

Vocational Training Team (VTT) Rotary Grant on Teaching Strategies with Conversational English at Secondary Schools in Tanzania, Africa

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Abstract

The project report describes a staff-development training program on effective teaching methodologies and English conversation for government schools in Tanzania. Given this need a training program was provided and funded from Rotary Foundation and the Rotary Club of Ames District 6000 as a Vocational Training Team (VTT) grant. The objectives of the program were to provide the training program on teaching strategies to staff including improving use of English through dialogue and using donated Amazon Readers with solar panels. Discussion items of the article include development and authorization of the VTT grant with support from the Rotary Club of Moshi-Mwanga, located in the Mwanga District of Tanzania. The authors, serving as the training team, provide a description of the schools selected for the project along with a report about the implementation of the program at their campus site. Evaluation of the training program using an interest survey, pre- and post-implementation survey, and post evaluation of the schools is discussed. Information about the primary goal of the project to train two faculty or staff as instructional coaches to sustain use of teaching methodologies with secondary school staff members is presented. Access to the development of *Strategies to Promote English Language Conversation in Tanzania, Africa* (Walsh, 2016) is provided with reference of the curriculum used for previous projects in Tanzania and published with the AJOTE (Walsh, 2012 and Walsh, 2015).

Keywords: Vocational training, Rotary Foundation, use of English, teacher trainers, Tanzania

Introduction

An ongoing problem facing many teachers and secondary education in Tanzania is a teacher shortage in the country created with the opening of government public “community” secondary schools and a required national testing scheme. The teacher shortage has resulted in higher staff turnover in many of the schools and the recruitment of teachers with limited post-secondary education (i.e., a graduation certificate) and formal teacher preparation or training provided with a university teaching diploma. This turnover has been perpetuated by lower student achievement test scores, which are posted online for parent viewing (i.e., on mobile phones) along with the school’s ranking. The shift away from some schools has reduced the amount of tuition money revenue and stifled the ability to pay teachers on a timely basis. This has been compounded with limited delivery of English instruction required at the secondary level. This is a challenge for teaching staff since they speak the national language of Swahili along with their local language (e.g., Pare) and possibly an additional family tribal language. Therefore, teachers may not have the proficiency or confidence to teach their subject entirely in the English language. These issues have resulted in a high number of younger teaching staff at many of the schools with limited curriculum resources and books. Attendance data gathered when conducting the program in the Pare Mountain dioceses schools (Walsh, 2015) found that 69% of the teachers had less than four years of teaching experience and teacher preparation students (i.e., student teachers) were recruited to support the staff shortage at the schools.

Given this need a VTT Rotary grant staff development on effective teaching methodologies and English conversation was provided by a team of four trainers to teachers at five secondary schools, in the Mwanza District, Kilimanjaro region of Tanzania. The grant was a partnership between the host Rotary Club of Moshi-Mwanza, District 9211 in Tanzania, East Africa and the international Rotary Club of Ames District 6000. The host Rotary club selected the schools receiving the training program, with trainer assignments made by the project team leader (Walsh). All schools are government schools except Kiriki, owned by the Muslim Order of Usungu. The VTT project also included a partnership with PowerFilm and Kindle, who provided portable solar panels for electrical power to charge the Kindle Reader e-book touch pads given to each school.

Project Goals and Objectives

The primary goal of the project was to train two faculty or staff at each school site, with an alternative trainer, to learn the program teaching strategies so they could conduct and continue the training in the future. The goal provided sustainability for the training program and included support resources for teacher trainers, with a monetary stipend for their teaching and classroom coaching provided to staff. The resources would include teacher textbooks and print material to support student performance and achievement. Schools were also provided a print copy of *The ESL Student Manual* and *The ESL Resource Book*. These ESL texts were compiled lesson activities providing practice on common English experiences and daily living word lists.

There were three learning skill objectives for the program. One objective was to provide effective teaching strategies on questioning techniques, graphic organizers, cooperative learning,

models of teaching and models based on the CRISS (Creating Independence through Student-owned Strategies). A second objective was to improve the teacher's English through discussion and dialogue activities. A third objective was to provide access to technology and e-books (i.e., English and Swahili) through the use of donated Amazon Kindle Fire Readers, including donated solar panels for charging, at each school. If available, computer training and support would be provided.

VTT Grant Development and Authorization

Given the circumstances of a younger inexperienced Tanzania secondary teaching staff, with limited educational training, seeking funding and approval of a Rotary grant to provide an English taught seminar on educational strategies and methodologies was needed. Initial efforts in writing the grant began in July of 2014 with support and revision efforts provided from the VTT team, Gerald Klonglan and Mary Wells, members of the Rotary Club of Ames Global Grant Committee.

Stakeholders in Tanzania supported the project to address the problems in supporting teachers' delivery of instruction to improve student achievement and provide educational resources in the secondary schools. Alimiya Osman, Tanzania country grant officer reviewed the grant providing clarification for the proposal with suggestions to improve sustainability of the project. Osman then recommended approval to Tanzania grant officer Stephen Mwanje for grant authorization. Authorization and support of the project was then given, after completion of the Rotary online application, to the Rotary Club of Moshi-Mwanga, the Rotary District 6000 committee members, and the Rotary international review team. The grant was the first VTT project approved for District 6000, based on this thorough review by the Rotary Foundation. The VTT was funded \$15,000 from District 6000 District Designated Funds (DDF) and \$15,000 from the Rotary Foundation World Fund.

Essential support to implement the grant was provided by the Rotary Club of Moshi-Mwanga host VTT members who reviewed elements of the draft (e.g., line budget items) and traveled to the selected five schools in the Mwanga district for on-site training approval based on a contract of expectations signed by the school headmaster or headmistress. They also traveled to the training sites to receive signatures from school officials, headmasters, and selected trainers to support sustainability of the project. The approval forms were critical to the project since the primary goal of the project was to train two faculty or staff at each school site, with an alternative trainer, to learn the program teaching strategies so they could conduct and continue the training in the future. Additional logistical efforts provided by the Rotary Club of Moshi-Mwanga included frequent computer communication and scanning of information about school demographics with map identification of campus sites and completed forms.

Description of Schools Selected for the Service Project

Information about each of the school sites was gathered by each trainer and recorded in their journal notes. Headmistresses and headmasters at each school, with support from staff members, provided trainers with the background about the secondary school. The trainers describe their

school based on their assignments to Mandaka / Kiriki (Walsh), Ngujini (Nelson), Kisangara (Hanson), and Kirya (Borer).

Mandaka Secondary School

Mandaka is a government school offering free secondary education to Tanzania students who successfully completed Standard 1-7 i.e., their primary education. The headmistress, Mwanaima Mnzava, is the administrator for the Form 1-4 School. Mandaka is a fully funded government school, with a student enrollment of 470 students serving 214 boys and 256 girls, providing student tuition, uniform and book expenses paid for by the government. Most students are “day schoolers” who walk to the campus from Mwanga, some traveling 13 km from Sangara (seven km east of Mwanga). A few students, whose parents can afford the expense, have bicycles. The school day begins with students doing cleaning chores and then meeting as a large group for announcements and directions.

Thirty-three staff members teach at the school and are evaluated twice a year using an eight-page form report. Teachers’ pay is increased based on student performance on national exams. Pay only decreases if a teacher is absent from work for 3-5 days, unless a medical excuse is provided.

Basic subjects are taught at Mandaka including English, Swahili, mathematics, physics, geography, health, biology, chemistry, civics, environmental education, and history. School remedial studies, debate, and sports activities are available for students. Class sizes typically range from 20-70 students at the school.

The school is currently constructing a girls’ dormitory for at risk girls who may potentially drop out due to early pregnancy. Parents at the school have donated 30,000 TSH (\$15 USD) with half of the funding achieved for the project. The school receives some money from a cattle pin created for stray animals that wander onto the campus. Farmers have to pay the school to get their animals back. Amos Makala, the regional commissioner of government schools for the Kilimanjaro region, visits the construction site for the dormitory. The students’ preparation of the road the day before and painting the trim rock white provides an attractive entrance for Makala’s officials, press, and police escort arriving at the school. Students line the street for the greeting and exiting of officials. Mwanaima presents a speech about the dormitory to the VIP people, school staff, students, and community leaders in front of the press camera during Makala’s visit.

Ngujini Secondary School

Ngujini Secondary is a government secondary school for Forms 1-4. Selemani Mbagi is the school’s headmaster and math teacher. In total, there are 14 teachers and two school cooks. Total enrollment is 215, with 109 boys and 106 girls. Classes taught at the school include English, math, Kiswahili, geography, chemistry, physics, history, biology, and civics. There is one computer and no Internet. The school has a small library from which students check out textbooks to study.

Each school day begins at 7:00. Students clean the campus and tend to the garden until 7:30, when they assemble. During assembly, selected individuals present to the student body a topic they researched. Announcements are made before students are dismissed to their classrooms. Punishments for being late or failing to wear the school uniform are handled at this time. Classes begin at 8:00. Four morning classes are followed by a short break, then five more classes until 14:30. Lunch is provided at 14:30 before students attend after school activities (i.e. debate, music, prayer, sports) or go home.

