DEPARTMENT OF EDUCATION Ph.D COURSE WORK

Semester	Paper Code	Course Title	Credits	Total	
Core Courses					
I	17EDNR0101	Educational Planning (EP)	4		
	17EDNR0102	Inclusive Education(IE)	4		
	17EDNR0103	Information and Communication Technology (ICT)	4		
	17EDNR0104	Educational Research Methodology (ERM)	4		
11	17EDNR0205	Quantitative Techniques in Educational Research	4		
	17EDNR02SX	Specific course to be prescribed by the Doctoral Committee	4	24	
	Seminar (3)				
	Term Paper/Topical Research				
	a) Project Planning including literature collection,		4		
III	finalisation of objectives and methodology				
Semester	b) Field / Lab Studies, Data collection, compilation of 32				
onwards	results, statistical analysis, results and final conclusion				
End of	Synopsis and thesis submission, final viva 6				
Program					

List of courses that are candidate centric (17EDNR02SX)

17EDNR02S1	Cognitive Science(CS)
17EDNR02S2	Pedagogical Perspectives of Education(PPE)
17EDNR02S3	School Education(SE)
17EDNR02S4	Teacher Education(TE)
17EDNR02S5	Higher Education(HE)

Learning Objectives:

After going through this course, the research scholar will be able to,

Concepts, types and theoretical foundations of educational planning;

- Strategic planning in education and related techniques, in general, and their application in formulating district education development plans and institutional development plans, in particular;
- Educational decentralization in India and district planning practices; and
- Sources and changing methods of financing education in India, including aid to education, and their influence on development policy and programme planning.

Learning Outcomes

On completion of this course the scholars will be able to,

- Understand Strategic planning in education and related techniques, in general, and their application in formulating district education development plans and institutional development plans, in particular;
- Familiarize Educational decentralization in India and district planning practices; and Sources and changing methods of financing education in India, including aid to education, and their influence on development policy and programme planning.

UNIT-I EDUCATIONAL PLANNING CONCEPTS AND APPROACHES

Educational planning-Concepts and types of educational planning-Theoretical foundations of educational planning/planning approaches-Sector-wide Approaches (Swaps) to educational planning-Social context of planning and essential conditions for successful educational planning, including institutional and political conditions-Changing landscape of educational planning, in general, and in India, in particular.

UNIT-II STRATEGIC PLANNING IN EDUCATION

Concept and methodology of strategic planning in education-Education sector diagnosis – analytical framework and techniques, data requirements, estimation, interpretation and use of key performance indicators, cost analysis in education, projection techniques and identification of education development issues and priorities-Methods of setting plan targets and estimation of additional inputs/requirements – physical, staff, academic, management and financial -Designing development interventions using the Logical Framework Matrix (LFM).

UNIT-III ISTRATEGIC PLANNING: IMPLEMENTATION AND MONITORING

Planning for implementation of the education development plan and programmes-Budgeting techniques-Planning under the on-going country-wide education development programmes like the SSA,

the RMSA and the RUSA -Education development plan appraisal practices in India and their influence on district planning -Monitoring of Educational Programmes and Projects

UNIT-IV EDUCATIONAL PLANNING IN INDIA

Educational decentralization in India, legal provisions and institutional framework and planning machinery-Local level planning techniques in education and their use in district planning in India - School Mapping-Micro Planning and School Improvement Planning

UNIT-V FINANCING EDUCATION IN INDIA

Sources and methods of financing education in India -Centre-state relationships in financing education and Finance Commissions-Return of the State: Political-economy of financing education in India through Centrally Sponsored Schemes (CSSs) and Centrally Assisted Schemes (CASs) and their implications for district planning in education -Foreign aid to education in India and their influence on shifting policy and programme planning - Financing school education in India, fund flow and related issues

REFERENCES

Essential Readings

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- Coombs, P.H (1969): What is Educational Planning? Paris: International Institute of Educational Planning (IIEP).
- Carron, Gabriel (2010): *Strategic Planning: Concept and Rationale*. IIEP Working Paper 1, IIEP: Paris.
- Carron, Gabriel (2010): Strategic Planning: Techniques and Methods. IIEP Working Paper 3, IIEP: Paris.
- Charvak (2000): From Decentralization of Planning to People's Planning: Experiences of the Indian States of West Bengal and Kerala. Centre for Development Studies, Thiruvananthapuram.
- Kaliranjan, Kaliappa and Otsuka Keijiro (2010): *Decentralisation in India: Outcomes and Opportunities*. ASARC Working Paper 2010/14. South Asia Bureau of Economic Research, Crawford School of Economics and Government, Australian National University: Canberra. available at https://crawford.anu.edu.au/acde/asarc/pdf/papers/2010/WP2010_14.pdf
- Tilak, J.B.G. (1988): "Costs of Education in India", *International Journal of Educational Development*, 8 (1): 25-42.
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- Carron, Gabriel (2010): *Strategic Planning: Techniques and Methods*. IIEP Working Paper 3, IIEP: Paris.
- Charvak (2000): From Decentralization of Planning to People's Planning: Experiences of the Indian States of West Bengal and Kerala. Centre for Development Studies,

