



ISSN 2278 – 0211 (Online)

Quality Circles in Open and Distance Learning Institutions; Opportunities and Challenges: A Case of the Zimbabwe Open University

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Abstract:

This case study adopted the qualitative approach to explore the possible implementation of students' quality circles in the Zimbabwe Open University. Interviews triangulated by document analysis were used to elicit students' and staff views on whether they feel the prevailing environment and organizational set up could be useful indicators on the successful implementation of quality circles in Zimbabwe Open University. Benefits and challenges to implementation were explored. Mashonaland East Region's 330 students and 16 academics were the population of the study. All the student representative council members and the student advisor were the participants. The study established that Zimbabwe Open University has great potential to successfully implement students' quality circles due to the existence of sound relationships between students and staff, a strong culture of induction and democratic leadership style. Issues that can be handled by the circles include; modules, tutor attendance, teaching approaches, technology among others. Student apathy in participating in group activities and lack of implementation of students' suggestions have been identified as threats to students' quality circles. These can be alleviated through; training at all levels of the organisation and use of modern forms of communication platforms such as, whatsapp, skype, e-mails, sms messages.

Keywords: quality circles open and distance learning

1. Introduction

If the quest for quality is an issue for conventional universities, open and distance learning institutions find it a great necessity as they have always struggled for recognition in the minds of the market. In view of the cut-throat competition in higher education in Zimbabwe, the Zimbabwe Open University took the first mover advantage of introducing a Quality Assurance Directorate so as address quality in a more astute fashion. This innovation has several bonuses, such as the fulfillment of regulatory quality standards, continuous improvement and become internationally competitive, much in accord with its vision of becoming a world class open and distance learning institution. The Quality Assurance Unit instantly put in place a Quality Management System based on the ISO 9001 quality model. While the Quality Management System is being implemented there is need to continuously improve on its effectiveness. Students' quality circles is one way of ensuring continuous improvement in teaching and learning. Quality Circles use two synergistic management principles: (1) those persons feeling the impact of a decision should be involved in making it (basis of "Theory Z" management, Ouchi 1981), and (2) those persons who are involved in a situation have the greatest incentive and potential to improve it (Revak and Nuhfer 2001). Rexhepi (2013:248) contends that, "Quality circles present the best way of incorporating the employees in a search for the best solution for the problems in enterprise." The same principle applies to the teaching and learning. The involvement of students in solving teaching and learning problems can be very effective too.

Japanese products moved on a continuum from being very cheap, poor quality products to quality and reliable between 1950 and 1980 respectively, credit to the quality control circles (Fukui, Honda, Inoue, Kaneko, Miyauchi, Soriano and Yagi 2002). According to the Japan Union of Scientists and Engineering, in 1962 there were only 20 Quality Circles with 400 members, which rose to 16000 circles in 1968 with 200 000 members. The number rose ten years later to 88000 circles with over 700 000 members. The current estimate of circle members is around 8 000 000. Rexhepi (2013) asserts that Japanese companies are estimated to be saving around \$5bn a year through the operations of quality circles. Such benefits are really phenomenal that if carefully implemented there could also be gains to the university through improved enrolments.

Fukui, Honda, Inoue, Kaneko, Miyauchi, Soriano and Yagi (2002:1) contend that, "Quality Control Circles (QCC) can tremendously contribute to any institution that has become conscious about quality management, including those doing so through compliance with the ISO 9000 series." The latter observation allays any fears whether an institution like ZOU, which has already adopted the ISO 9000 model, can implement quality circles.

2. Statement of the problem

Is it possible to implement quality circles in open and distance learning institutions like Zimbabwe Open University? This paper examines a possible organization of the students' quality circles in ODL. A further examination of the benefits of introducing students' quality circles in ODL is made. Challenges which are likely to confront ZOU in the implementation of students' quality circles are explored with possible solutions offered.

3. Research Questions

- How can students' quality circles be organized in ODL institutions?
- What are the benefits of students' QCs in ODL?
- What are the challenges of students QCs in ODL?
- What are the possible solutions to organizational challenges to students quality circles in ODL?

