

Dr. Gurjeet KaurProfessor
Deptt. Of Teacher Training & Non-

Formal Education (IASE) Faculty of Education

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EDUCATION

- Ph.D, Department of Teacher Training & Non-Formal Education (IASE), Faculty of Education, Jamia Millia Islamia(2012)
- Masters in Education (M.Ed, 1994), and Bachelor's degree in Education (B.Ed, 1993) from Department of Education, University of Delhi
- Masters in Physics (M.Sc, 1992) and Honours degree in Physics (B.Sc,1990) from University of Delhi.

PROFESSIONAL PROFILE

Currently employed as a Professor in the Department of Teacher Training & Non-Formal Education (IASE), Faculty of Education, Jamia Millia Islamia. Possesses over 25 years of University teaching including five years of teaching in the Bachelor of Elementary Education programme at Aditi Mahavidyalaya, University of Delhi. Courses taught cover a wide range: Pedagogy of Environmental Studies to D.El.Ed. students; Pedagogy of Physics to B.Ed. students; Elective course on 'Science, Education and Society' to B.Ed. students; 'Curriculum & Pedagogic Studies' and 'Qualitative Data Analysis' to students of M.A. (Education) and 'Research & Publication Ethics' to Ph.D. students. More than understanding of science, it is the non-comprehension of scientific concepts that catch her research attention. Her larger goals are towards making physical sciences more inclusive and accessible to learners, both at cognitive and socio-cultural level. She has worked on significant academic assignments with several institutions of national importance. She has worked on curriculum revision/ changes both at the level of institutions and at the level of policy.

<u>FIELDS OF RESEARCH INTEREST</u>: Cognitive Science, Science Education, Teacher Education, Curriculum Studies

PUBLISHED WORKS

Research Papers (Selected)

Kaur, G. (2012). Drawing Insights from Cognitive Science for a Strengthened Teacher Preparation: *International Journal for Cross Disciplinary Subjects in Education*, 3(2), 741-749.

Farooqi, F. & Kaur, G. (2012). Rethinking elementary teacher preparation; A syllabus revision exercise for the course 'Pedagogy of EVS' in DIET curriculum. *Voices of Teachers and TeacherEducators*, 1(2), 21-25.

Kaur, G. (2013). Textbook representations as reinforcers of mis (understandings): The case of Ray diagrams in optics. *Voices of Teachers and Teacher Educators*, 2(1), 13-17.

Kaur, G. (2013). Accessing children's ideas of the natural world: an exploration. *The Primary Teacher*, 38 (1 &2), 49-60.

Kaur, G. (2014). Facilitating conceptual change among future teachers: an investigative analysis. *Jamia Journal of Education*, 1(1), 112-121.

Kaur, G. (2015). Curricular Images of Scientists. *Economic and Political Weekly*, L-36, 71-76.

Kaur, G. (2016). Problematising prospective primary teachers' understanding of school textbooks: The case of EVS. *The Primary Teacher*, 41(2), 14-21.

Kaur, G. (2017). Seeing light: On cognitive challenges, curricular representations and conceptual comprehension of optical phenomena among pre service teachers. *Contemporary Education Dialogue*, 14(1), 22-48.

Reviews

Reviewed the book: Apple, M.W. & Beane, J.A. (2006) Democratic Schools: Lessons from chalkface Published in: *Contemporary Education Dialogue*, 4:2 Spring, 2007, 243-246. ISSN 0973-1849

Articles/Chapters in Books (Selected)

Kaur, G. (2015). Conceptual Change: Research trends and implications for science teacher preparation. In K.Akalamkam & S. Sharma (Eds.). *Pedagogic Trajectories* (pp.140-150). New Delhi: Synergy Books. ISBN 978-93-82059-30-1

Kaur, G.(2019). Textual Texture of school science. In Koul,R., Verma, G. & Nargund-Joshi, V. (Eds.). *Science Education in India- Philosophical, Historical and Contemporary Conversations* (pp49-65). Singapore: Springer

Kaur, G. (2023). भौतिकी, भाषा और भावी शिक्षक. In दीवान, ह. & सक्सेना, सा.(Eds.). विज्ञान, विज्ञान शिक्षा और समाज(pp51-70). नई दिल्ली : वाणी प्रकाशन

Full papers in Conference Proceedings

"Analysing and addressing learners' difficulties in Mathematics" published in the proceedings of 'Mathematics Education- Expanding Vistas 'a National conference organized by Deptt. Of Elementary Education, Lady SriRam College (University of Delhi), February 2008 (pp. 45-50).

