DEVELOPING SKILLS OF GIVING AND RECEIVING FEEDBACKS BETWEEN STUDENTS AND THEIR TEACHERS: A CASE OF MATHEMATICS STUDENTS IN JIMMA UNIVERSITY

By Kassahun Melesse* and Zelalem Teshome*

ABSTRACT

One of the strategies to improve quality of teaching and learning at training institutes could be by developing the skill of giving and receiving feedbacks among the individuals involved in the training. This action research is then done as a final work for HDP in Jimma University (JU) to develop the skill of mutual understanding for improvement targeting third year mathematics student teachers and their mathematics teachers.

Data were collected using questionnaire for all students and two focused group discussions among purposively selected few informants; one from students and the other from teachers. Based on the above two methods data were analyzed quantitative and qualitatively.

As indicated in the result, the system of giving and receiving feedbacks to improve the quality of teaching and learning activities was accepted as a very good approach both by students and teachers. Teachers agreed on what they have to improve in front of their students and this was appreciated by the students. Besides, some other controversial points were resolved by mutual agreement after discussion. Accordingly, students not only comment on the weak sides of their teachers, but also learnt to accept their weakness which were bottle necks for learning activities. Based on the findings it was recommended that such activity to continue not only in mathematics but also in all other subject areas in the future consistently.

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INTRODUCTION
The quality of teaching and learning in faculties of education of universities and teacher training colleges has attracted much attention of the Federal Democratic Government of Ethiopia especially after the implementation of Teacher Education System Overhaul (TESO). There has also been much debate on what sort of teaching – learning process encourages effective learning. Following this, the Higher Diploma Program (HDP) came into practice primarily focusing on teacher educators at national level to update the quality of teaching methods of instructors. This in return promoted active learning opening free interactions between learners and trainers followed by reflections and feedbacks. Then the need for giving and receiving feedbacks came to be cultural break through.

Giving and receiving feedback is one of the most important methods in improving the level of teaching and learning activities to increase the quality of education. Giving and receiving feedback from students enhances the improvement of the quality of education rather than damaging their self esteem against to improve the teaching – process (David Boud, 1997). This does not mean that teacher educators should never point out the shortcomings of student teachers’ work or raise problems concerning with their behavior in the campus. However, it is useful to be able to distinguish between giving and receiving feedbacks to and from student teachers’ academic activities and related behaviors on one hand, and being critical on personalities of the student teachers themselves (Hathaway, 1988; Jude, 1996; Phill Rich). This in return enhances the teacher-student relationship which is a corner stone for quality of education. Present education theories make a greater conviction to social process in student learning development and suggest smooth teacher-student relationships which plays major role in education (Ewnetu S. & Fisseha, 2008). Individual differences in students’ relationship to teachers are linked with differences in learning achievement (Pianta, 1997); which needs a trial of way out to smoothen this difference via giving and receiving feedbacks in this particular case.

The performance of the faculty of Education depends on the performance of every individual within the university or
Developing the skills of the faculty in particular. To ensure that all staff are meeting their potential, it is essential that there be a culture which enables feedback to be given and received. The purpose of this action research is to enable 3rd year student teachers of the Department of Mathematics to enhance the skill of giving and receiving feedback and to facilitate the friendly relationship between students and teachers to increase the quality of training going on. For this, the following general and specific objectives were designed to be measured by the performance indicators which follow.

**General objective:** Students will have developed the skills of giving and receiving Feedback through the support of their teachers.

**Specific objectives:** Students be able to: identify ones weakness and strengths to provide constructive feedback for better improvement, accept consents from other people for self improvement, identify main complaints/dissatisfaction of students on their instructors and the University management in general, identify student teachers weakness and strengths observed by their teachers, exercise arguing on the main issues/ problems identified on general discussion and group discussion, practice agreeing on weakness to improve from both sides based on the through argument and evidence.

**Performance indicators:** student teachers provided feedbacks on the strength and weaknesses of their teachers academic Performance using the questionnaire and FGD, student teachers actively participated in the discussions during the presentation of the feedbacks, they expressed their freely, they accepted their weaknesses and agreed to improve them, they freely argued on the comments that they are not convinced and support their argument by evidence.

**METHODS AND MATERIALS**

**Population and sites:** This action research was done in Jimma University (JU). It aims to develop the skill of giving and receiving feedback for improving the quality of learning. The target of the study were 1996 E.C. third year mathematics department student teachers at Jimma University.

