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ISSUES, CHALLENGES, AND PROSPECTS OF THE CHOICE BASED CREDIT SYSTEM (CBCS)

Rajesh Kumar Chauhan [1], Dr. Ashish Pathak

[1] Research Scholar, Department of Education, S.M.P. Govt. Girls P.G. College, Madhavpuram, Meerut, U.P.
[2] Assistant Professor, Department of Education, S.M.P. Govt. Girls P.G. College, Madhavpuram, Meerut, U.P.

Corresponding Author
Rajesh Kumar Chauhan,
rajesh.chauhan79@gmail.com

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ABSTRACT

The Choice Based Credit System (CBCS) represents a progressive approach to higher education, emphasizing flexibility, student autonomy, and the integration of interdisciplinary, intra-disciplinary, and skill-based courses. CBCS aims to integrate Indian higher education with global academic frameworks, by implementing a uniform grading system and facilitating credit transfer mechanisms. Students performance is evaluated through Continuous and Cumulative Grade Point Average (CGPA), ensuring the comprehensive evaluation of academic performance. However, despite its potential advantages, the implementation of CBCS faces significant challenges, including infrastructure constraints, increased faculty workload, and the need for standardized implementation across institutions. This paper critically examines the issues, challenges, and future prospects of the CBCS system in the Indian education context.

Keywords: CBCS, Issues, Challenges, Prospects, Higher Education, Curriculum Flexibility, Grading System

1. INTRODUCTION

India's higher education system is the second largest in the world and consists of a vast and diverse network of institutions that caters to millions of students across various disciplines. This vast framework of learning plays a critical role in shaping the educational and occupational demography of India. The University Grants Commission (UGC) plays a crucial role in regulating and standardizing higher education by formulating guidelines and regulations to ensure quality and accountability in educational institutions of India. Recent academic reforms recommended by the UGC have contributed to significant improvements in the system. However, there is a growing recognition of the need for greater flexibility and autonomy in designing examination systems and evaluation methods that integrate with the diverse curriculum offered by higher educational institutions. Evaluation plays a crucial role in the teaching-learning process, and the current system, while diverse, could benefit from a more unified approach. To facilitate smoother student mobility within and across institutions, a uniform grading system is desirable. This would allow students to seamlessly

transfer credits and progress in their academic journey without facing undue hurdles. Achieving this goal requires flexibility in education, which can be fostered through the introduction of interdisciplinary, intra-disciplinary, and skill-based courses. The Choice Based Credit System (CBCS), a semester-based structure, provides a framework for curriculum changes and updates to the examination system. By offering students a wider range of course options and allowing them to accumulate credits based on their performance, CBCS supports flexibility and customization.

The UGC has established uniform guidelines for implementing CBCS, ensuring a consistent approach across institutions. India's higher education system is undergoing a period of transformation, driven by the need for greater flexibility, uniformity, and alignment between curriculum, evaluation, and student mobility. The UGC's role in guiding these reforms is crucial. By adopting a more flexible approach to education and implementing a uniform grading system, India can enhance the quality and accessibility of its higher education system, empowering students to achieve their academic goals more effectively. . Recognizing the need to improve the quality and flexibility of higher education, India adopted the Choice Based Credit System (CBCS) in 2015, following a University Grants Commission (UGC) directive. The system is modeled after international credit transfer frameworks such as the European Credit Transfer System (ECTS) and the Credit Accumulation and Transfer System (CATS) in the UK. CBCS aims to make Indian education more globally competitive by providing flexibility and fostering a student-centric learning environment. The Choice Based Credit System was introduced following the recommendations of the National Knowledge Commission and the 11th Five-Year Plan to raise academic standards. It encourages regular curriculum revisions, internal assessments, and a shift toward a credit-based system, ensuring better alignment with international practices.

2. OBJECTIVES OF THE STUDY

1) To examine the implementation of the Choice Based Credit System (CBCS) in various countries around the world.
2) To explore the fundamental characteristics of the Choice Based Credit System (CBCS) in higher education across India.
3) To analyze the different categories of courses offered under the Choice Based Credit System (CBCS).
4) To investigate the grading system as per UGC guidelines within the framework of the Choice Based Credit System (CBCS).
5) To identify the Strengths and Weaknesses associated with the implementation of the Choice Based Credit System (CBCS) in Indian higher education.

