Action Research: An Approach To Improved Classroom Instruction

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Abstract

In the teaching/learning process, the instructor and his/her method of instruction impact on the learners. Success is also guaranteed when learners work in a non-threatening environment. This paper seeks to highlight how using action research approach, a group of university students who were repeating a communication course were all successful at the end of the semester. Students by establishing learning communities took responsibility for their learning. Changes were made to the way the content was presented by introducing a variety of methodologies. The teacher was a coach and facilitator to each group. These changes were fundamental to the high level of motivation. Attendance at classes and participation were outstanding. The ultimate success in the course has resulted in changes to this and other courses in the department.

Introduction

n all societies, economic, political and social developments are hinged on the extent to which citizens have the requisite skills to carry out the mandates for such development. One institution, which helps to prepare citizens with these skills, is the school. It is here that learners should therefore be given a fair opportunity to achieve success. This success is guaranteed when teachers are committed to "adopt participatory decision-making and collaborative problem-solving strategies to address school issues." (Kagan and Tippins, 1993, cited in Adams and Hamm, 1994, p. 4).

Research, especially quantitative research, has been ongoing in the field of education but when it comes to putting much of the findings into practice there is an obvious lack of implementing changes in the teaching/learning process. The concept of teacher as researcher is included in recent literature on educational reform, and encourages teachers to be collaborators in revising curriculum, improving their work environment, professionalising teaching and developing policy. This teacher research has its roots in what is called Action Research. (Johnson, 1993, par. 1).

What is Action Research?

Several definitions exist in the literature. Each one identifies a cyclical process and one in which the changes will be utilized immediately to improve the teaching/learning process. According to Kemmis and McTaggart, 1982, (cited in Johnson, 1993):

It is a deliberate, solution-oriented investigation that is group or personal owned and conducted. It is also characterized by spiraling cycles of problem identification, systematic data collection, reflection, analysis, data-driven action taken and finally, problem redefinition (ED355205)

Kember (2000) aptly defines it when he states:

Perhaps the clearest distinction between action research and other modes lies in the attitude to changes in what is being researched. Other paradigms tend to avoid perturbing the subject of their research. Action researchers set out with the avowed intention of improving their practice. Lewin (1952) and Rapport (1970) both maintain that research should...[cause] social change. The very essence of quality enhancement is improvement...schemes to improve the quality of learning and teaching should be derived from a paradigm that embraces change (p. 25).

Kember (2000) also refers to it as "a cyclical process of planning, acting, observing, and reflecting and is designed to deal with a concrete problem located in an immediate situation within a programme, organization or community. (George, N.A., Craven, M., Williams-Myers, C., and Bonnick, P. (2001, p. 7).

Unlike other research approaches, action research begins with the teacher. He/she identifies the problem then carries out the process. The findings are used to improve the teacher's practice. However, if the problem is not one that he/she cares about and can potentially change, it should not be done. (Adams and Hamm, 1994, p. 129).

Background to the Project

The current restructuring movement in many educational institutions has the concept of shared decision-making at the core of their operations. With this new thrust, comes a new responsibility. Every Administrator, Dean, Head of Department, and Lecturer becomes accountable to stakeholders – the students, the community, and Boards – for the policies, programmes and practices he/she seeks to implement.

In 1995, The University of Technology, Jamaica, the national institution at which the research was undertaken, made its transition from a College, which offered three-year diplomas and post-graduate degrees, to a University offering four-year full time degree programmes delivered across five faculties.

Students in the four-year full time degree programmes are required to take four core communication courses over two years as a part of their General Education programme. These are offered through the Department of Liberal Studies. In Year 1, students take Fundamentals of Communication, which is a writing and reading course, and Oral Communication, which focuses on speaking and listening. Second year students are registered for Advanced Communication and Business Communication in Semesters 1 and 2, respectively.

Advanced Communication is a highly student-centred course, which is designed to maintain and expand the reading and writing process skills developed in Fundamentals of Communication. Emphasis is placed on information-gathering skills for writing, critical thinking and topical, relevant issues of local and international importance.