4. Literature Review

4.1. Theoretical framework

Schmidt, Parmer, and Bohn (2005:24) define a classroom quality circle, "as a small, voluntary group of students enrolled in the same class who meet regularly to provide continuous student feedback to the teaching team for the purpose of improving the course content, structure, and environment in the present and redesigning it for the future."

From the definition above, characteristics of quality circles can be deduced. Quality circles are groups made up of a few individuals from the same work group. Shantanu and Shantanu (2013) specify that a group may have between six and twelve students. These can be employees or students. In this study these are students from the same faculty. Familiarity amongst themselves paves way for greater participation so is voluntary membership. Fukui et al (2002) concur by noting that the size of the group should allow recognition of members' contribution, develop a sense of belonging, and students from the same group share similar environments and experiences and thus affected by the same factors and have one goal.

Quality circles are autonomous. Students solve problems from their own faculty. The circle is not directed by faculty concerning the problem to be solved. They decide on their own which data to collect and analyse the cause, come up with possible solution and decide how to implement and present to management for endorsement and final implementation.

One of the major aims of class quality circles is continuous control and improvement throughout the study period. Fukui et al (2002:8) notes that, "the customer is never satisfied; the Circles never stop looking for better ways of doing the work." It is a reality that today's customer never ceases to demand more for the hard-earned dollar so the quality circle should seize every opportunity to exceed customer expectation. The philosophy is that there is always a better way of doing things than we currently know, so circles will always be relevant by searching optimal solutions to our current situation.

Quality circles utilize quality control concepts, tools and techniques in solving problems. Fukui et al (2002) note that throughout their operations the circle collects data to demonstrate the existence of a problem, analyze the data using tools like graphs, scatter diagrams and Pareto diagrams. The fishbone, What, When, Where, Who, Why and How(5W1H) are among problem solving techniques used.

Quality circles contribute to the continuous improvement of the organization and self-development of the students involved. Fukui et al (2002:9) note that, students involved develop "sound personal relations, analytical skills, presentation ability, and knowledge on various quality control tools."

4.2. How can students quality circles be organized in ODL institutions?

Shantanu and Shantanu (2013), Administrative Office Management (2012) and Prasanna and Desai (2011) have described the basic organizational structure of as having top management, a steering committee, a facilitator, a leader and voluntary members. The basic organizational structure of a quality circle can be diagrammatically represented as shown below.

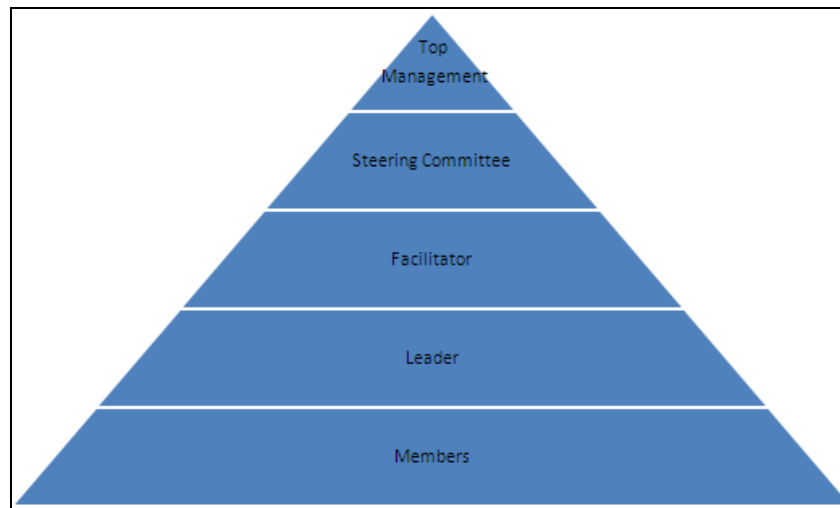


Figure 1: The basic organizational structure of a quality circle

Source: Shantanu, W. and Shantanu, K. (2013) *Quality Circle to Improve Productivity*.

