Annexure 29.A

**Avinashilingam Institute for Home Science and Higher Education for Women**
(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD)
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

**Department of Education**

**(Ph.D- Full Time Scholar admitted in January 2022)**

# 21PHED03C-Interactive Board Games for Primary Kids

**Name of the Scholar: Mrs. M. Antony Philomena : 21PHEDF002**
**Name of the Supervisor: Dr. C. Karthik Deepa**

**No. of credits: 5**

**Course Objectives:**

**To enable the scholar to**

- familiarize with the history and development of board games
- analyse the materials and genre of board games
- outline the stages of board game development
- relate the developmental requirements of primary kids
- recognize the role of games in learning

## Unit I Introduction to Board Games

Introduction-Board Games: Origin and History, meaning, definion, importance, types and significance ,nature, Scope and importance, Board Games in different countries, game designs across variety of genres: sports, game shows, games of chance, card games, schoolyard games, board games, and role–playing games Interactive board games- Advance developments. Designing: Plan, develop proto type, testing: Test the developed game, Frame game rules: evolve rules, goal and components of board games, Publish.

## Unit II Materials for Board Game

Traditional Materials, Indigenous materials, fabrics, eco friendly materials: recycled materials, Green Materials, Solar powered boards. Electronic materials: Sensors, circuits, motors. Materials for Sensory Board Games: different textures, colours, smells, sound.

**Unit III Growth and development of Primary school kids**

Growth and Development - Meaning, principles, factors and stages. **Primary school kids**: Aspects of growth and development - Physical, Mental, Social, Emotional and Moral. Nature and nurture, Developmental tasks and their Educational implications.

**Unit IV Games and Learning**

Classical theories of play: Surplus energy theory (Spencer 1873), Renewal of energy theory (Patrick 1916), Recreation theory (Lazarus 1883, in Dockett and Fleer 1999), Practice for adulthood (Groos 1898, 1901). Modern theories of play: Psychoanalytic theories (A. Freud 1968, S. Freud 1959, Erikson 1963), Cognitive theory (Piaget 1962), Arousal modulation theory (Berlyne 1960, Ellis 1973), Bateson's communication and metacommunication (1976), Mead's theory of self (1934), Sociocultural theory (Vygotsky 1977, 1978). Features of good games: interactive, goal oriented, provide ongoing feedback, grab and sustain attention, appropriate and adaptive levels of challenge, contextualized, and interesting.

**Unit V Games as Teaching Aid**

Overview of games in Education, Role of Games in Education, Game history in Teaching, Components of educational-game: (a) conflict or challenge (b) rules of engagement, (c) particular goals or outcomes to achieve (d) continuous feedback, (e) interaction within the environment, and (f) compelling storyline. Games in different subjects- Advance researches and policies based on games in teaching, learning. Advantages and Challenges of Games in learning. Assessment in Games.

**Course Outcomes:**

On successful Completion of this course, the scholar will be able to

- narrate the history and development of board games
- select the materials suitable for different genre
- draft the stages of board game development
- design board games by relating the developmental requirements of primary kids
- integrate games in learning

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Coimbatore - 641 043, Tamil Nadu, India

**Department of Education**

**Ph. D. Education**

**21PHED03D - Advanced Pedagogy of Teaching Social Science**

(Applicable for Ph.D. Part Time scholar admitted in January, 2022)

**No. of credits: 5**

Name of the Scholar : **Mrs. Mini Lakshmi,K (21PHEDP004)**
Name of the Supervisor: **Dr. H. Indu**

**Course Objectives**

To enable the scholar to

- develop an understanding about the meaning, nature, scope of Social Science Education.
- understand the role of various methods and approaches of teaching Social Sciences
- familiarize with the various pedagogical approaches and aspects of pedagogy
- employ appropriate strategies for the transaction of social science curriculum.
- effectively use different media, materials and resources for teaching Social Sciences

**Course Content**

**Unit I Conceptualization of Social Science Education**

Concept, meaning, nature, and scope of social sciences- Epistemological frame proposed in educational policy documents and various National Curriculum Frameworks concerning teaching-learning of social sciences.

