



University of Gondar

STEM Project- Summer Outreach Programme for Talented Students

Project Implementation Report

Inside every child is a scientist!

August, 2013

Gondar, Ethiopia

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1. Introduction

Mr. Mark Gelfand is head of Gelfand Family Charitable Trust (GFCT) and the sole founder and supporter of seven science centers in the country. Gondar has got one of the seven science centers which is already built and getting equipped with materials which are basically expected to serve science and technology students and researchers.

2. Launching of STEM Project at the University of Gondar

2.1. Committee establishment:

Initially an assignment was given to the coordinating committee(*Summer programs office and community service offices*) from the office of the academic vice president (date : 18/10/05 E.C)

Then a meeting was called by the academic vice president to all concerned faculty deans, the students' dean, department heads and others. The A/V/President, Dr. Desalegn M., explained about the STEM project and the participants read the STEM guideline prepared by the MoE and a discussion was conducted (date 20/10/05 E.C) .

2.2. Experience sharing:

A group of four committee members went to Bahirdar to share the experience of BDU and to talk to the Regional Education bureau (date: 21/10/05 E.C). The education bureau was responsible for the selection of the students. Total of 450 students (105 – Grade 7&8, 105 – Grade 9&10, and 240 – Grade 11&12) were reported to come to the University of Gondar. The students were selected from N.Gondar, S.Gondar, W.Gojjam, Awi zones and Gondar Town.

After the return from Bahirdar, the steering committee started organizing the experience of Bahirdar(teaching manuals, project guideline etc.) and made a discussion on how to get in to the real work. A meeting was called again by the A/V/President to all concerned offices to inform them that the actual project would start as of hamle 7/2005 E.C. The office of the summer programs was given the task of running the project.

It was expected that there would be 450 students in the project (of which 156 from Gondar Town- no dormitory service and 294 – out of the town and hence need dormitory service).

Actually only 362 students of the 450 expected came to the program. Even from these students some are substitutes, not the ones sent from the regional bureau. 18 students were added from the University Community School and 1 student by special consideration from the president office. Total number of students in the program was 381.

Summary of the number of students and their origin		
Zone	Total Number of Students	Number of Students who get dormitory Service
Gondar Town	95	13
North Gondar	80	80
West Gojjam	68	68
South Gondar	58	58
Awi	61	61
Community School(UoG)	18	0
Special student(Sinetibeb Awoke)	1	0
Total	381	280

3. Orientation for students, Staff and other concerned offices

On hamle 8/2005, there was orientation program to all the students and all offices, faculties and departments who get involved in the project and the program was organized by the steering committee and the Academic Vice President office.

3.1. Screening Instructors

Faculties and departments were responsible for the selection of instructors for the project. The project coordination committee gave orientation to departments on how to select the instructors for this project.

3.2 Preparing facilities

- **Cafeteria service**
 - Students from the town would get only lunch.
 - Students out of town would get breakfast, lunch and dinner.
- **Dormitory Service**
 - In addition to the students who were assigned to be in dormitory, some students were given a chance to be in dormitory due to some special requests. A total of 280 students were given dormitory service. Also, bed sheets and blankets were provided to the students using dormitory service.
- **Clinical Service**
 - Students were given clinical service and possible medications from the University hospital in referral cases although such cases were rare.
 - Guidance and counseling services were also available.
- **Day to day transportation for students in the town**
 - Among other services, Round-trip Taxi fare for students from Gondar town was provided for all the days they have to come to the university.
- **Procurement**
 - Each student was provided with Exercise book(1 piece), Pen(2 pieces), T-shirt and ID Card Badge. Students who were in dormitory(in addition to the above list) were provided with Soft papers, Soaps, Modes(for females). In addition laboratory chemicals and equipments were bought for the program.

4. Teaching-learning at the University of Gondar

Classes were launched as of Hamle 9/2005 E.C.

- 4.1. **Main courses:** Class schedules were prepared by the program coordinators (Science coordinator, Technology Coordinator. And Life skills and motivational coordinator).
- These coordinators were responsible for the follow up of the classes, labs and computers. Making sure there is electricity [stand by generator] and other lab resources are made available by closely working with the steering committee.
 - There were meetings with coordinators every weekend to evaluate and make improvements to the program.