Kisangara Secondary School

Kisangara Secondary School is a government school that offers “free” education to students who have completed Standard 7 and wish to continue on to Form 1-4. Students at Kisangara, like students from some government-funded schools, do not have to pay a school fee but do have to provide their own uniforms, school supplies, and lunch money. Kisangara has a total enrollment of 611 students with 288 being males and 323 females. Students travel from the village and surrounding rural areas to attend Kisangara. Many are from the low lands while others live up to eight kilometers away in the mountains. Most of the students walk to school and very few have bicycles. While the Rotary project was in session, students had to arrive to school at 7:00 to do the daily chores of cleaning the schoolyard and the classrooms. They then had a morning assembly and were dismissed to go to class. Classes and after school activities ended at 16:30 when students would gather for an end of the day assembly then dismissed to go home.

There are 32 teachers that teach various subjects at the school with 29/32 teachers consistently participating in the VTT program. Many of the teachers were fairly new to the field, with eight months of experience. The rest of the teachers had from at least three years of experience up to 11 years. Most of the teachers live in apartments or in homes with their families within walking distance of campus. The remaining teachers travel slightly farther away from neighboring villages. The headmistress of the school Madam Severina Molloga has been at Kisangara for two years and lives next to the school.

All teachers are required by the government to do lesson plans and record notes on the lesson. Madam Molloga meets regularly with the head of the different teaching departments and with the teachers to do evaluations and provide feedback to teachers. Basic subjects are taught at the school including biology, history, English, civics, chemistry, physics, math, Kiswahili, and geography. The class sizes for these different subject areas ranged from 30-80 per classroom.

Kisangara, like many other schools, has very few science and math teachers. For example, Mr. John Tendwa teaches both math and physics for sections A, B, and C for all forms. There is one laboratory to share among all science subjects for all students, which makes it very challenging when doing experiments. With the help of parents the school has been able to start a project (currently on funding pause) to build three new labs for biology, chemistry and physics. They also hope to start a new project to construct a girls’ dormitory on campus. Fifty bags of cement have already been donated to the school to start this project.

Kirya Secondary School

Kiryia is a government school (Form 1–4) with a student enrollment of 320 students with 140 boys and 180 girls. Most students are “day schoolers” who walk to the campus from the Mwanga district lake region. Basic subjects are taught at Kirya including English literature, Kiswahili, mathematics, physics, geography, biology, chemistry, civics, and history. It is not uncommon for 60 students to attend class. Technology is limited for 18 staff members at the school with only a few teachers owning personal computers. There are five female instructors. Kirya is uniquely located near one of the largest hydro-electrical dams in Tanzania earning the town’s name Spillway. Despite the local electrical source Kirya still strives to innovate new sustainability practices. Over the doorway is displayed their motto “Education for the Future.”

Kiryia was awarded the Zayed Future Energy prize in 2012 for their hard work building a sustainable and environmentally friendly campus. Kirya has a \$15,000 USD solar power system with 15 batteries that delivers about 3000 watts. This supports the current operating system, based on high costs for electricity from the dam, and burning wood for heat does cooking of most everything. They also have an innovative irrigation system and are analyzing the feasibility of adding a windmill for electrical production.

Kiriki Secondary School

Kiriki is a private Islamic secondary school with its campus situated in a beautiful valley in the Northern Pare Mountains of Tanzania. The school is operated by the Muslim Council of Tanzania’s Usange branch. The school has a current enrollment of 275 students, 17 teachers, and 11 support staff. Most of the students (n=225) reside on campus living in the boys’ or girls’ dormitory. Less than 50 students are “day schoolers” who walk to Kiriki. While religious affiliation is not requested for student enrollment the headmaster, Mussa Mnzava, estimates that about half the students are Muslim with the other half affiliated with Christian or pagan faiths. School dismisses on Friday at noon due to the Islam day of worship. During this time, the school Christian choir has singing practices. Also, on Fridays and before or after school academic instruction students remain active with cleaning chores (e.g., sweeping floors), maintenance activities (repairing the road and water lines), gardening, and cutting firewood. Recreation activities include football (soccer), volleyball, netball, and basketball sports.

A current challenge for the Kiriki and other private schools is declining enrollment due to the government schools now providing “free” (i.e., uniform and books may not be covered) education for secondary or Form 1 - 4 students. According to Mnzava, three years ago Kiriki had an enrollment of 500 students. Other nearby private schools, for example the Christian School at Shighatini, are experiencing similar enrollment declines. Basic subjects are taught at Kiriki including math, geography, English, history, Kiswahili, biology, chemistry, physics, Islamic knowledge, commerce, bookkeeping, advance math, physics for “A” level, and information computer technology. Students are required to take seven classes per week and have the option to select up to ten (i.e., three are for elective). One class may be a class offered in Islam or Christian religion. Both classes meet in the same building and time separated by a classroom wall. Students planning to take the Form 4 national exam are encouraged to take one of the religious classes since one section of the exam is given, based on student selection, on

Islam or Christian religion. Students passing Form 4 exam may enroll in the form 5 and 6 program offered at the school.

The school site has very good physical plant facilities with equipped science laboratories, including a lab technician available to repair and order equipment, prepare for practicums, and purchase supplies or chemicals. The school has a generator to provide for consistent electricity, including maintaining computer operations.

Kiriki's Instructional Technology (IT) teacher provides computer instruction to students using Windows 7 machines with programs on the hard drive, including a self-contained Internet system using VIVA Africa. The VIVA Africa system operates a database of text and video programs on educational topics, including an abridged Wikipedia database and Khan Academy instructional videos. Computer classes are required for Form 1 and 2 students. Students learn VIVA Africa and the MSOffice program (i.e., Word, Excel, PowerPoint and data bases). Form 3 and 4 students can schedule as an elective computer studies and then learn on their own (e.g., apply MSOffice programs and research information).

Implementation of the Training Program

The program trainers logged and reported the overview of seminar meeting events and time with teachers during the school day. Trainers spent most of their time providing classroom observations and feedback on the use of teaching strategies when not conducting staff development sessions. The Classroom Observation Feedback and Evaluation of Teacher Strategies Form or notes were documented during classroom visitations (refer to Table 1). Trainers reported greater use and implementation by staff integrating strategies into classroom lessons during their visits at the schools. Trainers were then able to provide support and recommendations in use of these various teaching methodologies with the staff. Schools were provided copies of English activity and resource books for teacher use with trainers reporting staff at the schools using these resources on a limited individual basis. The trainers describe their experiences in implementing the VTT training program at their school site as follows.

Mandaka Secondary School

Most goals and objectives of the VTT project were met with less emphasis and instruction provided to teachers, on an individualized basis, in English conversation skills. While the sessions were conducted in English and discussion activities modeled correct oral and written usage of the English language, the teaching staff did generally not request specific individual instructional lessons. The English teachers, for potential classroom application, primarily reviewed individually the ESL activity and resource books. Service time at the school focused on the delivery of the scheduled seminar to teachers on teaching strategies and classroom observations on the implementation of the strategies. Seminar sessions met from Monday to Thursday after school for 12 sessions from 15:00 to 17:00 for a total of 24 hours. One session ended at 16:00, due to a rainstorm in which rain infiltrated the classroom through the windows, with extra time added to the succeeding sessions for make-up. Thirty-one staff members participated in the staff development, with an average attendance rate of 18.52 hours. The classroom visitations and individual feedback to teachers promoting the use of strategies

provided additional training support for school participants. Individual volunteer use of Kindle Readers and ESL books provided further learning opportunities for the teachers.

Given the need for some curriculum compacting, due to dismissal on Friday at noon for Islamic worship and prayer, the core objectives of the project were achieved with a few activities modified or deleted due to the limited seminar meeting time. Project objectives not covered included interviewing in a cooperative triad and some discussion activities.

Table 1. Classroom Observation Feedback and Evaluation of Teacher Strategies Form

Teacher _____ School _____ Form _____ Date _____ Time _____

Subject _____ Lesson Title _____

Strategies Observed in Lesson (✓ Evident)

1. Cooperative Learning: Learning Together Think-pair-share Say and switch Round table / Round robin
 Corners Jigsaw Graffiti
2. Questioning Strategies: Open-ended Closed form and supply type “Think alouds” Seed maker
 Anticipation guide (before / after) Non-verbal student group responses (thumbs-up / thumbs-down)
3. Graphic Organizers: Time lines Sequence maps Cycles Venn diagrams Semantic maps
 Concept maps Hierarchical arrays
4. Models of Teaching: Concept attainment (two column examples) Inductive teaching (grouping information)
5. Information Collection Strategies: Information queries Concept and word detective Reading analysis
 Pyramid story theme Reading plan Information illustrator One-sentence summary frames
 Strategies for rewriting Discussion positions Compare and contrast Problem-solution graphic
 Semantic feature analysis (matrices) Two-column note-taking Two-column concepts
 Two-column problem-solve K-W-L Charts Two-column math problem Problem organizer: metacognition
6. Computer technology usage: Yes If so, which program? _____

Observation Feedback and Use of Teaching Strategies

Conference with Instructor: Location _____ Date _____ Time _____

Teacher Feedback, Ideas, and Self-Evaluation of Lesson

Classroom observations were a significant part of the VTT project. The classrooms provided information about the content of the national curriculum and insight into the limited student resources. VTT sharing of strategies based on the subject content of instructors was helpful in providing topic ideas using different methodologies discussed in seminar class. Forty-eight lesson observations across content areas (refer to Table 2) were made for Form 1-4 students, with 29/31 seminar participants’ classrooms visited for one or two periods, during the service project.

