*Course Code:BED2CC005* *Core Course*

**B.Ed. Degree Programme**

**Semester- II**

**EDUCATION IN CONTEMPORARY INDIA**

(4 Credits – 120 Hours)

**Preface**

This course delves into the complexities of the Indian education system within its socio-political and cultural context. It examines the historical evolution of education, contemporary challenges and emerging trends. The course aims to equip Prospective Teachers with a critical understanding of the Indian education system, enabling them to contribute effectively to its improvement.

## ✍ COURSE OUTCOMES

*On successful completion of the course, the Prospective Teacher*

1. States the preamble of Indian Constitution and its provisions for Education
2. Correlates the role of central and state governments in the development of education
3. Perceives the Tamil Nadu Uniform System of School Education Act
4. Appreciates the diversities in Indian society.
5. Illustrates the role of education in addressing the needs of the marginalized
6. Deduces the different types of schools and programmes on Education in India
7. Compiles the functions of Central and State government organizations of Education
8. Discusses the policies and commissions on education in India
9. Examines the challenges of education at different levels
10. Defends the importance of quality assurance in Education

**UNIT- I: CONSTITUTIONAL PROVISION ON EDUCATION (15 Hours)**

| Learning Outcomes | Content | Suggested strategies and Approaches |
|---|---|---|
| 1. Identifies the preamble of Indian constitution<br>2. Interprets the directive principles of state policy<br>3. Examines the articles and amendments related to education<br>4. Discusses the concurrent status of education and RTE 2010.<br>5. Correlates the role of central and state governments in the development of education<br>6. Perceives the Tamil Nadu uniform system of School education Act 2010 . | 1.1 Indian Constitution: Preamble- Directives, Principles of State Policy, Articles and Amendments related to Education Concurrent Status of Education<br>1.2 Role of Central and State Governments in the Development of Education<br>1.3 Right of Children to Free and Compulsory Education Act 2009 (RTE)<br>1.4 Tamil Nadu Uniform System of School Education Act (2010) Tamil Nadu private school (Regulations) Act, 2019 Tamil Nadu private school (Regulations) Rules, 2023 | • Seminar<br>• Assignment<br>• Lecture<br>• Peer learning<br>• Small group discussion |

**UNIT-II: SOCIOCULTURAL REALITIES OF INDIAN SOCIETY (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Identifies the diversity in Indian society.<br>2. Summarizes the role of education in addressing diversity.<br>3. Discovers multiculturalism in Indian society.<br>4. Responds to social inequalities, discrimination and marginalization<br>5. Critiques the stratification of Indian society<br>6. Illustrates the role of education in addressing the needs of the marginalized. | 2.1 Diversity in Indian Society: Nature, Challenges and Role of Education: Linguistic Diversity, Regional Diversity, Religious Diversity<br>2.2 Multiculturalism - Unity in Diversity<br>2.3 Social Inequality - Inequality, Discrimination and Marginalization<br>2.4 Stratification of Indian Society with Reference to Caste, Class, Gender, Region (Rural–Urban Disparity)<br>2.5 Role of Education in addressing the needs of marginalized groups in Indian Society: SC/ST and Women | • Seminar<br>• Assignment<br>• Lecture<br>• Peer learning<br>• Small group discussion |

**UNIT-III: EDUCATION SYSTEM AND STRUCTURES (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Deduces the different types of schools in India.<br>2. Traces the programmes of government to achieve universalisation of education.<br>3. Compiles the functions of various Central and State government organizations of Education. | 3.1 Schools in India: Types and affiliation<br>Schools Run by Autonomous Institutions of the Central Government (KVS, NVS, Sainik Schools)<br>Schools Run by the State Governments: Government, Aided and Private Schools<br>International Schools<br>3.2 Programme to achieve Universalization of Education:<br>District Primary Education Programme (DPEP),. Sarva Shiksha Abhiyan (SSA) to Samagra Shiksha Abhiyan, Rashtriya Madhyamik Shiksha Abhiyan (RMSA),<br>- Namma School - Namma Ooru Palli,<br>Illam Thedi Kalvi (Education at the Doorstep) scheme,Scheme For Infrastructure Development Private Aided/Unaided Minority Institutes,<br>(IDMI) – (Elementary Secondary/ Senior Secondary Schools), Scheme For Providing Quality Education In Madrasa (SPQEM) | • Seminar<br>• Assignment<br>• Lecture<br>• Peer learning<br>• Small group discussion |

**UNIT- IV: COMMISSIONS, COMMITTEES AND POLICY FRAMEWORKS ON EDUCATION (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Identifies education as a key area of public policy.<br>2. Appraises the implementation of educational policies<br>3. Discusses the policies and commissions on education in India<br>4. Examines the National Educational Policy 2020 | 4.1 Commissions and committees on education<br>Secondary Education Commission (1952-53),<br>The Education Commission (1964-66),<br>Yash Pal Committee Report-Learning without Burden. (1993),<br>National Knowledge Commission (2005).<br>4.2 Policy frameworks on education<br>Education as a Key area of public policy: need and relevance.<br>Implementation of educational policies<br>Preparing Action Plan - Political Support and Financial<br>Provisions – Involvement of Stakeholders<br>National Policy on Education, 1968<br>NPE (1986), Revised NPE (1992) and programme of action<br>4.3 National Educational Policy (NEP) 2020 | • Seminar<br>• Assignment<br>• Lecture<br>• Peer learning<br>• Small group discussion |

