comparing two geographical regions (e.g., Iowa and Tanzania). Show other examples of concept attainment lesson in the guide. Discuss how concept attainment teaching could be used in the classroom as a teaching strategy.
- **Lesson Plan Development:** Discuss and share an example of a lesson plan for participants to develop for sharing in their content area using one or more teaching strategies.
- **Questionnaire:** Complete in the guide and use cooperative strategy corners for sharing response results.
• Discussion Topics: Select topic ideas based on survey results or ideas in the guide. Participants record ideas using a cooperative graffiti sharing strategy.
• Additional Activities Completed (one or more): Questioning strategies, Risk-Taker Test, Interview, What do I Take?, and/or Improve a Neighborhood or Village.

It was found as a best practice to establish seminar and computer times earlier than anticipated, i.e., start at 9.00 to meet at 9.30, since time parameters are less rigidly followed in the Tanzania culture compared with American and European practices. As part of establishing a daily meeting schedule an agreed upon time was discussed with the seminar attendees about use of technology. Based on feedback from the participants, technology was scheduled during and/or after seminar as an optional activity for participation. Scheduling changes and flexibility were required based on the number of usable computers and availability of electricity. Participants were also requested to not use mobile phones during the seminar and given a certificate verifying participation in the seminar at completion.

Seminar Preparation and Participation
A student activity guide, Strategies to Promote English Language Conversation in Tanzania, Africa, written by Walsh was prepared prior to arrival in Tanzania with funding provided by the Bethesda Lutheran Church Tanzanian ministry organization for producing 80 manuscript copies. The Pare Dioceses provided the number of potential participants ahead of time for planning purposes. Use of the guide at the schools only required access to a chalkboard. Additional items packed for the seminar included a small dictionary, packages of 8x11 lined and blank paper, pens, pencils and nametags. Laminated cards showing the names of teaching strategies and cooperative learning techniques were also prepared for posting.

Figure 4. Scheduled Seminar Sessions and Attendance Information

<table>
<thead>
<tr>
<th>School</th>
<th>Meeting Days</th>
<th>Approx. Time</th>
<th>Total Hrs.</th>
<th>Ave. Attend Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mruma</td>
<td>T – F (4)</td>
<td>11.30 – 1.30</td>
<td>8</td>
<td>73% + 2.5 hrs.*</td>
</tr>
<tr>
<td>Shaghatini/Usange</td>
<td>M – Th (4)</td>
<td>11.30 – 1.30</td>
<td>8</td>
<td>60% + 8.5 hrs.*</td>
</tr>
<tr>
<td>Manka</td>
<td>M – W (3)</td>
<td>9.00 – 10.30, 11.00 – 1.30</td>
<td>9</td>
<td>83% + 15 hrs.*</td>
</tr>
<tr>
<td>Dindimo</td>
<td>Th – Sat (3)</td>
<td>9.00 – 10.30, 11.30 – 1.00 (or later)</td>
<td>13</td>
<td>85% + 0 hrs*</td>
</tr>
</tbody>
</table>

*Additional hours visited after scheduled seminar for computer instruction

A seminar on teaching strategies to promote English conversation was provided in June 2011 at Mruma, Shighatinini, Manka, and Dindimo. Teachers in the nearby village of Usange traveled by Toyota truck to Shiginatini to attend the seminar and were given a travel stipend. Upon arrival at the schools an agreeable schedule meeting time was established with the
headmaster or associate academic leader and seminar participants (see Figure 4). The scheduled meeting times for seminar were typically scheduled around morning tea break time (around 10.30) up until lunch break scheduled at 1.30 or 2.00 in the afternoon. Use of technology was scheduled during these seminar times or as an optional “drop in session” after 2.00 in the afternoon until 4.00 or 5.00. The scheduling set up in 2011 was similar to meeting times provided in 2006 and 2008.