3. CREDIT SYSTEMS IN VARIOUS COUNTRIES WORLDWIDE

3.1. THE EUROPEAN CREDIT TRANSFER SYSTEM (ECTS)

The European Credit Transfer and Accumulation System (ECTS) was developed by the European Union to promote mobility among higher education institutions across Europe and to ensure the recognition of academic qualifications and study periods abroad.

Under the ECTS, credits earned at one institution can be transferred to another within the European Higher Education Area (EHEA), playing a vital role in facilitating student mobility through initiatives like Erasmus. Established in 1989, ECTS is now widely implemented across European countries. In this system, a full academic year corresponds to 60 ECTS credits, equivalent to 1,500 to 1,800 hours of study, with each ECTS credit representing 25 to 30 hours of workload.

3.2. CREDIT ACCUMULATION AND TRANSFER SYSTEM OF UK (CATS)

The various Credit Accumulation and Transfer (CAT) schemes of UK, including **SEEC**, **NUCCAT**, **CQFW**, **SCOTCAT (SCQF)**, and **NICATS**, play a vital role in fostering flexibility and mobility within the education system. Each scheme is designed to meet the unique needs of its region while supporting a broader UK-wide effort to create more opportunities for lifelong learning. These schemes enable students to accumulate academic and vocational credits over time, transfer them between institutions, and build qualifications that are recognized across regions and educational sectors. They also

support non-traditional learning pathways and the recognition of prior learning, making education more accessible and adaptable to individual needs.

3.3. U.S. CREDENTIAL FRAMEWORK (USCF)

In the United States, most academic programs follow the Semester Credit Hour **(SCH)** system, which assumes a full-time course load consists of 30 credits per academic year. Each credit typically represents a weekly commitment of one hour of in-class instruction and two hours of independent study over the course of a semester. This translates to a total workload of approximately 45 to 50 hours per credit, with at least 15 of those hours being direct contact time in class.

3.4. ASEAN QUALIFICATIONS REFERENCE FRAMEWORK (AQRF)

The AQRF is a regional qualifications reference framework with eight levels, designed to encompass all education and training sectors, ranging from foundational to highly advanced skill levels. To promote lifelong learning, it extends beyond formal education to include informal and non-formal learning.

Its development was intended to support the building of the ASEAN Community. By aligning with the ASEAN Charter's objective of fostering human resource development through enhanced collaboration in education and lifelong learning, the AQRF has played a significant role in empowering ASEAN's people and strengthening the ASEAN Community in various ways.

3.5. THE VIRTUAL UNIVERSITY FOR SMALL STATES OF THE COMMONWEALTH (VUSSC) UTILIZES A TRANSNATIONAL QUALIFICATIONS FRAMEWORK (TQF)

The Transnational Qualifications Framework (TQF), created for the Virtual University for Small States of the Commonwealth (VUSSC), was designed to enhance the trustworthiness and acceptance of qualifications issued by national quality assurance bodies and accredited education and training institutions within small states. Acting as a reference system, the TQF connects and aligns national qualification systems and frameworks across various small states.

In practice, the TQF serves as a translation tool, making qualifications more understandable and facilitating the mobility of learners and workers between countries or industries. Its primary goal is to help build a flexible and mobile workforce within small states. For employers, the TQF simplifies the process of evaluating qualifications from international applicants. By enabling easier comparison of qualifications, the TQF supports labor market mobility across borders and sectors, improving the alignment between skills supply and demand.

For individuals, the TQF offers a clearer way to present their qualifications and competencies to potential employers or educational institutions abroad. It also simplifies the process of transitioning between different qualification systems, whether for career advancement or pursuing further education and training opportunities.

3.6. AUSTRALIAN QUALIFICATIONS FRAMEWORK (AQF)

The Australian Qualifications Framework created a national system of cross Sectoral qualifications capable of supporting the increasingly diverse needs of the workforce and students in education and training. It was introduced in 1995 and fully implemented from 2000. The AQF included guidelines for each qualification type and protocols for issuing qualifications.