The course which is divided into two modules, the research essay and critical thinking and writing, is structured around a fifteen (15) weeks semester with classes held once per week for two hours of lecture/tutorial session. Assessment is by coursework but students complete two of the four assignments under test conditions.

For the past three years, the failure rate has been progressively high, that is, in each class of 30, approximately 20% receive below 45%. From a population of 1200, there were over 150 failures. Students have the option of repeating the course in Semester 1 or 2 and in the Summer Session. Their objective is to pass the course with a C or a C- grade.

On completion of a call for resit students in Semester 2 of the academic year 2001-2002, fifty six (56) students were registered.

Purpose of the Action Research in Communication Course

According to Johnson (1993) the purpose of action research include: 1) school-based curriculum development 2) professional development strategy 3) systems planning and policy development and 4) an evaluative tool for self-evaluation (par. 1).

Having just completed a three-day residential Action Research Training Workshop, I undertook an Action Research with a group of resit students who had registered for Advanced Communication. An adage states "adults vote with their feet". It was therefore important to restore any confidence, which they might have lost, and to create a class which would assist in making meaningful and lasting changes in students' lives, as well as my professional development.

Based on conversation with staff about students' negative comments about the course, I realized that some of the students would be demotivated and just wanted to obtain a passing grade rather than enjoy the learning experience. I wanted them to enjoy the learning experience and achieve above-average grades.

Action Research is not considered to be inflexible. There is no fixed technique. As an approach, it is invaluable because of its practical, problem-solving quality. It is "trying new ideas and practice as a means of increasing knowledge about and/or improving curriculum, teaching and learning" (Kemmis and McTaggart, 1992, cited in Johnson, 1993, par. 2). I was ready for a challenge! I wanted to use a new methodology to teach this course.

This project was experimental in nature and my purpose was to determine whether a new approach would result in a higher pass rate among students. My first objective was to provide students with an atmosphere that was non-threatening. Imel (1994) states that "in most circumstances, adults are not captive learners and, if the learning situation does not meet their needs and interest, they will simply stop coming" (par. 2). Knowles (1984) extends this view and suggests that learners are "mutual partners in the learning endeavour." (Imel, 1994, par. 2). The project was therefore a partnership between my students and myself.

Research Setting

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The environment was non-threatening. Instrumental classical music was provided prior to the start of the class and stopped once they were in groups. During the period of journaling, there was also background music. On more than one occasions, students selected the type of music to be played.

The classroom was located on the top floor of a three-storey building. Classes were held from 2:00 p.m. to 4:00 p. m. on a Thursday. This was chosen deliberately. The noise level would be drastically reduced as a result of fewer classes being scheduled after 1:00 p.m. The classroom allowed for a square-shaped arrangement of the desks to facilitate the groups of fours.

I was never condescending and even when students wrote or spoke information which was incorrect, or they took a long time to grasp a concept, I would find different ways to help them to understand. The group was asked to assist with clarification or to provide an answer and I would remain close by to ensure it was correct.

Some of the comments on the environment were:

- The background music was good and contributed to the general mood of the class.
- The atmosphere in the class is more inviting than it was last semester.
- A very interactive and informative class.

The Process and Data Collection

Problem Identification

Thirty- one students registered to be part of an experiment to improve classroom instruction and students' grades and performance in Advanced Communication. Another instructor taught the other twenty five (25) students in the traditional way.

Implementation

The elements from which the project evolved and was conducted are based on the Kember (2000) Model. George, et al (2001, p. 7). In this model, which is derived from Kurt Lewin's model of action research, the researcher reflects- plans-acts-observes-and reflects. The researcher reflects in order to identify the problem to be researched and then plans how to engage in the action or change. In pursuing the action, he/she observes what

occurs and documents for analysis. The group being studied reflects on what was observed and plans the next set of actions, which may be required. This cyclical process continues until the objectives are met.

Planning

Students were introduced to the concept of Action Research in their first class. The first step was to plan how they wished the class to be conducted. This included the changes to the content but not the methodology. Students formed groups of fours and identified a team leader. Their task was to individually identify the strengths and weaknesses of their previous experiences in the advanced communication course and to make proposals for their learning of the content.

