University Grants Commission Minor Research Project under XI plan for the period 2013- 2015, File No: F 47-525/12 (WRO) dated 29th March 2013

Title: Impact of Credit and Grading System on the Undergraduate Programme in

Degree Colleges of Mumbai University

Principal Investigator: Pradnya Khandeparkar

Head & Associate Professor

Department of Statistics

S.I.E S College of Arts, Science & Commerce,

Sion (W), Mumbai, 400022. Maharashtra.

EXECUTIVE SUMMARY

University Grants Commission (UGC) took a decision for introducing the semester and choice based credit system in all the central, state and deemed universities and institutions of higher learning in the country under the Eleventh Five-Year Plan. (D.O. No. F.1-2/2008-XI Plan dated January 31, 2008 from the Chairman, UGC) This decision of implementation of Credit & Grade point system has been passed by the Academic Council of Mumbai University at its meeting held on 10th June, 2010 & subsequently the Management Council gave the concurrence at its meeting held on 18th July, 2010 after suggesting minor changes with the help of Deans of the concerned faculties and resolved to implement it from the Academic Year 2011-12.

To study the effect of credit based grading system, we have conducted a pilot survey of the stake holders. To gather the opinion of the teachers and students regarding the system two questionnaires were designed. On the basis of pilot survey carried out the questionnaires for main survey was designed. From the pilot survey we decided that Principals and Vice - Principals to be interviewed personally rather than through questionnaire to understand the administrative difficulties in implementation of CBGS. It was also decided to conduct focus group interviews of non-teaching staff.

The target population was the teachers and students of various colleges affiliated to Mumbai University. It was decided to select representative sample using two stage sampling. The primary units were colleges and secondary units were teachers and students. The primary data was then collected by distributing the questionnaire to about 500 students and 250 teachers.

Ignoring non-response, we finally collected data from 466 students and 209 teachers. The data collection was done by visiting various colleges situated in Central, Western, Suburbs of Mumbai. We also visited colleges outside Mumbai for collecting information. Though questionnaire method was used to collect the data from teachers and students, informal discussions also were carried out.

The statistical tools used to analyse the data collected from questionnaires are descriptive statistics, coefficient of association, ANOVA, Z- test, Chi square test etc. The data gathered was analysed using the methods described above with the help of statistical packages such as R, SPSS, Minitab and MS-EXCEL

The analysis of data collected from students lead to the following views of credit system. Most of the students preferred old annual system over the existing credit system. Students reported that teachers could complete the syllabus within the prescribed time only by taking extra lectures on holidays. Majority of students found lack of time for preparing for their examination. Students were not keen participate in co-curricular or extra-curricular activities due to internal assessment. Most of the students were satisfied with quality of evaluation of internal assessment. However students felt that there should be provision for revaluation of the internal assessment. Students felt that scaling down of internal marks is not justified. Some of the observations of the students are Slow learners find CBGS difficult, Credit system is difficult to cope up and is stressful.

The following points are reported from teachers' feedback. Teachers strongly felt that the existing credit system has to be modified or otherwise to be discontinued. One of the main reasons for dissatisfaction about credit system was tremendous increase in the assessment work. The increase in the assessment of answer books in credit system created stress among teachers. More than 50% of the teachers could not complete the syllabus within the stipulated time. However, they could complete the syllabus by conducting extra lectures which facilitates the students to prepare for their examination. The majority of teachers were of the opinion that, the credit system is effective only when the student teacher ratio is 40:1. Most of the teachers were of the opinion that attendance of students has improved. Teachers commented that the rules and regulations are not well defined. Hence the workshops should be conducted for better understanding and implementation of credit system. Teachers did not get sufficient time for self up-gradation in this system. The following are the suggestions from teachers. Storage and internet facilities should be provided to each teacher. There should be common question paper

for examination at all levels. There must be a transparent review of the system taken from the teachers. If the working of the system is not satisfactory it should be modified.

The following points are gathered from Principals and Vice-Principals from administration point of view. Semester system has caused heavy strain on the college administration with a increased number of examinations in every semester. There is a space constraint, rooms are not available to take extra lectures. The evaluation work of college and university examination is continued in holidays. No formal training is given to non-teaching staff.

Non-teaching staff commented that they are continuously engaged in answering the queries of the students with respect to admission, examination and results. The continuous evaluation has resulted in lot of work to laboratory staff in terms of setting labs and conducting examination.

The study of the credit based grading system revealed the following benefits of the system. The attendance of the students has marginally improved. The assignment component in internal assessment was instrumental in developing presentation skill, inspiring web search and reading reference books. The credit system made teachers adhere to their lecture planning efficiently. The continuous evaluation compels students to study throughout the year. Students are benefited by the additional examination introduced in credit system. We have also noted down the weaknesses of the system as: The teaching days are not sufficient to complete the syllabus as prescribed by the University, because many teaching days are lost in conducting internal and semester end and additional examinations. Papers setting, correction work and invigilation during examination has increased to three-fold because of additional examinations which consume lot of time of teachers. Hence teachers are not getting sufficient time to conduct cocurricular and extra- curricular activities for the students. Teachers do not get enough time for research activities because most of their time is spend in examinations related work. Many students do not take their regular examination seriously because of facility of additional examination. Most of the students do not get enough time for preparing for self-development courses and for participating in co-curricular activities like NSS, NCC, Cultural activities, college fest and sports etc.

We have listed down the following recommendations: The review committee should collect the recommendations from the respective colleges. The existing credit system should be modified on the basis of the recommendations. To avoid the clash between co-curricular, extra -curricular activities and examination the academic calendar should be prepared by a committee including members of various committees at the beginning of the academic year. The infrastructure in the colleges should be improved with the financial support of Management of the colleges and UGC. The rules and regulations should be well-defined and workshops are to be conducted for better understanding and implementation of credit system. The syllabus should be revised by taking in to account the number of teaching days available and number of lectures can be conducted during the semester. The majority of students find lack of time for preparing for their examination during the regular college days. This is one of the reasons for the performance of the students in the examination to be unsatisfactory. The study leave of at least 10 days should be given before their semester examination for better performance in the examination. The additional examination should not be given to the regular students in the same year. The assignment component should be included in the final year which encourages students to refer the books which are not prescribed in the syllabus, journals and collecting the information using internet. The nature of evaluation of internal assessment is totally different from semester examination. Therefore internal marks should not be scaled down according to semester end examination marks.