

Certificate Course in Education of Gifted Students



CLUSTER INNOVATION CENTRE
UNIVERSITY OF DELHI

Professional Development Course in Gifted Education

(Certificate Level)

Preamble

Cluster Innovation Centre has a mandate to integrate higher education with societal realities and to provide feasible solutions to real time problems. The center achieves these objectives through innovation projects and outreach programs. Under the ambit of CIC, M.Sc (Mathematics Education) is a post graduate course specially designed to prepare resourceful and creative mathematics teachers. The course develops its strength by introducing value added outreach programs for school teachers and students. Addressing to the needs of mathematics teachers and students, it was felt that teachers are not prepared to handle children who have high potentials in mathematics. The present school system promotes “one-size fit for all” culture in the class. This kind of unidirectional culture of teaching provides no stimulation and challenge to advanced learners who have appetite for more knowledge. In the absence of well accepted notion of giftedness in the country, gifted children (cognitively advanced learners) are the most misunderstood group of the learners in the school

With the objective to identify and mentor high potential students in Mathematics and Science, the Office of Principal Scientific Advisor to the Government of India has given a grant of one crore fifty lakhs to Cluster Innovation Centre under the project, “Establishing Process Based Identification and Mentoring Practices for Potentially Gifted Children in Science and Mathematics.

Students with gifted abilities are also a priority area mentioned in National Knowledge Commission (2009) and National Curriculum Framework (2005). Teachers who spend maximum time with students in the learning situations are generally ignorant about the clues of gifted behaviors. There is an urgent need to prepare teachers who are trained in differentiated teaching strategies so as to identify and meet the learning needs of gifted students.

Therefore, it is proposed to introduce Certificate level and Diploma Level courses to trained teachers to identify the "unique learning behavior" of gifted students and to equip them with teaching strategies to help students to optimize their potentials.

The course transacts the larger objective of M.Sc (Mathematics Education) program by training Mathematics teachers for differentiated teaching strategies and by preparing M.Sc students in differentiated teaching strategies to meet the learning needs of diverse learners in regular classroom.

Duration of the Course:

The program of study leading to Certificate Course in Education of Gifted Students will be of six months duration.

Admission to the course: Once a year

Eligibility Criteria:

In-service Teacher/School Counsellor/Teacher Educator/School Administrator, with at least one year teaching experience.

Intake and Reservation:

The intake to the Certificate course in Education of Gifted Students will be 20.
The reservation in admission shall be as per University of Delhi rules.

Reservation of seats:

General seats: 10

SC seats: 03

ST seats: 02

OBC seats: 05

CWAP/PD seats over and above

The candidates seeking admission under above categories must fulfill the minimum eligibility conditions and qualifying requirements.

Admission Procedure:

Candidates fulfilling the minimum eligibility shall be called for the Interview to be conducted by the Admission Committee constituted by the University for the purpose of admission. In case, the number of applications exceeds 60, common entrance test will be conducted to short list candidates for the interview.

Admission to the course shall be made in order of merit.

Separate merit list will be prepared for the candidates under each of the above categories.

Program Fee:

Admission Fee: Rs.7,500/-

Examination Fee: 600/- (Rs.100/- per paper + Rs.100/- Mark Sheet)

Conduct of the Program

The course will be of 20 credits. Each credit will be of 15 hours of workload out of which 08hours will be assigned to field work /project work.

Classes for the course will preferably be held in the evening.

Teaching sessions will be of 4-5 hours per week.

(Duration, credits and grading system are defined as per UGC norms)

Methodology of Teaching

Course will be interactive and experiential in nature. It will be developed through revisiting self-experiences, reflecting upon existing practices and generating suitable resources. The course will engage participants in dialogue and sharing of ideas and through regular submission of assignments. In this way, course will be self-directive, challenging and innovative.

Colleagues/Faculty from Department of Education will participate in the delivery of the course.

Course Structure:

The Certificate Course in Education of Gifted Students will be of six months duration. A student has to earn 20 credits as per the details below:

Course Scheme

Module	Title of the Module	Number of Credits	Total Marks-100 Internal/External
Module GE I.1	Unlocking the secrets of giftedness	03	40/60
Module GE I.2	Tracing the route(s) of giftedness: Identifying gifted students in Indian context	03	40/60
Module GE I.3	Knowing the inner world of gifted students: Understanding cognitive and affective needs	03	40/60
Module GE I.4	Raising the bar for all: Handling gifted students in the classroom	03	40/60
Module GE I.5	Course- Embedded Term long Project in School Setting followed by Project Report & Viva-Voce	08	100
	Total	20 Credits	500

Examination Scheme:

Each theory paper will have two components: Projects and Theory. Both projects and theory will be evaluated through Internal Evaluation and End Term Evaluation.

Each credit will have 60% project component and 40% theory component. Projects will be selected through course content for its practical applicability.

For Internal Evaluation, 40 marks will be allotted to various assignments during the course and 60 marks will be allotted for the End Term Examination.