Suggested Readings

- Blaug, Mark (1972): An *Introduction to Economics of Education*. The Penguin: London.
- Blaug, Mark (ed.) (1992): The Economic Value of Education. Hants, Edward Elgar: England.
- Chau, Ta-Ngoc (2003): Demographic Aspects of Educational Planning. IIEP: Paris.
- Colclough, Christopher and Anuradha De (2010): The Impact of Aid on Education Policy in India. RECOUP Working Paper No. 27, RECOUP Research Consortium on Educational Outcomes and Poverty, University of Cambridge. available at http://recoup.educ.cam.ac.uk/publications/WP27-CC_ADfinal.pdf
- De, Anuradha and Tanuka Endow (2008): *Public Expenditure on Education in India: Recent Trends and Outcomes*. Collaborative Research and Dissemination (CORD): India.
- Hallack, Jack (1977): Planning the Location of Schools: An Instrument of Educational Policy, IIEP: Paris.
- IIEP (n.a.): *Projections and Scenario Building (Module 5)*, Distance Education Programme on Education Sector Planning. Paris:UNESCO-IIEP. available at http://www.unesco.org/new/fileadmin/ MULTIMEDIA/FIELD/Beirut/images/T5.pdf
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- Litvack, Jennie, Junaid Ahmed and Richard Bird (1998): *Rethinking Decentralization in Developing Countries*. World Bank: Washington D.C.
- MHRD (2009): Rashtriya Madhyamik Shiksha Abhiyan: A Framework for Implementation. Department of School Education and Literacy, GOI: New Delhi.
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- Norton, Andy and Diane Elson (2002): What's Behind the Budget? Politics, Rights, and Accountability in the Budget Process. Overseas Development Institute: London.
- Nanjundappa, D.M. (1995): Approaches and Techniques of Decentralized Planning in Readings in Decentralized Planning, B.N. Yugandhar and Amitabh Mukherjee (ed.) Concept: New Delhi.
- Pritchett, Lant and Varad Pande (2006): Making Primary Education Work for India's Rural Poor: A Proposal for Effective Decentralization. Social Development Papers No. 95. World Bank: Washington DC: available at http://www.teindia.nic.in/Files/Articles/Articles_23feb12/pritchett_pande_decentralization_education_india.pdf
- Ruscoe, G. C. (1969): Conditions for Success in Educational Planning? Paris:IIEP
- Tilak, J.B.G. (1977): "Approaches to Educational Planning and their Applications in India", *Indian Economic Journal*, 24 (3).
- UNESCO (2007): Education Sector-Wide Approaches (SWAps): Background, Guide and Lessons. Paris. Available at: http://unesdoc.unesco.org/images/0015/001509/150965e.pdf
- Woodhall, M. (2004): *Cost-Benefit Analysis in Educational Planning*. Paris:IIEP, available at: http://unesdoc.unesco.org/images/0013/001390/139042e.pdf
- UNESCO Institute for Statistics (2009): *Education Indicators: Technical Guidelines*. Montreal: Canada
- UNESCO (2013): Education Micro Planning Toolkit. UNESCO: Bangkok.
- Varghese, N.V. (ed.) (1997): *Modules on District Planning in Education*, NIEPA: New Delhi.
- Varghese, N. V. (1996): "Decentralization of Educational Planning in India: The Case of District Primary Education Programme." *International Journal of Educational Development*, Vol. 16 (4): 355-365.

