

Choices Based Credit System(CBCS)— An analytical study

Santu Biswas

Department of Education. University of Kalyani, W.B.

Received: May 25, 2018

Accepted: July 03, 2018

ABSTRACT

The time has come for us to shift to newer methods and mechanisms of imparting education to the youth in general students in particular. There is lack of an 'Interdisciplinary approach' and neglect for 'value based courses'. The solution for such a problem is provide a choice for students to study multiple subjects and specialise in interdisciplinary areas. Thus the University Grants Commission (UGC) has initiated several steps to include innovation and improvement in course- curricula, introduction various types of examination, evaluation & assessment system. With a view to allow the flexibility in education system, so that students depending upon their interests and aims can choose interdisciplinary and skill-based courses, choice based credit system (CBCS), is adopted. The choice based credit system not only offers opportunities to learn core subjects but also opportunities discipline unrelated subject and explore additional avenues of learning beyond the core subjects for holistic development.

Quality is the major concern of the present higher education which could be judged and assessed only by the universally acclaimed system of evaluation and this could be possible through the CBCS. CBCS is essential for Higher Education as this system increases the sincerity among the students as they are preferring to learn the subjects of their choice. Thus, the present paper aims to highlight the analytical study of Choice-Based Credit System.

Keywords: Higher Education, CBCS, UGC, Interdisciplinary approach, core course.

Introduction:

"Choice Based Credit System is a proven, advanced mode of learning in higher education which facilitates a student to have some freedom in selecting his/her own choices in the curriculum for completing any Degree program".

University Grants Commission has come up with the Choice Based Credit System (CBCS) programme in which the students have a choice to choose from the prescribed courses, which are referred as core, elective or soft skill courses and they can learn at their own pace and the entire assessment is graded-based on a credit system. The basic idea is to look into the needs of the students so as to keep up-to-date with development of higher education in India. CBCS allows students an easy mode of mobility to various educational institutions spread across the world along with the facility of transfer of credits earned by students.

Choice Based Credit System was considered to be the benchmark for our academic institutions against the international level institutions. India has adopted the Choice Based Credit System on the recommendation of the Knowledge Commission (Sam Pitroda) as well as as per the Eleventh Five Year plan in order to bring about quality and transformational change in Indian higher education. Under the Choice Based Credit System, a student would pursue three kinds of courses and they are compulsory foundation courses, elective courses and core courses. Here, it is mandatory for a student to have the core subjects every semester and choose electives from the prescribed pool of subjects unrelated to his her own discipline. The Choice Based Credit System aims at introducing multidisciplinary approach to higher education enabling a student to have strong hold across multiple subjects from a wide range of elective subjects. This is an instrument for establishing uniformity within and across the higher educational institutions both at national and international level of education delivery system.

Concept of CBCS system in India:

The 11th Five Year plan of India proposed various measures for academic reforms in higher education. The National Knowledge Commission(Sam Pitroda) report to the nation in 2008-2009 on higher education and Yashpal Committee Report in 2009 recommended revamping of higher education through academic and administrative reforms. Keeping in view the challenges of the changed times and make the higher education in Indian Universities compatible with the universities in developed nations, the UGC (11th plan, March 2009) stressed on the following recommendations has to be put on CBCS system in Higher Education:

- **CHOICE BASED** - Choice of multiple courses
- **GRADING** - Marks secured is in letter grade format
- **SEMESTER** - Learner- Teacher Engagement Quotient can be measured semester-wise.
- **CREDIT** - Class hours per week carries additional importance in credit system

- **ASSESSMENT** - In the form of class room attendance, Mid Term Tests etc; is continuous and wide-ranging.

Vision of CBCS system:

The vision of Choice based credit system in Higher education in India is:

- To evolve a higher education system that is suitability blended with provision for knowledge values and skill practice where every student learns in without sacrificing his/her creativity.
- To development curricula that would facilitate student centric learning.
- To develop Examination reforms in higher education system in India.
- To the ultimate vision is to bring reforms in higher education, so that student's develop thinking as well as analytical ability, he/she gets equipped with necessary skills ultimately making his/her suitable for an employment and to integrate values.

Background of the study

Ministry of Human Resource Development (HRD), Govt. of India, has already initiated the process for developing New Education Policy (NEP) in our country to bring out reforms in Indian education system. University Grants Commission (UGC) participates more actively in developing National Education Policy, its execution and promotion of higher education in our country. The UGC has already initiated several steps to bring equity, efficiency and academic excellence in National Higher Education System. The important ones include innovation and improvement in course- curricula, introduction of paradigm shift in learning and teaching pedagogy, examination and education system.