**Figure 5. Teaching Staff and Enrollment in Seminar Sessions at the Dioceses Schools**

<table>
<thead>
<tr>
<th>School Site</th>
<th>Form</th>
<th>Dioceses Staff No.</th>
<th>No. of Students</th>
<th>Seminar Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mruma</td>
<td>I – VI</td>
<td>16</td>
<td>324</td>
<td>8 + 1*</td>
</tr>
<tr>
<td>Shaghatini/Usange</td>
<td>I – IV</td>
<td>14</td>
<td>277</td>
<td>9 + 1*</td>
</tr>
<tr>
<td>Manka</td>
<td>I – IV</td>
<td>18</td>
<td>450</td>
<td>7</td>
</tr>
<tr>
<td>Dindimo</td>
<td>I – VI</td>
<td>12</td>
<td>280</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TOTAL 37 + 3</td>
</tr>
</tbody>
</table>

* Participants only attended one session

Most teachers attended the scheduled session times, including seven teachers traveling to Shigatini from Usange by Toyota truck. Sometimes teachers would be absent for all or part of a session day to tutor students, i.e., preparing for Form IV national exams, or supporting family needs, i.e., grandmother funeral. Three participants elected to discontinue or were only available for one session. The greater need to support students was found at Mruma, the first school site visited in early June. Figure 5 provides information about the number of seminar participants for each school.

In 2006 and 2008 the seminar was scheduled in July, when students were in session with teachers teaching, compared with June 2011 when teachers were on holiday break. Given the differences in meeting months resulted in scheduling of longer session periods into the afternoon in July, with sessions scheduled during student classes being covered by other students or not attended by seminar participants. The differences in meeting months would support the higher attendance found for the participants in June compared with offering the seminar in July (see Figure 6). However, the total number of teachers available in June was lower; this is due to staff visiting family or holiday breaks.

A majority of the participants, school teachers and support staff, at the schools attended all or most of the seminar sessions in 2006, 2008, and 2011. A majority of seminar participants attended most sessions in 2011, including additional computer meeting sessions (see Figure 6). Additional factors identified causing participants to be absent from a seminar class for one or more sessions was due to:

- Absent from work
- A long walking distance from home
- Holiday break
- Family events
- Matriculation
- Administrative duties (e.g., headmaster)
- Teaching conflict (i.e., class) or work need
- Decision to discontinue or join seminar after starting.

Teachers not available to attend the seminar could receive a copy of the seminar book left with the headmaster at each school.

**Figure 6. Seminar Attendance Comparisons at the Dioceses Schools (> 50%)**

<table>
<thead>
<tr>
<th>School Site</th>
<th>Seminar Attend 2006</th>
<th>Seminar Attend 2008</th>
<th>Seminar Attend 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mruma</td>
<td>9/13 (69%)</td>
<td>12/19 (63%)</td>
<td>6/9 (67%)</td>
</tr>
<tr>
<td>Shighatini/Usange</td>
<td>11/23 (48%)</td>
<td>10/15 (67%)</td>
<td>15/17 (88%)</td>
</tr>
<tr>
<td>Manka</td>
<td>5/6 (83%)</td>
<td>5/10 (50%)</td>
<td>7/7 (100%)</td>
</tr>
<tr>
<td>Dindimo</td>
<td>9/14 (64%)</td>
<td>12/13 (92%)</td>
<td>6/7 (86%)</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>34/56 (61%)</strong></td>
<td><strong>39/57 (68%)</strong></td>
<td><strong>34/40 (85%)</strong></td>
</tr>
</tbody>
</table>

**Use of Technology at the Schools**

Depending on computer availability, including electricity power, instruction in the use of technology was provided during the scheduled session meeting time, i.e., Mruma for two hours, or after seminar classes (e.g., 2.30 – 4.30 at Shighatini) for teachers to attend on a volunteer basis. The computers were provided at the dioceses schools by the Evangelical Lutheran Church of Mecklenburg, Germany and available for seminar use in 2006 with a Windows operating system. Annually, during the month of May, a German team visits the school sites to update and repair the desk top computers. In 2011 all the schools, except Dindimo, had their operating system changed to a networked Linux System. Dindimo was not updated, left with three operating Windows computers, due to a lack of newly acquired computer lab space being use temporarly as a classroom. Given the change to a Linux networked operating system, usage at the schools varied because staff training was not provided for use of the system, including knowledge of the newly installed software programs. Use also varied within the schools due to assigning a full or part time computer teacher who was knowledgeable in the Linux system and provided opportunity for use with teachers and students. Given the differences in computer support at the schools, along with other identified issues, resulted in varying availability and access to technology for teachers and students. The status of the computer lab therefore effected seminar use with teachers.