National guidelines for cross-sector linkages, developed jointly with the Australian Vice Chancellors Committee and the Australian National Training Authority, were included in 2002 and national principles and operational guidelines for recognition of prior learning were added in 2002-2003. Four editions of the AQF Implementation Handbook were published between 1995 and 2007. The qualifications included in the AQF in 1995 were: Certificate I, Certificate II, Certificate III, Certificate IV, Diploma, Advanced Diploma, Bachelor Degree (including Bachelor Honours Degree), Graduate Certificate, Graduate Diploma, Master's Degree and Doctoral Degree. The Associate Degree was added in 2004 and the Vocational Graduate Certificate and Vocational Graduate Diploma in 2005

3.7. SOUTH AFRICAN NATIONAL QUALIFICATIONS FRAMEWORK

The initiative in South Africa began in the late 1980s and early 1990s, ultimately leading to the creation of the South African Qualifications Authority (SAQA) through the enactment of the SAQA Act (Act 58 of 1995). In 1998, SAQA introduced an eight-level National Qualifications Framework (NQF). This framework was implemented as a pivotal tool for promoting a more equitable education system in the country.

Its objectives include improving access to education and training, fostering mobility and progression within educational, training, and career pathways, and enhancing the overall quality of education and training. Additionally, the NQF aims to address historical inequalities in education, training, and employment opportunities, while also contributing to the holistic development of learners and the broader social and economic growth of the nation (as outlined in the SAQA Act of 1995).

3.8. UAE QUALIFICATIONS FRAMEWORK (QF EMIRATES)

The QF Emirates serves as a reference framework for existing qualifications and a foundation for developing new qualifications, focusing on "learning outcomes" defined by knowledge, skills, and various aspects of competence. This framework supports the establishment of a modern system for vocational, technical, and professional education and training in the UAE.

With its 10-level structure, the QF Emirates enables comparisons across all qualifications within the UAE and, where applicable, with international qualifications. It also facilitates the alignment of the UAE's qualification systems with those of other countries, such as Bahrain and Ireland, and with international meta-frameworks like the European Qualifications Framework (EQF) and the Framework for Qualifications of the European Higher Education Area (commonly known as the Bologna Framework).

3.9. THE UNIVERSITY MOBILITY IN ASIA AND THE PACIFIC (UMAP) CREDIT TRANSFER SCHEME (UCTS).

UMAP was founded in 1993 with support from various governments, academic institutions, and organizations. Its members include universities and other higher education institutions from countries in the Asia-Pacific Economic Cooperation (APEC) region, which covers East Asia, Southeast Asia, South Asia, and the Pacific islands.UCTS Framework: UCTS provides a mechanism to convert course credits from one institution to another, making it easier for students to transfer and apply them toward their degree programs. Universities within UMAP align their curricula to ensure that the learning outcomes and workload are comparable, facilitating easier credit recognition.

4. CHARACTERISTICS OF THE CHOICE BASED CREDIT SYSTEM (CBCS)

1) **Student-Centric:** The CBCS is a learner-centered system. Students can select courses as per their interest and career goal.
2) **Self-Paced Learning:** Students can choose to accelerate or slow down their learning by selecting courses accordingly. This system is particularly beneficial for students who wish to pursue other activities, internships, or part-time jobs alongside academics.
3) **Flexibility in Course Choice**: Students can select courses from a wide range of core, elective, and skill-based courses. Flexibility exists in choosing subjects from within or outside the primary discipline.
4) **Credit-Based Structure**: Each course is assigned specific credits based on the number of hours devoted to teaching and learning. Credits are calculated as:1 credit = 1 hour of lecture per week.1 credit = 2 hours of practical/lab work per week. Students must accumulate a predefined number of credits to earn their degree.
5) **Interdisciplinary Learning**: CBCS allows students to opt for courses across various **disciplines**. For example, a science student can study courses in **humanities**, **arts**, or **commerce**. This promotes a **multidisciplinary approach** to education.