Table 2. Classroom lesson observations at Mandaka Secondary School

Observation No.	Subject	Lesson Theme
1.	Kiswahili	Group verbal response of terms and sentences
2.	Civics	Identification and comparison of life skills
3.	Physics	Visual diagrams and information about vectors
4.	English	Choral responding to poetry literature titled "School Election"
5.	History	Impact of agriculture on food and land area
6.	Chemistry	Volumetric analysis practicum teacher demonstration with student participants
7.	English	Comparison of traditional and modern structures of a poem
8.	Geography	National regions in Tanzania shown on a map
9.	English	Following classroom instructions
10.	Biology	Classification of living things
11.	History	Sources of historical knowledge (e.g., archives and historical sites)
12.	English	Elements of the forms of the arts (i.e., handcraft, oral, spoken, and written)
13.	Chemistry	Laboratory rules
14.	Geography	Human social activities
15.	Geography	Characteristics of culture
16.	Geography	Small-scale agriculture
17.	Biology	Angiosperms in the plant kingdom
18.	English	Listening for information from different sources
19.	English	Reading and interpreting "The Poor Women" (poetry)
20.	Chemistry	Investigating products of hydrogen gas passed over heated metal oxide
21.	English	Literature element identification for "Houseboy" by T. Oyano
22.	Geography	Concepts and definitions
22.	English	Types of oral literature
23.	History	Interactions among the people of Africa
24.	Biology	Stages of growth and development in humans
25.	Biology	Plant and animal movement
26.	History	Colonization of Europeans vs. Africans in partition of Africa
27.	English	Comparing present and past tense
28.	English	Past tense and present continuous using written dialogue
29.	Civics	Comparison of the forms of government
30.	Civics	Indicators of economic development
31.	English	Literature themes for "Houseboy" by T. Oyano
32.	History	Comparison of events for World War I and II (concept attainment)
33.	Civics	National Symbols
34.	Kiswahili	Pronunciation of the Swahili language
35.	Kiswahili	Grouping word groups inductively
40.	Biology	Using standard units of measurement
41.	Civics	Roles of different groups and institutions in promoting our cultural values
42.	Kiswahili	Structure of the language
43.	Math	Algebraic exponents
44.	English	Literature figures of speech
45.	English	Events on the calendar
46.	History	Historical sites in East Africa
47.	Geography	Introduction to research
48.	Kiswahili	Creating sentences using sentence structure patterns

During classroom visitations, 30 to 90 minutes in length, notes were recorded about the lesson procedures, teaching delivery techniques, and ideas for improving lesson methodology encouraging use of additional strategies. For some classes assistance to students working in cooperative groups to find information or answer questions was provided. Lesson feedback

promoting the teaching strategies included graphic organizers for presenting information, inductively utilizing lecture notes, developing concept attainment comparison t-charts, encouraging use of anticipation guide questions, developing cooperative groups (e.g., assign student roles), and promoting nonverbal feedback (e.g., thumbs up or down voting). Individual teacher feedback was provided on the same day of the lesson observation. It was evident that greater use of the teaching strategies was shown during the final week of observations at the school. Strategies observed by teachers, integrated into their teaching curriculum, included a concept attainment lesson comparing World War I and II; t-chart comparison of traditional and modern poetry; graphic organizers (e.g., anhydrous calcium chloride chemistry model); geography concept organizer chart; anticipation guide questions about types of oral literature and indicators of economic development; semantic map of national symbols; hierarchical array comparing pre- and post-natal development; and an inductive lesson on grouping Swahili vocabulary words. Two seminar participant classrooms were not visited due to teacher absenteeism.

Ngujini Secondary School

Seminars occurred daily after school except for Fridays due to early release of classes for the Muslim day of worship. In total, 29.5 hours of seminar instruction were provided. Levels of comfort speaking English varied among the teachers, with many being hesitant to voice questions before their colleagues. To overcome this silence, it was found to be most effective to present material first and put teachers in small groups to discuss and develop examples of the strategies. While observing and contributing to their small group discussions, they asked many questions. Their questions were explained aloud to the rest of the class, and it was an effective way to create conversation each day.

The seminars experienced an initial decrease in attendance after the third day before picking up again in the second week. The drop in attendance may be attributed to their knowledge of the trainer's limited teaching credentials, as well as to various school meetings that coincided with the seminar. This was quickly overcome: a fact, attributed to the success of one-on-one classroom observations and feedback throughout the duration of the program. Working with teachers individually allowed for the tailoring of some strategies to specific teaching subjects. For example, it was a stretch to apply some of the information collection strategies to math and science classes. In a future program, a recommendation would include restructuring the seminar materials with scheduling to teach specific strategies to teachers on specific subject areas. Doing so might keep teachers more interested as well as free up their busy schedules to allow for the occasional unavoidable meeting that happens during seminar class hours.

Lesson observations and feedback formed the most important part of the program. Every teacher was observed at least twice throughout the duration of the program. For every observation, a Classroom Observation Feedback and Evaluation of Teaching Strategies form was completed and returned to the teacher. Immediately after each observation, meetings with teachers were conducted to discuss the feedback form, notes, and recommendations. With every meeting, at least one thing to improve upon was identified with encouragement provided to push teachers' limits in another area. Teachers responded well to the challenges posed and began

trying harder strategies. They seemed to really learn from the feedback and to appreciate it, although initially they seemed uncomfortable with being observed.

One example of the benefit of one-on-one feedback after observations is in the teachers' use of graphic organizers. Initially teachers expressed low interest in graphic organizers, stating they already use them as they are encouraged by the government to use graphic organizers. However, in classroom observations provided it was noticed that the teachers either used graphic organizers ineffectively or did not use them at all. There were numerous opportunities to use graphic organizers effectively, so in one-on-one feedback sessions specific graphic organizers were explained as useful to their unique lessons. After explaining the purposes and goals of each graphic organizer strategy, the teachers clearly grasped the strategies. Almost every time after explaining a strategy in feedback, teachers were thrilled to try using the strategy more effectively. In practice, the teachers created overly complex diagrams in small font and expected students to read the diagrams from the back of the room and know the information immediately. Other times teachers needed to explain to their students how to think about the organizer as well as the purpose and benefit to the students. Usually teachers did not ask the students to write the diagrams in their notes. After coaching and at the end of the program, it was frequently noted that graphic organizers were drawn in the notebooks of students. Teachers and students ended up really liking graphic organizers and using them frequently and effectively.

Kisangara Secondary School

After assessing the interests and needs of the teachers at Kisangara, the main objectives of the VTT seminars focused primarily on open discussions of the teaching strategies, including classroom observations, and uses of technology in the classroom. Very little focus was placed on individual and small group session work on English conversation skills, although many of the activities required or encouraged this. Seminar classes at Kisangara were held Monday through Thursdays from 14:30 to 16:30. Weekly exams were given on Monday mornings and Friday afternoons, because of Friday seminars held from 12:00 to 14:00. Twenty-eight teachers plus the headmistress of the school signed-up to participate in the VTT program and most were able to attend all sessions. The VTT seminar was held most days with the exception of having to cancel class because of a parent-teacher meeting and a scheduled time to go buy textbooks in Moshi. There was also one class that was shortened to allow students participation in debate club. The total number of seminar hours completed was 26 hours.

In addition to the seminars classroom observations, feedback was provided as opportunities for the teachers to improve use of teaching strategies. Most of the teachers took advantage of this opportunity. Many teachers requested multiple classroom observations and were able to discuss feedback in depth to help improve the execution of new strategies being used in the classroom. The teachers were also given the opportunity to use a Kindle in the classroom, if interested. Many took advantage of this opportunity and were eager to incorporate more technology into their classrooms, especially the science and math teachers. On the last day at Kisangara a projector was donated to the school to be used as a teaching aid. A two-hour introductory session was facilitated and teachers were able to test the projector for presenting PowerPoint and showing photos and videos.

Classroom observations took place in all different subject areas with 25/29 teachers. Those who were participating in the VTT program were interested and willing to participate in classroom observations. At the beginning, many teachers were eager to participate in classroom observations, but some teachers were reluctant in having a stranger come in to their classroom and watch them teach. After the first week the fears went away and almost all teachers signed up to have a classroom observation. Classroom observations were very beneficial in providing insight to the classroom environment and format. Teachers were able to receive feedback based on lessons they had prepared prior to the seminar and ones that they prepared using strategies they were learning in seminar classes. After some time, not only were teachers eager to try new strategies, discussed in seminar, but some of the newer teachers also wanted to try strategies they had studied at the university but had not yet tried in the classroom. The classroom observations were a great way to understand the curriculum being taught and a way to see what strategies would work best for the class sizes and subject content. Many discussions took place surrounding the topic of implementation and how to best facilitate the different strategies into the setting of the classroom and how to introduce them to students. Many teachers found that students became much more engaged and lessons were more enjoyable when using the different strategies.

The following strategies were observed in the classrooms during requested observations: cooperative learning (i.e., jigsaw, corners, think-pair-share, and learning together), Venn Diagrams, Semantic and Concept Maps, K-W-L Charts, and one concept attainment lesson. As the same classrooms and teachers were being observed for a second or third time, the increase in comfort level of both the teachers and students with the new strategies became very significant.

Kiryia Secondary School

An instructional coach at Kirya, provided input in establishing the school's daily schedule for the seminar program and the best time to meet each day. Based on his recommendation, discussed during the first seminar class, it was decided to meet at 15:00. Teachers would need to be with students, but they rotated ensuring the best attendance possible for the seminar. Seminar sessions met on Monday to Friday most days for 10 sessions totaling 21 hours. Sixteen staff members participated in the staff development with an average attendance rate of 15 teachers per session. Most goals and objectives of the VTT project were met with the sessions conducted in English and discussion activities modeling correct oral and written usage of the English language. Service time at the school focused on the delivery of the scheduled seminar to teachers and classroom observations on the implementation of the strategies. Seminar lessons provided instruction on teaching strategies and methodologies. Integration of teaching strategies across the curriculum was emphasized with major lesson topic themes developed. Reporting of the lesson seminar experience is provided in Table 3.