The Course-Embedded Term End Project will be evaluated periodically followed by project submission report and viva-voce examination. The periodic assessment will carry 30 marks, project report will carry 50 marks and viva-voce examination will carry 20 marks.

Where candidate fails to take examination in one or more papers or having taken the examination, has, but failed to secure the minimum pass marks in any one or more papers or in the aggregate, his/her marks in the class tests, semester reports and/or assignments will be carried forward to the subsequent examination.

In case of any objection by a student in the evaluation, reevaluation/retotaling will be done as per the University of Delhi norms.

Interpretation of Evaluation Result:

Evaluation results will be interpreted based on the Point Scale for Grading as given below:

Award of Grades based on Absolute Marks

Marks Range (out of 100)	Grade	Grade Point
Above 90	A+	10
80-89	A	9
70-79	B+	8
60-69	B	7
50-59	C	6
40-49	D	5
Below 40	E	-

Grades A+, A, B+, B, C, D in the course means that candidate has passed the course.

Grade E denotes falling in the course.

Grade D is the minimum passing grade.

The maximum period allowed to complete the course will be three years from the year of admission.

The certificate will be awarded by Cluster Innovation Centre, University of Delhi. Director of Cluster Innovation Centre will be the signatory.

Course Content Description

GE I.1: Unlocking the secrets of giftedness

The module gives an insight into the world of giftedness and the myths related to it. The module also highlights the challenges in defining the term gifted. It discusses various theories and definitions of giftedness and will enable the participants to construct functional definition of giftedness as per the need.

Learning Objectives:

- Define giftedness in terms of learning behavior
- Differentiate giftedness from other related terms
- Describe theories related to giftedness
- Identify traits of underachievers and gifted children with disability

Course Content:

- **Conceptions of Giftedness:** Developing an understanding of notion of giftedness, Theories and models of giftedness, Kinds of giftedness, locating range of giftedness, Myths about giftedness
- **Nature and Nurture Theory of Giftedness:** Inherent traits of giftedness, Developmental theory of giftedness, Maturation, practice and nurturance, Environmental Influence, Towards holistic theory of giftedness
- **Intelligence and Giftedness:** Theories of Intelligence, Giftedness, Intellectual Giftedness, Intelligent vs Giftedness, Multiple Intelligence and Giftedness, Creativity and Giftedness
- **Extreme Precocity:** Prodigies, Savant and Highly genius: Diversity in gifted population, Unevenly Gifted, Children with extraordinary IQ, Savant definition and description, Prodigy as reflected in research literature
- **Underachievers and Gifted with other kinds of Disorder:** Underachievement syndrome, Twice- Exceptional: Gifted children with learning disability, High risk gifted children, Ethically diverse and economically disadvantage gifted children

Reading List:

1. Baska, J. (2005) Comprehensive Curriculum for Gifted Learners (3rd Edition), Pearson.
2. Colangelo and Davis (2002), Handbook of Gifted education (3rd Edition), Pearson Ltd.
3. Delisle,R. (2002) Barefoot Irreverence: A Collection of Writing on Gifted Child Education. Prufrock Press.

GE I.2: Tracing the route(s) of giftedness: Identifying gifted students in Indian context

The module presents multiple criteria to help teachers identify potentially gifted children in Indian classrooms. The focus will be on observable behaviors in everyday classroom and out of classroom situations. It also includes study of identification tools, both standardized and non-standardized.

Learning Objectives:

- Define characteristics of gifted learners in Indian context
- Identify learning behaviors of gifted learners
- Evaluate available tools of identification of gifted learners
- Develop context specific identification tools suitable for Indian classrooms

Course Content:

- **Myths and beliefs about giftedness:** Issues in education of gifted students, prevailing myths about recognition and education of gifted students: Identification myths, educational myths, social & emotional development myths, misguided practices in gifted education, breaking the rigid notions of giftedness
- **Characteristics of gifted learners:** Construct of giftedness, Traits of gifted learners, Identifying gifted learners: standardized practices & context based practices, Case studies for reference
- **Learning behaviors of gifted children in and outside classroom:** Knowing a gifted child in classroom, Heterogeneity of behavior among gifted students, Principles of identification, Context-specific approaches of identification
- **Introduction to available tools of identification of gifted children and its relevance in Indian Context:** Reference of gifted students and gifted education in Indian education policies and documents, Study of available identification tools: both standardized and non-standardized, Critical analysis of available instruments with respect to their usability and effectiveness in Indian context.(Standardized intelligence, creativity and ability tests)
- **Role of teachers and parents in identification:** Teachers' attitudes, beliefs and prejudices about gifted students, Meeting the learning, social and emotional needs of gifted children Practical recommendations and interventions for educating gifted students, role and support of family in nurturing giftedness

Reading List:

1. Johnsen,S.(2004). Identifying Gifted Students: A Practical Guide. Prufrock Press.
2. Maitra, K. (2000). Giftedness in Action: Theory and Practice. Kanishka Publishers, New Delhi.
3. National Curriculum Framework-2005
4. National Knowledge Commission Report-2009
5. Winner E. (1996), Gifted Children: Myths and Realities: New York, Basic Books Publishers.