6) **Grading System:** CBCS uses a grading system instead of the traditional marks-based evaluation. Key components include:

Semester Grade Point Average (SGPA

7) **Cumulative Grade Point Average (CGPA)**. The grading system enhances transparency, reduces stress, and enables uniformity across institutions.
8) **Skill Development:** CBCS emphasizes **skill-based courses** to enhance employability and vocational skills. Students can opt for **Skill Enhancement Courses (SECs)** and **Ability Enhancement Courses (AECs)**.
9) **Credit Transfer and Mobility:** CBCS facilitates **credit transfer** between institutions under the National Academic Depository (NAD).This helps students pursuing **online courses** (like MOOCs) or transferring between universities.

Holistic and Continuous Evaluation: CBCS emphasizes **continuous internal evaluation** (assignments, presentations, quizzes) alongside end-semester examinations. Promotes consistent student engagement and participation.

5. CATEGORIES OF COURSES UNDER THE CHOICE BASED CREDIT SYSTEM (CBCS).

1) **Core Courses:** These courses are mandatory for students in every semester to fulfill the requirements of a particular academic program. These courses are central to the discipline of study, ensuring that students acquire the essential knowledge and skills required to complete the program in that field.
2) **Elective Courses:** These courses offer students the flexibility to choose from a pool of available courses. These courses are supportive to the student's primary discipline, providing additional or expanded knowledge. These courses provide exposure to other disciplines or domains, broadening the student's academic experience. Electives are divided into two categories:
   - **Generic Electives**: These are designed to enhance general skills and competencies.
   - **Discipline-Specific Electives**: These focus on areas closely related to the student's primary field of study or may even be interdisciplinary in nature.
3) **Generic Electives (GE):** These courses are elective courses chosen from a different discipline, intended to give students exposure to a new subject area. A course that is considered a core course in one discipline can serve as an elective in another, and vice versa. The UGC (2014**)** guidelines stipulate that students must complete one GE course in each of the first four semesters (GE-1, GE-2, GE-3, GE-4).These courses often have the same credit value as core courses. **Benefits** of these courses are:
   1) Exposure to a new discipline.
   2) Preparation for interdisciplinary research.
   3) Flexibility to pursue a postgraduate degree in a different field.
   4) Many postgraduate programs require a minimum of two semesters of study in a secondary discipline, which these GEs can fulfill
4) **Discipline-Specific Electives:** These courses are elective courses offered within the student's main field of study. Some universities or institutes also offer interdisciplinary electives within the main discipline to encourage a broader understanding of related fields.
5) **Ability Enhancement Courses (AEC):**These courses are designed to enhance a student's skills and knowledge. These courses are categorized into:
   - **Ability Enhancement Compulsory Courses (AECC*):*** These courses are **compulsory** for all students, irrespective of their discipline. The purpose is to enhance specific abilities relevant to the academic journey. Examples include:

Environmental Science, English or MIL (Modern Indian Languages) Communication.

- **Skill Enhancement Courses (SEC):** These courses are designed to impart practical skills and provide hands-on training. These courses are value-based or skill-based and allow students to develop practical skills related to their field of study or in general skill development.

6) **Project Work / Dissertation**

- **Definition**: This component often comes in the final semesters and involves research or a practical project related to the student's field of study.
- **Purpose**: It helps students apply theoretical knowledge to real-world problems and develop research or analytical skills.
- **Credit Weightage**: Project work is typically a high-credit course that significantly impacts the final degree.

7) **Non-Credit or Value-Added Courses**

- **Definition**: These courses may not contribute to the final credit tally but are offered to enhance students' knowledge in specific areas such as languages, soft skills, or personal development.
- **Example**: "Yoga and Meditation," "Foreign Languages," or "Personality Development."