**Unit II Approaches to Pedagogy of Social Science**

Pedagogy- Concept, meaning and nature of Pedagogy-Advanced teaching pedagogy-meaning, nature, need and Principles. Critical appraisal of approaches to teaching learning Social Sciences–Behaviorist approach; Constructivist approach; inter disciplinary approach, integrated approach; Critical Pedagogy and Problem posing education.

**Unit III: Traditional Teaching- Learning Strategies and resources in Social Science**

Critical appraisal of various teaching learning strategies viz., lecture cum discussion, Seminar, projects, problem solving, simulation, field visits, Cooperative learning, Peer tutoring, Concept Mapping, Generative Learning Strategy-Creativity in Social Science classrooms. Textbooks, teacher handbooks, teacher's education manuals, and activity book– their conceptualization and processes

**Unit IV:Innovative Media, Materials and Resources for Teaching- Learning.**

Integration of ICT in teaching-learning processes web-based learning, e-learning, e-content: Meaning, Need and significance – Types and forms of e-content - Difference between e-learning and e-content. Online and Digital Education –Guidelines in National Education Policy 2020 For Ensuring Equitable Use of Technology. Mobile Learning, Flipped Classrooms, Webinars, Open Educational Resource (OER), Digital repositories,Web 2.0 Technologies and their educational implication: wikis, blogs, podcasts, social media, instant messaging - Google apps in education,

**Unit V Quality Improvement in Teacher Education**

Meaning and scope of teacher education – theory and practice – difference between training and education, Norms and Standards of Teacher Education in India: NCFTE 2009, NCTE Regulation 2014, Role of different agencies in quality assurance of teacher development. Challenges in professional development of teachers – relevance to school education, Quality Enhancement of Teacher Educators, assurance of quality of teacher education programs, Guidelines in National Education Policy 2020 for the enhancement of professional effectiveness of teachers.

**Course Outcomesenhancement**

**On successful completion of this course the scholar will be able to:**

- List out the scope of Social Science Education.
- Compare the various methods and approaches of teaching Social Sciences
- Apply the various pedagogical approaches in teaching
- Effectively use innovative media and materials for the transaction of social science curriculum.
- Critically analyse the challenges in teacher education and find ways to overcome it

**References**


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**Department of Education**

**Ph. D. Education**

**21PHED03E–Psychopedagogical approaches to Science Education**

**(Applicable for Ph.D. Part Time scholar admitted in January, 2022)**

Name of the Scholar : **Mrs. Sabitha.C.K (21PHEDP005)** **No. of credits: 5**

Name of the Supervisor: **Dr. H. Indu**

**Course Objectives**

To enable the scholar to

- acquaint with the nature of science
- understand the methods of teaching science
- develop an understanding of pedagogical approaches in science education
- familiarise with different psycho pedagogical approaches
- facilitate learning through psycho pedagogical approaches

**Unit I Science as a subject of reasoning and explanation**

Science-Nature and scope of Science-Aims of learning Science- knowledge and understanding through Science-Imbibing values through science learning-Cognitive understanding of science as a subject- Nurturing natural curiosity, creativity and aesthetic sense- relating science education to natural and social environment, technology and society.

**Unit II Science as a practical and dynamic subject**

Scientific attitude -scientific temper -scientific interest - science and nature –the interrelationship-Science Process Skills-Learning Science through experience-Importance of Science as a practical and academic subject-Academic achievement in Science-Scientific Literacy.

**UnitIII Introduction to pedagogy**

Pedagogy-definition, meaning, importance and types of pedagogy, Pedagogy of science and attitude towards science, Role of Pedagogy in Effective Learning. Elements of effective Pedagogy – Instructional Strategies, Management Techniques, Curriculum Design. Factors affecting Pedagogy.