Table 3. Lesson Seminar Report of Activities Promoting Integration Across Subject Areas at Kirya

- Graphic organizers and use of cooperative learning strategies were introduced in the seminar session. A

cooperative jigsaw, splitting the group into triads, assigned each group a different graphic organizer based on a topic of their choice. The activity unfolded as follows:

Edwin, Rashid, and Joctan created a biology Venn diagram comparing plants and animals. Maria and her two partners created a sequence map about the process of cooking Ugali. Daniel and his fellow history teachers made a time line of Tanzanian history. Kelvin, Ernest, and Mohammed chose to make a two column chart listing the pros and cons of technology in education. Each group presented their graphic organizer to the class.

To conclude this lesson discussion on how each graphic organizer can be used for any subject was articulated with the idea that some would be applied more easily in certain situations.

- The session involved playing Mancala, and encouraging ideas for learning in each subject related to the game. Questions were formulated about the game. For example, if player A ends with 17 pieces did player A win or lose? The questions were then posed as discussion items to show the integration possibilities for the Mancala activity as follows:

1. Mathematics Facts – Numbers in the game were corresponded to everyday common units and groupings. For example,

48 pieces total, 24 on each side, we related this to 24 hours in a day or the amount of eggs purchased in two dozen.

2. A Literature lesson could formulate a written procedure or descriptions of this game.

3. A history lesson may study the uses of this game throughout time because it's very old and was believed by many historians to have been played in ancient Egypt during workers breaks from building the pyramids.

Just like cooperative learning strategies, teachers should look for various methods to create activities into learning opportunities.

- The lesson started with the models of teaching using inductive and concept attainment data analysis. The class was divided into two halves to analyze the inductive data set about the Maasai and Chagga tribes and then group the data set into logical categories. Discussion then focused on how inductive data sets can be used to teach each subject. Following that activity various types of questions and question writing strategies were analyzed with practice writing questions.

- A donated GPS device to promote technology for learning was used for instruction. The lesson was introduced by briefly reading through the owner's manual followed by discussion how the GPS relates to each teaching subject as follows:

Math teachers could use the GPS data for elevation equations, distant calculations, and speed and time word problems. Geography teachers use it to mark geographic features, their definitions, and relations to each other also learning about longitude and latitude. Literature subjects would focus on writing procedures and descriptions for the GPS and even reading comprehension of the manual. Historically GPS devices have been used in exploration and wars. Specifically, cattle migration used to interfere with agriculture causing many problems and even armed conflicts. GPSs were used to map safe migration routes and make peace between herders and farmers

Before the lesson a few waypoints, walking from the Spillway across the Dam, were placed on the GPS. As a group the teachers marked a waypoint together in the class named Kirya. The class walked to the most southern and northern parts of campus marking the dorms and football field. Along the way the walking speeds and directions were analyzed as different teachers took turns handling the device. After returning to the classroom the GPS data was used to create a school map, which they compared to their existing map.

• The training program continued with a lesson on flying a kite outdoors. Participants worked in groups, based on their teaching content area, to evaluate the following curriculum integration activities provided:

- Mathematics – Calculate the area of the kite with a tape measure.
- Physics – Draw a diagram with labels of the kite and flying orientation.
- Literature – Write a procedure for flying the kite.
- Geography – Explain how geographical features relate to kiting. For example, lakes can be a good area for large kites to provide uplift while trees are obstructions that can damage or tangle a kite.
- History – List examples of historical events for kiting (i.e., kite boarding invention).

Students discussed the integration activities in class.

A meeting with the headmaster at Kirya provided support for use of the Classroom Observation Feedback and Evaluation of Teacher Strategies Form with additional copies made to promote the use of teacher learning strategies. The classroom feedback forms were used for classroom observations recorded for the following classes at Kirya:

- Chemistry – Use of chemical properties
- Kiswahili – Singing songs in Swahili and English
- Civics – Keyword identification in reading
- Kiswahili – Reciting phrases
- Civics – Settlement, urban and rural group questioning.

The uses of the strategies were observed in these classrooms included think-pair-share, cooperative learning, and use of semantic maps in chemistry class. In the Kiswahili class students engaged in cooperative learning activities. In civics students were identifying key words after reading ideas and then rewriting concepts on the board. The civics classes were engaged in cooperative learning together strategies using think-pair-share, concept word detective, discussion positions, open-ended questions, think alouds, seed maker, and two-column strategies (i.e., note-taking, concepts, and problem-solve).

Kiriki Secondary School

Most of the goals and objectives of the VTT project were met including additional instruction in computer technology (i.e., third objective of project, if available computer training and support would be provided). On an individualized basis, staff was provided instruction in computer technology using application programs on Windows 7 HP Compaq desktop computers. Teachers did not select the use of the ESL activity and resource books since the headmaster, Mussa Mnzava, kept the materials in his office for review and for later use at the school. Service time at the school focused on the delivery of the scheduled seminar to teachers and classroom observations on the implementation of the strategies. Seminar sessions met on Monday to Thursday after school for 12 sessions from 15:00 to 17:00. Due to Kiriki being a private school with most students living on campus (i.e., 225 students in dormitories and 50 day-school walkers) half the staff had assignments after school. Therefore, the headmaster divided the staff into two groups with one seminar session meeting on Monday and Wednesday and the other on Tuesday and Thursday. This resulted in the staff receiving six sessions for a total of 12 hours of training. Given this shortened period of staff development, curriculum compacting and assignments were given to the teachers at the end of each session. Sixteen staff members

participated in the staff development with an average attendance rate of 10.2 hours. School was dismissed on Friday at noon for Islamic worship and prayer. The classroom visitations and individual feedback to teachers provided additional training support for the participants. Individual volunteer use of technology (e.g., desktop computers and Kindle Readers) gave further learning opportunities for the teachers.

Given the need for curriculum compacting, the core objectives of the project were achieved with a few activities modified or deleted due to the limited seminar meeting time. Some homework and advanced reading assignments were given to the teachers to cover more material. Project objectives not covered included an article lesson reading about the Chagga tribe, the risk-taker test, interviewing in a cooperative triad and discussion activities. My absence due to illness for a day and a half resulted in the reduction of one seminar session for each group.

Classroom observations were a significant part of the VTT project. The classrooms provided information about the content of the national curriculum and insight into the limited student resources with class sizes ranging from 4 to 50 students. VTT sharing of strategies based on the subject content of instructors was helpful in providing topic ideas using different methodologies discussed in seminar class. Lesson observations were made for Form 1-6 students, with all 16 seminar participants' classrooms visited, including one additional teacher who did not attend the training program. Refer to Table 4 for the record of lesson observations completed at Kiriki.

Table 4. Classroom lesson observations at Kiriki Secondary School

Observation No. Subject Lesson Theme

1. English – Uses of the dictionary
 2. Information and Computer Studies – Computer Input and Output Devices
 3. Geography – Map reading and topographical interpretation
 4. Physics – Astronomy
 5. English – Poetry interpretation “Eat More” by Joe Carrie (1894-1968)
 6. Math – Quadratic equations
 7. Biology – Genetics study of heredity and variation (PowerPoint presentation)
 8. Biology – Safety in the environment
 9. English – Difference between American and British English
 10. Math – Principles of statistics
 11. Geography – Geologic forces affect the Earth
 12. General Studies – Cross cutting issues (i.e., land pollution)
 13. Chemistry – Carboxylic acid groups
 14. Commercial – Reading analysis of “Passed Like a Shadow” by Bernard Mapalala
 15. Computer Lab – Introduction to MSWord processing and file management
 16. Kiswahili – Tree diagramming parts of speech
 17. Chemistry – Organic hydrocarbons and Alkane groups
 18. Math (Basic Applied) – Mode formula calculations for grouped data
 19. Geography – Water management and economic development
 20. Commerce – Production and working capital
-

During classroom visitations for two consecutive periods (80 minutes in length) notes were recorded about the lesson procedures and teaching delivery techniques. Ideas for improving lesson delivery were suggested by trainers and shared with teachers to promote integration and use of the strategies. All classrooms were visited for the two period sessions, except one, which had a 40-minute observation period because of a scheduling conflict. Some class assistance was provided to students, working in cooperative groups to find information or answer questions. Lesson feedback supporting the teaching strategies included extension exercise ideas promoting student rewriting of information rather than copying directly from lecture notes or text, use of nonverbal feedback (e.g., thumbs up or down voting), developing cooperative learning strategies (e.g., think pair-share and graffiti map activity), assigning roles for student work in cooperative groups, incorporating the people bingo activity for instruction, and specific lesson elements suggestions (e.g., use of entry words in dictionary activity and calculations using mode formula). It was evident that greater use of the teaching strategies was shown during the final week of observations at the school.

Evaluation of the Training Program

Staff Development Interest Survey

Trainers administered the Staff Development Interest Survey (refer to Table 5) early in the seminar-training program (e.g., session 1 or 2) to assess staff knowledge and interest in use of various teaching strategies. A short formative evaluation was made available to staff to record questions or concerns about the training program on an ongoing basis but were not completed since it was found that teachers were able to ask questions and express concerns directly in class or on an individual basis to the trainers. The trainers also received feedback about the seminar program during scheduled meetings with the coaches.