The lab at Shighatini was brought up to operating conditions with the support of a part-time teacher providing password and Linux system network information. After entering the system it was found that the network provided the following programs and files after login instructions were completed. Charts were posted in the lab showing the major features of the
German Linux system (see Figure 7). Student cards were also made for assigning teachers or students to a username before logging in to the computer.

**Figure 7. Linux Computer System Posted Features at the Shighatini Lab**

**Linux Network Computer System**  
Login (type lower case letters) Procedures:  
Teacher Computer Terminal  
1. Username – teacher  
2. Password – linux  
Student Computer Terminals  
1. Select tsuser# (number) assigned by the teacher  
2. Password – edubuntu  

**Steps to the Library e-Books to Read in the Linux Folder**  
1. Double click with the mouse the 4allfolder  
2. Inside the folder window select and double click the icon Library II  
3. Select a book folder name and double click to see the e-Book cover pages  
4. Double click the book to read.  

**Steps to Linux Tool and Simulation Program Access**  
1. With the mouse select and pull-down the Applications window  
2. Select an icon category Accessories, Education, Graphics, Office, or Science  
3. Drag the mouse to the right side of the icon and select a program.  

**Linux Tool and Simulation Program Suggestions**  
<table>
<thead>
<tr>
<th>Icon Category Name</th>
<th>Program Names / Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessories</td>
<td>Calculator, Text Editor</td>
</tr>
<tr>
<td>Education</td>
<td>KBrunch – Fractions, KGeography – Africa, Kig – Geometry, KPercentage – Math % Problems, TuxPaint - Draw</td>
</tr>
<tr>
<td>Graphics</td>
<td>OpenOffice.orgDraw – Drawing tool</td>
</tr>
<tr>
<td>Science</td>
<td>Kalzium – Chemistry</td>
</tr>
</tbody>
</table>

**Linux File Saving and Logout Procedures**  
SAVE to Teacher’s Home or tsaser# Home folder  
LOGOUT – Select System in the top menu bar and pull down logout tsuser#  

**Web Browser on the Linux Local Server**  
Access – In the menu bar pull down Applications, select Web Browser, and drag over to KeWeasel. When the window opens select icon:  
- Wikipedia  
- The World Factbook  
- Atlas of World History  
- File Folders: Select literature (e.g., William Shakespeare or Ernest Hemmingway) or factbook icon (e.g., Philip’s Atlas of World History) to pdf download the selected links.
At Mruma, having a full time computer teacher, the Linux system was found to be fully functioning with an ink and lazerjet printer. The teacher at Mruma was also providing computer instruction to students at the school. Usange teachers reported their lab was functioning and being used, with Mruma (and potentially Dindimo) needing support to provide technology using the Linux platform. For the seminar participants most teachers were interested in gaining skills in the use of word processing, spreadsheets, drawing programs, and accessing to network resources including e-Books and networked contained Wikipedia (internet was not available at the schools). Computer use in 2008 using the Windows systems with Microsoft Office found similar use preferences focused on individualized session activities including use of the Paint program, Word processing using Word Pad, OpenOffice spreadsheet, file management skills, and basic skills using the mouse and keyboard. Technology skills varied among teachers with the need for basic instruction in the use of the computer keyboarding, to instruction on using the Paint program and entering formulas to create a usable spreadsheet program for listing student grades and scores. Some teachers preferred selecting the Onscreen Keyboard window to mouse click the keys on the screen rather than using the keyboard, due to limited keyboarding (typing) skills. Computer resources and teaching support materials were not available at the schools, based on anecdotal information provided by assigned technology teachers.

Seminar Discussion Topics and Participants Feedback
The “Survey About Tanzania” activity in Strategies to Promote English Language Conversation in Tanzania, Africa was completed at some school sites in 2011 and was found to be engaging for seminar participants. Teachers were asked questions with responses typically shared and discussed in groups (see Figure 8). The ideas are shown and grouped into topic categories.