"Analysing and Addressing Future Teachers' Alternative Conceptions in Optics" published in the proceedings of 'Canada International Conference on Education', Toronto, April 2011 (pp514-521). ISBN 978-0-95642-63-9-0

"Exploring phenomenography-language interface in science for conceptual transformation during teacher preparation" published in the proceedings of 'epiSTEME -5; International Conference to review research on Science, Technology and Mathematics Education' organized by Homi Bhabha Centre for Science Education,

TIFR, Mumbai, India, January 2013(pp118-123). ISBN 978-93-81542-83-5

"Science and Technology as People's Enterprise" published in the proceedings of 'Education as a Right Across the Levels.: Challenges Opportunities and Strategies' an International Education Conference organized by of Education, Jamia Millia Islamia, 2014 (pp621-628). ISBN 978-81-309-2742-8

PAPERS PRESENTED AT SEMINARS/CONFERENCES

"Presented a paper titled "Schools as socio-culturally safe zones: Exploring the role of text book" in the 'National Conference on Mental Health and Well Being; Issues, Challenges and Strategies for the Future' organized by IGNOU. New Delhi on 7Th and 8th Feb.2013.

Presented a paper titled "Engaging future teachers with school textbooks: Trialling an intervention" in the 'International Education Conference on the theme Teacher Education: Challenges, opportunities and Strategies' organized by Faculty of Education, Jamia Millia Islamia on 7th & 8th December, 2016

Presented a paper titled "संकल्पनात्मक समझ और भाषा: कुछ बुनियादी सवाल, सरोकार व संभावनाए" on 19th October, 2022 in the national workshop on the theme 'सामजिक विज्ञान शिक्षण की ज़रुरत, चुनौतियां एवं संभावनाएं' organised by UGC-Human Resource Development Centre, Panjab University, Chandigarh./

Presented a paper titled "भारत में सेवा पूर्व शिक्षक-शिक्षा: बदलते परिप्रेक्ष्य, प्रारूप और पाठ्यक्रम" on 9th May 2023 in the National seminar on Teacher Education organised by Vidya Bhawan G.S.Teachers' College, Udaipur.

Presented online a paper titled "Whose science is it anyway? – Reflections on fractures between prospective teachers' lived epistemologies and school science" on 24th July,2024 in the XVIII World Congress of Comparative Education Societies on the theme 'Fostering Inclusive Ecologies of Knowledge: Education for Equitable and Sustainable Futures' organised from 22-26 July 2024 at Cornell University, Ithaca, New York.

Presented a paper titled "School Science through the lens of prospective teachers' funds of knowledge: Reflections on the formal vs. lived science" in the 14th Annual International Conference of Comparative Education Society of India organized in Panjab University, Chandigarh on 22-24 November, 2024

SUPPLEMENTARY MATERIAL DEVELOPED

Co-authored with three others an activity bank titled "पुस्तकों से परे हमारा पर्यावरण". NCERT (2012). ISBN 978-93-5007 -209-7

Wrote a module titled "Shelter" in the block 'Understanding and Transacting Themes in Environmental Studies' as part of the course 'Pedagogy of Environmental Studies' (pp54-68). IGNOU (2014). ISSN 2014978-81-266-6770-3

COMPLETED ACADEMIC ASSIGNMENTS AND CONSULTANCIES

S.N	Title	Agency	Period	Outcome
1	Member, Joint Review Mission to the State of Bihar	MHRD	17-23 Feb, 2013	Report submitted to MHRD
2	Member, Review of Teacher Development Units prepared for Secondary Maths un- der the TESS India Project	UK, DFID and	Oct 2013 - Jan,2014	Feedback communicated
3	Member, Consultative Team for review of the Neces- sary Teacher Training Programme being im- plemented in Madhya Pradesh	Humana People to People India-	13-17 April,2015	Report Submitted