- Varghese, N.V. (ed.) (1997): *Modules on District Planning in Education*, NIEPA: New Delhi.
- Varghese, N.V. (ed.) (1997): Modules on District Planning in Education, NIEPA: New Delhi.
- Varghese, N. V. (1996): "Decentralization of Educational Planning in India: The Case of District Primary Education Programme." *International Journal of Educational Development*, Vol. 16 (4): 355-365.
- Varghese N.V. and K. Biswal (1999): *School Mapping: An Analysis of Educational Facilities in Dhenkanal District*, Orissa, Mimeo. NIEPA: New Delhi.
- Zaidi, S.M.I.A., K.Biswal, N.K.Mohanty, and A.A.C.Lal (2012): Secondary Education Planning and Appraisal Manual. NUEPA: New Delhi. available at http://www.nuepa.org/Download/Publications/1Secondary%20Education%20Manual(Prof%20Zaidi%20).pdf

- Tilak, J.B.G. (1977): "Approaches to Educational Planning and their Applications in India", *Indian Economic Journal*, 24 (3).
- Varghese, N. V. (1996): "Decentralization of Educational Planning in India: The Case of District Primary Education Programme." *International Journal of Educational Development*, Vol. 16 (4): 355-365.

MODE OF PEDAGOGY AND EVALUATION

The methodology of curricular transaction would include lecture-discussion and practical exercise/group work, group discussions and seminar presentations. Since this is a skill-oriented course; emphasis will be on practical exercises, simulation exercises, seminar presentations. The course evaluation will be done on the performance in the group work, book reviews, term paper, seminar presentations and end-term written examination.

- E-journals
- E-Books
- Power Point Presentations prepared by experts
- Online Classes
- Online discussions with experts from various universities\ colleges
- YouTube Videos by Expert
- https://crawford.anu.edu.au/acde/asarc/pdf/papers/2010/WP2010 14.pdf
- http://www.nuepa.org/Download/Publications/1Secondary%20Education%20Manual(Prof%20Zaidi%20).pdf
- http://www.unesco.org/new/fileadmin/ MULTIMEDIA/FIELD/Beirut/images/T5.pdf
- http://unesdoc.unesco.org/images/0015/001509/150965e.pdf

Learning Objectives:

After going through this course, the research scholar will be able to,

Concepts, types and theoretical foundations of educational planning;

- Strategic planning in education and related techniques, in general, and their application in formulating district education development plans and institutional development plans, in particular;
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Learning Outcomes

On completion of this course the scholars will be able to,

- Understand Strategic planning in education and related techniques, in general, and their application in formulating district education development plans and institutional development plans, in particular;
- Familiarize Educational decentralization in India and district planning practices; and Sources and changing methods of financing education in India, including aid to education, and their influence on development policy and programme planning.

UNIT-I INTRODUCTION TO INCLUSIVE EDUCATION

Inclusive education: Concept, definition and importance - Difference between special education, integrated education and inclusive education - International and National initiatives on inclusive education: The World Declaration on Education For All and UNICEF, World Submit for Children (1990); DPEP, RCI Act 1992, PWD Act 1995, National Trust Act 1999, Right to Education Act 2009 - Government schemes and initiatives on inclusive education: SSA and RMSA.

UNIT - II FACTORS RELATED TO INCLUSIVE EDUCATION

Access: In terms of proximity, gender and socio - culturally and linguistically backward children, minorities, physically challenged gifted and talented children - Barrier free environment: From BIWAKO Millennium Frame Work and BFE manual by CCD, New Delhi - Achievement: Reasons for under achievement, strategies for enhancing achievement levels.

UNIT-III COLLABORATIVE AND COOPERATIVE PLANNING FOR INCLUSIVE EDUCATION

Concept meaning and need for planning in inclusive education - Models of inclusive education, components of inclusive education - Organizing inclusive classroom: physical layout of the inclusive classroom, substitute teachers, peer tutoring, cooperative learning, collaborative instruction, team

teaching and technology in inclusive classroom - Parent and community Involvement: promoting positive behavior and social competence in children/students with diverse needs.

UNIT- IV NEEDS AND ISSUES IN INCLUSIVE EDUCATION

Accountability, advocacy, attitudes and awareness on inclusive education - Curriculum design, instruction and resources for inclusive education, pre- service and in -service for inclusive education - Problems and prospects of inclusive education in terms of school organization, curriculum adaptation, staff development needs and linkage with the community, material and human resources.

UNIT- V RESEARCH ON INCLUSIVE EDUCATION

Need for research on inclusive education theory and practice - Priority aspects of research on inclusive education - Need for use of multimethodologies in inclusive education research - A critical analysis of research done on inclusive education in India and across the globe.