**Unit IV Pedagogical approaches in Science education**

Methods for teaching science- Hands on Learning, Story Telling, Role Play. ICT Enabled Learning, Documented Problem Solving, Scientific argumentation model, Inquiry-based science education, Process oriented guided inquiry learning, Experiential learning.

**UNIT V Psycho pedagogical approaches**

Concept of psycho pedagogy- definition, importance, function and scope. Areas of psycho pedagogy, Exponents of psycho pedagogy, the practice and profile of the psycho pedagogue in the school environment, functions of psycho pedagogue, psycho pedagogy and its facilitating strategies in the learning process.

**Course Outcomes**

On successful completion of this course the learner will be able to:

- list out the importance of science education
- develop scientific temper and a positive attitude towards teaching and learning science
- apply the different Pedagogy in teaching – learning process
- critically analyse the effectiveness of different Pedagogical Approaches
- formulate the relationship between psychology and Pedagogical Approaches

**References:**


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Coimbatore-641043,TamilNadu,India

**Department of Education**
**Ph. D. Education**
**21PHED03F - Cognitive Theories and Pedagogical Approaches**
(Applicable for Ph.D. Part Time scholar admitted in January, 2022)

**No. of credits: 5**

Name of the Scholar: **Ms. M. Vijayalakshmi (21PHEDP003)**

Name of the Supervisor: **Dr. H. Indu**

**Course Objectives**

To enable the scholar to

- acquire knowledge of cognition and types of cognitive process
- know about the cognitive learning theories
- understand the different types of pedagogy and role of pedagogy in teaching and learning
- familiarize with the various pedagogical approaches and aspects of pedagogy
- acquaint with the relationship of cognition and pedagogical approaches

**Unit I - Cognition**

Cognition - Meaning and Definition, Kinds of cognition, Types of Cognitive process – Attention, Memory, Thinking, Learning, Creativity, Logical Reasoning. Cognitive skills. Factors that affect cognition, Impact of cognition, Ways to enhance cognition.

**Unit II - Cognitive Learning Theories**

Meaning of Cognitive Learning, Components of Cognitive Learning, Theories of Cognitive Learning –Jean Piaget's Cognitive Development Theory, Bruner's Theory of Cognitive Development, Lev Vygotsky's Social Cultural Cognitive Theory and Information Processing Theory.

**Unit III–Pedagogy**

Pedagogy-Meaning, Definition, Difference between pedagogy and teaching, Importance of Pedagogy in Teaching, Types of Pedagogy, Role of Pedagogy in Effective Learning. Elements of effective Pedagogy – Instructional Strategies, Management Techniques, Curriculum Design. Factors affecting Pedagogy.

**Unit IV -Pedagogical Approaches**

Meaning, Difference between Pedagogical Approach and Pedagogical Technique.Different aspects of Pedagogy – Social Pedagogy, Critical Pedagogy, Culturally Responsive Pedagogy, Socratic Pedagogy. 21st century Pedagogical Approaches – Constructivism, Collaborative teaching, Integrative pedagogy, Experiential pedagogy, Reflective pedagogy, Inquiry Based pedagogy.

**Unit V–Cognition and Pedagogical Approaches**

Effectiveness of Pedagogical approaches on cognitive abilities -Effect of different pedagogies like Lecture method, Laboratory method, Constructivism, Reflective pedagogy, Experiential pedagogy, Guided discovery, Cooperative learning on academic achievement, retention, attitude, creativity and thinking skills. STEM-based learning on the cognitive skills.Effect of games on cognitive abilities.The effects of Mindful Movement intervention and Science digital story telling on Academic and Cognitive Abilities of students.

**Course Outcomes**

**On successful completion of this course the learner will be able to:**

- list out the cognitive process and cognitive skills
- compare the stages in various cognitive learning theories
- apply the different Pedagogy in teaching – learning process
- critically analyse the effectiveness of different Pedagogical Approaches
- formulate the relationship of cognition and Pedagogical Approaches

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