**UNIT- V: CHALLENGES IN EDUCATION (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Explains the implications of Liberalization, Privatization and Globalization of education<br>2. Examines the challenges in education at different levels.<br>3. Defends the importance of quality assurance in Education<br>4. Extrapolates public private partnership in education.<br>5. Justifies the Three language formula in schools.<br>6. Discusses teacher's autonomy and academic freedom | 5.1 Liberalization, Privatization and Globalization of Education<br>5.2 Challenges in Education from preschool to senior secondary<br>5.3 Universalisation of school education<br>Universal access<br>Universal enrolment<br>Universal retention<br>Universal achievement<br>5.4 Quality assurance in Education. Technological integration in school education<br>5.5 Public Private Partnership (PPP) in School education<br>5.6 Medium of Schooling- Three Language Formula.<br>5.7 Teacher's autonomy and academic freedom | • Seminar<br>• Assignment<br>• Lecture<br>• Peer learning<br>• Small group discussion |

**ASSESSMENT**

1. Assignment
2. Observation
3. Report of discussion
4. Seminar
5. Tests
6. Debate

**SUGGESTED ACTIVITIES (Any two)**

1. Develop a case study of the school management committee on the implementation of the RTE Act. Include interviews with educators and parents and an analysis of how effectively the school management committee is working.
2. Develop and administer surveys or conduct interviews with educators, students and parents from linguistic minority communities. Focus on understanding their educational challenges, needs and perceptions regarding language use in education. Analyze the data to identify common issues and areas for improvement and write a report on your findings.
3. Design a student-centric educational activity that reflects the core principles of NEP 2020, emphasizing holistic development, experiential learning and inclusivity.
4. Write a report on the challenges and opportunities in education from preschool to senior secondary, with a focus on universalization, quality assurance, technological integration and public-private partnerships in the context of NEP 2020.
5. Analyse the problems of school education in India in terms of policies and present a report on it with suggestive measures to improve the present status.

**📖PRESCRIBED READINGS**


- Chand, B., & Prasad, D. R. (2024). *Contemporary Education in India*. Neelkamal Publications.
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- Gupta, R. (2019). *Contemporary India and Education*. Tondon Publication.
- Husain, N., & Shipra. (2017). *Contemporary India and Education*. Shipra Publications.
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**📖SUGGESTED READINGS**


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- Naik, J. P. (1979). *Education Commission and After*. A P H Publishing Corporation.

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- Rao, P. R. (1988). *Indian Heritage and Culture*. Sterling Publishers Pvt. Ltd.
- Singh, A. P., & Murari, K. (2019). *Political Process in Contemporary India* (1st ed.). Pearson Education India.
- Tilak, J. B. G. (Ed.). (2021). *Education in India*. SAGE Publications Pvt. Ltd.

*Course Code:BED2CC006* *Core Course*

**B.Ed. Degree Programme**

**Semester- II**

**PSYCHOLOGICAL PERSPECTIVES IN EDUCATION**

(4 Credits -120 Hours)

**Preface**

It is a course designed to equip Prospective Teachers with a comprehensive understanding of the psychological principles underlying learning and teaching. This course delves into the intricate relationship between psychology and education, exploring how human behavior, cognition and motivation influence educational processes especially learning. By examining various psychological theories and research, Prospective Teachers will gain insights into learners' cognitive, emotional and social development.

## ✍ COURSE OUTCOMES

*On successful completion of the course, the Prospective Teacher*

1. Describes the meaning and characteristics of learning
2. Lists out various factors affecting learning and various types of learning curves
3. Illustrates different types of transfer of learning and its implementations
4. Implements the contributions of various theories of learning in the classroom context
5. Categorizes different cognitive processes with suitable examples
6. Illustrates concept formation with examples and meta cognition with strategies
7. Explains the concept and types of memory and forgetting
8. Designs strategies to improve memory
9. Analyses different learning styles
10. Generates various strategies to develop achievement motivation among students

**UNIT- I: NATURE OF LEARNING (10 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Describes the meaning and characteristics of learning<br>2. Identifies the factors affecting learning<br>3. Explains the plateaus of learning<br>4. Realizes the transfer of learning from one situation to another | 1.1 Learning: definitions, nature and principles of learning<br>1.2 Factors affecting learning: learner, method and task variables<br>1.3 Learning curves, types and plateaus in learning<br>1.4 Transfer of learning: types and implications | • Lecture through visual presentation<br>• Briefing<br>• Group discussion<br>• Assignment<br>• Seminar<br>• QA Session<br>• Peer learning |

**UNIT- II: THEORIES OF LEARNING (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Analyzes various Behaviourist, Cognitive, Constructivist, Social and Humanistic Learning theories<br>2. Compares and contrasts various Theories of Learning<br>3. Identifies the importance of Learning theories in the classroom | 2.1 Behaviorist theories: Thorndike, Pavlov, Skinner<br>2.2 Cognitive learning theory: Bruner<br>2.3 Gestalt learning theory: Kohler<br>2.4 Social Constructivist theory: Vygotsky<br>2.5 Social Learning theory: Bandura<br>2.6 Experiential Learning: Kolb<br>2.7 Gagne Hierarchy of learning | • Lecture through visual presentation<br>• Group discussion<br>• Assignment<br>• Seminar<br>• Talk by experts<br>• Panel discussion |

**UNIT- III: COGNITIVE PROCESS IN LEARNING (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Differentiates, sensation and perception<br>2. Explains attention and its types<br>3. Evaluates thinking, reasoning and problem solving.<br>4. Defines Meta-cognition, Concept formation and Concept Mapping | 3.1 Sensation and perception<br>3.2 Attention: meaning, types, factors and span of attention<br>3.3 Thinking, reasoning and problem solving<br>3.4 Meta-cognition: meaning and strategies to improve meta-cognition<br>3.5 Concept formation, concept mapping | • Lecture through visual presentation<br>• Group discussion<br>• Assignment<br>• Seminar<br>• QA session<br>• Talk by experts |