- Ahuja, A and Jaharia, N.K., (2002) Effective Teacher Training: Cooperative Learning Based Approach, National Publishing House, New Delhi.
- Aniscow, M and Booth,T (2003) The Index for Inclusion: Developing Learning and Participation in Schools, Bristol: Centre for Studies in Inclusive Education.
- Baskar, E.T., Wang, M.C, and Walberg. H.J, (1994) The effects of inclusion on learning, Educational Leadership, 52(4), 33-35.
- Fisher.D, Sax,C, Rodifer, K, and Pumpian, I, (1999) Teachers' perception of curriculum and climate changes: The added value of Inclusive education, Journal for a Just and Caring Education, 5,256-268.
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- Jitender Kumar, (2013) Inclusive Education, Twenty First Century Publications, (First Edition) ISBN-10:9380144423;ISBN:-13:978-9380144429.
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- Manorama Sharma, (2007) Special Education Music Therapy, APH Publishing Corporation, New Delhi.
- McGregor and Vogelsberg, R.T (1998) Inclusive schooling Practices: Pedagogical and research foundations, USA: Paul H. brookes.
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- Salend, S.J, and Garrick-Duhaney, L (1999) The impact of inclusion on students with and without disabilities and their educators, Remedial and Special Education, 20,114-126.
- Scruggs and Mastropieri (1996) Scruggs, T.E., Mastropieri, M.A., and McDuffie, K.A (2007) Co-teaching in inclusive classrooms: A metasynthesis of qualitative research, Exceptional Children,73(4),392-416.
- Sharma, P.L (2003) Planning Inclusive Education in Small Schools, R.I.E, Mysore.
- Sharma, P.L (1990) Teachers handbook on IED-Helping children with special needs, N.C.E.R.T. Publication.
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- Status of Disability in India (2000) Published by Rehabilitation Council of India, PP.P445.
- Tim Loreman, Joanne Deppeler and David Harvey, (2010) Inclusive education: Supporting diversity in the classroom-9781741759860, Allen & Unwin Publisher, (2nd Edition) http://www.allenandunwin.com.
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- UNESCO (2006) Inclusive Education. Available on http://portal.unesco.org/education/en/ev.php-URI_ID.

- Journal for a Just and Caring Education-United Statess.
- International Journal of Inclusive Education- Routledge, Taylor& Francis
- Journal of Inclusive Education- Maintained by Hatib Shabbir, Directorate of ICT, AIOU.
- Journal of Educational Change-Springer Link
- Journal of Special Needs Education- Taylor& Francis
- European Journal of Special Needs-Taylor& Francis
- Journal of Special Education- ERIC
- Asia Pacific Journal of Teacher Education- Taylor& Francis
- Journal of Special Needs- Taylor & Francis

E-JOURNALS

- The electronic Journal of Inclusive Education-Core Scholar, Wright State University
- British Journal of Special Education- Wiley Online Library
- Asian Journal of Inclusive Education-A half Yearly International Journal
- International Journal of Inclusive Education-Taylor& Francis
- Journal of Theoretical and Social Psychology- Wiley Online Library

LIST OF WEB PORTALS

- http://portal.unesco.org/education/en/ev.php-URI_ID.
- http://www.allenandunwin.com
- http://www.ssa.nic.in/childspl/ssa_plan_mannual.pdf.
- www.castpl.org
- www.mcie.org
- www.inclusionproject.org
- http://ollibean.org
- www.theinclusiveclass.com
- http://www.udlcenter.org
- http://www.parentcenterhub.org/resources
- http://www.thinkcollege.net
- https://www.thinkinclusive.us
- https://www.indiastat.com
- http://mhrd.gov.in/iedss
- http://www.educationforallinindia.com
- http://www.ncert.nic.in/pdf_files/SpecialNeeds.pdf

MODE OF PEDAGOGY

- Discussions
- Visit to Special Schools
- Work shops
- Training Programmes
- Seminars
- Symposiums.

- Video conferencing
- MOOC Courses

17EDNR0103 INFORMATION AND COMMUNICATION TECHNOLOGY

Credit - 4

Learning Objectives:

After going through this course, the research scholar will be able to,

Concepts, types and theoretical foundations of educational planning;

- Strategic planning in education and related techniques, in general, and their application in formulating district education development plans and institutional development plans, in particular;
- Educational decentralization in India and district planning practices; and
- Sources and changing methods of financing education in India, including aid to education, and their influence on development policy and programme planning.

Learning Outcomes

On completion of this course the scholars will be able to,

- Understand Strategic planning in education and related techniques, in general, and their application in formulating district education development plans and institutional development plans, in particular;
- Familiarize Educational decentralization in India and district planning practices; and Sources and changing methods of financing education in India, including aid to education, and their influence on development policy and programme planning.

UNIT-I ICT IN EDUCATION

Information: ICT: Definition, Meaning, Scope and significance in the context of Education – ICT supported, enhanced and enabled instruction- ICT Vs Pedagogy, self-directed and self-determined learning, ICT in Distance Education – ICT for Professional Development, Educational Management and curriculum development and Evaluation–National Policy on ICT -UNESCO ICT. Competency Standards Framework. Computer Mediated Communication, Video conferencing - Audio and Video Content on the Web.