Figure 8. Seminar Participant Ideas for the “Survey About Tanzania”

Question 1: What are the best things about living in Tanzania?
Good climate and moderate temperatures
Security and peace
Geographical features support agriculture
Free from civil wars and political unrest
Kindness of the people and tendencies of lifestyle

Question 2: What are the major problems and challenges that need to be addressed and solved in your community?
Government corruption
Lack of employment of the youth
Lacking information and communication
Lack of social services
English language problems in education
Computer knowledge
Health problems

Question 3: What ideas and issues would you like to discuss in class?
Health
Discuss current health practices in Tanzania.
Discuss human diseases like HIV aids.
What kind of drug abuse exists in Tanzania today?
Economics
How can conditions be improved to reduce poverty in Tanzania?
What can be done to attract business and corporations to develop in Tanzania?
How can transportation and internet “logistics” be developed in Tanzania?
Discuss the free market effects from globalization.
Discuss the influence of Europe on the Tanzanian economy.

Social Issues
Have you or anyone you know experienced humiliation or segregation?
How can the basic needs of the Tanzanian people be met?
How can the older and disabled people be taken care of in Tanzania?

Environment
How can the natural resources of Tanzania be preserved?
How can we best preserve forests and create more parks or reserves?
Discuss environment issues like global warming.

Religion and Values
What are the effects of western culture and lifestyles on Tanzanian culture?
Discuss the threat of terrorism in the world.
Discuss religion and conflict in the Middle East, and in other areas of the world.
How can we educate women about early marriage?
What are the effects of polygamy marriages?

Education
How can education reduce poverty?
Discuss general issues in education and how it should be provided.
Discuss civil service education and the role of social services.
How can we improve Tanzanian education?

Government
Discuss corruption in government and Tanzania politics.
How can we prevent and avoid government corruption in Tanzania?

Technology
Discuss the types of software used with the computer.
What are some software programs you would like to use?

The responses provide insight into Tanzanian attitudes about the culture and life in Northern Pare. The third question on the survey requested ideas and issues for discussion in class. The discussion ideas were then restated as questions for use in a cooperative graffiti activity for seminar class.

Seminar Evaluation and Implementation of Strategies
An evaluation was completed by seminar participants at the completion of the staff development in 2006 and 2008. A five-point scale was used rating 1-never, 2-rarely, 3-sometimes, 4-usually and 5-always for each item.

Figure 9. Teacher Evaluation for the 2006 Seminar at Five Dioceses Schools

<table>
<thead>
<tr>
<th>Item</th>
<th>Teaching Dimension</th>
<th>Mean Score</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Clear instruction</td>
<td>4.38</td>
<td>(4.2-4.6)</td>
</tr>
<tr>
<td>2.</td>
<td>Adequate practice opportunity</td>
<td>3.69</td>
<td>(3.1-4.4)</td>
</tr>
<tr>
<td>3.</td>
<td>Useful cooperative learning strategies</td>
<td>4.19</td>
<td>(4.0-4.4)</td>
</tr>
</tbody>
</table>
4. Plan to use cooperative learning 4.19 (3.8-4.4)
5. Plan to use seed maker and question strategies 4.05 (3.3-4.6)
6. Useful discussion topics 4.44 (4.2-4.6)
7. Helpful lesson examples and models 4.53 (4.2-5.0)
8. Templates are useful 4.07 (3.8-4.6)
9. Able to deliver strategies with existing resources 4.21 (4.0-4.8)
10. Instructor provided positive learning environment 4.45 (4.2-4.8)

In Figure 9 the total average scores and range is shown for the five schools, based on responses from 42 teachers provided the staff development in 2006. Generally, the seminar was positively received by participants and included favorable comments and suggestions. High frequency responses given on the open-ended comments and suggestion section of the evaluation form were:

- Useful strategies (resource) helpful in teaching, promoting education, knowledge and information (n=16).
- Introduce program to include other schools in Tanzania and/or primary schools (n=7).
- Provide more time in the seminar (n=6).
- Clear understanding of presentation, techniques and strategies (n=5).

Additional suggestions in 2006 included giving teacher certificates upon completion, conducting the seminar in specific subject areas, providing time to practice strategies in the classroom, and developing more strategies or resources to promote English conversation. One participant reported difficultly understanding the English accent of the seminar facilitator. This may reflect the fact that the teachers know Kiswahili and Pare as their first and second language, followed by English. Another teacher suggested providing the seminar in another language to improve understanding, suggesting Kiswahili, French or German. The evaluation forms were given to the headmaster with average scores calculated for each item.

