



## An Assessment of Lectures and Students Views on Introduction of Conveyor Belt Marking over Centralised Traditional Marking: A Case at Zimbabwe Open University

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### Abstract

The purpose of the study was to examine the strengths and weaknesses of the traditional centralised marking and explore possibilities and challenges of introducing conveyor belt marking at Zimbabwe Open University. Individual interviews were carried out for students enrolled in both undergraduate and postgraduate programmes in the Faculty of; Arts and Education, Commerce and Law, Applied Social Science and Science and Technology. Lecturers who have been involved in centralised marking were purposefully sampled to answer questionnaires. It was established that students understudy were more supportive of using belt marking unlike the Lecturers who pointed out too many challenges before implementing it. The challenges identified to be experienced in belt marking were organisation and management of the marking process. It was indicated that the varying level of commitment among markers, discipline, their speed at marking and mastery of content related to some questions posed great challenge to belt marking. Belt marking supervisors had to mark their own scripts, moderating those of group members and doing other administrative tasks. The solutions to the challenges involved identifying subject specialists across the University departments, staff recruitment and in service training for Staff. There was need for Departmental Chairpersons and Subject Coordinators across Faculties need to liaise with each other for the smooth running of the marking sessions. If ever belt marking was to be introduced in Open and Distance Learning institutions, there is need to revamp the whole system through training, staffing rationalisation and recruitment of permanent staff in the departments.

**Key Words:** Traditional marking; Conveyor belt marking; Marking reliability; Challenges.

### Introduction

Assessment is important in evaluating modules, methods of teaching and finally grading of the learners. Palomba and Banta [1999] defined assessment as the systematic collection, review and use information about educational programmes undertaken for the purpose of improving learning and development. It is vital that assessment is carried out in all fairness. More than often students candidates cry foul especially when they do not perform well at the end of the semester or programme. Marking is one of the processes that ensure that the assessment is reliable and valid. Zimbabwe Open University use centralised marking where faculties would convene at a central venues in their respective faculties and departments to mark examinations. It is against this background that the research seeks to explore the strengths and weaknesses of the centralised traditional marking system currently being practised by Zimbabwe Open University with the possibility of introducing conveyor belt marking. The research explores possibilities and challenges of introducing belt marking at Zimbabwe Open University.

### Marking Systems

A mark is a score awarded to a student by an examiner based on his/her judgement (Ofqual, 2013). In traditional centralised marking, the system involves one Marker marking the whole script and course. Each Marker is assigned scripts to mark by the Chairperson of the department According to Bukenya, (2006), the process starts with the Chief Examiner and Senior examiners developing question papers and marking guides. The senior examiners train their markers how to apply the marking scheme [Ofqual, 2011; Ofqual, 2013]. Consistency in the application of marking scheme ensures reliability in the marking process [Chamberlain and Taylor, 2010]. Markers are placed into teams by the Chief examiner under the supervision of the Team Leader. The Team leader selects some scripts for moderation to check adherence to the marking scheme. A Marker exceeding agreed deviation depending on the subject could be asked to do a remarking. After marking transcript checkers, check for errors on the marked scripts as well as transcription of marks onto the mark sheets. After the Marker has completed marking, the marks are entered on the mark sheets and went through various boards for approval, grading, and publication of results. New developments in marking include automated marking which uses optical mark recognition software to mark multiple choice exams. There is also on-screen marking whereby candidates scripts are scanned onto a computer for marking by Examiners (Ofqual,2013).On-screen marking has the advantage in that Examiners can be monitored and corrected by Senior examiners immediately. Senior examiners mark certain scripts on each examiners batch. As the Examiner marks the script the mark is compared with the already marked script by the Senior Examiner, thereby checking the accuracy of the Marker (Ofqual, 2013). Conveyor belt marking involve organising Markers into groups in which each Marker is assigned a question(s) to mark by the Team Leader [Bukenya, 2006]. This type of marking is also referred to as item level marking [Ofqual, 2013]. Item level marking reduces bias (halo effect) and remove the influence of one marker on the script [Pinot de Moira, 2011; Spear, 1996]. The process of Belt marking starts with allocation of marking scripts to the Belt Marking Supervisors (BMS). The Supervisor and his/her team open the scripts and start the process of tallying with his/her team. This involves counting and recording the number of students who answered each of the questions for each and every centre that wrote the

examination. Each Marker is assigned a question(s) to mark. A script control movement form is filled in to account for the movement of scripts. The Supervisor can adjust the allocation of the question if there is a need. Difficult questions can be allocated to seasoned markers while the less experienced markers are assigned easy questions [Suto et al., 201