**UNIT- IV: MEMORY, FORGETTING AND MOTIVATION (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Explains the meaning, types, strategies to improve memory of learner<br>2. Analyses the causes of forgetting<br>3. Identifies various motivation techniques in the classroom | 4.1 Memory: definitions, types and strategies to improve memory, Information processing theory<br>4.2 Forgetting: definition, causes and retroactive and proactive inhibition<br>4.3 Curve of forgetting, educational implications<br>4.4 Motivation: definition, types, Maslow's theory of motivation and classroom motivation techniques<br>4.5 Achievement motivation: meaning and developing achievement motivation | • Lecture<br>• Group discussion<br>• Assignment<br>• Seminar through visual presentation<br>• Debate<br>• QA session<br>• Peer learning |

**UNIT-V:FACILITATING LEARNING (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Explains the concept of group and its types<br>2. Uses the socio-metric techniques in the classroom<br>3. Examines group dynamics in the classroom<br>4. Identifies the different learning styles | 5.1 Learning in groups: concept, types and characteristics<br>5.2 Sociometry: use and importance<br>5.3 Group dynamics: group cohesion—educational implications<br>5.4 Learning style: concept and characteristics, Fleming's VAK model, Dunn and Dunn Learning style model | • Lecture<br>• Group discussion<br>• Assignment<br>• Seminar<br>• Peer learning |

**ASSESSMENT**

1. Assignment evaluation
2. Observation of classroom behaviour
3. Report of discussion
4. Seminar presentation
5. Tests

**SUGGESTED ACTIVITIES (Any two)**

1. List out any five learning activities on your subject based on contributions of learning theories.
2. Develop concept maps for any one topic of your own choice.
3. Conduct a study on achievement motivation of high school students.
4. Conduct a study on learning style preferences for a group of 30-40 children using any tool on learning style.
5. Transact a short lesson to peers, focusing on specific psychological principles related to motivation, attention, or memory.

**📖PRESCRIBED READINGS**


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- Aggarwal, J. C. (2005). *Child Development and Process of Learning*. Shipra Publications.

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**📖SUGGESTED READINGS**


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- Benjafield, J. G. (1992). *Cognition*. Prentice Hall.
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*Course Code:BED2PC006* *Pedagogic Course*

**B.Ed. Degree Programme**
**Semester – II**
**PEDAGOGICAL CONTENT KNOWLEDGE OF BIOLOGICAL SCIENCE EDUCATION**
(4 Credits- 120 Hours)

**Preface**

This course aims to equip prospective biology teachers with the advanced skills to analyze Biological content from both pedagogical and technological perspectives. By developing a deep understanding of how to transform complex Biological concepts into accessible, engaging and technologically integrated learning experiences, teachers can effectively cater to the needs of diverse learners in an increasingly digital world.

✍ **COURSE OUTCOMES**

*On successful completion of the course, the Prospective Teacher*

1. Analyses the content in Biology text books of Tamil Nadu State Board
2. Practices emerging strategies for teaching Biological Science
3. Examines the ways to link technology, pedagogy and content in classroom teaching
4. Analyses Digital taxonomy
5. Identifies the contributions of learning theories in Biology
6. Prepares various types of test items
7. Illustrates models of teaching Biological Science
8. Designs lesson plan based on different models of teaching in Biological Science
9. Constructs achievement test and diagnostic tests
10. Uses appropriate remedial measures

**UNIT – I: EXPLORING PEDAGOGIC CONTENT KNOWLEDGE (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Familiarizes with pedagogic analysis<br>2 Analyses the content area of Biology text book of class IX & X<br>3 Prepares lesson plans for teaching of Biology content of class IX & X | 1.1 Pedagogic analysis –meaning, objectives, scope, steps and advantages<br>1.2 Content analysis –meaning and steps<br>1.3 Content analysis of Biology textbooks for standards IX and X of the Tamil Nadu State Board | • Seminar<br>• Assignment<br>• Discussions<br>• Interactive Learning |

**UNIT – II: TECHNO PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Identifies the ways and means to link technology, pedagogy and content<br>2 Correlates technology, pedagogy and content in classroom teaching<br>3 Explains the importance of technology in teaching and learning Biological Science<br>4 Uses different technologies in teaching Biological Science | 2.1 Technological Pedagogical Content Knowledge – Concept, need and scope<br>2.2 Interrelationship of different areas of TPACK<br>2.3 Techno-Pedagogical Skills of Biology Science teacher<br>2.4 Technology Integrated Taxonomy (1999) – Peck and Wilson<br>2.5 Open Access Resources in Science | • Lecture<br>• Illustrations<br>• Digital presentations<br>• Seminar<br>• Discussions<br>• Assignment |

**UNIT – III: APPLICATIONS OF LEARNING THEORIES (10 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Analyses the different learning theories<br>2 Compares the different theories of learning<br>3 Identifies the importance of learning theories in classroom | 3.1 Implications of eminent psychologists in teaching Biological Science<br>Jean Piaget's theory of cognitive development<br>Jerome S. Bruner's theory regarding concept formation<br>Robert M. Gagne's hierarchical stages of learning<br>Lev Vygotsky's social constructivist theory<br>Ausubel's meaningful learning<br>Howard Gardner's theory of multiple intelligence | • Lecture<br>• Seminar<br>• Assignment |

**Unit – IV: MODELS OF TEACHING IN LEARNING BIOLOGICAL SCIENCE (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Defines Models of teaching<br>2. Classifies different families of models of teaching<br>3. Chooses the appropriate model for teaching Biological Science<br>4. Prepares lesson transcripts based on models of teaching | 4.1 Meaning and definition of models of teaching<br>4.2 Role of models of teaching<br>4.3 Families of models of teaching<br>4.4 Elements of models of teaching<br>4.5 Concept Attainment Model<br>Advance Organizer Model<br>Inquiry Training Model | • Discussions<br>• Electronic visual presentation<br>• Seminar<br>• Assignment |