UNIT -II E-LEARNING

E-Learning: Meaning, Concept, Importance, Strengths and Limitations, Virtual Learning, Virtual Instrumentations, Virtual Worlds: Educational Implications, Characteristics of the e- learner - Requirements of the e- educators, e-tutor, e-moderator – Online tutoring. Learning Management Systems and Learning and Content Management Systems: Concept, Need and Significance – Proprietary and FOSS LMS / LCMS – Brahaspathi of UGC / IIT – Course Management using LMS / LCMS - International and Indian Initiatives in E- Learning.

UNIT-III EDUCATIONAL MULTIMEDIA AND E-CONTENT DEVELOPMENT

Multimedia: Concept, Meaning and Advantages – Features of Multimedia. Instructional Multimedia Development - Principles, Models, Guidelines and Significance – Instructional Multimedia

Evaluation – Principles, Models, Techniques and Tools. E–Content Development: Meaning, Need and Significance – Types and Forms of e- Content – Short Learning Objects – Modules - Components – Stages - Steps involved – Scripting for e- Content – Learning Object Repositories - Evaluation of e-contents- E – Content Development initiatives in India – NPTEL, NME ICT-Role of UGC-CEC and EMMRC'S-Quality Assurance in E-Content.

UNIT-IV E-RESOURCES, WEB 2.0 & SOCIAL MEDIA IN EDUCATION AND MOBILE LEARNING

E-Resources: Meaning, Concept, Types, Importance, Advantages and Limitations. E-Resources in Indian Education: UGC – INFLIBNET, UGC INFONET, ERNET, DELNET. Forms of Digital information – On Line Libraries and Journals - Gateways and Portals - SWAYAM portal. E-theses Library, E–Journal Consortium. M-Learning: Concept and Meaning, Definition – Pedagogical approaches, Models and Theories – Informal and Non-formal settings –Mobile: Applications and Uses

UNIT-V RESEARCH TRENDS IN ICT

Research in ICT integration: Prospects, Issues, Challenges and opportunities - broad spectrum of institution, programme and teacher characteristics associated with ICT integration – M-Governance-iPod enabled Learning- ICT to foster creativity- MOODLE and MOOC environment - Cloud computing - OER- Assistive technologies - Smart classroom.

- Beetham Helen and Rhona Sharpe (2007). *Rethinking Pedagogy for a Digital Age : Designing and Delivering E- Learning*. London Routledge.
- Conrad, Kerri (2001), Instructional Design for Web Based Training New York: HRD Press.
- Counts E. L. (2003) Multimedia Design and Production for Students and Teachers. Boston: Allyn and Bacon.
- Ramganesh.E and Srinivasa Raghavan (2010): E-Resources in Higher Education, Publication Division, Bharathidasan University, Tiruchirappalli.
- Harasim, L.(1990) Online Education: Perspectives on a New Environment. New York:Prasser.
- Heinich, R., Molenda, M., Russell, J. & Smaldino, S. (1999) *Instructional Media & Technologies for Learning. 6 th edition.* New York: Merrill Prentice Hall.
- Judy Brown and Jason Haag (2011) *ADL Mobile Learning Handbook*. Wisconsin: Advanced Distributed Learning (ADL) Co-Laboratories. (Free E-Book Available at http://mlhandbook.adlnet.gov)

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- Mayer R (2005). *The Cambridge Handbook of Multimedia Learning*. New York: Cambridge University Press.
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- Michael W. Allen, Michael Allen (2002) Michael Allen's *Guide to E- Learning*, New York: Wiley Publication.
- Naseema, C. and Alam, M.A. (2004): From Blackboard to the Web. Integrating Technology and Education, New Delhi: Kanishka Publishers, Distributors
- Peter Fenrich, Creating Instructional Multimedia Solutions: Practical Guidelines for the Real World, Informing Science Publications, 2005.
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- Resta, P (Ed.) *Information and Communication Technologies in Teacher Education: A Planning Guide.* Paris UNESCO 2002.
- Richard Andrews, Caroline A. Haythornthwaite (2007) The Sage Handbook of E- Learning Research.
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- Schank, R.C. (2001) Virtual Learning New York: McGraw Hill.
- Singh P.P., Sandhir Sharma, E- Learning: *New Trends and Innovations*, Deep & Deep Publications, 2005.
- Som Naidu, E- Learning: A Guidebook of Principles Procedures and Practices, CEMCA, 2006.
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- Tay Vaughan, Multimedia Making it Work, Seventh Edition, McGraw- Hill Osborne Media, 2006.
- Usha Reddi and Sanjaya Mishra (2003). *Educational Multimedia: A Handbook for Teacher Developers*. New Delhi: Commonwealth Educational Media Centre for Asia.
- Warlck, D F (2005) A Classroom Blogging: A Teacher's guide to the Blogosphere. Raleigh, NC: the Landmark Project.
- Zane L. Berge, Lin Muilenburg (2012) *Handbook of Mobile Learning*. New York: Routledge