In Rwanda the Government has introduced belt marking where each belt marking team consists of five (5) members. This has eliminated remarking of scripts. The National Examination Council of Rwanda, indicated that in the past traditional marking in which each script was marked by one marker led to hasty and sloppy marking as the markers were paid according to the number of scripts they would have marked [Rwanda Focus, 2009]. The Kenyan National Examination Council introduced the conveyor belt and to ensure marking reliability the markers were trained and sat for the examination they were going to mark in order to judge their content level (Manyumba and Mutwiri, 2009). Conveyor belt marking in Tanzania, among other reasons was adopted to reduce the time for marking, queries and biases by markers (East African Community Meeting of Secondary Education Examination Report, 2010).

### **Marking Reliability**

Wheadon and Pinot de Moira (2013) defined marking reliability as measure of agreement between the mark awarded to a piece of work and the mark that should have been awarded. Pinot de Moira (2011) suggests involving many markers per script as one way of achieving marking reliability while Suto et al. (2011) are of the opinion that by giving complex questions to be marked by seasoned examiners ensures reliability in the marking process. Research by Tisi et al. (2013) and Pinot de Moira, (2011) have revealed several ways in which Item level marking lead into attainment of marking reliability. Factors such as test items, marking scheme, markers subject knowledge and teaching experience were found out to be influential in determining marking reliability (Meadows and Billington, 2007; Chamberlain and Taylor, 2010). However personality issues like gender bias and poor handwriting were regarded important in deciding a mark to award to a piece of work (Baird, 1989). The discussion has shown that one important factor in influencing the awarding of marks is human related such as level of education and teaching experience. It is the thrust of this paper to explore ways in which the human element in marking can be reduced by exploring the possibilities of introducing belt marking, which involve more than one marker per script, at Zimbabwe Open University.

### **Research problem**

There are challenges in the traditional marking of examination in the University set up as evidenced by application for a remark by students. The Students often complain of unfair marking on the part of the Lecturers especially where the student has failed a course. The Paper examines the two forms of marking in order to find out the one most appropriate for use by Zimbabwe Open University an Open and Distance Learning institution.

### **Research Questions**

The research was guided by the following questions:

1. What are the possibilities of introducing belt marking at Zimbabwe Open University?
2. What are the strengths and weaknesses of introducing belt marking at the Institution?
3. What strategies can be adopted by the University to improve the effectiveness of marking?

### **Purpose of the Study**

The purpose of the study is to explore processes, possibilities and challenges of introducing belt marking at Zimbabwe Open University. The Institution is currently using centralised marking in its assessment of Students. The paper examines the strengths and weaknesses of using belt marking instead of the traditional centralised marking. The findings of the study can be adopted, modified or improved for use by Zimbabwe Open University and other interested parties in the field of education.

### **Methodology**

The study adopted qualitative methodology, and the case study design was used. Open ended questionnaires and interviews were used as instruments to collect information from lecturers and students at Mashonaland Central region. A case study was useful in this research because the scope was broad. This is in line with McMillan and Schumacher (1993), who alludes that a case study is more appropriate to be used when the scope of the study is broad. Various aspects of both centralised and conveyor belt marking were studied in order to weigh the strengths and weaknesses of each form of marking. Lecturers and students were purposively selected from one regional centre of Zimbabwe Open University as these had an in depth knowledge and experience. Most lecturers in the four Faculties have previous experience in marking at various levels. Open ended questionnaires were distributed to lecturers and students in the four faculties. This allowed lecturers and students to answer the questions freely at their own time, pace and without interference from the researcher. Participants managed to express their views and feelings on the introduction of belt marking at Zimbabwe Open University. Focus group interviews were conducted to students in each of the faculty. The group constituted 10- 15 students selected randomly during tutorial dates. Group interviews allowed the participants to openly express their feelings, perceptions and beliefs on various forms of marking as supported by Gall et al. (1986). Interviews were seen to be necessary as they augmented data collected from questionnaires.

### **Findings**

The Respondents were asked to give their views on the introduction of conveyor belt marking over the traditional centralised marking at Zimbabwe Open University in the marking of examinations. The research established that all the lecturing staff were in favour of using traditional method of marking as it enabled the marker to control and manage

time of marking independently. The lecturers were of the view that when they are tired of marking they could engage in other productive work like problems being encountered in marking to ensure effective marking, thus getting refreshed. For the lecturers it was monotonous to mark the whole day without a short break being confined in a room. Lecturers had the feeling that centralised marking allows them to be more accountable for the marks and scripts of the candidates. In case of moderation of scripts one lecturer could do so which is impossible with belt marking. The marker can mark all the questions. Centralised marking was seen therefore to make use of few markers in a department. The method becomes cheaper in terms of human resources. The management of centralised marking was seen as less taxing as it involves less coordination as is the case with belt marking. It was indicated that in centralised traditional marking, the lecturer marks scripts, record them and forward them to the programme leaders for moderation who are experts in various disciplines.