**UNIT- V: ASSESSMENT AND EVALUATION (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Identifies the strategies of evaluation<br>2 Develops skill to construct test items in Biological science<br>3 Explores various enrichment activities | 5.1 Concept and purpose of evaluation<br>Types of evaluation – formative and summative evaluation<br>5.2 Qualities of a good test<br>5.3 Types of tests – achievement test, diagnostic test and prognostic test<br>5.4 Different types of test items<br>5.5 Construction of achievement test and diagnostic test in Biological Science<br>5.6 Remedial teaching and enrichment activities | • Lecture<br>• Seminar<br>• Assignment<br>• Discussions |

**ASSESSMENT**

1. Document analysis
2. Assignment
3. Paper presentation
4. Questioning
5. Discussion Reports
6. Seminar presentation
7. Tests

**SUGGESTED ACTIVITIES (Any two)**

1. Prepare a digital lesson on any topic in Biology.
2. Prepare a lesson transcript based on any one model of teaching.
3. Write different types of test items(50 items) for any one unit in Standard IX Biology.
4. Prepare a report on the best practices in your teaching practice school.
5. Analyse the content of Biology textbook of Class X.

## 🕮PRESCRIBED READINGS


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- Mariamma Mathew. (2023). *Instructional strategies and techniques in Science education- for Biological and Physical Sciences*
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*Course Code:BED2PC007* *Pedagogic Course*

**B.Ed. Degree Programme**

**Semester – II**

**PEDAGOGICAL CONTENT KNOWLEDGE OF ENGLISH EDUCATION**

(4 Credits – 120 Hours)

**Preface**

This course focuses on the intricate relationship between content knowledge (English language and literature) and pedagogical knowledge. It aims to equip prospective English teachers with a deep understanding of how to transform subject matter into meaningful learning experiences for students. The course emphasizes the development of pedagogical strategies that effectively address diverse learners' needs and promote critical thinking, creativity and language proficiency.

✍ **COURSE OUTCOMES**

*On successful completion of the course, the Prospective teacher*

1, Analyses the content in English text books of Tamil Nadu State Board

2. Practices emerging strategies for teaching English

3. Examines the ways to link technology, pedagogy and content in classroom teaching

4. Analyses Digital taxonomy

5. Identifies the contributions of learning theories in English

6. Prepares various types of test items

7. Illustrates models of teaching English

8. Designs lesson plan based on different models of teaching in English

9. Constructs achievement test and diagnostic tests

10. Uses appropriate remedial measures

**UNIT – I: EXPLORING PEDAGOGIC CONTENT KNOWLEDGE (10 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Familiarizes with pedagogic analysis<br>2. Analyses the content area of English text book of class IX & X | 1.1 Pedagogic analysis: meaning, scope and methodology<br>1.2 Content analysis of English textbook for classes IX to X of Tamil Nadu State Board syllabus | • Seminar presentation<br>• Discussion<br>• Interactive session<br>• Written Individual Assignment |

**UNIT – II: TECHNO PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Identifies the ways and means to link technology, pedagogy and content<br>2. Correlates technology, pedagogy and content in classroom teaching<br>3. Explains the importance of technology in teaching and learning English<br>4. Employs different technologies in teaching English | 2.1 Techno pedagogy – meaning, need and scope<br>2.2 Technological Pedagogical Content Knowledge (TPACK)<br>2.3 Techno-pedagogical skills of English teacher<br>2.4 English teacher as a techno pedagogue<br>2.5 Digital Taxonomy-Peck and Wilson | • Lecture<br>• Seminar presentation<br>• Invited talks<br>• Discussion<br>• Written Individual Assignment<br>• Digital lesson plan presentation |

**UNIT – III: APPLICATIONS OF LEARNING THEORIES (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Analyses the different Learning theories<br>2. Compares the different Theories of learning<br>3. Identifies the importance of Learning Theories in classroom | 3.1 Implications of eminent psychologists in teaching English<br>Watson, Skinner, Thorndike – Behavioral theory<br>Jean Piaget – Theory of cognitive development<br>Lev Vygotsky – Social constructivist theory<br>Noam Chomsky – Linguistic theory of language development<br>Robert M. Gagne – Hierarchical stages of learning<br>Howard Gardner – Theory of Multiple Intelligences<br>Kolb – Experiential learning<br>Paulo Freire – Critical Pedagogy<br>Siemen's and Downes' – Connectivism | • Lecture<br>• Seminar<br>• Visual/Audio Presentation<br>• Group Assignment<br>• Invited talks<br>• Quiz and test |

**UNIT – IV: MODELS OF TEACHING IN ENGLISH LANGUAGE (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Defines models of teaching<br>2. Classifies different families of models of teaching<br>3. Selects the appropriate model for teaching English<br>4. Prepares lesson transcripts based on models of teaching | 4.1 Meaning and definition of teaching models<br>4.2 Assumptions regarding teaching models<br>4.3 Role of teaching models<br>4.4 Families of teaching models<br>4.5 Elements of teaching models<br>4.6 Some typical models:<br>Synectics model<br>Inductive thinking model<br>Role play model | • Discussion<br>• Video/Audio presentation<br>• Seminar presentation<br>• Quiz and test<br>• Group Assignment |

**UNIT- V: ASSESSMENT AND EVALUATION (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Identifies the strategies of evaluation<br>2. Constructs test items in English | 5.1 Concept and purpose of evaluation<br>5.2 Types of evaluation – formative and summative evaluation, Continuous and Comprehensive Evaluation (CCE)<br>5.3 Types of tests – Achievement test, Diagnostic test and Prognostic test<br>5.4 Different types of test items<br>5.5 Construction of achievement test in English | • Lecture<br>• Seminar presentation<br>• Quiz and test<br>• Written Assignment<br>• Discussion |

**ASSESSMENT**

1. Tests
2. Assignments and projects
3. Classroom participation and discussions
4. Quizzes
5. Reflective journals

**SUGGESTED ACTIVITIES (Any two)**

1 Develop an e-content on any one topic from English textbooks at secondary stage.
2 Prepare teaching learning resources for developing language skills.
3 Prepare a write-up on pedagogical aspects of English Language teaching with reference to NEP 2020.
4 Prepare outcome-based lesson plans on Prose, Poetry and Grammar of English Language.
5 Prepare a report on the best practices you have observed in school during internship.