**Study design and sampling:** The study design was quantitative and qualitative study based on purposive sampling appropriate for Focus Group Discussion.
(FGD). All the third year students involved in responding the questionnaire.

**Data collection and instruments:** Information was collected using formatted questionnaire self administered by 3rd year mathematics student teachers, and FGD on the two groups; one group of students and second group of teaching staff. The questionnaire was taken from the HDP training module designed for action research activities.

**Data analysis:** Data were summarized and analyzed both quantitatively and qualitatively using basic descriptive statistics.

**Ethical consideration:** Data were collected from the aforementioned sources through official permission of the university authorities and the consent of the individuals in the FGD taken into consideration.

**Implementation:** Once important issues for feedback and discussion were identified, action plan was designed on how to implement in giving and receiving feedbacks through group and general discussion. Then the problems (issues) identified were presented to the 3rd year mathematics students by the instructors. First selected weakness of delivery accepted by instructors openly. Next, issues that needed further argument before accepting or rejecting were presented separately. Then followed by strength and weakness of students openly. After the presentation, students were grouped into small group of at most 7, to discuss on the argumentative issues like: teachers weakness requested for further justification, student weaknesses to be accepted and weaknesses to be argued further like that of the teachers. From this, the student group representatives presentation of their group view on the general session followed at the end. These activities were done into two different days; the first on students giving feed back to their instructors; the second students accepting or rejecting the points (weaknesses) raised for improvement in their side.

**RESULTS**

Year III student teachers of the department of Mathematics, were requested to give their views about their knowledge of the subject and feelings they have about their
instructors using formatted structured questionnaire and FGD.

In the formatted check list given to them, they were asked to rate 1, 2, 3, 4 respectively for agree strongly, agree most of the time, disagree most of the time and disagree strongly. 63.6% of them were positive and agreed strongly or most of the time that they have confident about their subject knowledge, and learn better when discussing their work with other students.

More than 80% of the students agreed that it is helpful to get regular feedback about their progress, if teachers tell them exactly they have to do to improve in their training. Besides, 93.9% disagreed against the issue that teachers do give more attention to boys than girls.
### Table 1: Rate of Teaching and Learning activities

<table>
<thead>
<tr>
<th>Q</th>
<th>Teaching and learning activities and knowledge acquired</th>
<th>Agree+</th>
<th>Disagree+</th>
<th>Agree in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am confident about my subject knowledge</td>
<td>21</td>
<td>12</td>
<td>63.6</td>
</tr>
<tr>
<td>2</td>
<td>My teachers are good at helping me develop my subject knowledge</td>
<td>19</td>
<td>14</td>
<td>57.6</td>
</tr>
<tr>
<td>3</td>
<td>I learn better when I can discuss my work with other students</td>
<td>21</td>
<td>12</td>
<td>63.6</td>
</tr>
<tr>
<td>4</td>
<td>Lectures are the best way of giving us subject knowledge</td>
<td>16</td>
<td>16</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>Subject classes are always interesting and enjoyable</td>
<td>14</td>
<td>19</td>
<td>42.4</td>
</tr>
<tr>
<td>6</td>
<td>I am confident about my teaching ability</td>
<td>16</td>
<td>13</td>
<td>51.6</td>
</tr>
<tr>
<td>7</td>
<td>My teachers have helped me to develop teaching skills</td>
<td>13</td>
<td>18</td>
<td>41.9</td>
</tr>
<tr>
<td>8</td>
<td>There are many opportunities to practice my teaching skills</td>
<td>10</td>
<td>21</td>
<td>32.3</td>
</tr>
<tr>
<td>9</td>
<td>I have been helped to develop teaching resource materials</td>
<td>9</td>
<td>20</td>
<td>31</td>
</tr>
<tr>
<td>10</td>
<td>I have been helped to develop teaching resource materials</td>
<td>17</td>
<td>16</td>
<td>51.5</td>
</tr>
<tr>
<td>11</td>
<td>Knowing how to get good exam marks is very important</td>
<td>21</td>
<td>11</td>
<td>65.6</td>
</tr>
<tr>
<td>12</td>
<td>It is useful to have regular feedback about how I am getting on with my work</td>
<td>29</td>
<td>4</td>
<td>87.9</td>
</tr>
<tr>
<td>13</td>
<td>It is helpful to have oral and written feedback on my teaching abilities</td>
<td>25</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td>14</td>
<td>It is much faire to be assessed on all our work, not just an examination</td>
<td>21</td>
<td>12</td>
<td>63.6</td>
</tr>
<tr>
<td>15</td>
<td>It is helpful if teachers tell me exactly what I need to do to improve</td>
<td>28</td>
<td>5</td>
<td>84.8</td>
</tr>
<tr>
<td>16</td>
<td>I would like to spend more time in schools</td>
<td>21</td>
<td>11</td>
<td>65.6</td>
</tr>
<tr>
<td>17</td>
<td>Teachers in schools have helped me a lot</td>
<td>19</td>
<td>11</td>
<td>63.3</td>
</tr>
<tr>
<td>18</td>
<td>Teaching is my first choice of career</td>
<td>12</td>
<td>20</td>
<td>37.5</td>
</tr>
<tr>
<td>19</td>
<td>My teachers provide me good models for the teacher I would like to be</td>
<td>16</td>
<td>15</td>
<td>51.6</td>
</tr>
<tr>
<td>20</td>
<td>Teachers give more attention to boys than girls</td>
<td>2</td>
<td>31</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Agree+ = Agree and strongly agree  
Disagree+ = Disagree and strongly disagree
Following the questionnaire process, Focus Group Discussions (FGD) were given at different levels on the same issues; giving and receiving feedbacks; one group of student teachers of third year mathematics, the second group of teacher educators in the faculty.