- British Journal of Educational Technology, UK.
- Australian Journal of Educational Technology, Australia.
- Electronic Journal of e –learning.
- International Journal of Learning Technology.
- Journal of interactive media in Education.

• European Journal of Education.

E-JOURNALS

- International Journal of Emerging Technologies in Education- KASSEL university press.
- American Educational Research Journal Sage Publication -INC.
- Learning media & Technology—Tyler & Francis Publishers.
- Journal of computing in higher education _ Springer Publishers.
- Journal of educational computing in research Sage publication.
- Journal of educational multi media & Hyper media –Association for the computing & Education.
- Journal of educational media, memory & Society Bergon Journals.
- International Journal in Learning Common Ground Publishers.
- International Journal Of Technological Learning & development Inder Science Enterprises Ltd.
- International Journal Of Technology Enhanced Learning Inder Science Enterprises Ltd.

LEARNING OUTCOMES

- Analyzing the feasibility of ICT integration with he available facilities (skill of analysis)
- Development ICT enabled educational practices (skill of application)
- Design an ICT framework in education with national policy on ICT and UNESCO (skill of creation
- Developing web communications skills
- Handling Video conferencing facilities (Technical Skills)
- Developing e-Learning technologies (Technical Skills)
- Participating in the virtual learning environment (KVS)
- Developing multimedia components for learning concepts in the area of research (Technical Skills)
- Utilizing e-resource and web2.0 technologies (Skills of analysis)
- Developing pedagogical and heutagogical approaches with ICT (Competency of techno pedagogy)
- Utilizing and evaluating databases (Assessment Skill)
- Evaluating ICT,-Learning and web tools with reference to their impact(Research Skills)

MODE OF PEDAGOGY

- Lecture method.
- Seminar method.
- Discussion method
- Written and performance assessment.
- Seminar.
- Conduct of workshop by the scholars.
- Internship Assessment Reports
- Discussion (Multi-disciplinary).

- Multi Media Projector PPT.
- E- Content Compact Disc / Pendrive.
- Access Of INFIBNET, NDL Port Gyanghosh.
- OER, Weblinks etc.,

17EDNR0104 EDUCATIONAL RESEARCH METHODOLOGY Credits: 4

Learning Objectives:

After going through this course, the research scholar will be able to,

Concepts, types and theoretical foundations of educational planning;

- Strategic planning in education and related techniques, in general, and their application in formulating district education development plans and institutional development plans, in particular;
- Educational decentralization in India and district planning practices; and
- Sources and changing methods of financing education in India, including aid to education, and their influence on development policy and programme planning.

Learning Outcomes

On completion of this course the scholars will be able to,

- Understand Strategic planning in education and related techniques, in general, and their application in formulating district education development plans and institutional development plans, in particular;
- Familiarize Educational decentralization in India and district planning practices; and Sources and changing methods of financing education in India, including aid to education, and their influence on development policy and programme planning.

UNIT - I RESEARCH IN EDUCATION

Educational Research and Policy making. Principles of scientific inquiry and theory development – Inter - disciplinary nature of educational research. Educational Research in India. Emerging Trends and Challenges in Educational Research. Operationalization of key terms.-Objectives research questions. Thesis writing: Steps, Chapters, tables, interpretation, result discussion. Hypotheses: Formulation and Testing. Review of Related Literature (RRL): - Software's and websites for related studies. Plagiarism. Zotero/ Mendeley, Plagiarism detection Software. Ethics in educational research. Sources (RRL): Primary, secondary. Reference Management. APA style of references, References Vs Bibliography.

UNIT - II RESEARCH PARADIGMS AND DESIGN

Quantitative, Qualitative and Mixed methods. Quantitative Methods of Research: Experimental Research. Quasi-Experimental Designs: Nonequivalent Comparison Group Design, and Time-Series Design. Latin square design. - Casual-Comparative and Correlational research; - Classification by Time: Cross-sectional, Longitudinal (Trend and Panel studies), and Retrospective; Classification by research

objectives: Descriptive, Predictive and Explanatory. Research Culture and Attitude. Quantifying Social Phenomenon.