International Journal of Engineering Research and Applications Vol.3, March-April 2013, pp814-819

In an ODL situation, top management puts in place a “steering committee to oversee and provide direction for the implementation of quality control circles program (Fukui et al 2002:14).” The chairperson could be either the Quality Assurance Director. The roles of the steering committee essentially involve planning, implementing monitoring and evaluating the programme. The steering committee ropes in top management and the dean of students for their deep involvement in student affairs. A quality control circle office headed by the Quality Assurance Manager (as facilitator) is also put in place. The QC circle office is by and large for implementation of policy decisions of the steering committee. Among other issues it may also train regional facilitators (Regional Directors). At the regional office the Regional Director is the facilitator. Regional facilitators provide training to circles leaders in the use of problem solving techniques and tools as well as developing for use by the leaders. This role may be ceded to the student advisor and quality assurance coordinator while the RD assumes the management role where solutions are brought to him/her. The Regional Quality Assurance Coordinator and Student Advisor are members of the student quality circle who may lead the group on rotational basis or may cede the group leadership to students. The leader “conducts the weekly article meeting” (Administrative Office Management 2012:2).

Students (members) are the most important component as circle members. In every region, each faculty might have their own circle that have to be trained. Shantanu and Shantanu (2013) point out that every level of the circle needs appropriate training in the, purpose, composition, benefits, (Administrative Office Management 2012) and tools and techniques (Fukui et al 2002). Training will thus give direction and students act from an informed point view.

The outlined arrangement of quality circles indicates general flow of information from the top to the bottom and the other way round. By implication, sound relations should be prevalent among management and students and among students themselves. In the same vein, Cole in Rexhepi (2013:245) comments that, “You cannot leave the quality circles in a hostile environment and still expect great results from them.”

4.3. What are the benefits of students QCs in ODL?

For a clearer view of the benefits of students’ quality circles to be conceived, we would like to examine the philosophy behind the concept and its objectives first and then finally examine the benefits of the concept.

The philosophy of student quality circles is that the student as the beneficiary of intended quality improvements. To that end the student knows best what he/she wants provided, in what sort of an environment by whom, when, using which andragogics and technologies/media. Shantanu and Shantanu (2013), Prasanna and Desai (2012) and Administrative Office Management (2012) describe quality circles as a people-building philosophy, a participative management approach which values people, their feelings and views with regard to improvement of their working environment and improvement of their self-esteem as useful members of the organization. Cullen and Johnson (1999) assert that classroom circles allow students to become co-learners. Revak and Nuhfer (2001) share the same view when they explain that through classroom circles teachers and students share the responsibility for teaching and learning through shared empowerment. Involvement of students in quality circles creates a relationship between the students and the institution where learners can spell out their views on improvements in the learning environment and the institution responds.

Several authors have enumerated the objectives of quality circles. The long list of objectives may be classified under in two categories; one category focuses on the behavior improvement of people within the organization, such as enhancement of morale, establishment of sound human relations, Fukui et al (2002:9); Change in attitude, self development, development of team spirit Prasanna and Desai (2011). The second category of objectives focuses on the organizational factors to be adjusted such as, focus on customer satisfaction, efficiency, and improve products and services Gaikwad and Gaikwad (2009) improvement of organizational culture Prasanna and Desai (2011).

In the context of students' quality circles in ODL these certainly apply quite well where both the students and the organization benefit. Students' morale is boosted on the awareness that their contribution leads to improvement in their campus life. On the other hand the institution realizes increased enrolments as result of its responsiveness to students' needs and meeting or exceeding customer requirements. Team spirit is developed during quality circle meetings thereby creating student-institution relationship in solving problems.

4.3.1. Benefits of Quality Circles

The attendant challenge to the implementation of quality circles is the question, 'What's in it for me?' by the various actors. The university, students (members of the quality circles), leaders and facilitators all benefit in their own way.