The education plays enormously significant role in building of a nation. There are quite a large number of educational institutions, engaged in imparting education in our country. Majority of them have entered recently into semester system to match with international educational pattern. However, our present education system produces young minds lacking knowledge, confidence, values and skills. It could be because of complete lack of relationship between education, employment and skill development in conventional education system. The present alarming situation necessitates transformation and/or redesigning of education system, not only by introducing innovations but developing "learner-centric approach in the entire education delivery mechanism and globally followed evaluation system as well.

Majority of Indian higher education institutions have been following marks or percentage based evaluation system, which obstructs the flexibility for the students to study the subjects/courses of their choice and their mobility to different institutions. There is need to allow the flexibility in education system, so that students depending upon their interests and aims can choose interdisciplinary, intra-disciplinary and skill-based courses. This can only be possible when choice based credit system (CBCS), an internationally acknowledged system, is adopted. The choice based credit system not only offers opportunities and avenues to learn core subjects but also exploring additional avenues of learning beyond the core subjects for holistic development of an individual. The CBCS will undoubtedly facilitate us bench mark our courses with best international academic practices. The CBCS has more advantages than disadvantages.

Objectives of the study:

- To study the basic features of Choice based credit system(CBCS) in Higher Education in India.
- To study the various types of courses in Choice based credit system(CBCS).
- To study the elements of Choice based credit system(CBCS).
- To study the Grading system- As per UGC Guideline for Choice based credit system(CBCS).
- To study the Impact of Choice based credit system(CBCS) in Higher Education in India.
- To study the Advantage and Disadvantage of Choice based credit system(CBCS) in Higher Education in India.
- To study the suggestion for Embodiment of Choice based credit system(CBCS) in Higher Education in India.

Basic Features of CBCS system

The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity

in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations. Some basic features of CBCS system are mentioned below,

- Students can learn at their own pace.
- Adopt an interdisciplinary approach in learning.
- This is a uniform CBCS for all central and state and other recognised universities.
- There are three main courses: Core, Elective and Foundation.
- There are also non-credit courses available which will be assessed as 'Satisfactory' or 'Unsatisfactory'. This is not included in the computation of SGPA/CGPA.
- Enhance skill/employability by taking up project work, entrepreneurship and vocational training.
- All the three main courses will be evaluated and accessed to provide for an effective and balanced result.
- Credits can be transferred if the student changes his/her branch of study.
- CBCS is a step towards moving away from numerical marking to grading.
- Grading minimizes the stigma of "fail".
- The credit based grading system is considered desirable because it facilitates student mobility across institutions within the country and across other countries. Potential employers can thus assess performance of students, judicially.

Types of Courses in CBCS System:

Under CBCS, students will study the following types of courses:

Core Course:

A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.

Elective Course:

Generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.

Elective Course:

Generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.

- **Discipline Specific Elective (DSE) Course:**

Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).

- **Dissertation/Project:**

An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.

- **Generic Elective (GE) Course:**

An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective. (A core course offered in a discipline/subject may be treated as an elective by other discipline/subject and vice versa and such electives may also be referred to as Generic Elective)

Ability Enhancement Courses (AEC)/Competency Improvement Courses/Skill Development Courses/Foundation Course:

The Ability Enhancement (AE) Courses may be of two kinds: AE Compulsory Course (AECC) and AE Elective Course (AEEC).

AE Compulsory Course (AECC)

"AECC" courses are the courses based upon the content that leads to Knowledge enhancement. These are are mandatory for all disciplines and include (i) Environmental Science, (ii) English/MIL Communication.

AE Elective Course (AEEC)

These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based instruction. Project work/Dissertation is considered as a special course involving application

of knowledge in solving / analysing /exploring a real life situation / difficult problem. A Project/Dissertation work would be of 6 credits. A Project/Dissertation work may be given in lieu of a discipline specific elective paper.

Basic Elements of CBCS system

CBCS system has the following basic elements:

Semesters: The assessment is done semester wise. A student progresses on the basis of the courses taken rather than time like three years for science, arts, commerce or four years for engineering etc. Each semester will have 15–18 weeks of academic work which is equal to 90 teaching days. There is flexibility in creating the curriculum and assigning credits based on the course content and hours of teaching.