**🕮PRESCRIBED READINGS**

1. Adams, M. J. (1990). *Thinking and Learning about Print*. MIT Press.
2. Alexander, L. G. (1975). *A First Book in Comprehension, Précis and Composition*. Longman.
3. Boswood, T. (1997). *New Ways of Using Computers in Language Teaching*. TESOL.
4. Brewster, J., Ellis, G., & Girard, D. (1992). *The Primary English Teacher's Guide*. Penguin Books.

5. Cameron, L. (2001). *Teaching Languages to Young Learners*. Cambridge University Press.
6. Choudhary, N. R. (2002). *English Language Teaching*. Himalaya Publishing House.
7. Egbert, J., & Hanson-Smith, E. (1999). *CALL Environments: Research, Practice and Critical Issues*. Internet for English Teaching.
8. Sperling, D. (1997). *The Internet Guide for English Language Teachers*. Prentice-Hall Regents.
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2. Bond, L. G. (1980). *Reading Difficulties: Their Diagnosis and Correction*. Appleton-Century-Crafts.
3. Brinton, D. M., Snow, M. A., &Wesche, M. B. (1989). *Content-Based Second Language Instruction*. Newbury.
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6. Ibrahim, A. M. (2010). Information & Communication Technologies in ELT. *Journal of Language Teaching and Research, 1*(3), 211-214. Academy Publisher. ISSN 1798-4769.
7. Kohli, A. L. (2001). *Techniques of Teaching English in the New Millennium*. DhanpatRai.
8. Lee, H. J., & Tsai, C.-C. (2007). *Exploring the Concept of Technological Pedagogical Content Knowledge (TPCK): Toward an Integrated Framework for Technology Integration*. British Journal of Educational Technology, 38(4), 519-535.
9. Mishra, P., & Koehler, M. J. (2006). *Technological Pedagogical Content Knowledge: A Framework for Integrating Technology in Teacher Education*. Journal of Teacher Education, 57(1), 60-70.
10. Shulman, L. S. (1986). *Those Who Understand: Knowledge Growth in Teaching*. Educational Researcher, 15(2), 4-14.
11. Singh, Y. K. (2005). *Teaching of English*. APH Publishing Corporation.

*Course Code:BED2PC008* *Pedagogic Course*

**B.Ed. Degree Programme**
**Semester – II**
**PEDAGOGICAL CONTENT KNOWLEDGE OF HISTORY EDUCATION**
(4 Credits – 120 Hours)

**Preface**

This course aims to equip prospective history teachers with the advanced skills to analyze historical content from both pedagogical and technological perspectives. By developing a deep understanding of how to transform complex historical narratives into accessible, engaging and technologically integrated learning experiences, teachers can effectively cater to the diverse needs of learners in a rapidly evolving digital age.

✍ **COURSE OUTCOMES:**

*On successful completion of the course, the Prospective Teacher*

1. Analyzes the content areas in History of text books of Tamil Nadu State Board
2. Infers the meaning and methodology of pedagogic content analysis
3. Analyses digital taxonomy
4. Correlates Technology, Pedagogy and content at different levels
5. Explains the importance of technology in teaching and learning History
6. Employs different technologies in teaching History
7. Compares the different theories of learning
8. Prepares lesson transcripts based on models of teaching
9. Constructs achievement and diagnostic tests
10. Selects suitable remedial measures and enrichment activities

**UNIT – I: EXPLORING PEDAGOGIC CONTENT KNOWLEDGE (10 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Familiarizes with pedagogic analysis<br>2 Analyses the content area of history textbook of class IX and X. | 1.1 Pedagogic Analysis - meaning, scope and methodology<br>1.2 Relevance and methodology of pedagogic analysis in History<br>1.3 Analysis of history textbook content of class IX and X of Tamil Nadu State Board | • Discussions<br>• Questioning<br>• Seminar presentation |

**UNIT – II: TECHNO-PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Identifies the ways to link techno-pedagogue content knowledge.<br>2 Correlates technology, pedagogy and content in classroom teaching.<br>3 Employs technology in teaching history. | 2.1 Techno-Pedagogy: meaning, need and scope<br>2.2 Technological Pedagogical Content Knowledge (TPACK) - TK, PK, CK, TPK, TCK, PCK<br>Need and importance<br>Interrelationship among Technology, Pedagogy and Content<br>2.3 Scope and purpose of Techno-pedagogue in History<br>2.4 History Teacher as a Techno-pedagogue<br>2.5 Digital Taxonomy –Peck and Wilson | • Seminar<br>• Discussions<br>• Questioning |

**UNIT – III: APPLICATIONS OF LEARNING THEORIES (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Analyzes the different learning theories.<br>2. Compares and contrast various learning theories.<br>3. Identifies the importance of learning theories in classroom. | 3.1 Learning Theories<br>Importance of learning theories in History education.<br>Application of learning theories in History education.<br>Ausubel's Theory<br>Social Learning Theory<br>Constructivism<br>3.2 Implications of theories in History education. | • Discussions<br>• Questioning<br>• Seminar presentation<br>• Test |