4.3.2. Benefits to the university

Fukui et al (2002:93) identifies, "improvement in customer orientation" as one of the benefits of quality circles. The identification of problems and solutions by the beneficiaries is likely to result in the university addressing real issues rather than imagined issues that affect the customer. This also leads to the university gaining a greater, "understanding of the requirements of the customer" Fukui et al (2002:93). Rexhepi (2013:249) contends that circles, "improve communication within the organization" which leads to "commitment to the organization and establishment of a better relationship" (Fukui et al 2002:93) with management and faculty. Circles lead to transparent management and operational system. Consequently, student participation in problem identification and solving reduces conflicts and intolerance by students. Effective solutions to problems should be found due to diversity of ideas from students from different backgrounds and experiences. Rexhepi (2013) also notes that there is greater acceptability and commitment to implementation of solutions by both students and management because of collective generation and acceptance of the solutions to problems.

4.3.3. Benefits to the circle members

Members of the circle do not participate in vain. They are personal intangible but important life skills that accrue to them. Fukui et al (2002:94) assert that there is, "transformation of oneself into a thinking human being." The techniques and tools used in quality control circles may not occur to one naturally. These are taught to actors in quality circles. Members get to realize as well that they are not only in university to learn but also contribute to the betterment of their learning environment.

Fukui et al (2002), Administrative Office Management (2012) explain that quality circles develop students' self confidence. Every stage in the QC story develops actors. From problem identification to data collection, data analysis, coming up with a solution, presentation to management, implementation and to monitoring the effectiveness of the solution, self-confidence is strongly. Each QC story builds upon the other so much that at the end of the period actors would have developed self-confidence to very high levels.

QC circles are all about teamwork. Participants in quality circles develop teamwork spirit, which is very important in life. Members of the circle "establish closer relationships" (Fukui et al 2002:94). Expectation is that the relationships only foster a great sense of belonging to both the circle and the university.

4.3.4. Benefits to circle leaders

Fukui et al (2002:97) identify "development of group skills" as a benefit accruing to circle leaders. The effectiveness of circles greatly hinges on the skills of the group leader. The leader has to lead the group in drafting code of ethics for effective operation. The circle leader prepares the meeting agendas. The leader has to steer and keep the discussion on track then summarize the proceedings at the end.

Fukui et al (2002) also note that leaders develop analytical skills. The leader develops a questioning attitude in order to get to the real cause of a problem to avoid addressing symptoms of a problem. Through the questioning attitude, the leader also develops the same mind set in the circle members.

Interpersonal skills are developed in the leaders. To start with they learn how to concentrate on the task at hand and avoid issues that are outside the circle. Then, also have to deal with difficult members. In this regard, they learn not to control them without putting them down as their contribution is vital. Communication skills are sharpened, as they have to pay attention to verbal and non-verbal communication. Leaders learn to maintain their composure where negative and positive thoughts are kept to oneself to maintain the group spirit.

4.3.5. Benefits for facilitators.

Fukui et al (2002:98) identify "development of training skills" as a benefit accruing to the facilitators. The facilitators learn how to conduct a training needs analysis, develop a training programme, and convince circle members they need new skills to deal solve problems in their learning environment. They also develop presentation skills, which are participatory to avoid boredom. They also learn questioning techniques, which help to evaluate grasp of concepts learnt

Facilitators also develop coaching skills as asserted by Fukui et al (2002). Coaching is more of guiding than instructing. Facilitators guide leaders on circles meetings management from agenda setting, guiding discussions and how to collect data. Leaders are guided on how to summarize data in actionable format, how to enlist the support of difficult members. They are also guided on how to support circles members in their execution of tasks after the meetings.

Facilitators develop coordinating skills. Fukui et al (2002:99) deduce that, “in their coordinator roles facilitators have to blend diplomacy and psychology with their managerial skills. Application and blending of these disciplines is no stroll in the park. Development of these skills is quite an incentive on its own. The facilitators have to ensure that the needs of the circle leaders are provided in liaison with other university departments. Facilitators coordinate with management therefore have to think through management and be prepared to address management concerns.