Credit system: Each course is assigned a certain credit. When the student passes that course, he earns the credits which are based on that course. If a student passes a single course in a semester, he does not have to repeat that course later. The students can earn credits according to his pace.

Credit transfer: If for some reasons, he cannot cope with the study load or if he falls sick, he has the freedom to study fewer courses and earn fewer credits and he can compensate this in the next semester.

Comprehensive continuous assessment: There is a continuous evaluation of the student not only by the teachers but also by the student himself.

Counting of Credits in Credit System: One credit per semester is equal to one hour of teaching, which includes both lecture (L) or tutorial (T) or two hours of practical work/field work (P) per week. A study course can have only L component or only T or P component or combination of any two or all the three components. The total credits earned by a student for each semester is L+T+P.

In compliance with the Global Grading System: All the major higher education institutions across the world are implementing this credit system. For instance, the 'National Qualifications Framework' in Australia, the Pan-Canadian Protocol on the Transferability of University Credits the UK Credit Accumulation and Transfer System (CATS) and even in the US system, Japan system, etc. are based on credit system.

Grading system of CBCS system- As per UGC Guideline:

UGC has introduced a 10-point grading system in CBCS to allot grading as shown in the following table 1.

Table 1: Grading system in CBCS as per UGC guidelines.

Sl. No.	Letter Grade	Grade	Grade Point
1	O	Outstanding	10
2	A+	Excellent	9
3	A	Very Good	8
4	B+	Good	7
5	B	Above Average	6
6	C	Average	5
7	P	Pass	4
8	F	Fail	0
9	Ab	Absent	0

Advantage of CBCS system:

Advantage of CBCS system in Higher education in India are:

Students Centric: CBCS offers freedom to choose subjects according to their own learning needs, interests and aptitudes which is beneficial for students. This system signifies a shift in focus from teaching based system to learning education system as the workload is based on the investment of time in learning. A student can exercise the option to decide his/her own pace of learning- slow, normal or accelerated plan and sequence his/her choice of paper, learn to face challenges through term work/project work/ and may venture out to acquire extra knowledge/proficiency through add- on facilities.

Improve the interdisciplinary approach in education: All cutting edge development in technologies occur at the interface of two or more disciplines. Making the curriculum interdisciplinary enables integration of concepts, theories, techniques, and perspectives from two or more disciplines to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline.

Facilitates student's mobility: CBCS allows easy mode of mobility to various educational institutions spread across the world along with the facility of transfer of credits earned by students. This provides more transparency and compatibility between different educational structures.

Standardization of higher education: CBCS upgrades educational and occupational aspiration of the upcoming generation. The great advantage is that the learning process is made continuous and the evaluation process is not only made continuous but also made learner-centric and is designed to recognize the capability and talent of a student.

Develop quality education: Though the students choose courses of inter-disciplinary nature, the required courses for majoring in a subject will ensure depth. Professionalism and quality consciousness are the basis for every change. With faculty advising, CBCS can offer a very flexible and open system for a quality up gradation of higher education.

Teacher Capacity Building: The teacher training and capacity building is going to be carried out to enhance the skill, knowledge as well as to create right kind of attitude required to play a role of teacher. It will not only increase the competency with respect to knowledge but also in terms of technology, research, teaching and pedagogy. This will enable them to work as facilitator as well as motivator for students.

Continuous and Comprehensive Assessment: This is an integral part of CBCS. A continuous assessment system in semester system (also known as internal assessment/comprehensive assessment) is spread through the duration of course and is done by the teacher teaching the course. The assessment is done through various means including: Written tests, MCQ based quizzes, Presentations, Projects, Field visits, Seminars, Group discussions/activities etc. The continuous assessment provides a feedback on teaching learning process. The feedback after being analysed is passed on to the concerned for implementation and subsequent improvement. **Grading System:** Firstly, scoring system encourages mechanical rote learning turning students into a good memoriser rather than a good analyser. Like the Vedas says such pupils are like "donkeys carrying bags of sandalwood on their back, who can only feel the load but never its values." Grading system is expected to bring some change in this attitude. Grading constitutes the core of CBCS, as it tries to reduce the subjective element in assessment/evaluation and there by prevents any disadvantage to the student. Grade is an index of the performance of a student in a particular course. It is the transformation of scaled marks secured by a student in a course. Grade point is the weightage allotted to each grade depending on the range of marks awarded in a course.