The course outline was presented and each group asked to decide on how they would like the course presented. Very often learners feel that they are not connected to or engaged in the learning process. By engaging the students in deciding on the order of the content, adding to the content or removing some areas, they were taking ownership for their learning and would perhaps feel safe and motivated to do well. This is consistent with Imel's (1994) views that "an ideal learning climate has a non-threatening, non-judgmental atmosphere in which adults have permission for and are expected to share in the responsibility for their learning," (par. 2). This was adopted in the project.

Acting

The next step was to act. The information was first compiled individually, and then shared in each group. One report was compiled and presented to the entire class by the reporter. A general discussion followed. It became evident that the methodology and organization of the content were their major concerns.

Each suggested change was rationalized and a new outline developed. The changes were made to the order of the content and to the weighting of the assignments. One area, which showed up as a concern in their discussion, was that of a Checklist which was used to measure the affective domain. I thought that they would want it removed but the students asked that it remain. The major assignment, which was a Research Paper, also remained in the same format, except for the number of pages, which was reduced from twelve to ten, and the use of primary sources.

In the second week of the semester, students were given topics from which they would write their paper. Having chosen a topic, students asked to be regrouped according to the topic chosen. According to Imel (1999), "support for adult learners is provided through a learning environment that meets both their physical and psychological need." (p. 2.) This was supported. The large number in the class was easier to handle as students established their learning communities in a pleasant atmosphere in these smaller groups. This learning environment was an important element in the success of the relationship between instructor and the learners.

The class met for two hours. The learning material was presented. On alternate weeks, the class was scheduled for three hours. The final hour was for the Reflection Sessions.

The instructor was responsible for teaching the concepts and each group would decide on an activity to reinforce that concept based on the needs of the group. Such activities included peer editing, or assigning specific tasks to be reported on by one member of the group. In order to reinforce a concept taught in the previous class, review sessions were organized by the class, a group would randomly ask someone from another group to be the "teacher/facilitator". A feature of all groups was the posing of questions, which required students' engagement in problem solving and critical thinking.

Observation

Step three involves observation. In this area, both the teacher and students are involved. The teacher documents in her Journal what occurred in each class. This activity is important as it assists the instructor in identifying recurring activities, themes, successes, problems or failures. (Yee-Sing and Williams-Myers, 2003, p.

18). In this project, I focused on their ability to reason; how well they remained focused on the task and their ability to order and present the information; their interpersonal relationships, in particular how they listened to each other and sought clarification from each other. Students' observation also involved identifying areas of strength and weaknesses in the teacher's method, as well as making recommendations for change.

Reflection

At the end of each class, students reflected on the process by recording their experiences in their Journals. Specific questions guided journalizing. Questions asked were: "What went well?" "What could have been done better?" "Do you have any questions or comments?"

Prior to the fortnightly meetings, the team leaders met with the instructor to comment on the progress of their groups. At the reflection sessions, the team leaders and the other students again reflected on the process. In order to create a relaxed atmosphere, students were offered refreshments and background music was played prior to the start of the meeting.

The teacher having analysed the comments in the Journals sought clarification on some concerns raised or queries made, without directing them at specific individuals. This forum further provided an opportunity for sharing information on what worked well in the different groups. Confidentiality was guaranteed at these sessions and only the teacher had access to the Journals once the entries were made and turned in. Students were able to comment freely on the project. Anonymity from teacher and students was also guaranteed by a personal code on each Journal. This also allowed for ease of identification at the next class.

The completion of reflections very often leads back to the first step in the cycle. (George, et al. 2001, p. 7). At this stage, the class planned, acted on the plan, observed, reflected and moved on to the next concept. Students' feedback sometimes meant planning another strategy to assist them. It also meant that a group, which was having difficulty with a concept, could overcome that hurdle as a result of the discussions.

Data Collection

Action research uses many forms of inquiry to examine, critique, analyse and understand teaching and learning. Having decided on the problem or topic to be researched, the researcher determines the data collection procedure that is most suited to the project (Yee-Sing and Williams-Myers, 2003, p. 18).