UNIT - III QUALITATIVE METHODS OF RESEARCH

Discourse Analysis. - Qualitative research approaches: Phenomenology, Ethnography, Case studies, Triangulation and Grounded theory -characteristics, types, data collection, Interpreting Data, analysis and report writing. - Historical Research: meaning, significance, steps, primary and secondary sources of information, external and internal criticism of the source. - Mixed Research: Narrative inquiry. Focus group discussion, Biographic research.

UNIT - IV SAMPLING DESIGN AND TECHNIQUES

Population and Sample: sampling unit, sampling frame, sample size and sampling error. Sampling Techniques: Random Sampling and Non-random sampling. Random Sampling Techniques: simple random, systematic, stratified random, cluster, and multi-stage. Non- Random Sampling Techniques: convenient, purposive, judgment, quota and snowball. – Sampling techniques in qualitative and mixed research.

UNIT - V METHODS OF DATA COLLECTION

Questionnaire, Tests, Inventories and scales: construction and uses. Interview: types, characteristics and applicability, guidelines for conducting interviews. Qualitative and quantitative observation: use of the checklist and schedules, time sampling, field notes, participant observation, focus group discussion. - Primary and Secondary data: sources, online tools. Standardization of a research tool: Reliability, Validity, Item analysis and Objectivity. Use of Large scale data in Educational research.

- Anastasi, A., & Urbina, S. (2012), *Psychological Testing*, Prentice Hall, New Jercy.
- Best, John (2004), Educational Research, Prentice Hall India ltd, New Delhi.
- Christensen, L. (2007), Experimental Methodology, Allyn & Bacon, . Boston.
- Clifton F.Conrad and Ronald C.Serlin (Ed)(2006), *The Sage Handbook for Research in Education*, Sage Publication, London & New Delhi.
- Clive Opie (2004), *Doing Educational Research- A Guide for First Time Researchers*, Vista Publications, New Delhi.
- John W.Creswell (2012), Educational Research, PHI Learning, New Delhi.
- Koul, Lokesh.(2006), *Methodology of Educational Research*, Vikas Publishing House, New Delhi.
- Mangal S.K (2013), Research Methodology in Behavioural Sciences, PHI Learning, New Delhi.
- Mc Burney (2003), Research Methods, Thomson and WordStar, Australia.
- Pandey K.P (2010), Fundamentals of Educational Research, Vishwavidyalaya Prakashan Varanasi.
- Radha Mohan, (2011), *Research Methods in Education*, Neelkamal Publications Pvt. Ltd, Hyderabad.

- Renuka D Badwane (2013), *Research Methodology in Social Science*, Chandralok Prakashan, Kanpur.
- Sharma, Bharti (2004), *Methodology of Educational Research*, Vohra Publishers and Distributors, New Delhi.
- Sharma, S.R. (2003), *Problems of Educational Research*, Anmol Publications Pvt. Ltd, New Delhi.
- Suryakumar K.R (2014), Textbook of Educational Research, Pacific Books International, Delhi

- Australian Educational Researcher, Springer Publication
- International Journal of Educational Research, Elsevier Sci ltd Publication
- Research Methodology in Strategy and Management, Elsevier Bv
- Review of Educational Research, Sage Publications Inc
- Educational Research For Policy and Practice, Kluwer Academic Publishers
- Journal of All India Association for Educational Research All India Association for Educational Research (AIAER)
- International Journal of Social Research Methodology: Theory and Practice, Taylor & Francis
- Journal of Educational and Behavioral Statistics, Sage Publications Inc
- Qualitative Research, Sage Publications ltd
- e Journal of All India Association for Educational Research, All India Association for Educational Research
- Pinnacle Educational Research & Development, Pinnacle Journal Publications
- Journal of Contemporary Educational Research and Innovations, JCERI Publisher

MODE OF PEDAGOGY

- Teaching by Research supervisors, Department Faculty members
- Seminars by Research Scholars
- Student Participation in Conferences/ Seminars

- E- Journals
- E- Books
- Power Point presentations prepared by experts
- Online classes
- Online discussions with experts from various Universities/ colleges
- YouTube expert videos

Credit – 4

Learning Objectives:

After going through this course, the research scholar will be able to,

Concepts, types and theoretical foundations of educational planning;

- Strategic planning in education and related techniques, in general, and their application in formulating district education development plans and institutional development plans, in particular;
- Educational decentralization in India and district planning practices; and
- Sources and changing methods of financing education in India, including aid to education, and their influence on development policy and programme planning.