GE I.3: Knowing inner world of gifted students: Understanding their cognitive and affective needs

Gifted children are always misunderstood as they are constantly discussed purely in cognitive terms. There are many stereotypes associated to their personal and social lives. This module will help teachers to look beyond the academic needs of gifted learners. It will prepare teachers to balance the advanced cognitive needs and other needs of gifted students in a dynamic learning environment.

Learning Objectives:

- Identify advanced cognitive needs of gifted learners

- Identify social and emotional needs of gifted learners
- Develop and modify learning resources to meet the varied needs of gifted learners

Course Content:

- **Asynchronous cognitive development and social maturity in gifted learners:** Giftedness as advanced cognitive abilities, higher intellectual capacity and heightened curiosity, case of uneven development of different facets of personality, disparities between intellectual abilities and physical abilities, psychological and social issues of uneven development of gifted children
- **Emotional lives of gifted students:** Affective needs of high ability learners, motivational issues and behavior manifestation, heightened sensitivity among gifted students, adjusting with norms as a challenge for gifted students
- **Classroom strategies to balance cognitive and social needs of gifted students:** Classroom organization and emotional scaffolding, ability grouping, cooperative learning, problem-solving and hands-on projects, profiling gifted students
- **Issues with highly gifted students:** Giftedness beyond NPC, high risk behavior of highly gifted students, self-belief and interpersonal relations, support and role of school, teachers and family
- **Counselling Services for gifted students:** Multi-potentiality, dual exceptionalities and self-concept, need of counselling, group counselling, counselling with families, need based counselling, school counselling program

Readings:

- Schwartz, D.(1999). Diverse population of gifted children: Meeting their needs in the regular classroom and beyond. Pearson Education Ltd.
- Coleman & Cross. (2005) Being Gifted in School: An Introduction to Development, Guidance and Teaching (2nd Edition). Prufrock Press Inc.
- R.D. James (1987). Gifted Children speak out. Walker & Company Publishers.

GE 1.4 Raising the bar for all: Handling gifted students in the classroom

This module focuses on curriculum models to channelize the potentials of gifted children. The module suggests multiple strategies and resources to promote higher order thinking skills, classroom dialogue and scientific investigation in classroom discourses.

Learning Objectives:

- Differentiate among various curriculum models for gifted students
- Plan multiple instructional strategies to meet the diverse needs of gifted students
- Develop and use instructional resources to promote culture of inclusion in the classroom
- Create individualized mentoring plan for highly gifted students

Course Content:

- **Curriculum models for gifted learners:** Integrated curriculum model, school – wide enrichment model, Purdue pyramid model of talent development, Gagne’s differentiation model of gifted and talented

- **Instructional strategies to meet the needs of gifted students:** Acceleration, enrichment, differentiation, compacting and telescoping, mentoring, designing need based/ subject specific programs for gifted students
- **Challenging gifted underachievers:** Art of questioning, using dialogue in classroom discourse, promoting skillful thinking, stimulating gifted underachiever through alternate curriculum
- **Giftedness and Inclusion:** Gifted students in inclusive classroom; moving beyond 'one-size fit' for all; acceptance, freedom and independence all in one class; tiered objectives and tiered activities; use of technology in inclusive paradigm
- **Mentoring Gifted Students:** Idea and need of mentoring; characteristic, roles and responsibilities of mentor; characteristic, roles and responsibilities of mentee; relation between mentor and mentee; designing and evaluating mentoring program

Readings:

- Clark. B. (2007). Growing up gifted: Developing the potential of children at home and at school (7th Edition). Prentice Hall Publishers.
- Reis and Renzulli. (1997). The School Wide Enrichment Model: A How-To- Guide for Educational Excellence. Prufrock Press.
- Whitley, M.D. (2001). Bright Minds, Poor Grades: Understanding and Motivating Your Underachieving Child. Berkley Publishing House.

GE I.5 Course- Embedded Term long Project

This module provides an opportunity to carry out an in-depth project in real time setting dealing with any aspect of gifted learners. It allows validating the theory with practical applications. It promotes the culture of investigation and independent thinking.

Learning Objectives:

- To plan small scale in-depth project proposal
- To carry out project in scientific manner
- To analyze the findings with concrete conclusion & suggestions

Project can be chosen from any of the following suggested topics:

- Case Study of a potentially gifted child
- Preparing set of five thematic enrichment activities for gifted child
- Developing accelerated thematic unit for a gifted child
- Nurturing gifted underachiever through dialogue and questioning in classroom
- Construction and validation of an identification tool to identify gifted children
- Documentation and commentary on observable learning behaviors of gifted children in real-time setting
- Development and field trial of differentiated instructional strategies and assessment plan for gifted students in regular classroom
- Setting up gifted resource room in the school

- Putting up the case for National Policy on Gifted Education in India
- Profiling Gifted learners for their social and emotional characteristics
- Study of social adjustment issues among gifted learners

(Above mention topics are only suggestive. Any topic related to the field of giftedness may be chosen)

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