In this project, the data were gathered from the groups and the teacher. The tools were:

- Students' feedback. These were done in Journals. They recorded their ideas, reflections, reactions, and knowledge. The teacher provided guidelines for the kind of information, which should be recorded in the Journal and the frequency.
- Other tools included student performance data, used to assess and evaluate the effectiveness of instruction
- Observations were done by student and teacher and captured strategies and techniques used by both.
- Discussions were a part of the reflections where students shared their experiences and engaged in problem-solving and decision-making. This activity allowed me to strategically engage in reflection and change.
- Media recording is another tool which can be used. A tape recorder was used during the discussion/reflection sessions to allow for the review of my practice.

At the end of the semester, the data were analysed based on the learners' and teacher's outcomes.

Outcomes and Assessments

The teacher becomes a part of a change process in a purposeful way. As the researcher, he/she is concerned with a specific inquiry and sets out to study this problem or situation in order to provide solutions, modify the problem or make improvements. In action research, the tasks do not end even if the project has ended. The

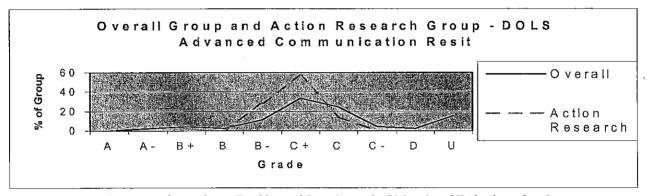
researcher continues to make revisions, evaluates the process and makes changes to his/her teaching. This was the highlight of the project.

Learner Outcomes

1. Academic Performance

Thirty-one students completed the course. The graph in Figure 4 shows the levels of student achievement in the class that participated in the Action research compared to the overall group taking the course that semester. There was only one failure in the Action Research group.

Figure 1: Department of Liberal Studies Advanced Communication comparison of Action Research resit student (group) performance and overall resit student performance



Source: Using Action Research to enhance Teaching and Learning at the University of Technology, Jamaica. Presented at the Fourteenth International Conference on Assessing Quality in Higher Education, University of Vienna, and Austria. Nancy George, Ed.D., Michael Craven, Ph.D., Claudette Williams-Myers, Ph.D., Pauline Bonnick M.A.

Figure 2 presents the range of the original grades and the grades received on completion of the action research project. Students received much higher scores. Only one student received a failing grade of 45% because one of the assignments was never turned in and he was often absent due to illness.

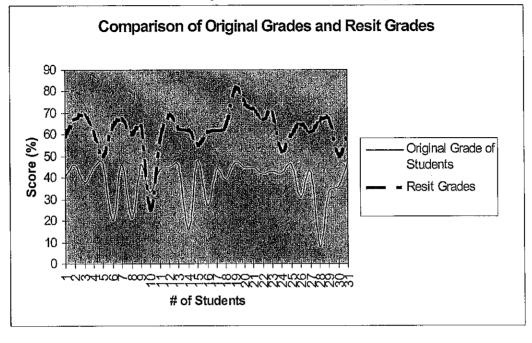


Figure 2. Comparison of Students' Original Grades and Grades on Completion of the Action Research Project

Figure 3 presents the comparison of the grades in the experimental action research group and the control group. In the control group of 25 students, eighteen (18) students received grades, which ranged from C- to B, and seven students failed, while in the experimental group, thirty (30) students received grades ranging from C- to A-, with one student failing.

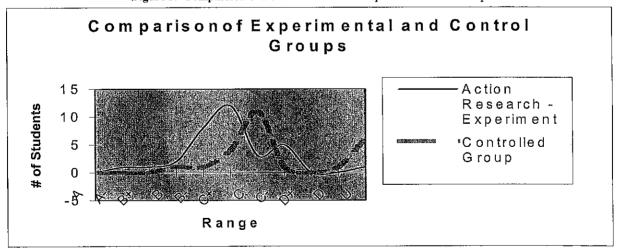


Figure 3. Comparison of Action Research Group with Control Group

Other Skills

Resulting from this research, certain skills were developed which were not always achieved in traditional classes. Chief among these were problem-solving skills, critical thinking skills and team building. Students learnt to be tolerant, respectful of others' views, have a sense of value, develop confidence, and handle diversity issues. These were important issues as they were no longer in their programme group, but with a group of students from different faculties who were pursuing different programmes. The immersion in this diversity was enriching as they were more aware of the other disciplines and could use these wide experiences to assist in the completion of assignments.