**UNIT- IV: MODELS OF TEACHING IN LEARNING HISTORY (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Defines model of teaching.<br>2. Lists out the different families of models of teaching.<br>3. Selects suitable model of teaching for history.<br>4. Prepares lesson plan based on models of teaching. | 4.1 Models of Teaching - meaning and definitions<br>4.2 Assumptions of teaching models<br>4.3 Role of Teaching models<br>4.4 Families of teaching models<br>4.5 Elements of Teaching models<br>Concept Attainment Model<br>Advance Organizer Model<br>Jurisprudential model | • Lecture<br>• Seminar<br>• Assignment<br>• Discussions |

**UNIT-V: ASSESSMENT AND EVALUATION (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Identifies the importance of evaluation in teaching learning process.<br>2. Describes the qualities of a good test.<br>3. Differentiates formative and summative evaluation.<br>4. Prepares achievement and diagnostic test.<br>5. Suggests remedial measures for teaching History. | 5.1 Evaluation: Concept, Need and Importance<br>Qualities of a good test<br>Formative and summative evaluation<br>5.2 Types of test items - objective, short answer, essay<br>5.3 Different types of test<br>Achievement test<br>Diagnostic test<br>Prognostic test<br>5.4 Construction of an achievement test<br>5.5 Difference between achievement and diagnostic test<br>5.6 Remedial teaching in History | • Discussions<br>• Questioning<br>• Seminar presentation<br>• Test (oral/ written) |

**ASSESSMENT**

1. Assignments and projects
2. Classroom participation and discussions
3. Quizzes and examination
4. Reflective journals
5. Portfolios
6. Technology integrated demonstrations
7. Tests

**SUGGESTED ACTIVITIES (Any two)**

1. Critically analyse the role of technology in teaching and learning History.
2. Preparation of lesson transcripts based on any two models of teaching.
3. Prepare a report on various learning strategies and techniques used by History teachers.
4. Prepare different types of test items for Standard IX History.
5. Analyse the content of classes VI to X.

## 🕮PRESCRIBED READINGS


1. Aggarwal, J. C. (2003). *Teaching of Social Studies: A Practical Approach*. Prentice Hall India Pvt. Ltd.
2. Alexey, Semenov, UNESCO. (2005). *Information and Communication Technology in Schools: A Handbook for Teachers*.
3. Bhatt, B. D., &Aggarwal, J. C. (1909). *Educational Document in India: Survey of Indian Education*. Arya Book.
4. Dash, B. N. (1998). *Content Cum Methods of Teaching Social Studies*. Ralyani Publishers.
5. Josh, P. S. V., &Gholkar, S. V. (1983). *History of Modern India*. Chand V Company.
6. Joyce, B. V., & Well, M. (2003). *Models of Teaching* (5th ed.). Prentice Hall.
7. Madhukumar, Indira. (2005). *Internet Based Distance Education*. Global Network.
8. Passi, B. K. (1991). *Models of Teaching*. NCTE.
9. Singh, Gopal. (2004). *Teaching Strategies*. APH Publishing Corporation.


## 🕮SUGGESTED READINGS


1. Aggarwal, J. C. (2003). *Teaching of Social Studies: A Practical Approach*. Prentice Hall India Pvt. Ltd.
2. Alexey, Semenov, UNESCO. (2005). *Information and Communication Technology in Schools: A Handbook for Teachers*.
3. Bhatt, B. D., &Aggarwal, J. C. (1909). *Educational Document in India: Survey of Indian Education*. Arya Book.
4. Dash, B. N. (1998). *Content Cum Methods of Teaching Social Studies*. Ralyani Publishers.
5. Josh, P. S. V., &Gholkar, S. V. (1983). *History of Modern India*. Chand V Company.
6. Joyce, B. V., & Well, M. (2003). *Models of Teaching* (5th ed.). Prentice Hall.
7. Lee, H. J., & Tsai, C.-C. (2007). *Exploring the Concept of Technological Pedagogical Content Knowledge (TPCK): Toward an Integrated Framework for Technology Integration*. British Journal of Educational Technology, 38(4), 519-535.
8. Madhukumar, Indira. (2005). *Internet Based Distance Education*. Global Network.
9. Mishra, P., & Koehler, M. J. (2006). *Technological Pedagogical Content Knowledge: A Framework for Integrating Technology in Teacher Education*. Journal of Teacher Education, 57(1), 60-70.
10. Passi, B. K. (1991). *Models of Teaching*. NCTE.
11. Shulman, L. S. (1986). *Those Who Understand: Knowledge Growth in Teaching*. Educational Researcher, 15(2), 4-14.
12. Singh, Gopal. (2004). *Teaching Strategies*. APH Publishing Corporation.

*Course Code:BED2PC009* *Pedagogic Course*

**B.Ed. Degree Programme**

**Semester – II**

**PEDAGOGICAL CONTENT KNOWLEDGE OF MATHEMATICS EDUCATION**

(4 Credits – 120 Hours)

**Preface**

This course aims to equip Prospective Mathematics teachers with the advanced skills to analyze mathematical content from both pedagogical and technological perspectives. By developing a deep understanding of how to transform complex mathematical concepts into accessible, engaging and technologically integrated learning experiences, teachers can effectively cater to the diverse needs of learners in a rapidly evolving digital age.