Learning Outcomes

On completion of this course the scholars will be able to,

- Understand Strategic planning in education and related techniques, in general, and their application in formulating district education development plans and institutional development plans, in particular;
- Familiarize Educational decentralization in India and district planning practices; and Sources and changing methods of financing education in India, including aid to education, and their influence on development policy and programme planning.

UNIT - I DESCRIPTIVE ANALYSIS

Data types: Nominal, Ordinal, Interval and Ratio; Data Levels: individual and group. - Normal Distribution: Theoretical and empirical distributions, Uses Probability and its applications - Relative Positions Percentile Rank z-scores. - Product Moment, Partial and Multiple correlations. - Linear Regression Analysis. Multiple Regressions. Introduction to Multilevel Models.

UNIT - II PARAMETRIC TESTS

Estimation of a Parameter: Concept of parameter and statistics, Sampling error, Sampling distribution, Standard Error of Mean. - Testing of Hypotheses, Statistical Significance, Null and Alternative Hypotheses, Directional Alternative Hypotheses, Testing of Null Hypotheses, Types of Error, Multivariate Analysis, Meta-analysis, One-Way, Two Way Analysis of variance, Students 't' test.

UNIT - III NON PARAMETRIC TEST

Analysis of variance and Co- variance (ANOVA and ANCOVA): concept, assumptions and uses. Analysis of Frequencies using Chi - Square Test, Contingency Coefficient. - Non-Parametric

statistics: Sign test, Rank test, Run and Median test, and Mann Whitney test, Kolmogorov – Smirnov Two sample test.

UNIT - IV DATA ANALYSIS

The problem of measurement in psychology, Probability, Item response Theory, Classical Test Theory, Psycho metrics, Multivariate analysis, Meta analysis. Patters and Data. Methods of qualitative data analysis: - Content analysis, logical and inductive analysis, illustrative method; analogies. - Meta analysis. -Triangulation of data. Item analysis, Cluster analysis, multivariate analysis.

UNIT - V COMPUTER FOR DATA ANALYSIS

Application of SPSS for analysis. Application of STATA-Effect Size, Research Report: Guidelines and format-use of bibliography, references, footnotes, glossary, appendices- Evaluation of research report. - Intellectual property right.

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- Bhabhagrahi Biswal and Dash B.C (2014). Statistics in Education and Psychology. New Delhi: Dominant Publishers.
- Cohen, L., Manion, L. & Morrison, K. (2011). Research methods in education, 7th Edition. Routledge. Special Indian Edition by Cambridge University Press India.
- Dash B.N. and Nibedita Dash (2014). Educational Measurement Statistics and Guidance Services, New Delhi: Dominant Publishers.
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- Gary Borich and Tom Kubiszyn (2004). Educational Testing and Measurement. Singapore: John Wiley & Sons.
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- Greer, B., & Mulhern, G. A. (2010). Making sense of data and statistics in psychology, 2nd Edition. Palgrave, Macmillan.
- Guilford, J.P., and B. Fruchter. (2006). Fundamental Statistics in Education and Psychology. Tokyo: McGraw Hill (Student-Sixth edition).
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• Timothy Teo, (2013) Handbook of Qualitative Methods for Educational Research, Published by Sense Publishers, The Netherlands.

JOURNALS

- The Quantitative Synthesis of Single-Subject Research, SAGE journals.
- Socio-psychological Environments and Learning: a quantitative synthesis, BERJ, British Educational Research Journal.
- The Effects of Homework on Learning: A Quantitative Synthesis, The Educational Research.
- Evaluating Social Programs; Theory, Practice, and Politics. Quantitative Studies in Social Relations Series. ERIC journals.
- Comparing Web-Based and Classroom-Based Learning, A Quantitative study, Journal of research on technology in education.
- International Journal of Data Analysis Techniques and Strategies, Inderscience Publishers
- Advances in Data Analysis and Classification, Springer Heidelberg
- International journal of Multivariate Data Analysis, Inderscience Publishers
- Computational Statistics & Data Analysis, Elsevier Science Bv
- Journal of Nonparametric Statistics, Taylor & Francis ltd

MODE OF PEDAGOGY

- Teaching by using Power point presentation by experts
- Discussions
- Student presentations
- Quiz conducting related to topics
- Visiting Cognitive Science laboratories/ Libraries
- Conducting Seminars by subjects experts
- Doing Projects

- E-journals.
- E-Books.
- Power Point Presentations prepared by experts.
- Online Courses
- Online discussions with experts from various universities\ colleges.
- YouTube Expert Videos