6. UGC GRADING SYSTEM UNDER CBCS

The UGC has prescribed a **10-point grading system** for evaluating students in CBCS. This system ensures uniformity in the assessment process across universities and colleges following CBCS. Here's a breakdown of the grading system:

Letter Grade	Grade Point	Marks Range (%)	Description
O	10	90-100	Outstanding
A+	9	80-89	Excellent
A	8	70-79	Very Good
B+	7	60-69	Good
B	6	50-59	Above Average
C	5	45-49	Average
P	4	40-44	Pass
F	0	<40	Fail
Ab	0	-	Absent

- **Grade Points**: The numerical equivalent of letter grades, used for calculating the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA).
- **Marks Range**: Specifies the percentage range of marks that correspond to each letter grade.
- **Qualitative Description**: Provides a descriptive label for each grade to denote a student's performance level.
- **Calculation of SGPA and CGPA**

1) **Semester Grade Point Average (SGPA)**: It is the weighted average of the grade, points obtained by the student in all the courses in a semester. It is calculated using the formula:

$$SGPA=\sum SGPA=\sum Ci \sum (Ci \times Gi)$$

Where:

- Ci = Credit of the *hith* course
- Gi = Grade point secured in the *hith* course

2) **Cumulative Grade Point Average (CGPA)**: It is the cumulative weighted average of grade points across all semesters and is calculated similarly to SGPA but for all courses taken till that point.

CGPA=∑(∑CGPA=∑Ci∑(Ci×Gi)

6.1. ILLUSTRATIVE EXAMPLE OF CGPA CALCULATION:

Let's say a student has completed four semesters with the following SGPA in each semester:

- Semester 1: SGPA = 7.5, Credits = 20
- Semester 2: SGPA = 8.0, Credits = 22
- Semester 3: SGPA = 6.8, Credits = 18
- Semester 4: SGPA = 8.2, Credits = 24

To calculate CGPA:

Sum the weighted grade points across all semesters
Total Weighted Grade Points=150+176+122.4+196.8=645.2
Sum the credits across all semesters
Total Credits=20+22+18+24=84
CGPA= Total Weighted Grade Points\ Total Credits
CGPA = 645.2/84
Thus, the student's CGPA is 7.68.

6.2. ADVANTAGES OF THE GRADING SYSTEM UNDER CBCS

1) **Flexibility**: Students can opt for courses at their own pace and interest, as long as they accumulate the required number of credits.
2) **Uniformity**: A standard grading scale ensures consistency in evaluation across universities following CBCS.
3) **Focus on Continuous Assessment**: Instead of depending solely on final exams, students are assessed continuously throughout the semester, which is reflected in their grades.

6.3. CHALLENGES AND CRITICISMS

While CBCS and the grading system offer many advantages, there are certain challenges:

1) **Subjectivity in Evaluation**: The relative nature of grades can sometimes lead to inconsistency in awarding grades.
2) **Implementation Issues**: Not all institutions have fully implemented the CBCS grading system uniformly, leading to discrepancies in academic standards.
3) **Overemphasis on Grades**: There is a concern that the focus on grades can overshadow holistic learning.

The UGC's grading system under CBCS is designed to offer flexibility, consistency, and fairness in student evaluation. By focusing on both grades and credits, the CBCS grading framework promotes continuous learning and provides students with the opportunity to explore interdisciplinary courses.

7. ISSUES AND CHALLENGES OF CBCS

1) **Lack of Standardization:** One of the most significant challenges with CBCS is the lack of standardization across institutions. Each university is given the autonomy to design its own curriculum, course content, and grading criteria. This flexibility, while beneficial for academic innovation, results in inconsistency, making it difficult for employers and other institutions to compare the qualifications of students from different universities. Without a uniform credit allocation system, students may face difficulties transferring credits between institutions.
2) **Curriculum Overload:** The flexibility of CBCS allows students to choose from a variety of elective courses, but this can lead to an overload in their academic schedules. In an attempt to accumulate the required credits,

students may opt for more courses than they can effectively manage. As a result, they risk acquiring a superficial understanding of multiple subjects rather than gaining in-depth expertise in a few areas. Striking a balance between academic rigor and curriculum flexibility is essential to avoid this issue.