**COURSE OUTCOMES:**

*On successful completion of the course, the Prospective Teacher*

1. Identifies the meaning, scope and methodology of pedagogic analysis
2. Analyzes the content area of Mathematics text books of Tamil Nadu State Board
3. Examines the ways to link technology, pedagogy and content in classroom teaching
4. Analyses Digital taxonomy
5. Identifies the contributions of learning theories in Mathematics
6. Prepares various types of test items
7. Illustrates models of teaching Mathematics
8. Designs lesson plan based on different models of teaching in Mathematics
9. Constructs achievement test and diagnostic tests
10. Uses appropriate remedial measures

**UNIT – I: EXPLORING PEDAGOGIC CONTENT KNOWLEDGE (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Familiarizes with pedagogic analysis<br>2 Analyses the content area of Mathematics text book of class IX and X<br>3 Prepares lesson plans for teaching of Mathematics | 1.1 Pedagogic analysis: meaning, scope and methodology<br>1.2 Content analysis of Mathematics textbook for classes IX and X of Tamil Nadu State Board syllabus. | • Seminar<br>• Assignment<br>• Discussions<br>• Interactive Learning |

**UNIT – II: TECHNOPEDAGOGIC CONTENT KNOWLEDGE ANALYSIS (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Identifies the ways and means to link technology, pedagogy and content<br>2 Correlates technology, pedagogy and content in classroom teaching<br>3 Explains the importance of technology in teaching and learning Mathematics<br>4 Employs different technologies in teaching Mathematics. | 2.1 Techno pedagogy – meaning, need and scope<br>2.2 Technological Pedagogical Content Knowledge (TPACK)<br>2.3 Interrelationship of Content knowledge, Pedagogic knowledge and Technological knowledge<br>2.4 Techno-Pedagogical Skills of Mathematics teacher<br>2.5 Mathematics teacher as a techno pedagogue<br>2.6 Digital Taxonomy – Peck and Wilson. | • Lecture<br>• Illustrations<br>• Digital presentations<br>• Seminar<br>• Discussions<br>• Assignment |

**UNIT – III: APPLICATIONS OF LEARNING THEORIES (10 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Analyses the different learning theories<br>2 Compares the different theories of learning<br>3 Identifies the importance of learning theories in classroom | 3.1 Implications of eminent psychologists in teaching and learning Mathematics<br>Jean Piaget's theory of cognitive development<br>Jerome S. Bruner's theory regarding concept formation<br>Lev Vygotsky's social constructivist theory<br>Howard Gardner's theory of multiple intelligence | • Lecture<br>• Seminar<br>• Assignment |

**UNIT – IV: MODELS OF TEACHING IN LEARNING MATHEMATICS (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Defines models of teaching<br>2. Classifies different families of models of teaching<br>3. Chooses the appropriate model for teaching Mathematics<br>4. Prepares lesson transcripts based on models of teaching | 4.1 Meaning and definition of teaching models<br>4.2 Assumptions regarding teaching models<br>4.3 Role of teaching models<br>4.4 Families of teaching models<br>4.5 Elements of teaching models<br>4.6 Some typical models:<br>Concept Attainment Model<br>Advance Organizer Model<br>Inquiry Training Model | • Discussions<br>• Electronic visual presentation<br>• Seminar<br>• Assignment |

**UNIT- V: ASSESSMENT AND EVALUATION (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Identifies the strategies of evaluation<br>2 Constructs test items in mathematics | 5.1 Concept and purpose of evaluation<br>5.2 Types of evaluation – formative and summative evaluation<br>5.3 Types of tests – achievement test, diagnostic test and prognostic test<br>5.4 Characteristics of a good test<br>5.5 Different types of test items – objective type, short answer type and essay type<br>5.6 Achievement test – concept, purpose, steps of construction<br>Construction of achievement test in mathematics<br>5.7 Diagnostic test – concept, steps of construction and remedial teaching | • Lecture<br>• Seminar<br>• Assignment<br>• Discussions |

**ASSESSMENT**

1. Document analysis
2. Assignment
3. Participant observation
4. Seminar presentation
5. Technology integrated demonstrations
6. Tests

**SUGGESTED ACTIVITIES (Any two)**

1. Prepare a digital lesson on any topic in Mathematics
2. Prepare a lesson transcript based on any one model of teaching.
3. Construct an achievement test in Mathematics for any topic in class IX mathematics.
4. Construct a diagnostic test in Mathematics for any topic in standard IX.
5. Prepare different types of test items for any one unit in Standard IX Mathematics.

**🕮PRESCRIBED READINGS**


- Babu, R., &Dandapani, S. (2022). *Essentials of Microteaching*. Neelkamal Publications.
- Bruce, J., & Weil, M. (2004). *Models of Teaching*. Prentice Hall of India.
- Das, A., & Bay, R. (2020). *Digital Pedagogy with ICT and Learning Technologies*. CBS Publishers.
- James, A. (2006). *Techniques of Teaching of Mathematics*. Neelkamal Publications.
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- Mangal, S.K. (2000). *Teaching of Mathematics*. R.P.FadonPrakash Brothers.
- Mangal, S.K., &Mangal, S. (2023). *Learning and Teaching*. PHI Learning Private Limited.
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**🕮SUGGESTED READINGS**


- Aggarwal, S. M. (2001). *A Course in Teaching of Modern Mathematics*. DhanpatRai Publishing House.
- Bhasin, S. (2005). *Teaching of Mathematics: A Practical Approach*. Himalaya Publishing House.
- Ediger, M., &Rao, D. B. (2000). *Teaching Mathematics Successfully*. Discovery Publishing House.
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*Course Code:BED2PC010* *Pedagogic Course*

**B.Ed. Degree Programme**
**Semester – II**
**PEDAGOGICAL CONTENT KNOWLEDGE OF PHYSICAL SCIENCE EDUCATION**
(4 Credits - 120 Hours)

**Preface**

This course aims to equip Prospective Physical Science teachers with the advanced skills to analyze physical science content from both pedagogical and technological perspectives. By developing a deep understanding of how to transform complex physical science concepts into accessible, engaging and technologically integrated learning experiences, teachers can effectively cater to the diverse needs of learners in a rapidly evolving digital age.