The Staff Development Interest Survey given during the first seminar session to participants (n=25) was developed to assess interest in topics to be presented during the seminar program at Mandaka. Participants rated high interest (i.e., total average scores equal or greater than 4.0) in learning cooperative strategies, question writing skills, models of teaching, and lesson planning. Moderate to lower interest (i.e., total average scores equal or lower than 3.9) were found in learning English using discussion activities, teaching with graphic organizers, utilizing information collection strategies, and having the instructor observe the teacher's classroom. Learning and using programs in the computer lab (mean average = 3.0) scores were most frequently rated 1 (n=7) and 5 (n=6). The high deviation of scores may be due to the unavailability of computers at Mandaka and interest expressed in learning how to use Microsoft Word and Excel programs (n=11). It was interesting to note that instructors rated their ability to speak and write in the English language moderate to high (mean average = 4.1). Participants expressed interest in taking the seminar to improve their teaching methodologies and improve English communication skills.

The Staff Development Interest Survey was given to 12 teachers (n=12) at Ngujini. Participants rated high interest (i.e. total average scores equal to or greater than 4.0) in cooperative learning strategies, question writing and problem solving skills, and

writing/planning a lesson plan for use in their classrooms. Moderate to lower interest (i.e., total average scores equal or lower than 3.9) was found in learning conversational English with discussion activities, graphic organizers, activity collection strategies, models of teaching, and learning/using computer programs. Similar to results at Mandaka Secondary School, scores for learning and using computer programs were most frequently rated 1 (n=4) and 5 (n=5). Ngujini Secondary owns one computer, making it difficult to use with students in class, but teachers expressed great enthusiasm for learning how to use Excel, word processing, and the Internet. Teachers expressed interest in taking the seminar to improve their teaching, student success, and English skills.

The Staff Development Survey was given out on the first day of seminar to participants (n=29) at Kisangara to evaluate interests of what topics should be covered during seminar time. Participants rated all but one of the categories as high interest (i.e., total average scores equal or greater than 4.0). Out of those the top three were; an interest in question writing strategies (mean average = 4.8), writing and planning a lesson (mean average = 4.9), and learning cooperative learning strategies (mean average = 4.6). The only category that was below 4.0 was learning and using a program in the computer lab, which had high variability between scores with the most frequent being 1 (n=8) and 5 (n=13.) This was interesting

Table 5. The Staff Development Interest Survey and Formative Evaluation

Staff Development Interest Survey

Name _____ (Optional)

School: _____ Teaching Subject Content Area: _____

Teaching Subject Content Area: _____

Part I. Have you taken this seminar before? YES NO If so, when? 2006 2008 2011 2014

Part II. Rank from 1 to 5 (low to high) or U (undecided) your interest in learning the following topics:

	Low	Somewhat	High	Undecided		
	1	2	3	4	5	U
1. Practice in learning conversational English using discussion activities (e.g., opinion surveys).	1	2	3	4	5	U
2. Learning cooperative learning strategies for classroom teaching.	1	2	3	4	5	U
3. Learning question-writing strategies using different techniques to develop student problem-solving skills.	1	2	3	4	5	U

4. Drawing different graphic organizers (e.g., Venn diagrams) to share information on the board.

1 2 3 4 5 U

5. Learning how to use activity collection strategies for showing and recording information (e.g., two-column note taking and semantic charts).

1 2 3 4 5 U

6. Learning about the model of teaching for creating concept attainment (i.e., developing T-charts) and inductive strategies (i.e., grouping facts of information) for teaching.

1 2 3 4 5 U

7. Writing and planning a lesson for use in your classroom.

1 2 3 4 5 U

8. Having your instructor observe a strategy you are using with your students and provide feedback.

1 2 3 4 5 U

9. Learning and using a program in the computer lab. If interested, which program?

1 2 3 4 5 U

10. Rate your ability to speak and write in the English language.

1 2 3 4 5 U

Part III. Open-ended questions:

1. Why did you decide to take the staff development-training seminar?

.....

2. Do you have any questions for the instructor or interest in a visitation to your class?

.....

Thank-you! This will be helpful in planning the seminar activities. Responses are kept confidential.

Formative Staff Development Evaluation

Directions: If needed please complete and place in the container provided.

Name (optional):

Date Session Name or Pages

What questions or ideas would you like to have addressed for the next session?

.....

.....

because as class continued, it was evident that the teachers all had an interest in incorporating more technology into the classroom. The high deviation, similarly to the other schools, could be due to the unavailability of computers at the school. Only Kisangara has one computer, which is primarily used by the school secretary. The introduction of the Kindle Fire into the classroom could have also played a part in the increased interest of technology use. Many of the teachers expressed interest in taking the seminar to gain more experience and learn more teaching strategies to implement into the classrooms. Some also expressed wanting to be in the seminar to help improve students' performance in the classroom.

At Kirya the Staff Development Interest Survey was given during the first seminar session to seminar participants (n=14). Participants rated high interest (i.e., total average scores equal or greater than 4.0) in learning cooperative strategies, question writing skills, drawing graphic organizers, models of teaching, and lesson planning. Moderate to lower interest (i.e., total average scores equal or lower than 3.9) were found in learning English using discussion activities, utilizing information collection strategies, and having the instructor observe the teacher's classroom. Learning and using programs in the computer lab (mean average = 3.09) scores were most frequently rated 1 (n=4) and 5 (n=4). The high deviation of scores may be due to the unavailability of computers at Kirya and the fact some teachers have personal computers they use at the school. It was interesting to note that instructors rated their ability to speak and write in the English language moderate to high (mean average = 4.0). Participants expressed interest in taking the seminar to gain skills and knowledge in learning teaching strategies (n=10).

Pre- and Post-Evaluation: Staff Development Implementation Survey

Evaluation instruments developed to measure the impact of the seminar-training program included the Pre- and Post-Evaluation: Staff Development Implementation Survey. The instruments have been field-tested based on use with previous seminar offerings at schools in Tanzania. Generally, teacher responses to the Pre- and Post-Evaluation: Staff Development Implementation Survey showed a general shift, using a five point rating scale, in comparing current practices and anticipated plans to use the teaching strategies at all five schools. The numbers of teachers responding to the pre- and post-evaluation were as follows: Mandaka (n = 28/26), Ngujini (n = 10/13), Kisangara (n = 29/26), Kirya (n = 9/9), and Kiriki (n=16/16). Refer to Tables 6 to review the pre-post evaluation shifts in mean scores. The anticipated changes reported by the training team as most notable for the rating scale were:

- Kisangara most strategies such as jigsaw and graffiti, round table, graphic organizers, and concept attainment showed average mean scores of .04 to 1.05.
- Kiriki the change was most evident in responses for use of jigsaw and graffiti cooperative strategies and teaching students questioning strategies.
- Ngujini showed moderate increases in use of corners, think alouds, and questioning strategies, as well as an increase reported by teachers in their ability to use the strategies.

At all five schools staff reported a decrease in the use of the lecture method from the pre- to post-evaluation.

Table 6. Pre- and Post-Evaluation: Staff Development Implementation Survey

DIRECTIONS: Please circle the number on the rating scale to best describes your **current use and practice** of these teaching strategies, which will be provided in the staff development English conversation seminar. This will be helpful in evaluating the effectiveness of the seminar activities. Responses are kept confidential. **Thank-you!**