**Figure 10. Teacher Evaluation for the 2008 Seminar at Five Dioceses Schools**

<table>
<thead>
<tr>
<th>Item</th>
<th>Teaching Dimension</th>
<th>Mean Score</th>
<th>Kittelson</th>
<th>Walsh</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Clear instruction</td>
<td>4.5</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Adequate practice opportunity</td>
<td>4.3</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Useful cooperative learning strategies</td>
<td>5.0</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Plan to use cooperative learning</td>
<td>3.9</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Plan to use seed maker and question strategies</td>
<td>3.7</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Useful discussion topics</td>
<td>3.1</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Helpful lesson examples and models</td>
<td>4.1</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Templates are useful</td>
<td>4.3</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Able to deliver strategies with existing resources</td>
<td>3.9</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Instructor provided positive learning environment</td>
<td>4.4</td>
<td>3.6</td>
<td></td>
</tr>
</tbody>
</table>
At the end of the seminar participants completed a similar evaluation form in 2008. In Figure 10 the total average scores and range is shown for the five schools, based on responses from teachers provided the staff development in 2008. Generally, the seminar was positively received by participants and included favorable comments and suggestions. Responses given on the open-ended comments and suggestion section of the evaluation form are grouped and summarized as follows:

- Computer session was interesting (and used for the first time) gaining how to use the starting and operations (7 responses).
- Conduct seminar annually or with longer sessions to learn more and/or practice strategies in the class (8 responses).
- Staff development promotes and develops English conversation through different strategies we learned about (4 responses).
- Need more time for the computer to learn about the internet (1 response).
- Instructor tried his level best (1 response).
- Suggest a special computer course to learn uses (1 response).
- Do not conduct seminar during class time (1 response).
- Provide seminar at central location or school (1 response).
- Upgraded computer knowledge in use of Open Office and PowerPoint (1 response).

A specific comment reported by a participant was:
These teaching strategies are in fact very good, but seem much better if they are used in a class with few numbers of students, but in Tanzania many schools have got a big number of students. A class can sometimes have up to 60 students.

An evaluation form was given to the headmaster with average and mode scores calculated for each item at their school.

**Figure 11. Teacher Evaluation of Strategies for Implementation Reported in 2011 (n=29 completed evaluations)**

<table>
<thead>
<tr>
<th>1 (Never)</th>
<th>2 (Rarely)</th>
<th>3 (Sometimes)</th>
<th>4 (Usually)</th>
<th>5 (Always)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I plan to use “think alouds” and anticipation guides for questioning students’ comprehension about reading information. (mode = 3, range = 2 - 5)</td>
<td></td>
<td></td>
<td></td>
<td>3.79</td>
</tr>
<tr>
<td>2. Graphic organizers (e.g., time lines, sequence maps, cycles, and Venn diagrams) will be drawn to show information on the board. (mode = 3, range = 1 - 5)</td>
<td></td>
<td></td>
<td></td>
<td>2.79</td>
</tr>
<tr>
<td>3. I will use semantic feature analysis (matrices) in comparing information and listing features. (mode = 3, range = 2 - 5)</td>
<td></td>
<td></td>
<td></td>
<td>3.67</td>
</tr>
<tr>
<td>4. Concept maps, semantic maps, and hierarchical arrays will be shown to provide information about the subject I teach. (mode = 5, range = 2 - 5)</td>
<td></td>
<td></td>
<td></td>
<td>3.75</td>
</tr>
<tr>
<td>5. I plan to use a concept attainment lesson with my students when teaching. (mode = 5, range = 1 - 5)</td>
<td></td>
<td></td>
<td></td>
<td>4.17</td>
</tr>
<tr>
<td>6. I plan to use an inductive lesson with my students when teaching. (mode = 4, range = 1 - 5)</td>
<td></td>
<td></td>
<td></td>
<td>3.93</td>
</tr>
</tbody>
</table>
7. I plan to use computer technology with students when I teach. (mode = 3, range = 1 - 5) 
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.14</td>
</tr>
</tbody>
</table>