Motivation was high. As I moved around the groups, I recall the urgent, but excited requests to validate their progress. Individual and collective responsibility also facilitated the completion of assignments. A sense of community, of caring and sharing, were always evident. The kinds of activities which the students engaged in sometimes became "friendly competition". In cases where one group had two members in attendance, they were coopted by other groups.

Attendance, which is not compulsory, was at an "all time high." Students sent in apologies for lateness and absence, when it was unavoidable. Those who had part-time jobs and had asked permission to leave before the end of the class, were often the last ones to leave the class. There was never an urgency to leave at the end of the class.

The students responded well to the new method. I watched some students who seemed resistant to group work, become the leaders. The fact that no student felt that he/she was the weakest link was a strength of the project. Another advantage was that all assignments could be seen or heard by each group and at times by the entire class.

Students reported on the impact of the new methodology in the following comments:

I feel no threats. In fact, I feel relieved and thankful.

The approach taken to teach this course should have been done a long time ago. Keep up the good work. With this method we will do well and the failure rate will not be as high as before.

The new approach for teaching the course works as it makes the class more fun and I only wish that this was the way it was taught in the first place.

The class is motivating. Although we were from different faculties and classes we were motivated to do well.

The course helped to develop my writing skills and critical thinking as well.

I am now clearer as to what a thesis statement consists of. I am sure that on continuing I will learn a lot more.

The personality of the teacher contributed significantly to our success. She was patient and very helpful.

3. Overall Benefits to Students

On completion of this course, the students would have benefited in the ways outlined below.

- Broadened their perspective on the teaching/learning process as they got first- hand information on how courses are developed through their involvement and suggestions.
- Recognized the importance of teamwork to the success of any activity
- Learnt to offer constructive criticism as they focus on issues and not personalities
- Extended their understanding of student-centered learning
- Encouraged to use higher- order thinking skills and thus widen their knowledge.

Lecturer Outcomes

Action Research is concerned with change. In a purposeful way, individuals engage in studying their own problems in order to solve them. It is, however, not enough to simply make decisions, but to make informed decisions. Through this project, I was able to decide on the changes I could implement during and after the project, based on the data I had gathered.

This was not difficult because I was conducting the research and I was the subject of the research. The benefits of this research were not only in the systematic reflections but also in the documentation of the entire process through journalising. The value and importance placed on the close interaction among learners cannot be ignored. I could not be a prouder teacher.

As the facilitator, I learnt that students could rise to any challenge that they are presented with. They are capable of doing well but it is important to exercise patience and learn to listen to students. I also realized that most students will respond in a positive manner to group work if it is properly structured.

What was also important to me was to teach so that they understood and then to present situations for them to develop the skills which were not only for communicating, but those which also made them problem-solvers, critical thinkers and decision-makers. In embracing the new approach, I facilitated students in their exploration of what works best for them. I helped them to become masters of their own destiny through confidence building, and shared in their successes and failures. I showed them how to trust others and how to apply what they have learnt in all spheres of lives.

Since the completion of this project, it is difficult for me to teach the traditional way. My students enjoy this new methodology. I am also more reflective about the process every time I conduct a class. Like Lawrence Stenhouse who once said, "It is the teachers, who, in the end, will change the world of the school by understanding it" (cited in Johnson, 1993, par. 10). I want to be a part of that change process and make a difference on my students and profession by engaging in action research in my classes.

Recommendations

On completion of this project, the following are some recommendations:

- The implementation of student- centered learning in all classes.
- Lecturers of adult learners create a non-threatening environment so that learning becomes more meaningful.
- Conducting workshops for faculty to highlight the methodology used.
- Create a forum for participants to share their experiences.
- Further research on adult learning styles

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Notes