3) **Inadequate Guidance and Counseling:** With CBCS offering an extensive range of courses, students often need more guidance in making informed academic decisions. Counseling services are either underdeveloped or absent in many institutions, leading students to choose courses without a clear understanding of how they align with their career goals. Effective academic counseling services are crucial to help students navigate the complexities of the CBCS system.
4) **Limited Interdisciplinary Collaboration:** While CBCS encourages interdisciplinary learning, the rigid structures of many institutions prevent students from fully benefiting from cross-disciplinary education. In some universities, students are restricted to courses within their primary department, limiting their exposure to knowledge in other disciplines. To realize the potential of CBCS, institutions must foster greater collaboration between departments and encourage the development of interdisciplinary courses.
5) **Assessment and Grading Challenges:** CBCS relies on continuous assessment, which often leads to complex grading mechanisms. With a large number of courses and varied assessment methods, maintaining consistency and fairness in grading can be difficult. Furthermore, the focus on accumulating credits may cause students to prioritize grades over gaining deep, meaningful insights into the subject matter. Institutions must establish clear, uniform guidelines for assessment to ensure that students are evaluated based on learning outcomes rather than merely the number of credits earned.
6) **Resource Constraints:** Implementing CBCS requires significant resources, including skilled faculty, adequate infrastructure, and comprehensive learning materials. However, many higher education institutions, particularly in rural areas, lack these essential resources. Without sufficient faculty and infrastructure, the quality of education in CBCS programs is often compromised, leaving students with a subpar educational experience.
7) **Employability Concerns:** Although CBCS allows students to develop a diverse range of skills, employers may find it challenging to evaluate these qualifications due to the lack of standardization. Traditional education systems with more focused and specialized curriculums might still be preferred by some employers. Universities must work closely with industry leaders to ensure that CBCS curriculums are aligned with job market demands and that students are graduating with the relevant skills.
8) **Transition Issues:** The shift from a traditional education system to CBCS is significant. This transition requires not only changes in curriculum design but also adjustments in teaching methods and administrative processes. Both faculty and students may struggle to adapt, leading to inefficiencies in implementation. Continuous training and orientation programs are essential for facilitating a smooth transition to CBCS.

8. PROSPECTS OF CBCS

1) **Flexibility and Student Choice:** The hallmark of CBCS is its flexibility, which allows students to choose courses that align with their academic interests and career goals. This freedom provides a more personalized learning experience, enabling students to explore diverse subjects and build a unique academic profile.
2) **Holistic Development:** CBCS promotes interdisciplinary learning, encouraging students to develop a well-rounded educational background. Exposure to various fields enhances critical thinking, creativity, and problem-solving skills, preparing students to excel in today's complex and interconnected world.
3) **Skill Development:** By integrating vocational and skill-based courses, CBCS equips students with practical competencies that enhance their employability. This focus on skill development helps bridge the gap between academic learning and real-world applications, making students more competitive in the job market.
4) **Credit Transfer and Mobility:** CBCS facilitates seamless credit transfer between institutions, allowing students to continue their education across different universities. This flexibility is particularly beneficial for students who need to relocate or wish to pursue courses at multiple institutions.

5) **Continuous Assessment:** CBCS encourages ongoing assessment rather than relying solely on final exams. This continuous evaluation process helps students track their progress and fosters a deeper understanding of the course material.
6) **Emphasis on Learning Outcomes:** CBCS focuses on clearly defined learning outcomes for each course. This transparency ensures that students understand the skills and knowledge they are expected to acquire by the end of each course.
7) **Student-Centric Approach:** The CBCS system is designed with the student at the center of the learning process. It promotes self-directed learning, active participation, and greater responsibility for one's education.
8) **Industry Alignment:** CBCS offers opportunities for collaboration between universities and industry, ensuring that curriculums remain relevant to current job market demands. This collaboration helps students develop skills that are directly applicable in the workforce.

9. CONCLUSION

The CBCS represents a transformative approach to higher education in India, offering flexibility, interdisciplinary learning, and an emphasis on skill development. However, for CBCS to reach its full potential, institutions must address key challenges such as standardization, resource allocation, and employability. By fostering collaboration between academic institutions, industry leaders, and policymakers, the CBCS can become a cornerstone in improving the quality of Indian higher education. With time and refinement, CBCS has the potential to create a globally competitive, student-centered education system that meets the diverse needs of learners and the demands of a rapidly evolving world.

CONFLICT OF INTERESTS

None.

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