4.4. What are the challenges of students QCs in ODL?

The success of quality circles hinges mostly on management support. Shantanu and Shantanu (2013) produced a long list of some causes of failure among which lack of management support is one. Management has to support quality circles so that resources such as time, manpower, facilities and implementation of solutions are guaranteed.

Schmidt, Parmer and Bohn (2005:8) point out realized that, “in general students are not accustomed to providing continuous feedback to their instructor.” Student apathy can be attributed to the general culture where students do not participate actively in spelling what, how, where and when to learn. Faculty and management decide everything. This scenario can be unlearned through training.

Shantanu and Shantanu (2013:815) observe that quality circles do not perform where morale is low and there is autocratic management. In autocracy, quality circles will sooner than later discover that their solutions to problems are not implemented (Administrative Office Management 2012) and find no justification to their continued existence. Management has to trust students and lower level employees that their activities do not usurp their powers but that the success of the circles leads to university prosperity.

Percy, Naghdy, Montgomery and Turcotte (2001) note that taking part in collective activities other than one’s designated work may result in increased work pressure on both the student and the academics. The greatest challenge will be to maintain interest and commitment to the group. More often than not, the chop rests on quality circles.

4.5. What are the possible solutions to organizational challenges to students quality circles in ODL?

An analysis of the causes of failure of quality circle point toward the need for thorough training at all levels of the organization. Management has to be exposed to the concept (Prasanna and Desai 2012). An appreciation of the approaches used in problem solving and the benefits to the organization in its entirety should be developed in management. Fears of usurping management powers (Rexhepi 2013) should be dispelled during the training and emphasize on the benefits.

Management should be shown how their support leads to successful implementation of quality circles without which no resources, nor execution of solutions would be possible.

Facilitators and leaders must be trained in order for them to effectively execute their functions and roles. Students, as circle members need training so that they can identify and provide solutions to problems. Schmidt, Parmer and Bohn (2005) concluded that,

One avenue to explore to increase the effectiveness of student feedback committees is to increase the training provided to both student feedback committee and class members (for example, more thorough and explicitly explain what the SFC is, how it functions, and what strengths it can bring to the course and to individual student).

Student participation thus can be improved through thorough training. In addition, the group should have a pre-plan on how to deal with increased workload on both staff and students in their code of ethics.

5. Methodology

The study adopted the qualitative approach guided by the interpretivist philosophy where “research is fundamentally concerned with meaning and it seeks to understand social members’ definition of a situation” (Schwandt, 1994: 118). The case study method was used to describe the prevailing environment in the Mashonaland East region as a test case of the possibility of implementation of the students’ quality circles throughout the institution. Interviews were used to elicit students’ views on whether they feel the prevailing environment, organizational set up, relationships between students and the institution could be useful indicators on the successful implementation of quality circles in ZOU. These views are complimented by document analysis on the existing quality assurance structures.

5.1. Population

The study targeted Zimbabwe Open University students and academics to predict the possibility of successful implementation of students’ quality circles. The views of students [330] and academics [16] in Mashonaland East Province were used to represent the whole university.

5.2. Sample

All the student representative council (SRC) members made up the sample. These were selected because of their experience as student leaders who have worked with university management. The student advisor represented academics since he works with students and has vested interest in general student participation in institutional activities.

5.3. Data collection

The views of both the students and academics were elicited through the use of interviews and document analysis.

6. Presentation of Findings and Discussion

The findings of the study were presented and discussed in themes. Document analysis findings were used to confirm interview findings.

6.1. Sub-problem 1: How can students' quality circles be organized in ODL institutions?

Literature review findings generally present a typical circle arrangement in triangular shape as shown above (Shantanu and Shantanu (2013), Administrative Office Management (2012) and Prasanna and Desai (2011)). Each department may have its own circle of about six members. In high enrolments, each intake for a programme may have its own circle.