RESEARCH PROJECTS

Title	Agency	Period
Developing, Trialling and Analysing an Intervention for Enhancing Future Teachers' Understanding of Class V EVS textbook.	IASE, JMI	Jan 2015 to18 March 2016
Curricular intentions, teachers' comprehension and transaction of contemporary EVS textbooks : a study	NCERT	13.04.2015-12.03.2016

RESEARCH GUIDANCE – PhD

SN	Name of candidate	Title of thesis	Status
1	Rasheed Ahmad	Developing e-learning materials for addressing alternative frameworks in Physics at senior secondary level.	Awarded
2	Akhilesh Mishra	Exploring collaborative concept mapping: Eliciting and analyzing students' understanding in science.	Awarded
3	Aisha Jabeen	Understanding of science as a socio-cultural phenomenon among prospective science teachers	Awarded
4	Shruti Chopra	Teachers' understanding of students' conceptions in Physics	Awarded
5	Tapshri	Visual literacy and multimedia as complementary tools for	Awarded

		conceptual understanding of science at elementary level	
6	Namrata	Analysing and addressing prospective teachers' concep-	Awarded
		tions of heat and thermodynamic phenomena.	
7	Fizzah Zainab	Critical Pedagogy in science classroom: Prevalent prac-	In progress
		tices and possibilities	
8	Ruchi Garg	Understanding classroom processes in the context of teach-	In progress
		ers' beliefs about the nature of the subject and its practice	
9	Muzammil Hasan	Teaching Learning Practices in developing foundational	In progress
		literacy & numeracy	
10	Aayesha Zameer	Pre-Service teachers' conceptual difficulties in Electriciy	In progress
		& Magnetism	

E-CONTENT DEVELOPMENT

Name of Module	Course	Offered by	Uploaded at
	Online Course on Pedagogy of	NCERT	Swayam
Cultivating sensitivities	Environmental Studies		-
through EVS classrooms			
Shelter	Online Course on Pedagogy of	NCERT	Swayam
	Environmental Studies		-
Addressing alternative frame-	Online Course on Pedagogy of	NCERT	Swayam
works in EVS	Environmental Studies		-

PROGRAMMES COORDINATED

- Member, Steering Committee-'Education as a Right Across the Levels; Challenges, Opportunities and Strategies'. The International Education Conference, 10-11 March 2014 organised by Faculty of Education, Jamia Millia Islamia in collaboration with UNESCO
- Coordinated the 10 day refresher programme in science for the benefit of Jamia school teachers from 12.05.2014 to 21.05.2014.
- Member, Steering Committee- International Education Conference 2015 on the theme 'Learning Technologies in Education' organized by Faculty of Education, Jamia Millia Islamia on 24-25 February 2015.
- Coordinated a three day national level capacity building programme for teacher educators on the theme 'Preparing Reflective Practitioners' from 24.05.2016 to 26.05.2016. organized by School of Education, Jamia Millia Islamia.
- Member, Steering Committee- International Education Conference 2016 on the theme Teacher Education: Challenges, opportunities and strategies organized by Faculty of Education, Jamia Millia Islamia on 07-08 December, 2016.
- Coordinated the first Refresher Course for teacher educators organized by UGC-HRDC, JMI in December 2018
- Coordinated a three-day national Seminar on the theme विद्यालयी शिक्षा में भाषा और साहित्य का अध्यापन on issues related to pedagogy of language and literature in school education which was organized by IASE, JMI in collaboration with Azim Premji University from 9th Oct-11th Oct, 2020.

• Coordinated the NEP- 2020 Orientation & Sensitization Programme from 19th September to 30th September, 2024 organized by the Malaviya Mission Teacher Training Centre, Jamia Millia Islamia.