Primarily, six students from year III mathematics class were purposively selected for Focus group discussion (FGD) to discuss on the issues of their subject knowledge, teaching skills, methods of assessment in teaching mathematics and general comments regarding teachers, students and materials.

The first point of discussion was on students feeling on their subject knowledge and actions to be taken for improvement. In this discussion students focused on two directions. One, on the students activity perspective and the other on the teachers. In line of the students themselves, they revealed that they have confidence in most of major courses except calculus courses. In other courses like physics and education; they complained that all physics laboratory works were not done completely and properly. On the other hand, only two courses were given by the time of this discussion and suggested that most of educational courses must be given before they go out for practicum/teaching practice. Besides, they recommended that students must help themselves by reading books and references after their teachers gave them the highlights in the class. Their recommendation went further that students must at least acknowledge and respect teaching profession which is their future career.

From their teachers activity perspective, they suggested that teacher educators should give more assignments, study materials like handouts and group works and assignments must be consolidated at the end. Primarily, teacher educators should be well prepared before coming to class and show good behavior to motivate their students and be flexible according to the pace of students. They should also avoid unnecessary repetition of topics or units. Beyond all, teacher educators must not be overloaded by make-up classes and other additional duties and responsibilities.

The second point of discussion was students reflection on their teaching skills developed so far in the training and suggest
possible means of improvement. In this discussion students complained that they have never exercised formal teaching except presentations for class activities and group assignments. For this, they suggested peer teaching and micro teaching would have been appropriate to develop the skill before going out for practicum. Besides, summer teaching services could be arranged during the long vacation by arranging official and supportive letters to students residential areas or regions. Above all, student teachers themselves must be interested and get ready to do works given by their instructors. Teacher educators on the other hand should respect students and understand their problems. They should encourage and initiate students to work hard and participate actively in their class activities individually as well as in the group work. Teacher educators should start their lessons by revising the previous lesson to check the level of understanding of their students. They should also use their time efficiently to finish the courses with normal pace. Their teaching must be supported with teaching aids like overhead projectors, flip charts, models and the like. They are required to be flexible according to the class atmosphere during teaching and learning interactions.

Students were also asked to reflect their views on the methods of assessments used which was the third point of discussion. Here continuous assessment was recommended the best if applied to all courses with appropriate gap given in between. Assignments and tests were suggested to be corrected in time and feedbacks be given timely. Further more, students suggested that more weights be given to tests (20%) than the assignments (10%) showing their inclination towards mid and final examinations. They also reflected that taking attendance regularly is necessary but with no values/grade points allotted. Moreover, examinations should be set in fair distribution with respect to students level of understanding (slow, average, above average) and the time coverage (periods taken) of each chapter/unit. Variety of questions like objectives and subjective types are essential in the examinations but workout problems should not appear as short completion type since completion is lose or gain game where whatever you have tried cannot be seen or checked. Providing optional questions like 7 out of 10 or so...
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would be appropriate in the workout section of the final examination to give students selection opportunity.