Never	Rarely	Sometimes	Usually	Always	Undecided
1	2	3	4	5	U
1. Students learn together in cooperative groups using think-pair-share and say and switch strategies.					
Mandaka	Pre-Evaluation	Mean Score = 3.64		Post-Evaluation	Mean Score = 4.48
Ngujini	Pre-Evaluation	Mean Score = 4.4		Post-Evaluation	Mean Score = 4.2
Kisangara	Pre-Evaluation	Mean Score = 4.32		Post-Evaluation	Mean Score = 4.56
Kiryia	Pre-Evaluation	Mean Score = 4.13		Post-Evaluation	Mean Score = 4.11
Kiriki	Pre-Evaluation	Mean Score = 3.63		Post-Evaluation	Mean Score = 4.25
2. Round table or round robin cooperative strategies are used with students.					
Mandaka	Pre-Evaluation	Mean Score = 3.04		Post-Evaluation	Mean Score = 3.69
Ngujini	Pre-Evaluation	Mean Score = 3.3		Post-Evaluation	Mean Score = 2.9
Kisangara	Pre-Evaluation	Mean Score = 3.87		Post-Evaluation	Mean Score = 4.04
Kiryia	Pre-Evaluation	Mean Score = 3.63		Post-Evaluation	Mean Score = 3.78
Kiriki	Pre-Evaluation	Mean Score = 2.73		Post-Evaluation	Mean Score = 3.75
3. Corners cooperative strategies or evaluation (i.e., opinion questions) are practiced in my classroom.					
Mandaka	Pre-Evaluation	Mean Score = 3.04		Post-Evaluation	Mean Score = 3.62
Ngujini	Pre-Evaluation	Mean Score = 3.5		Post-Evaluation	Mean Score = 3.6
Kisangara	Pre-Evaluation	Mean Score = 3.91		Post-Evaluation	Mean Score = 3.96
Kiryia	Pre-Evaluation	Mean Score = 3.5		Post-Evaluation	Mean Score = 3.78
Kiriki	Pre-Evaluation	Mean Score = 3.67		Post-Evaluation	Mean Score = 3.69
4. Jigsaw and graffiti cooperative strategies are used in the classroom.					
Mandaka	Pre-Evaluation	Mean Score = 3.00		Post-Evaluation	Mean Score = 3.60
Ngujini	Pre-Evaluation	Mean Score = 3.4		Post-Evaluation	Mean Score = 3.2
Kisangara	Pre-Evaluation	Mean Score = 3.17		Post-Evaluation	Mean Score = 4.22
Kiryia	Pre-Evaluation	Mean Score = 3.75		Post-Evaluation	Mean Score = 3.75
Kiriki	Pre-Evaluation	Mean Score = 2.50		Post-Evaluation	Mean Score = 3.71
5. "Think alouds" and anticipation guides are written for questioning students' comprehension about reading information.					
Mandaka	Pre-Evaluation	Mean Score = 3.12		Post-Evaluation	Mean Score = 3.69
Ngujini	Pre-Evaluation	Mean Score = 3.9		Post-Evaluation	Mean Score = 4.0
Kisangara	Pre-Evaluation	Mean Score = 4.00		Post-Evaluation	Mean Score = 4.20
Kiryia	Pre-Evaluation	Mean Score = 3.44		Post-Evaluation	Mean Score = 3.67
Kiriki	Pre-Evaluation	Mean Score = 3.36		Post-Evaluation	Mean Score = 3.60
6. Questioning strategies (e.g., true-false supply type and rank order matching) are given to students to evaluate understanding of content information.					
Mandaka	Pre-Evaluation	Mean Score = 4.16		Post-Evaluation	Mean Score = 4.40
Ngujini	Pre-Evaluation	Mean Score = 4.4		Post-Evaluation	Mean Score = 4.0
Kisangara	Pre-Evaluation	Mean Score = 4.64		Post-Evaluation	Mean Score = 4.64
Kiryia	Pre-Evaluation	Mean Score = 4.38		Post-Evaluation	Mean Score = 4.13
Kiriki	Pre-Evaluation	Mean Score = 3.44		Post-Evaluation	Mean Score = 3.57
7. Students are taught questioning strategies and assigned to write their own questions.					
Mandaka	Pre-Evaluation	Mean Score = 3.32		Post-Evaluation	Mean Score = 3.83
Ngujini	Pre-Evaluation	Mean Score = 3.6		Post-Evaluation	Mean Score = 3.5
Kisangara	Pre-Evaluation	Mean Score = 4.04		Post-Evaluation	Mean Score = 4.08
Kiryia	Pre-Evaluation	Mean Score = 4.11		Post-Evaluation	Mean Score = 4.22
Kiriki	Pre-Evaluation	Mean Score = 2.80		Post-Evaluation	Mean Score = 3.90
8. Graphic organizers (e.g., time lines, sequence maps, cycles, Venn diagrams, semantic maps, concept maps and hierarchical arrays) are drawn to show information on the board.					

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Mandaka	Pre-Evaluation Mean Score = 3.15	Post-Evaluation Mean Score = 3.36
Ngujini	Pre-Evaluation Mean Score = 4.8	Post-Evaluation Mean Score = 4.0
Kisangara	Pre-Evaluation Mean Score = 3.68	Post-Evaluation Mean Score = 4.16
Kiryia	Pre-Evaluation Mean Score = 4.0	Post-Evaluation Mean Score = 4.5
Kiriki	Pre-Evaluation Mean Score = 3.31	Post-Evaluation Mean Score = 3.56

9. Concept attainment strategies (i.e., two column examples) are written and shown with my students for teaching.

Mandaka	Pre-Evaluation Mean Score = 3.11	Post-Evaluation Mean Score = 4.0
Ngujini	Pre-Evaluation Mean Score = 4.8	Post-Evaluation Mean Score = 4.0
Kisangara	Pre-Evaluation Mean Score = 3.71	Post-Evaluation Mean Score = 4.00
Kiryia	Pre-Evaluation Mean Score = 3.89	Post-Evaluation Mean Score = 4.0
Kiriki	Pre-Evaluation Mean Score = 3.38	Post-Evaluation Mean Score = 3.86

10. Inductive teaching strategies (i.e., categorizing notes on the board) are used with my students for teaching.

Mandaka	Pre-Evaluation Mean Score = 4.04	Post-Evaluation Mean Score = 4.0
Ngujini	Pre-Evaluation Mean Score = 4.6	Post-Evaluation Mean Score = 3.8
Kisangara	Pre-Evaluation Mean Score = 4.32	Post-Evaluation Mean Score = 4.16
Kiryia	Pre-Evaluation Mean Score = 3.78	Post-Evaluation Mean Score = 3.67
Kiriki	Pre-Evaluation Mean Score = 3.29	Post-Evaluation Mean Score = 3.36

11. I can use and teach these strategies (rated above for items 1 to 10) with the materials and resources available in my classroom.

Mandaka	Pre-Evaluation Mean Score = 3.85	Post-Evaluation Mean Score = 4.27
Ngujini	Pre-Evaluation Mean Score = 4.3	Post-Evaluation Mean Score = 4.6
Kisangara	Pre-Evaluation Mean Score = 4.52	Post-Evaluation Mean Score = 4.65
Kiryia	Pre-Evaluation Mean Score = 4.22	Post-Evaluation Mean Score = 4.11
Kiriki	Pre-Evaluation Mean Score = 4.00	Post-Evaluation Mean Score = 4.19

12. Lecture and student note-taking is the primary method used for teaching students course content information.

Mandaka	Pre-Evaluation Mean Score = 4.04	Post-Evaluation Mean Score = 3.67
Ngujini	Pre-Evaluation Mean Score = 4.7	Post-Evaluation Mean Score = 4.3
Kisangara	Pre-Evaluation Mean Score = 4.04	Post-Evaluation Mean Score = 3.81
Kiryia	Pre-Evaluation Mean Score = 3.56	Post-Evaluation Mean Score = 2.78
Kiriki	Pre-Evaluation Mean Score = 3.69	Post-Evaluation Mean Score = 3.38

13. Computer technology is used with students when I teach. If so, which program?

Mandaka	Pre-Evaluation Mean Score = 1.15	Post-Evaluation Mean Score = 1.32
Ngujini	Pre-Evaluation Mean Score = 1.4	Post-Evaluation Mean Score = 2.1
Kisangara	Pre-Evaluation Mean Score = 1.15	Post-Evaluation Mean Score = 2.95
Kiryia	Pre-Evaluation Mean Score = 1.56	Post-Evaluation Mean Score = 2.71
Kiriki	Pre-Evaluation Mean Score = 1.64	Post-Evaluation Mean Score = 2.40

At Kiriki, most revealing was a review of the item tallies showing a frequency of 1 and 2 (i.e., never and rarely) responses made on the Pre-Evaluation (n=48) compared with the Post-Evaluation (n=10). This difference shows that a significant number of teachers shifted their responses from never to rarely to plans to sometimes, usually, or always use of the strategies.

Refer to Table 7 to review the responses for use of information collection strategies with students at each school. Anticipated use of the 18 information collection strategies was reported at most schools overall as “fairly high” depending on the particular strategy selected. Strategies most frequently selected were compare and contrast; concept and word detective; reading plan; problem solution graphic; two-column concepts; reading analysis; discussion positions; and two-

column problem-solve. However, at Kiriki teacher planned use of information collection strategies was reported as “somewhat moderate to low” 11/18 of the information strategies. It was found at Kiriki that teachers tended to select and rate highly the information collection strategies used for lesson development planning during the seminar.

Table 7. Pre- and Post-Evaluation: Staff Development Implementation Survey

14. Circle the information collection strategies that are currently being used with your students

(pre-/post-evaluation values):

A. Information queries

Mandaka n= 7/8

Ngujini n= 0/1

Kisangara n= 2/3

Kiryia n= 1/3

Kiriki n= 2/3

C. Reading analysis

Mandaka n= 14/14

Ngujini n= 1/5

Kisangara n= 11/14

Kiryia n= 4/4

Kiriki n= 8/4

E. Reading plan

Mandaka n= 10/13

Ngujini n= 2/5

Kisangara n= 5/8

Kiryia n= 2/3

Kiriki n= 6/2

G. One-sentence summary frames

Mandaka n= 4/5

Ngujini n= 2/6

Kisangara n= 3/3

Kiryia n= 1/0

Kiriki n= 2/2

I. Discussion positions

Mandaka n= 22/22

Ngujini n= 3/5

Kisangara n= 14/14

Kiryia n= 7/5

Kiriki n= 8/5

K. Problem-solution graphic

Mandaka n= 5/10

Ngujini n= 1/4

Kisangara n= 0/7

Kiryia n= 2/4

Kiriki n= 6/6

M. Two-column note taking

Mandaka n= 2/8

Ngujini n= 4/6

Kisangara n= 2/8

Kiryia n= 2/3

B. Concept and word detective

Mandaka n= 5/12

Ngujini n= 1/4

Kisangara n= 1/5

Kiryia n= 6/4

Kiriki n= 5/5

D. Pyramid story theme

Mandaka n= 3/7

Ngujini n= 0/6

Kisangara n= 0/1

Kiryia n= 1/3

Kiriki n= 0/0

F. Information illustrator

Mandaka n= 4/6

Ngujini n= 0/2

Kisangara n= 2/4

Kiryia n= 1/4

Kiriki n= 3/2

H. Strategies for rewriting

Mandaka n= 6/6

Ngujini n= 1/5

Kisangara n= 2/4

Kiryia n= 2/3

Kiriki n= 4/3

J. Compare and contrast

Mandaka n= 16/21

Ngujini n= 5/9

Kisangara n= 11/17

Kiryia n= 6/7

Kiriki n= 10/10

L. Semantic feature analysis

Mandaka n= 2/8

Ngujini n= 0/9

Kisangara n= 1/3

Kiryia n= 1/1

Kiriki n= 2/2

N. Two-column concepts

Mandaka n= 10/15

Ngujini n= 2/6

Kisangara n= 3/10

Kiryia n= 4/3

<p>Kiriki n= 2/6</p> <p>O. Two-column problem-solve</p> <p>Mandaka n= 6/11</p> <p>Ngujini n= 1/3</p> <p>Kisangara n= 1/3</p> <p>Kiryia n= 1/2</p> <p>Kiriki n= 2/5</p> <p>Q. Two-column math problem</p> <p>Mandaka n= 2/4</p> <p>Ngujini n= 0/0</p> <p>Kisangara n= 1/3</p> <p>Kiryia n= 0/0</p> <p>Kiriki n= 3/2</p>	<p>Kiriki n= 4/5</p> <p>P. Problem organizer: metacognition</p> <p>Mandaka n= 0/6</p> <p>Ngujini 0/1</p> <p>Kisangara n= 4/7</p> <p>Kiryia n= 2/2</p> <p>Kiriki n= 2/2</p> <p>R. K-W-L Charts</p> <p>Mandaka n= 2/2</p> <p>Ngujini n= 0/6</p> <p>Kisangara n= 0/12</p> <p>Kiryia n= 4/6</p> <p>Kiriki n= 0/1</p>
--	--