Disadvantage of CBCS system:

Too Many Choices of subjects: The students in the CBCS might get confused with too many choices of subjects available for them. They may not know what to select and what not to select. This creates a confusion in the minds of the student. Too many choices for anything is not going to prove beneficial as more the choices more is the confusion around.

Lack of knowledge on Teaching Capacity: An Individual opting for certain choice may not know the teaching capacity of the faculty, the availability of resources with them etc. This might lead to a negative impact on the students after the selection is done if they are not happy with these things. The roles played by every individual in this needs to be perfect and justice needs to be given to the subject.

Missing better opportunity: The students might miss on other better alternatives available for them. One will not know the opportunity that has been missed by selecting some other. It creates an atmosphere of doubt on the choices one has made.

Burden: It is a burden on the faculty as well as the availability of resources. One may not be able to teach different subjects efficiently. An Individual needs to have knowledge on all the aspects for which the teaching is to be done. One needs to be a Master of all in this.

Effective Time Management: It will be difficult to manage the time for different varieties of subjects. Time Management needs to be done by the institution, the faculty and even the students. It requires a perfect collaboration of the activities involved in the daily schedule. This inclusively has an impact on the curriculum and everyone included in managing it.

Lack of concept about CBCS system in students & teachers: Choice based credit system (CBCS) is a new concept in college students and teachers. So many students and teacher are ambiguous about this concept.

Higher Expenses: It impacts the money making ability of the institution. The institution needs more staff, more resources, more efficiency, more coordination, more resources and more of everything. To have this in proper balance, the institution will have to bear higher expenses. The burden of this will be directly transferred to the students by increasing the fees.

Impact of CBCS system in Higher Education in India:

- 1) Shift in focus from the teacher-centric to student-centric education.
- 2) Students may undertake as many credits as they can cope with (without repeating all courses in a given semester if they fail in one/more courses).
- 3) CBCS allows students to choose inter-disciplinary, intra-disciplinary courses, skill oriented papers (even from other disciplines according to their learning needs, interests and aptitude) and offer more flexibility for students).
- 4) CBCS makes education broad-based and at par with global standards. One can take credits by combining unique combinations. For example, Physics with Economics, Microbiology with Chemistry or Environment Science etc.
- 5) CBCS offers flexibility for students to study at different times and at different institutions to complete one course (ease mobility of students). Credits earned at one institution can be transferred.
- 6) Students get better exposure and networking through attending the course in many college.

Suggestion for Embodiment of CBCS system in Higher Education in India:

The implementation of CBCS system can prove beneficial for Institutes. Student-centric approach of Education creates interest and applicability in the scope of study. Our solution enables easy Choice Based Credit System in Educational Campuses. Master Soft has customized this solution keeping in mind the growing need to automate credit courses of higher education.

Following points could be considered as the suggestions for Embodiment for the CBCS system:

- Admittedly, Choice based credit system is students friendly but things are yet to be needed to justify the efficacy of it. Class room teaching should be given importance.
- Seminars, Conferences and debate should be organised to discuss its merits and demerits in detail.
- Professional training should be given to the teachers to handle it effectively.
- Provision of both Percentage and grading system should be maintained.
- Its adaptation should be optional or choice based rather than mandatory.
- All the P.G college of India should also be brought under the CBCS, as they also catering the responsibility of Higher Education on a large scale.
- Equalization in standard of education system should be maintained so that mobility of students could be checked.
- Selection of papers and choosing credits should be governed by the concerned department/ institution.
- To make it more effective, guidance and counselling services should be arranged for the teachers and students while choosing soft core papers.
- Care should be taken about the gap between Central and state Universities in regard to quality of education as well as the availability of infrastructure at point.
- The University can have multiple users. The user can view his/her profile as well as change password.
- Student has the mobility to register, apply, keep track of courses selected and examination schedule through our Solution.
- Faculty has the flexibility to manage student data, create courses and schemes, offer courses, allot curriculum and assign/ transfer teachers.
- Through this solution the teacher can prepare teaching plans, mark attendance and prepare assignments for students.
- Solution for CBCS system is holistic, easy to use and provides comprehensive management.