The last point of discussion in this FGD with student teachers was to forward any general comments and suggestions around the issues raised above. Accordingly, students confessed that student teachers are gradually developing interest towards teaching profession though many of them joined the faculty without their interest. For this, they said, good model teacher educators contributed a lot. According to the discussants, good model trainers/teachers are those who are well prepared and transfer knowledge properly, who care and respect their students, help students with equity and use their time effectively and efficiently, make students read and work hard, flexible enough according to the situation of the class atmosphere, and understand the background and level of understanding of their students. Besides, friendly relationship between teachers and students was raised as one important issue for facilitating smooth learning situations. This friendly relationship could be manifested by easy approach for consultation, mutual respect ions, and educators decision making and honesty. But with all these, they recommended that unethical and unnecessary relationship should be avoided with reasonable distance.

The second FGD group was a group of academic staff those who teach these third year mathematics students in general. This group was asked to reflect its views on what must be improved both from teachers and students perspectives. In this regard, several complaints were raised against students behavior suggesting that it needed serious improvement. In line with the teaching learning activities, teacher educators complained that some students do not attend classes with interest, they disturb the seating arrangements which is time consuming to rearrange and start the class on time, they are not willing to attend make-up classes. Moreover, students from other classes come to collect extra chairs and their exercise books while class is on progress, students are usually fast to blame others like complaining on the teaching styles and academic qualification of scares teachers but they are weak to fulfill their own responsibilities like coming late which is a common phenomenon. In general it would be very difficult to manage the usual large class
size of student population. Besides, these staff members also commented on students misbehavior coming from outside the classroom perspective. They said that students shout outside the class room knowing that class is going on in the near by rooms; some even listen to the mobile music in regular and loud video shows during the evening sessions. They do not respect staff members unless the ones who teach them. It is very difficult to pass by the corridor without being knocked by the shoulder. Writing none sense things and stamping their muddy feet on the wall are common phenomenon. Putting the light off and showing a very loud video show in the near by field while evening class going on are regular disturbance. In general many of the students do not care to close unnecessary water tap flow and electric light wastes even if it goes days and nights.

From the assessment points of view teacher educators reflected that some students are usually absent in the examination time and try to bring forged medical certificate. Those taking the examination are seen cheating developing different cheating skills from time to time, like bringing leaflets, writing inside their sensitive bodies difficult to search, using electronics like mobiles and calculators, etc. After the correction for the evaluations are made and grades are announced many of them try to lobby their teachers to change the grades illegally. The known motto of these students is “he/she gave me F or D but I got A or B.”

Assessment method comments were areas where both parties accepted with mutual understanding. In this regard, assignments and tests must be corrected on time and feedbacks must be given properly and timely. Attendance is essential part but must not be graded. Distribution of examination questions setting must be according the topic coverage, and the questions must be put in their appropriate categories, that is work out type questions should not appear in short completion part. Variety of questions in an examination booklet is inevitable.

**DISCUSSION**

As the objective indicated this action research was meant to exercise giving and receiving feedback and develop some improvements on the weaknesses agreed upon between student teachers and teacher
Developing the skills of educators. A better skill of communication and understanding is expected from both parties for the development of quality of education cascading down to the level of high schools and elementary schools (Egan, 1977; Maurer, 1994). From the information (feedbacks) found by the check lists of different groups of FGD, weak points and strong points were identified and summarized for discussion. The main points of the findings were categorized: one, strong points of the two parties for encouragement; two, weak points both parties agreed by the study subjects accepted for improvement; three, weak points of teachers or students where there was a need to justify for acceptance, that is where subjects refrained to accept leading for further justification. Weak points accepted right away and refrained for further justification through discussion were expected both from teachers (exemplary) and students (indicator of progress or change).

Accordingly therefore, the following were summarized for presenting the result to the general audience to the 3rd year mathematics students and the study team, assumed appropriate for discussion. The following issues were well accepted by concerned parties (teachers of the study team) for improvement.