The students were more in favour of belt marking in the marking of their examination scripts. The lecturers pointed out the strengths of belt marking but there were all in disagreement with its implementation at the University. It was observed that belt marking allows the examiner to specialise in one question or questions assigned to him/her, thereby increasing the pace of marking. There is deep understanding of the marking scheme as the marker concentrates on few questions thereby improving on reliability of marking. This contributes to efficiency and fairness in marking. The students felt that belt marking minimise malpractice resulting in high degree of fairness in the marking process. Belt marking was regarded to have internal moderation imbedded in it by the lecturers since one script is marked by more than one lecturer. The spirit of team work is enhanced as the markers work in a group. The lecturers would tend to understand each other as well as discovering one's strengths and weaknesses. Coordination between department and across faculties is promoted as members from different departments work together. The slow markers are cushioned by fast markers, thereby allowing presentation of marks to various boards and publication to be done in time. There is also maximum use of expertise in the university as staff is sourced from other faculties and Departments to form marking groups.

### **Challenges of introducing belt marking at Zimbabwe Open University**

Response from lectures identified shortage of lecturers specialising in certain areas such that creating a belt becomes difficult. Some sections consisted of two or three lecturers which makes belt marking impossible as the lecturers would end up mark too many questions which defeats the purpose of belt marking. It was also indicated that fast markers may end up marking many questions in an effort of assisting the slow markers. Hence the diverse character of the markers poses challenges to belt marking. Belt marking confines markers at one marking venue of all the faculties. Some markers are very fast while some are slow hence fast markers would feel delayed and disadvantaged, thereby creating friction and misunderstanding within a marking group. Lecturers expressed displeasure on the time it would take in tallying the questions answered by the students to allow allocation of questions to respective markers before marking begins. The process of tallying questions was regarded as time consuming thereby bringing frustration and fatigue in lecturers before they start marking. The other challenge mentioned was the unbalanced number of questions answered by the students. Some questions are very popular which can be answered by many students. This may result in some lecturers marking many questions while others would be marking few questions. Markers mark at different pace and accuracy. It was felt that markers allocated questions that are difficult to mark spend a lot of time marking, whilst others take less time to mark easy questions like in Statistics. This would cause resentment within the marking groups. It was observed that other Markers get involved in other businesses like attending departmental queries during marking thereby delaying other colleagues in the belt marking group. The Lectures expressed the fact that if one member is affected by illness, family commitment or economic problems, the whole group is delayed. It was also noted that belt marking is monotonous, as the examiner marks the same question(s) throughout the session. Script control and monitoring script movement was a task highlighted by the majority of the lecturers. There is the danger that some scripts may disappear with poor monitoring. Accountability of scripts may be a challenge if script movement control is not put in place. It was found that some pages within a script may be left unmarked in situations where the candidate had not put his/or her papers in order. Markers may not be bothered to check through all the pages other than the question tasked to mark.

### **Conclusion**

The research found out that although lecturers were aware of some of the advantages of conveyor belt marking over traditional centralised marking they were not willing to adopt and implement it at the University. The lecturers preferred to continue with traditional centralised marking because they felt it gave them autonomy of how to mark the scripts. They did not want to be confined in the marking venues where they would mark as all faculties but be in their specific faculties. They expressed that belt marking would not give them the freedom to attend to other business like student queries since this is an ODL university. Lecturers wanted to manage, control and organise their marking according to faculty rather than being controlled by the needs of the marking group members. They were also not comfortable with lecturers from other Departments marking scripts for students they did not teach. In contrast the students' were of the opinion that the university should replace traditional marking with conveyor belt marking. The students were of the view that belt marking would protect them from those lecturers who are biased and unfair in their marking.

### **Recommendations**

- The study therefore recommends that centralised marking being done by the university be continued, only in areas of speciality would other members from other faculties be utilised.
- The lecturing staff recommended recruitment of more lecturers in the different specialist areas to avoid belt marking and improve on the traditional centralised marking.
- Lecturers who teach similar modules could come together to align their modules such that the content for a certain module taught across Faculties be the same for example Research Methods and Statistics which is

taught in all the faculties, be taught by anyone from any of the faculties. This would allow setting similar examination to be marked by all the members.

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