For some schools use of computer technology remained very low on both the pre- and post-evaluations, probably due to the fact these school did not have computers or electricity was not available (e.g., Mandaka). At Kiriki individual teachers volunteered to receive computer training in MSOffice (i.e., Word and PowerPoint) and use of database (i.e., VIVA Africa and Encarta) programs from the trainer and had the support of an IT teacher with a functional Window computer lab. Given the technology resources and computer access, the change at Kiriki reported in anticipated computer technology usage was moderately low changing from pre- to post-evaluation (mean score 1.64 to 2.40). At Ngujini there was a small increase (mean score > 0.5) in anticipated use of computer technology. The use of computer technology at Kisangara had the largest increase (mean score 1.8), although review of the item responses was very low changing from “never” to “rarely” being reported for anticipated use in the classroom. The increase in use reported at Kisangara could be due to some teachers having access to individual laptops, the Kindle Fire, and LCD projector that was donated to the school.

School reports for unanticipated unchanged use of teaching strategies were found for inductive teaching at Mandaka and Kisangara. The results reported for Kirya, showing differences in rating scores comparing the evaluations, were not significantly different possibly due to high score ratings on the pre-evaluations. The trainer reported this might indicate that even before the seminar these teachers knew the value and utility of the teaching strategies. Teachers at Kirya anecdotally reported a strong willingness to learn and utilize the strategies. Other factors could have impacted the pre- to post-evaluation scores. For example, greater fluency and use of the Swahili language might have limited the understanding of the evaluation survey items. The small sample size of respondents completing the evaluation may have also affected the findings. Additional factors like class size will need to be considered when evaluating teacher planned implementation and use of the teaching strategies. The length of training periods and evaluation schedules, will need to be considered when evaluating teacher planned implementation and use of the teaching strategies.

Staff Development Seminar Post-Evaluation and Formative Evaluation

The teachers at the secondary schools completed an evaluation of the staff development seminar experience, provided by the trainers. This instrument has also been field-tested based on use with previous seminar offerings at schools in Tanzania. Faculty feedback from the Staff

Development Seminar Post-Evaluation (refer to Table 8) were made at each school with the following number of evaluations completed: Mandaka (n = 24), Ngujini (n = 13), Kisangara (n = 26), Kirya (n = 14), and Kiriki (n = 16). Overall the post evaluation showed strong support for the seminar-training program. Mean scores indicate teachers rated the evaluation items highly, while giving more variable ratings for discussion topics, cooperative learning, and use of information collection strategies. Teacher open-ended responses identifying most or least useful strategies, overall, varied among the schools. Lower mean scores were reported suggesting more time and opportunities to practice strategies. When asked for recommended changes in the seminar teachers most frequently reported the need to provide more staff development and support in learning the strategies. Teachers reported the most needed support to improve their classroom teaching were teaching material books or aides and reference books. At Ngujini teachers recommended providing the training yearlong to all schools.

Table 8. Staff Development Seminar Post-Evaluation at Five Schools

Directions: Please circle the number which best describes the effectiveness of the seminar in developing teaching strategies and English conversation skills using the scale below. This will be helpful in evaluating the seminar activities. Responses are kept confidential. **Thank-you!**

Never	Rarely	Sometimes	Usually	Always	Undecided
1	2	3	4	5	U
1. Instruction and presentation of the strategies were clearly introduced.					
Mandaka	Mean Score = 4.75	Kiryia	Mean Score = 4.57		
Ngujini	Mean Score = 4.4	Kiriki	Mean Score = 4.4		
Kisangara	Mean Score = 4.88				
2. Adequate opportunity was provided to practice the strategies.					
Mandaka	Mean Score = 4.39	Kiryia	Mean Score = 4.57		
Ngujini	Mean Score = 4.1	Kiriki	Mean Score = 4.2		
Kisangara	Mean Score = 4.36				
3. Cooperative learning strategies are useful to promote English conversation in the classroom.					
Mandaka	Mean Score = 4.78	Kiryia	Mean Score = 4.71		
Ngujini	Mean Score = 4.5	Kiriki	Mean Score = 4.7		
Kisangara	Mean Score = 4.85				
4. The discussion topic ideas are useful for classroom use.					
Mandaka	Mean Score = 4.04	Kiryia	Mean Score = 4.31		
Ngujini	Mean Score = 4.7	Kiriki	Mean Score = 4.3		
Kisangara	Mean Score = 4.68				
5. The lesson examples are helpful and provide useful models to promote English conversation.					
Mandaka	Mean Score = 4.5	Kiryia	Mean Score = 4.21		
Ngujini	Mean Score = 4.8	Kiriki	Mean Score = 4.5		
Kisangara	Mean Score = 4.58				
6. The templates are useful for classroom teaching (e.g., question writing, problem-solution graphic and lesson plan templates).					
Mandaka	Mean Score = 4.42	Kiryia	Mean Score = 4.07		
Ngujini	Mean Score = 4.9	Kiriki	Mean Score = 4.4		
Kisangara	Mean Score = 4.42				

7. The activity collection strategies for showing and recording information (e.g., two-column note taking, K-W-L organizers, problem-solution graphic and semantic charts) will be useful for teaching.

Mandaka	Mean Score = 4.17	Kiryia	Mean Score = 4.07
Ngujini	Mean Score = 4.3	Kiriki	Mean Score = 3.75
Kisangara	Mean Score = 4.62		

8. The instructor was helpful and provided the staff development environment in an open “easy-going” manner.

Mandaka	Mean Score = 4.55	Kiryia	Mean Score = 4.57
Ngujini	Mean Score = 4.4	Kiriki	Mean Score = 4.5
Kisangara	Mean Score = 4.85		

9. Rate the quality and value of the staff development-training seminar in helping to improve my teaching.

Mandaka	Mean Score = 4.87	Kiryia	Mean Score = 4.64
Ngujini	Mean Score = 4.9	Kiriki	Mean Score = 4.25
Kisangara	Mean Score = 4.96		

10. Identify the most useful activities or strategies for your teaching.

11. Identify the least useful activities or strategies for your teaching.

12. Recommendations for changes and improvement of the seminar and general comments.

13. What is needed the most to support and improve your classroom teaching?

High ratings were found for instruction and presentation of the strategies, and the overall rating of the quality and value of the training seminar was equally high. The findings from the staff development post-evaluation were substantiated anecdotally by feedback from the headmasters and headmistresses, including Rotary Club of Moshi-Mwanga Rotary meetings attended by the trainers. Tusu Tusubira from Uganda visited Kiriki, during service work by the team leader, and the VTT project school sites to evaluate the Rotary grant project. The VTT project was selected randomly as an international grant program for evaluation. Based on interviews from the VTT team at the Rotary Club of Moshi/Mwanga and school sites (i.e., headmasters or headmistresses, coaches, and teachers) Tusu reported strong enthusiasm for the program and “fit” with the national curriculum. According to Tusu, teachers and students want to continue using the strategies and students report having gained more confidence with these approaches. Tusu will provide a final report to VTT project stakeholders.

Project Sustainability with Instructional Coaches

The primary goal of the project was to train two faculty or staff at each school site, with an alternative trainer, to learn the program teaching strategies so they could conduct and continue the training in the future. The primary goal provided sustainability for the training program and included support resources for teacher trainers, with a monetary stipend for their teaching and classroom coaching provided to staff. Identified school coaches would then be required to submit reports, using a format guideline, showing intervention with teaching staff on continued use of the teaching strategies. The sustainability reports would include the following suggested teacher interventions:

- Classroom observations and feedback to teachers using the “Classroom Observation Feedback and Evaluation of Teaching Strategies” form
- Demonstration of a strategy in the classroom
- Conference with a teacher about how to use a strategy
- Conference with a teacher introducing a strategy (e.g., new staff member)
- Presentation and teaching with the staff use and demonstration of strategies
- Conducting a short seminar to staff on teaching strategies and use of the Kindle Readers.

The reports would then be e-mailed by the coaches to Tegemea Mfanga and the Rotary Club of Moshi-Mwanga VTT team who would evaluate the completed files. Finally, the reports would be transferred to team leader (Walsh) for review by the Rotary Club of Ames VTT team and provided a narrative evaluation confirming payment for the coaches’ stipend by Mfanga.

