Book Review

Pedagogy of Science

Textbook for B.Ed. (Physical Science) Part II

Author and Publisher
NCERT, New Delhi
ISBN: 978-93-5007-225-7
Year: 2013
Pages: 247 (Page No. 303-549 in continuation of Part I)
Price: ₹ 130

The book under review is the second part of the Text Book on Pedagogy of Science for B.Ed. students by NCERT, the apex research organisation in the field of school education in India.

The book is divided into six chapters and the chapterisation is done in continuation of the first part of the book, hence, it carries chapter 10 to chapter 15. These chapters are 'Print and ICT resources in learning physical science', 'Tools and techniques of assessment for learning physical science', 'Planning for teaching-learning of physical science', 'Lifelong learning in physical science', 'Professional development of physical science teachers' and 'Teacher as a researcher'.

The first chapter of the book, which is 10th in continuation of part-I, tries to develop the understanding of pupil teachers with regard to the variety of print and ICT resources and their application in teaching and learning of physical science. The chapter explicitly describes Dale's cone of experience, how to use and select appropriate media, social networking and integrating ICT in teaching learning process. Chapter-11 is devoted to test, examination, measurement, assessment and evaluation. All these concepts have been explained properly in an easy to understand language for pupil teachers. Special emphasis has been given to Continuous and Comprehensive Evaluation (CCE) and assessment of learning of students with special needs. In Chapter 12, the book

describes various aspects of planning for teaching-learning of physical science. Some of the important concepts dealt in this chapter are elements of physical science lesson, making groups, planning for activities and laboratory work, reflective planning, unit and lesson planning. Chapter 13 is devoted to lifelong learning and its various dimensions. The concept of lifelong learning has been dealt with properly. The needs and ways of lifelong learning is also highlighted with the emphasis on the use of ICT in the process of making lifelong learning a meaningful and an effective tool for personal continuous development. Chapter 14 discusses the professional development of physical science teachers. It has been placed at an appropriate place in the book, just after the chapter on lifelong learning. Pre-service and in-service professional development has been dealt with length and breadth. Role of reflective practices in professional development is also given a place in the chapter, which is worthwhile. The final section of the book i.e. Chapter 15 talks about how to put teacher on the place of a researcher and therefore the chapter is titled as 'teacher as a researcher'. This chapter deals with the importance of research in general and action research in particular and suggests teachers to actively engage in action research to solve problems related to physical science teaching.

Each chapter is written in such a way that every student can understand the book easily. Concepts are described quite lucidly and illustrated with examples and diagrams which are organised, coloured and well-labeled. Activities/ exercises are also given at appropriate places for students' practice so that pupil teachers can construct their own knowledge by doing so. The book is specifically written for B.Ed. students but it is equally a helpful guide for all physical science teachers and physical science teacher educators. It has been prepared taking into account the Position Paper on Teaching of Science of National Curriculum Framework 2005.

On the whole, the book is well-organised. Every chapter starts with a box highlighting the topics and the sub-topics being included in that chapter followed by an introduction. All chapters are fully elaborated, comprehensive and easily understood. At the end of each topic/ sub-topic, one or more activities are given, through which students can not only test their understanding, but also can have practical experiences and enrich their understanding and skills by performing the activity. Each chapter ends with a brief summary and chapter-end exercise, which may be helpful in self-assessment of learning.

The book is available in good quality print and this is an easy reference for student-teachers and teacher-educators (Physical Science) as the important points are

highlighted in colours. The price of the book is kept at a reasonable price of Rs.130 in an attempt to reach out to all students.

References and web resources are also given in the last nine pages of the book. Had the book been provided with additional reading materials at the end of each chapter or at the end of the book, it would have been more useful to the learners. Overall, the book is a very useful guide and it promises to meet the requirement of both teacher-educators and pupil-teachers of B.Ed. alike.

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