In 2011 an evaluation form was given with a focus on implementation and potential use of the strategies in the teacher’s classroom. In Figure 11 (above) the total average scores are shown for the five schools, based on responses from 29 teachers, with a range of six to ten teachers responding from each attendance site. A five-point scale was rating 1-never, 2-rarely, 3-sometimes, 4-usually and 5-always was used for each item based on anticipated use of the strategy. For item seven, when asked which program or tool teachers plan to use with their students, most stated a word processing program (n=7) including use of Microsoft or OpenOffice including PowerPoint use (n=3). Six participants expressed interest in using e-Books for student reference or science class. Two teachers reported they will not use technology with students because they have not learned about computers or have an insufficient number for a classroom. For item eight teachers were directed to rank which cooperative learning strategies they plan to use in their classroom. Teachers responded with numerical rankings or use of X’s to indicate preferences. Based on the evaluation the following strategies were identified from high to low based on the number of responses:

- Learning Together (n=21)
- Think Pair-Share or Say and Switch (n=16)
- Corners (n=15)
- Jigsaw (n=15)
- Graffitti (n=10)
- Use All (n=5)
- Use None (n=1)

When asked to rate, on a five point scale, the quality and value of the staff development training seminar in helping to improve my teaching participant responses (n=29) ranged from three to five with an average rating of 4.55. The range of mean scores between the schools were from 4.4 to 4.8. When participants were asked to identify activities about the seminar or record other comments the following positive responses were most frequently given:

- Use or learn techniques and demonstration of the different strategies, methodologies or tools (e.g., graphic organizers and models of teaching) (14 responses)
- Cooperative learning strategies (e.g., round robin, jig-saw and graffitti) (7 responses).
- Facilitator presentation and members participated to share ideas (e.g., lesson plan) (7 responses)
- Knowledge and use of computer applications (6 responses)
- Discussions with the teachers (2 responses).

One participant identified specific activities like the risk-taker test, models of teaching, graphic organizers, learning guides, and the Maasai reading as their favorite part of the seminar training. Suggestions provided by attendees included the following comments:

- Offer the seminar each year (2 responses)
- Provide rewards or monetary support for the seminar (2 responses)
Use of the methods with larger classes (1 response)

On one evaluation the certificate was identified as a positive component of the seminar, with the group at Manka insisting on having their pictures taken with the certificates in their hands. Another class at Dindimo were taking pictures of the facilitator handing them the certificate, which provides further support for the use of this document. Regarding having the seminar in June one idea expressed was as follows:

However, in the future conduct the seminar when the school is in session in the real classes in the presence of the facilitator.

From each evaluation form the major response ideas were recorded from each participant (n=29).

Recommendations

Curriculum Guide Use (Walsh 2012) were effective in reaching the desired goals, along with providing flexibility for use for participants based on variation in attendance and scheduling, Strategies to Promote English Language Conversation in Tanzania, Africa will need additional revisions prior to its reuse. In 2006 and 2008 recommendation for revisions to the manuscript were made with changes prior to the seminar given in 2011.

In 2006 discussion topics of interest reported by participants based on completion of the “Survey About Tanzania” were Tanzania's health issues, i.e. HIV and malaria, economic development, education issues, subject content, government politics, improving infrastructure, impact of poverty and cultural influences. Similar interest in these topics were substantiated from the survey given in 2011. Topics were discussed using using cooperative learning strategies including graffiti. These topics of discussion should continue to be included in future seminar experiences.

In 2008 Kittelson, provided suggestions to improve program implementation and delivery. Recommended changes in lesson activities made prior to use in 2011 included improvements in the “People Bingo” activity, adding a lesson plan for learning strategies (i.e., graphic organizers, think alouds, and anticipation guide), including a technology lesson plan, shortening the Maasai reading, and improvement to the “Improve a Town or Village” exercise. The lesson plans were added for use in 2011, and should be included in future seminar delivery instructional plans including the use of technology.

Interest in the content and issues about the Maasai reading have been found to be positive in the seminar, shown by participant engagement, discussions, and documentation of written responses in graffiti groups. Recommendations made in 2008 to shorten the Maasai reading resulted in assigning teachers two pages to read using the jigsaw cooperative learning sharing technique for 2011. The recommended vocabulary page is still needed, particularly for Maasai terms identified in the article.