## ✍ COURSE OUTCOMES

*On successful completion of the course, the Prospective Teacher*

1. Analyses the content in Physics and Chemistry text books of Tamil Nadu State Board
2. Practices emerging strategies for teaching Physics and Chemistry
3. Examines the ways to link technology, pedagogy and content in classroom teaching
4. Analyses Digital taxonomy
5. Identifies the contributions of learning theories in Physical Science
6. Prepares various types of test items
7. Illustrates models of teaching Physical Science
8. Designs lesson plan based on different models of teaching in Physical Science
9. Constructs Achievement test and Diagnostic tests
10. Uses appropriate remedial measures

**UNIT – I: EXPLORING PEDAGOGIC CONTENT KNOWLEDGE (20 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Explains the concept of pedagogic analysis<br>2 Analyses the content area of science text books for standard IX and X | 1.1 Pedagogic analysis – meaning, objectives, scope, steps and advantages<br>1.2 Content analysis – meaning and steps<br>1.3 Content analysis of Physics and Chemistry textbooks for standards IX and X of the Tamil Nadu State Board | • Digital presentation<br>• Group discussion<br>• Workshop |

**UNIT – II: TECHNO PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Describes the meaning and scope of TPACK<br>2 Compares the various components of TPACK<br>3 Adapts technology integrated taxonomy | 2.1 Technological Pedagogical Content Knowledge(TPACK) – meaning, need and scope<br>2.2 Interrelationship of different areas of TPCK<br>2.3 Techno-Pedagogical Skills of physical science teacher<br>2.4 Technology Integrated Taxonomy (1999) – Peck and Wilson | • Digital presentation<br>• Group discussion<br>• Lecture<br>• Peer discussion |

**UNIT – III: APPLICATION OF LEARNING THEORIES (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1 Identifies various Theories of Learning<br>2 Analyses the implications of each Theories | 3.1 Implications of eminent psychologists in the field of physical science education:<br>Piaget's Theory<br>Jerome S. Bruner's theory of concept learning<br>David Ausubel's Theory of Cognitive Subsumption | • Discussion<br>• Digital presentation<br>• Group discussion<br>• Brain storming |

**UNIT – IV: MODELS OF TEACHING IN LEARNING PHYSICAL SCIENCE (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Describes the concept models of teaching<br>2. Explains the types of teaching model | 4.1 Models of teaching:<br>Definition<br>Characteristics<br>Fundamental elements of models of teaching<br>Families of models of teaching<br>4.2 Types of teaching models:<br>Inquiry Training Model<br>Concept Attainment Model<br>Advance Organizer Model | • Digital presentation<br>• Group discussion<br>• Workshop |

**UNIT- V: ASSESSMENT AND EVALUATION (15 Hours)**

| Learning Outcomes | Content | Suggested Strategies and Approaches |
|---|---|---|
| 1. Infers the importance of evaluation in teaching learning process<br>2. Prepares an achievement and diagnostic test<br>3. Suggests remedies for teaching physical science | 5.1 Evaluation:<br>Concept and need<br>Importance<br>Qualities of a good test<br>Formative and summative evaluation<br>5.2 Types of test items<br>5.3 Different types of tests:<br>Achievement test<br>Diagnostic test<br>Prognostic test<br>5.4 Construction of an achievement test<br>5.5 Diagnostic test:<br>Steps<br>5.6 Difference between achievement and diagnostic test<br>5.7 Remedial teaching in physical science | • Digital presentation<br>• Group Discussion<br>• Assignment |

**ASSESSMENT**

1. Assignments
2. Classroom participation and discussions
3. Quizzes and exams
4. Reflective journals
5. Portfolios
6. Technology integrated demonstrations

**SUGGESTED ACTIVITIES (Any two)**

1. Critically analyse the school science text book of any one standard (VI to X).
2. Develop a lesson plan based on models of teaching.
3. Observe the best practices in your teaching practice school and prepare a report.
4. Construct an achievement test of 50 marks from any one unit of physical science (VI to VIII).

**🕮PRESCRIBED READINGS**

• Gupta, S. K. (1985). *Teaching of Physical Science in Secondary Schools*. Sterling Publication Pvt. Limited.

- Mathew, M. (2023). *Instructional Strategies and Techniques in Science Education*. By the Author.
- Materanri, V. K., & Mateswari, V. (2010). *Teaching of Science*. Vayu Rakheja.
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- Nayak, A. (2019). *Teaching of Physics*. APH Publishing.
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- Sharma, R. C. (2006). *Modern Science Teaching*. DhanpatRai Publications.
- Sivarajan, K., &Faziluddin, A. (2006). *Science Education*. Calicut University, Central Co-operative Press.
- Vanaja, M. (2010). *Educational Technology*. Neelkamal Publishers.
- https://www.tntextbooks.co.in/


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- Bhatia, K. K. (2001). *Foundations of Teaching Learning Process*. Tandon Publication.
- Das, R. C. (1985). *Science Teaching in Schools*. Sterling Publishers.
- Lee, H. J., & Tsai, C.-C. (2007). *Exploring the Concept of Technological Pedagogical Content Knowledge (TPCK): Toward an Integrated Framework for Technology Integration*. British Journal of Educational Technology, 38(4), 519-535.
- Mangal, S. K., &Mangal, U. (2009). *Essentials of Educational Technology*. PHI Learning Pvt. Ltd.
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- Mishra, R. C. (2008). *Lesson Planning*.
- Panner, S. A. (1976). *Teaching of Physical Science Tamil*. Government of Tamil Nadu.
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