Conclusion:

Choice Based Credit System is essential for Higher Education. This system increases the sincerity among the teacher as well as the students. In the current economic crisis, innovation is seen as a key strategy for institutions and companies not only to recover but to prosper and to sustain growth into the future (World Economic Forum, 2010). To conclude it can be said that education is not an end but an integral process in building the youth of a nation and subsequently at a global level. A well designed system of evaluation is a powerful educational device. CBCS have been efficient in eliminating rote learning and memorizing introducing critical thinking and analysis which leads to creativity and innovation in education system. From the empirical evidence students perceive the CBCS to be student centric which provides student freedom and has clarity in evaluation with clear syllabi and adequate college resources providing all round

development of students. It is concluded that the significant factors. Thus CBCS will enable the smooth transition from a teacher-centric system to a student-centric system.

The UGC has always initiated measures to bring efficiency and excellence in the Higher Education System of India. The basic motive is to expand academic quality in all aspects, right from the curriculum to the learning-teaching process to examination and evaluation systems. However, so far multiple methods are followed by different universities across the country towards examination, evaluation and grading system. Considering this diversity, the implementation of the choice based credit system seems to be a good system in assessing the overall performance of a student in a universal way of a single grading system.

Reference:

1. Aithal, P. S., & Kumar, P. M. S. (2016). Analysis of Choice Based Credit System in Higher Education. *International Journal of Engineering Research and Modern Education (IJERME)*, 1(1), 278- 284.
2. Alka S. Kelkar and Lakshmy Ravishankar (2014) Choice based credit system: An academic reform in higher education. *University News*, vol.51, No. 08.
3. Amutha Joseph (2012), Choice Based Credit System: The need of the hour, *University News*, Vol.51, No. 08. 15.
4. B. Saharish (2009), Special issue on Evaluation System: Implementing UGC-mandated Reforms in Higher Education, *University News*, 47(45), pg 39-40.
5. Chabey, A.K. (2015). Choice Based Credit System (CBCS). a better choice in education system. *International Journal of Creative Thoughts*, p.g- 2-13.
6. Chaudhary, C. (2012). Assessment of adoption of Choice Based Credit System by India Universities. *International Journal of Behavioural and Movement Sciences*, p.g- 45-49.
7. Hanchinalkar, S.B. (2014) A Study of Choice-Based Credit System Implemented at Secondary Teacher-Training Institutes By University of Mysore. *Indian Journal of Experimental and Innovation in Education*.
8. Hasan, M & Parvez, M. (2015). Choice-Based Credit System in India. Pros and Cons. *Journal of Education and Practice*, p.g- 30-33.
9. Kaur, A. & Sharma, M. (2016). Academic curriculum reform of Indian higher education: Choice Based Credit System (CBCS). *International Journal of Advanced Research in Education and Technology*. P.g- 78-80.
10. Kelkar, A.S & Ravishankar, L. (2014). Choice Based Credit System: boon or bane. *Current Science*, p.g- 1229-1230.
11. Mali, R.M. (2015). Role of ICT for effective implementation of CBCS in teacher education. *Global Academic Research Journal*, p.g- 16-20.
12. Naidu, B.V.R. (2016). Choice Based Credit System in India. A critical evaluation. *International Journal of Academic Research*, p.g-77-87.
13. P. Purna Chandra Rao (2009). Special issue on Evaluation System: Student Evaluation for Quality Education, *University News*, 47(45), pg 92.
14. Ramesh B Kasetwar (2009), Special issue on Evaluation System: Evaluation system in India: A Stocktaking of Prevalent practice and Alternative Strategies. *University News*. 47(45), pg 13-14.
15. Roy, N.R., Khanam, U.K. & Devi, T. (2013). Attitude Towards Choice Based Credit System of PG level in Higher Education: A Study on Assam University. *Scholarly Research Journal for Interdisciplinary Studies*, p.g- 1198-1208.
16. Rumani Saikia Phukan, What is CBCS or Choice Based Credit System? How Does It Work? <http://www.mapsofindia.com/my-india/education/what-is-cbcs-or-choice-based-credit-system-how-does-it-work>, 24/06/2015.
17. S. Ramananda Shetty (2009), Special issue on Evaluation System: Evaluation System. *University News*, 47(45), pg 19-20.
18. Stanley, J. (2005), *The Hindu*. Online edition of India's National Newspaper. Tuesday. Apr 12, 2005.
19. UGC Guidelines on Adoption of Choice Based Credit System, University Grants Commission, India. Downloaded from the website: http://collegesat.du.ac.in/UGC_credit_Guidelines.pdf.