INVITED LECTURES/TALKS (Selected)

- "Engaging with Children's Intuitive Ideas" for B.El.Ed. students of Gargi College, University of Delhi on 15.04.2019
- "Examining Textbooks: Lenses to Look Through" in the 1st refresher course for teacher educators organized by HRDC, Jamia Millia Islamia in December, 2018
- "Distinguishing Features of Qualitative Research Paradigm" on 13.03.2019 in the Research Methodology workshop for DIET and SCERT faculty organized jointly by SCERT and IASE, Jamia Millia Islamia
- "Tracing the Paradigm Shifts in Pedagogical Practices" on 02.07.2019 in the Faculty Induction Programme organized by MHRFDC, Hansraj College, University of Delhi from June 17- July 16, 2019.
- "Analysing Textbooks: Points to Ponder" on 02.07.2019 in the Faculty Induction Programme organized by MHRFDC, Hansraj College, University of Delhi from June 17- July 16, 2019.
- "Critical Pedagogy" on 24.09.2019 in the Orientation Programme organized by HRDC, Jamia Millia Islamia in September, 2019
- "Understanding Students' Ideas in Science" as part of an online workshop organized by Deptt. Of Elementary Education, Lady Sriram College for women, University of Delhi on 2nd January 2020
- "Curriculum and Pedagogy; Charting the Road Ahead" on 08.09.2021 as part of a Faculty Development Programme organized jointly by Mahatma Hansraj Faculty Development Centre, Hansraj College and Aditi Mahavidyalaya, University of Delhi on the theme 'National Eucation Policy 2020: Implementation and Challenges'
- "Ethical Issues in Research" on 15.06.2023 for faculty members of various colleges and universities as part of Faculty Development Programme organized by Amity University on the theme 'Cultivating Academic Integrity in working Professionals'
- "Process Based Classroom Teaching" on 03.01.2024 for faculty members of various colleges and universities as part of 2-Week Online Refresher Course in Teacher Education from 02 January to 15 January, 2024 organised by MMTC, Jamia Millia Islamia
- "Theorising Knowledge and Understanding Research Paradigms" on 21.05.2024 for faculty members of various colleges and universities as part of eight day "NEP 2020- Orientation and Sensitization programme" organized by MMTC, JMI from 20 May to 30 May 2024.
- "Holistic and Multi-Disciplinary Education" as part of eight day online 'NEP 2020- Orientation and Sensitization programme' from 4th October to 16th October 2024

PROFESSIONAL DEVELOPMENT

Orientation / Refresher courses attended:

- Participated in 60th four-week Orientation programme from 13.08.02 to 11.09.02 organised by UGC-ASC, JMI
- Participated in the 13th three-week Refresher programme from 19.05.05 to 09.06.05 organised by UGC-ASC, JMI
- Participated in the 18th three-week Refresher programme from 17.05.10 to 07.06.10 organised by UGC-ASC, JMI.
- Participated in the 1st three-week special winter programme from 11.12.12 to 01.01.13 organized by UGC-ASC, JMI

Other programmes attended:

- Completed training under the Pre Service Curriculum of the Intel Teach Essentials Course conducted at Deptt. of TT & NFE from 28.05.07 to 02.06.07.
- Attended a Short term course on Research Methods in Education organized by Deptt. of Educational Studies, JMI from 30th November to 4th December, 2009.
- Attended SAKSHAM IT-Champion Training Program on 23-24th March,2018
- Attended the Nai Talim -Experiential Learning and Work Education in School & Teacher Curriculum Organised by Mahatma Gandhi National Council of Rural Education from 17-23rd November,2018
- Completed the NEP 2020 Orientation & sensitization Programme organized by MMTTC, JMI from 19.04.2024 to 30.04.2024.

MEMBERSHIP OF SIGNIFICANT BODIES

-Life Member, Comparative Education Society of India

OTHER ROLES & RESPONSIBILITIES

- Co-ordinator, Diploma in Elementary Teacher Education –Part I,2005-06, 06-07,07-08
- Co-opted member, Admissions Committee, 2007-08. and 2008-09.
- Co-Incharge, Practice Teaching (B.Ed.), 2012-13, 13-14.
- Asstt Supdtt, Annual Examination -2014,2015
- In Charge, School Experience Programme (B.Ed.) 14-15
- Co Editor, Jamia Journal of Education, 2014-2015, 2017-2018, 21-22, 22-23
- Coordinator and Course Advisor B.Ed.- 2015
- Coordinator B.Ed.- Part II- 2016-17
- Coordinator, B.Ed.- part I-2017-18, 19-20
- Coordinator-B.Ed.-partII-2018
- Assistant, Dean, Students' Welfare, JMI. 2019 2024
- Coordinator-Ph,D. -2024 onwards
- Convenor, Gender Champions Club, JMI. 2022-