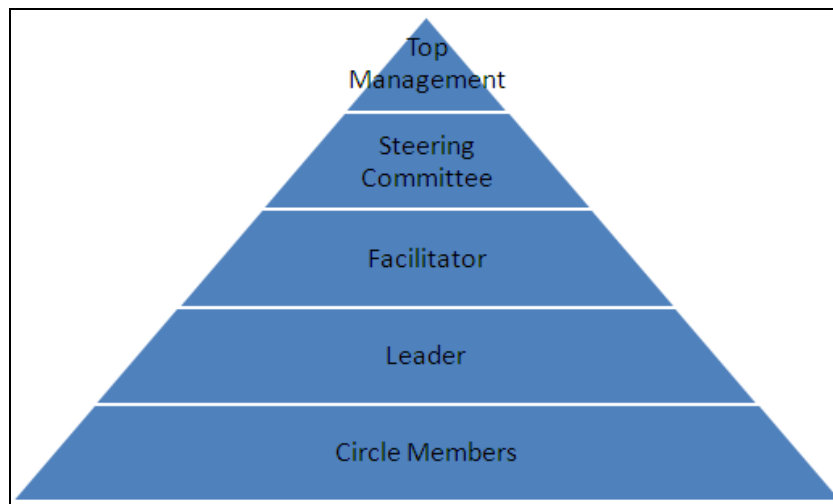


Figure 2: The basic organizational structure of a quality circle.

Source: Shantanu, W. and Shantanu, K. (2013) *Quality Circle to Improve Productivity*.

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Since open and distance learning classes are different from conventional classes, the issues that are dealt with by circles in the two set-ups are slightly different. ODL circles may deal with issues such as modules, tutors attendance, additional teaching materials, andragogical orientations and technologies used in delivery of tutorials among other classroom discourse issues.

Participants were asked to describe the leadership style prevalent in ZOU. One participant described it as open door policy where SRC members and indeed every other student have never been denied access to any office for assistance or grievance lodging. Another participant briefly described it as democratic. Cole in Rexhepi (2013:245) comments that, "You cannot leave the quality circles in a hostile environment and still expect great results from them." The findings indicate that the leadership style widely prevalent in ZOU is fertile ground for successful implementation of quality circles.

Participants were asked to describe the relationship among students. Participants explained that there were excellent relationships among students. Relationships are generally strengthened through SRC activities such as sport explained another participant. Student-student relationships are important as they facilitate easy flow of information. .

6.2. Sub-problem 2: What are the benefits of students QCs in ODL?

Participants were asked what they would benefit from participating in QCs. One participant noted that by participating in QCs, they would assume leadership roles among their fellow students. Assumption of leadership roles leads to development of leadership skills that are needed in one's life. These include problem-solving skills both at work and at home. This concurs with Fukui et al (2002) who explain that quality circles transform of participants into thinking human beings. On that same note another participant explained that one learns to manage time where family life and school and work activities are so balanced that they are all taken care of.

One participant noted that there is development of people skills. "I have to motivate other students to register their concerns with the circle, communicate with other students, develop sound relationships between and among students and the faculty" this finding concurs with Fukui et al (2002) who note that members of the circle establish closer relationships.

"Leadership roles cannot to be assumed by people with low confidence levels," explained another participant. This finding concurs with Fukui et al (2002) and Administrative Office Management (2012) who explain that participants in quality circles develop confidence throughout their participation in problem identification, data gathering, solution analysis, presentation to management and implementation of solution.

Participants were asked how the institution would benefit from the implementation of quality circles. One participant noted that, "quality circles enlist the commitment of students to the cause of the institution. If students take part in coming up with several solutions to problems they have identified, there is no way they would despise the operations of the institution as they have been part of its decision-making mechanism." This finding concurs with Fukui et al (2002) who propound that quality circles enlist commitment

of participants to the organization and establishment of a better relationship. Other benefits listed by participants are enumerated below;

Improve the image of the institution

Solve problems well in time and also being proactive

Sensitive to the customer's needs

Asked what would be the benefits to circle leaders and facilitators, one participant listed the benefits as;

- Development of group skills
- analytical skills,
- communication skills and,
- Possibly training skills.