The first set of typed log entries showing completed documentation of at least 10 required intervention strategies recorded by the coaches at each of the schools has been completed. The second set of reports, due October 1, 2016, was completed with the third and fourth (final) reports due on April 1 and October 1, 2017. At the time of this writing all schools had successfully completed two reports with two schools incomplete in finishing the third report due on April 2017.

School resources provided in the grant included a monetary stipend to purchase textbooks and resources to support student performance and achievement. All school trainers worked with the school coaches and teacher teams to develop a prioritized list of needed books and school resources. At a bookstore in Moshi, the trainers and coaches purchased the requested books aligned with the Tanzania national curriculum and exams. Some additional smaller purchases included medical kit, calculators, and sports equipment for the schools.

Table 9. Examples of Logged Entry Submissions by School Coaches Supporting Sustainability of Teaching Strategies at the School

1) Mandaka Secondary School Coaches Sarah Mchomvu and Marium Kiwanda

TITLE: Assistance of new teachers. PARTICIPANTS: Coaches and the new teachers DATE: 7/3/2016-16/3/2016

TIME: 1hour a day

LOCATION: Library

ACTIVITY: The coaches assisted the new teachers (staff and teaching practice teachers) on the modal strategies, which will involve the students more than the use of the lecture method. The coaches and the new teachers met at the library for a week in which the teachers learned on the different ways to use in class such as graffiti, round robin, concept attainment etc.

EVALUATION: The new teachers learned on the ways that can improve students’ participation in the class and they promised to use them in class after the mid-term break.

2) Ngujini Secondary School Coaches Teophil Nyambo John and Shangilia E. Masuki

Activity Title/Goal: Use of graphic organizer (Time-line chart) and anticipation guide questions

Participants: Lucia John; History II^A and Masuki S: Trainer Time/Duration & Date: March 8, 2016, 12:30-01:50pm

Location: Classroom

Activity Description/Observation:

The teacher explains about the strategy and how to use it. Lucia introduced the topic and then asked the students to arrange the sequence of the events using the timeline chart. Presenting materials using time line chart helps the students to capture well the general order of the events basing on the topic introduced. You could write different statements on the blackboard, which explain different events together with their years and ask students to arrange them in timeline chart to see if they understood well the strategy. Keep trying the strategy and try other strategies, which can be better for your lesson. Anticipation guide questions arises the students' attentions due to the reasons that make them to think quickly and give out answers freely regardless are correct or not. Keep using this will be much helpfully.

Teacher Feedback:

Madam Lucia agrees with my feedback. She is going to try again the timeline chart strategy.

3)Kisangara Secondary School Coaches Severina Molloga and Salma Jukulu

TITLE: SEMINAR ON TEACHING STRATEGIES AND EVALUATION

PARTICIPANTS: ALL TEACHERS
STAFFROOM

DATE:13/09/2016

LOCATION

FACILITATORS: SEVERINA F. MOLOGA & SALMA R. JUKULU TIME: 9:20 – 10:40 A.M ACTIVITIES

- Teachers were given a task to select a strategy, which had not been employed in classroom teaching and share it with others
- Facilitators were passing around for checking and assistance
- The coaches conduct group competition on the strategies

EVALUATION

- All teachers were satisfied with the seminar and shown awareness on the strategies
- Teachers who mastered well teaching strategies will continue to assist other in order to simplify teaching and learning process.

4) Kirya Secondary School Coaches Rashid and Joctan

Activity and Title Goal: Practice Graphic Organizers – Concept Map in Physics class

Participants: Teacher Juma and Students in Form One **Date:** 18/05/2016 **Time:** 1:40 – 03:00

Location: Classroom

Activity description: Juma used a concept map strategy when elaborating ideas about basic principles of scientific investigation. He drew a dash symbol to the following step that relates. With this manner he identified steps that involve in scientific investigation starting with observation, puzzling questions, hypothesis, experiment, data collection and analysis, data interpretation, data representation and conclusion.

Classroom teacher feedback, observation and or evaluation: Students followed the concept on the map fast than when the idea is explained in graffiti.

5) Kiriki Secondary School Coaches A. H. H. Mbagi and Paul Epafra

Title: SEMINAR ON HOW TO USE A KINDLES Presented by MR. MARJANI and COACHES

Participants: All teaching Staff. **Date:**10th Day of March 2016 **Time:**15:10 to 17:00 Hrs.

Location: IT building

ACTIVITIES:

The trainer showed the participants how to open Kindle reader. Participants practiced the use of Kindle reader. They all learnt how to select textbooks that were saved in a Kindle reader. The presenter Mr. Marijani and the coaches assigned the participants to practice the use of Kindle reader.

EVALUATION.

Teachers were able to open and use a Kindle reader. They were also satisfied with the presentation and were comfortable with the result.

Conclusion and Discussion

The Rotary VTT grant project was overall successful in meeting its primary goals in providing training in teaching methodology through English activities and discussion. Some curriculum compacting and modifying (e.g., deleting some discussion activities) was necessary in order to focus on the presentation of teaching strategies to school staff due to time constraints. Schools had to reduce training contact hours because of scheduling limitations (e.g., Friday afternoon school dismissal for Islamic worship and prayer) and availability of the staff.

President of the Rotary Club of Moshi/Mwanga, Omary Mbelenje, along with other members expressed support for continuing the VTT program in the future with an ICT computer technology-training component included. This recommendation is needed, given the recent Internet upgrades in Tanzania, however the need to update electricity capacity at the school sites by use of solar panels or an alternative consistent power source will be required.

The curriculum program offered using *Strategies to Promote English Language Conversation in Tanzania, Africa* will need to be continually updated and reviewed based on evaluation feedback provided by the teachers. Trainer feedback will also be important for improving the seminar training, for example, recommending the restructuring of learning of teaching strategies based on a teacher's subject area of content instruction. As technology becomes more available at the schools, including increasing access to high speed Internet, integration of the lesson activities with use of computers will be necessary. For example, teacher lesson development of graphic organizers and concept attainment charts with an LCD projector viewed by students. Survey and evaluation instruments used in the program will need to be tested for construct validity and statistical reliability using test-retest, inter-rater, or internal consistency estimates.

Note of Appreciation

With the leadership of Tegemea Mfanga and team members Gasiano Senzige and Dr. Mark Mvungi of the Rotary Club of Moshi-Mwanga the grant was successfully implemented. Much success of the project was due to the Rotary Club of Moshi-Mwanga in arranging homestays, ground transportation, and administrative tasks supporting the seminar plans for each of the schools selected by their VTT team. Continued support was provided by Tegemea Mfanga who

received sustainability reports from the schools and transferred the documents for evaluation with stipend payment to the school coaches on an ongoing basis.

The Rotary Club of Ames support of the VTT team Gerald Klonglan and Mary Wells provided valuable guidance in development and implementation of the grant. Their involvement was critical in writing the initial grant proposal, final report, and article submission prior to departure and after returning from Tanzania.

The Iowa VTT team consisting of Hayley Nelson, Gretchen Hanson, and Brian Borer made the project a success due to their dedication and involvement in preparation meetings before departure for the service work assignment, along with the post follow-up requirements contributing to the grant report. Their enthusiasm and effective delivery of the seminar curriculum was evident based on feedback from school personnel and grant stakeholders.

Lead Author's Comment: Program and Curriculum Development

The activities and evaluation instruments for the VTT program are based on seminar training experience at the North and South Pare dioceses schools in Tanzania in 2006, 2008, 2011, and 2014. Publications in the AJOTE (Walsh, 2012 and Walsh, 2015) about the seminars provided at the dioceses schools can be accessed via the URL shown in the references.

The curriculum program based on English as a Secondary Language (ESL) teaching experiences in Costa Rica and Chile. The seminar text provided to teachers includes components from staff development training provided by the Ames Community Schools (ACS) including CRISS strategies, models of teaching, and cooperative learning. Recent additions to the student guide have included questioning strategies based on development and use with grade six students in the ACS Extended Learning Program (ELP). Some activities were adapted for use in Tanzania or developed for reading relevancy (e.g., articles on the Massai and Chagga tribes). Later revisions of the guide have been based on survey data from the Staff Development Course Post-Evaluation and narrative feedback received by seminar participants. The guide used in the training program (Walsh, 2016) titled *Strategies to Promote English Language Conversation in Tanzania, Africa* includes a teacher (student) and trainer's guide. To access the student and trainer's guide go to the Home page description of the training program and type the URL @ <https://sites.google.com/site/tzteacherstratenglish/ring>. Then select the title link in the side menu window *Strategies to Promote English Language Conversation in Tanzania, Africa* (Walsh, 2015). You can then proceed to View or Download pdf copies of the text.

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References

- Walsh, T. E. (2012). Providing Staff Development in Teaching Strategies and English Language Conversation at North Pare Evangelical Lutheran Church of Tanzania (ELCT) Dioceses Secondary Schools in Tanzania, Africa. *African Journal of*

Teacher Education AJOTE, 2:2. March 21, 2014 @
<https://journal.lib.uoguelph.ca/index.php/ajote/article/view/1688>

Walsh, T. E. (2015). Returning to Provide Staff Development in Teaching and English Language at an Evangelical Lutheran Church in Tanzania (ELCT). *African Journal of Teacher Education* AJOTE, 4:2. March 4, 2015 @
<https://journal.lib.uoguelph.ca/index.php/ajote/article/view/3353>

Walsh, T. E. (2016). Strategies to Promote English Language Conversation in Tanzania, Africa. Unpublished Manuscript.