Teacher educators, the study team agreed that teachers in general must be prepared to teach effectively and apply continuous assessment simultaneously. The teaching learning activities should also be supported by teaching aids like overhead projector, flipchart, three dimensional models etc. Teachers must also show good behavior and motivate students for active participation. Teaching delivery must be flexible according to the pace and capacity of students. Teachers should be responsible to provide reading materials and or notes followed by variety of examples and exercises. One of the method of active learning is group work. Group formation then must be at random to minimize some shadowed students hidden form participation. Teachers must consolidate the assignments and group work results at the end. Teachers must assess the activities of each session by injecting question and answer drills to check how things are going on. Student teachers are required to develop teaching skills even if before going out for practicum. Teacher educators then should assist their students to present some selected topic even if in major subject areas, organizing peer or micro teachings. This could be enhanced by arranging
teaching services in long vacations like summer by initiating the faculty through the departments. At last teacher educators accepted they must not be overloaded by extra work at the expense of their regular teaching activities. Besides, they agreed to make frequent action researches to identify academic problems and try to alleviate them.

Similarly the following points were accepted by students for improvement. They acknowledged they have to work hard on their subject areas to improve their subject knowledge and avoid running here and there when examination approaches. This could be done by reading, doing exercises, actively participating in practical activities. They revealed that they are interested in doing more practical works and acquiring new ideas from time to time instead of repeating the same thing. They admitted that they are developing interest towards teaching profession gradually through the training time.

On the contrary there were some points where the two parties (students and teachers) did not accept right away but resolved through discussion and justification; which needed communication skills of helping to improve the relationships (Long, 1996).

First, teachers openly projected their reservation on comments that students forwarded to them requesting explanation or justification. From the students comments, teachers were requested to avoid repetition while revising the previous courses on one hand, and to revise the previous courses on the other; which were contradictory ideas from the teachers perspective; and asked them what they really want to be done. Majority of the third year students were convinced that these ideas are indeed contradiction except which was meant unnecessary and irrelevant repetition of some elementary topics in which case the teachers accepted. It was also found that students requested their teachers to teach them the application part of mathematics on hand and complained that teachers are teaching mathematics as history on the other. The discussion was then opened by teachers requesting their students to explain what they really meant by these two points commented, specially being trained as mathematics teachers in its pure sense,
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what do we mean when we say application of mathematics in their domain? Students then, explained that when they said by application of mathematics, they meant to emphasize application problems given at the end of each chapter in the texts and whence the teachers accepted the idea. Regarding the idea of teaching mathematics as history, they explained that mathematics should be thought as conceptualization given emphasis instead of mere memorization and copying lecture notes directly from the texts.

Students should have freedom to read and help themselves. This was indeed a question of quality of teaching methods accepted by their teachers right away. Teachers then agreed to improve their teaching system according to the comments. The next point of explanation was the issues students commented that give us examples and challenging question in lieu of the discussion method which was assumed time consuming. This idea further went in saying that students need time to read instead of killing time by class learning. Teachers tried to argue strongly that group work was one of the best way of implementing active learning and they are supposed to use it after graduation in the high schools they are to teach and also prompted in pedagogical aspects. Students on the other hand argued that some instructors used to give a long period of time for discussion on the issues we do not have previous basic knowledge or experience which resulted boring and fruitless. On the contrary, majority of students agreed that classes are essential for students, only very few students could learn by reading and suggested that the comment in this regard is not the property of the majority of students. Finally teachers agreed that discussion method must not be boring rather should motivate students to be active, hence variety of activity must be indulged from time to time for active learning; which boiled down to common agreement.

The other point was that the same teacher teaching different courses again and again which makes the learning monotonous and barrier to have different experience, behavior and style from different teachers. Teachers agreed on this issue that students have the right to complain on such issues unless there was staff shortage in the department which was really the fact currently. Here students also compromised that they can tolerate same staff teaching
on different courses provided that the instructor is efficient and effective in his/her qualification.

CONCLUSION/GENERALIZATION
Finally the discussions were completed with the following major successes.

- It helped students to know the results of their responses to the questionnaire and group interview (FGD).
- It facilitated the smooth relationships between the students and their instructors.
- It has developed the skills of giving and receiving feedback in both parties, students as well as their instructors.
- The whole project was successful in such a way that students enjoyed exercising the skill of exchanging feedback on the quality improvement of their training, by accepting comments which are clear and constructive and arguing on those which they thought it was unfair.
- It created openness between students and their teachers to raise academic issues for improvement.

RECOMMENDATIONS
- Smooth relationship between the two parties must continue in all other subject areas.
- Besides, such investigation must be conducted regularly to develop the skill of and make it culture breaking the old tradition.

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REFERENCES