Facilitators generally manage the operation of quality circles, so "they develop managerial skills" responded one participant. Asked to explain further the participant highlighted skills such as training leaders, coordinating the work of circles with management so that communication flows from circles to management and vice versa. These findings concur with the views of Fukui et al (2002).

6.3. Sub-problem 3: What are the challenges of students QCs in ODL?

Participants were asked to state the possible challenges they might face in the implementation of quality circles. One participant without hesitation pointed out that, "students are not willing to provide information." Asked why they are not willing to provide information, the participant explained that students complain that they have always been supplying information but they have not seen their contributions being considered in decision-making, giving the example of the institution's failure to revise the fees structure. This finding concurs with Administrative Office Management (2012) who expound that quality circles collapse if their solutions to problems are not implemented.

Another participant noted that there is generally lack of interest in taking part in collective student activities. Asked why students have that apathy, the participant explained that students due to increased workload, they might end up failing their examinations. This finding concurs with Percy, Naghdy, Montgomery and Turcotte (2001) who discovered that, when the workload increases, collective activities such as quality circles usually suffer.

6.4. Sub-problem 4: What are the possible solutions to challenges to students quality circles in ODL?

Participants were asked if there was any induction conducted before they assumed their offices as SRC members or academics. SRC members pointed out that the Student Advisor inducted them effectively, while academics noted that the Human Resources department inducted them. This finding concurs with Schmidt, Parmer and Bohn (2005), Prasanna and Desai (2012) and Rexhepi (2013) who assert that all levels of the organization must be trained for effective implementation of quality circles. Since the organization has a culture of training incumbents before they occupy offices, there is a great chance that circles might succeed in the institution. Training will address student and academics' knowledge, attitudes and skills gap in the implementation of quality circles. As a response to increased work pressure, participants explained that students need to develop time management skills, such as using leave days sparingly. It may even involve working during rest times. Another participant noted that cooperating with others so that meetings are conveniently scheduled when everyone is likely to be available.

A new finding with regards the circle meetings and getting student feedback was the use of e-conferencing. One participant asserted that the current student is technologically savvy and can perform all the needed communication through modern technology. Whatsapp, skype are all possible platforms. If a student is located in remote areas, they can use Whatsapp.

7. Conclusion

From the findings of this research it can be concluded that the following opportunities exist;

- Zimbabwe Open University has great potential to successfully implement students' quality circles due to the existence of a conducive environment characterized by sound student-management, student-faculty, student-student relationships, a strong culture of induction to students and employees
- The Mashonaland East Region predominantly uses the democratic leadership style which is fertile ground for successful implementation of quality circles
- There is a quality management system in place which makes it easy to implement quality circles
- The basic quality circle arrangement is applicable to ZOU, that is four tier from; Top Management that is represented by a Steering Committee --- Facilitator---Leader---Circle
- Issues that can be handled by the circle include; modules, tutor attendance, teaching approaches, additional teaching materials, technology, classroom discourse issues among others
- Implementation of students' quality circles has benefits to the institution such as greater customer focus that eventually lead to greater student satisfaction
- There are opportunities for personal gains to students, leaders and facilitators who take part in the students' circles

There are challenges that have been discovered which may hinder the successful implementation of students' quality circles in ZOU;

- There is general student apathy in participating in group activities
- Students felt they made suggestions in the past that have not been implemented, for example, revising fees downwards for the benefit of students
- Students' quality circles are likely to increase the workload of all the participants

The challenges can be alleviated through;

- Thorough training at all levels
- Improved time management
- Using various forms of communication platforms such as, whatsapp, skype, e-mails, sms messages

8. Recommendations

In view of the conclusions made, the following recommendations are forwarded;

- Implement students quality circles that adopts the basic quality circle structure
- Implement students quality circles within the context of the democratic leadership style as concluded
- Management should respond to students recommendations or suggestions as soon as possible in order to sustain students' quality circles and overall student satisfaction
- Thoroughly train management, faculty and students before implementation of students quality circles
- Use various social platforms to communicate with students and encourage the use of the same platforms among students.

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