The models of teaching strategies with examples have been found useful for teachers in 2006 and 2008. Other subject examples were added as recommended including a concept attainment lesson on world geography comparing and contrasting Tanzanian and Iowa (U.S.) cultures. Evaluation of other concept attainment examples should be considered in future manuscript revisions.

Walsh and Kittelson also discussed the need to use the curriculum text in a flexible manner focusing on either developing English conversation skills of the participants or to provide greater emphasis on learning teaching strategies. This was evident in the differences
found among the teachers at the schools in their ability to speak English as a third language, followed by Swahili and Pare. Since the guide was written to provide this dual purpose, and given the amount of activities available for use during this short seminar time period, providing instruction based on the needs of the teachers was easy to provide. The use of English was generally found to be strong when revising the schools in 2011.

Further revisions have been made to Strategies to Promote English Language Conversation in Tanzania, Africa following the 2011 seminar experience.

Technology use involving computer lab access was not available in 2006. At this time it was recommended when the window machines with tool software programs (i.e., word processing, spreadsheet and graphics), are made available consideration on how to integrate the use of technology with the seminar curriculum should be explored. In 2008 inroads to meeting this recommendation were made with the use of word processing to type lesson plans or template activities by teachers. Teachers were also using spreadsheet and graphic programs. In 2011 use of these tool programs continued, using open courseware programs, i.e., OpenOffice and reference e-Book materials. Given an increase in technology use by teachers, computer use is still limited. Due to these conditions, the following recommendations are suggested:

- Consistent reliable electricity availability made possible with a back-up power system (e.g., generator)
- Availability of a traveling technician to make repairs and trouble-shoot on a regular basis
- Ink cartridges with at least one workable printer for students and staff
- Staff development on the available software tool programs including reference e-Book sources
- Training in the Linux operating system including file management (e.g., saving to a user folder)
- Internet access using cell tower technology.

The Linux system appears to be a viable network system for the school. However, one or two full or part time staff members should be assigned to facilitate use of the lab with teachers and students. Posting of procedural posters (see Figure 8), like those at Shighatini will provide support in use of the Linux system for access to programs. Having two trained teachers knowledgeable in the use of the Linux system would be ideal in event one staff member leaves.

Conclusions
Based on the evaluation and feedback from seminar participants future staff development plans over a longer time period in English strategies and technology should be provided to the secondary dioceses schools, or at a training center like Mwangaza in Tanzania. Since all five secondary schools have computer labs, consideration on how to integrate the use of technology with the seminar curriculum should be strengthened using the available open courseware tool programs and e-Books. Kittelson successfully integrated computer spreadsheet use with a survey activity provided to teachers at Manka. If the schools can access the internet via cell tower technology in the future, additional opportunities to integrate the use of the guide with technology would be possible.

Given the current educational training level, turnover rates of staff at the dioceses schools, and the prevalent use of teaching using “chalk talk” lecture methods teachers will need
to be provided staff development opportunities in order to collect a “toolbox” of teaching strategies for use with their students.

Other reasons for providing the seminar is to develop the English proficiency of the teachers and provide teaching strategies to move teachers beyond “chalk talk” note taking delivery methods of instruction. To improve seminar attendance considerations regarding scheduling (i.e., before students arrive or during) and meeting times will need to be based on preferences suggested by the teachers. Evaluation of whether to provide the seminar in June during holiday break or July, when teachers are instructing students will need to be considered. Incentives providing a stipend to teachers could be provided to improve attendance. Staff members required to travel to another school site should also be provided a bonus stipend to cover bus or Dali Dali transport.

If the five secondary schools are revisited they should allocate one instructor trainer per school or pairs of schools. This would permit more time for the teacher facilitator to remain at a location to develop stronger community and cultural ties with the people, understanding of the unique dynamics of the school, provide more scheduling flexibility including classroom visits using the strategies, and access for teachers to attend the seminar. The instructor could provide computer technology support and work with teachers to implement strategies with their students, if the seminar was offered during school term. A pastor at Shighetini suggested providing another future seminar for people in the community to introduce or improve English conversation. Future seminars using the guide could be provided to other secondary or primary schools in Tanzania, or at a training center like Mwangaza in Tanzania.

REFERENCES