- Meetings with all the students were conducted twice during the training period. The first meeting was at the end of the third week and the last being in the sixth week exactly four days before the termination of the programme. And improvements were made according to the feedbacks collected from the students.

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- Courses offered include Mathematics, Computer Science, Chemistry, Biology, and Physics. For students in Science Stream Chemistry, Biology, Physics and for those in technology stream Electronics and computer programming were offered throughout the duration.

4.2. Short courses:

Life skill and motivational trainings and Visits

- Every Saturday there was Life skill and motivational classes [By Lecturers from Psychology department]. This component of the training included:
 - Introduction to the period of adolescence and life skills
 - Self-management skills
 - Academic skills
 - Social skills
 - Youth and reproductive health problems
- For three consecutive Sundays there were also visits to:
 - First week: All campuses of the University including the hospital, and Skill Laboratory for Medical and Health Science Students, and the Oxidation pond.
 - Second week: Fasil Castle and the Epiphany Swimming Pool.
 - Third week: Dashen Beer factory and the beautiful beer garden.

These visits gave flavor to the program in addition to the inspiration it created in learners and in making them aware of their surroundings.

5. Community Service Activity

- In partnership with the Dashen beer factory, students were able to participate in a community service activity by planting over 5000 seedlings.

6. Documentation and reporting of the project

- The University's public and international relations office has closely worked with the project coordinating committee and has prepared a documentation of the program from the start to the end.
- The project coordinating office has reported the implementation of the STEM project to the evaluating committee from the MoE.

7. Challenges faced

- **Students attitude:-** Quite a significant number of students, especially those students who were using dormitory services, were asking for more money in addition to the transportation cost they received from the regional education bureau.
- **Maintenance of dormitories:-** The university had to make maintenance of dormitories for the new year, had it not been for the STEM project. Hence there was an inconvenience in the program of the maintenance department of the university.
- **Students health problems:-** there was some illness and homesickness. And two students were unable to complete the program.
- **Curriculum:-** The fact that grades 7&8, 9&10 and 11&12 were mixed together was not convenient both for teachers and students.
- **Here are some of the students' comments as it is written by themselves:**

Student 1: *" In general the program is good. In this program there are many good and bad sides. The good one the computers and laboratories and the teachers. The bad one is the food. So, for the future, correct this mistake and make this university excellent in all aspects."*

Student 2: *“My comment is that in this university most of the things are very nice. But in dormitory proctors there is a problem and there is also a problem in TV room. So this must be corrected. Totally it is a nice learning program.”*

Student 3: *“Generally it is good for me. Most programs are good. But there is a little mistake in science stream. They do not teach us the theories of the lesson. They teach only the practical and do not use the time completely.”*

8. Farewell program

There was a colorful closing program with a music-band and a coffee ceremony on Sunday 19/12/2005 E.C organized by the steering committee.

- The Vice President for Research and Community Service, Prof. Afework Kassau and the General Director for Teaching Learning Core Process, Dr. Yemataw Wondie, instructors who were part of the project have attended the closing program.
- Guests, office representatives from the town’s sport bureau and the women’s youth and children bureau have also attended the closing program.
- Students who did some creative works were invited to share their success with the rest of the students and with all the audience.
- The ceremony was very entertaining and motivating for the students so that they keep their effort and achieve the best that they can in their school works.





9. Acknowledgement

The project coordinators would like to extend their special thanks to the following:

- Amhara Education Bureau.
- Bahirdar University.
- The office of the Academic Vice president.(Dr. Desalegn M.)
- The office of Research and C/S Vice president.(Prof. Afework Kassu)
- The office of Administrative Vice president.(Ato Solomon A.)
- Faculty Deans and Department Heads.
- The Office of students' service (Cafeteria, Dormitory, Clinic heads and workers)
(Mr. Shewit, Mr. Atnafu, Mr. Tesfamariam, Mr. Asmeche)
- All Instructors and Lab assistants who were part of the project.
- Finance office Heads and other workers(Mr. Abebe and Ms. Melke)
- Campus Security.
- University Drivers (Mr. Maru)
- All STEM Students.

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