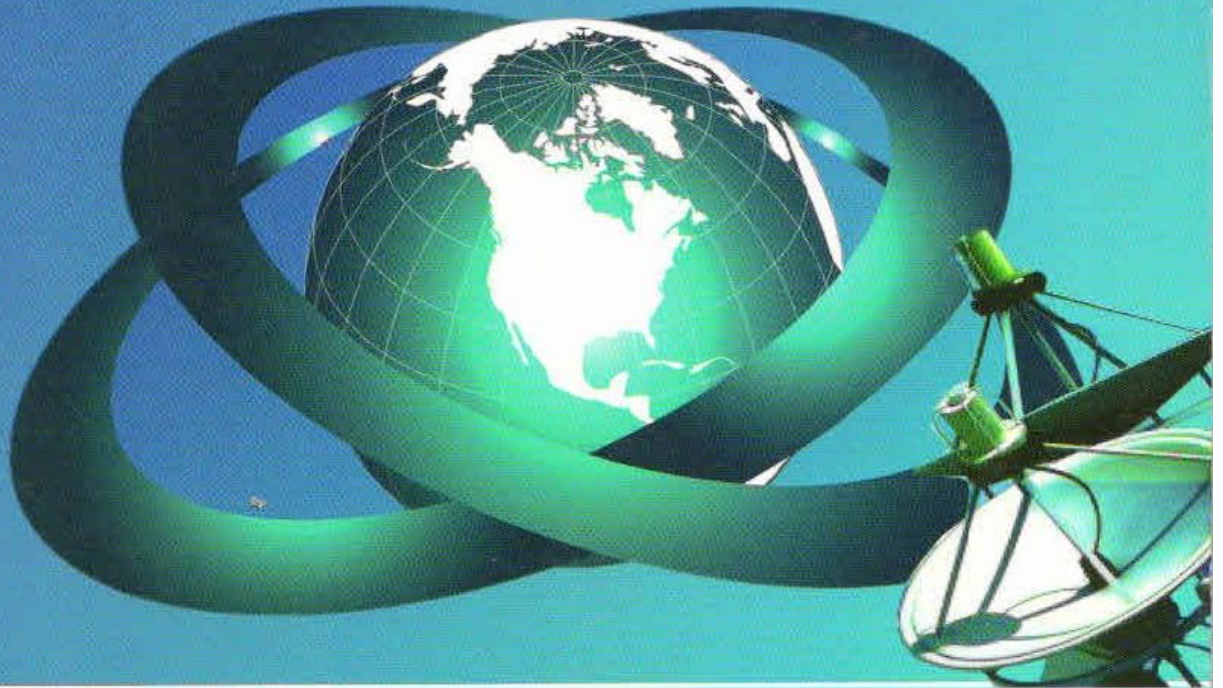


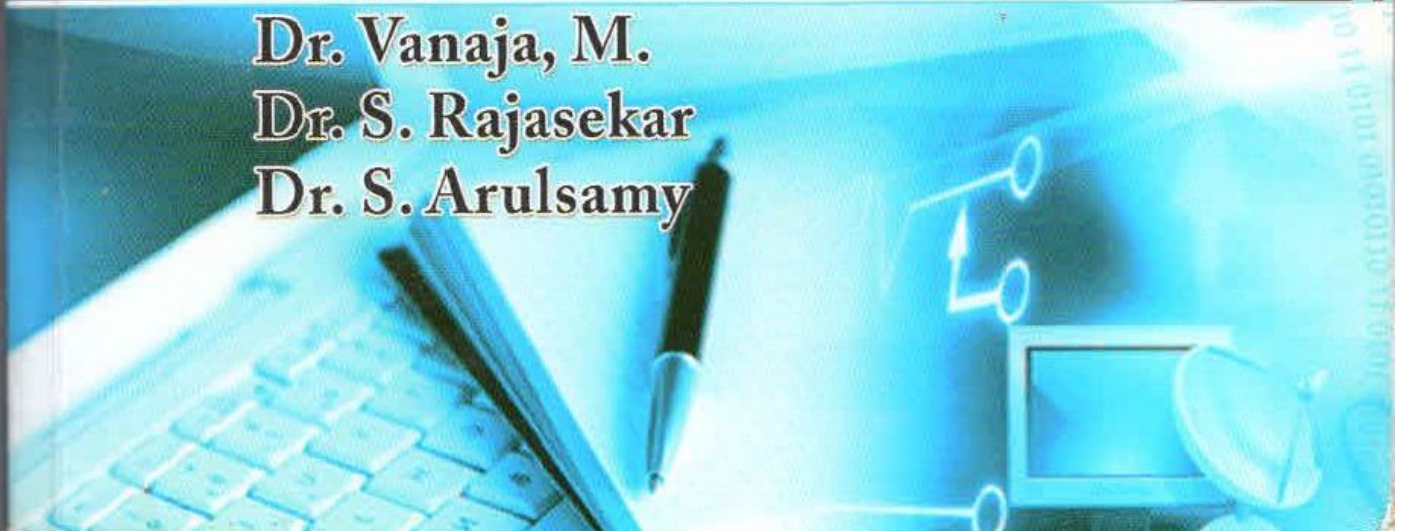


NEELKAMAL

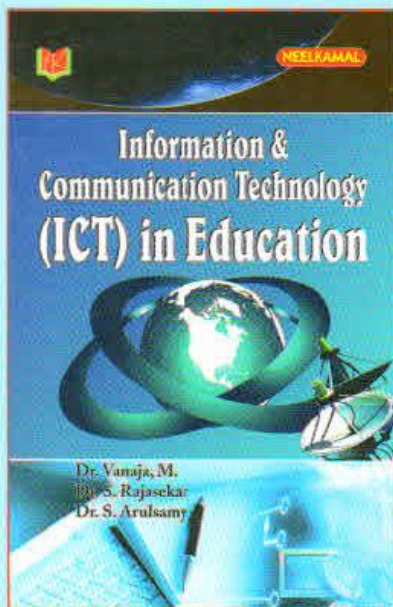
# Information & Communication Technology (ICT) in Education



Dr. Vanaja, M.  
Dr. S. Rajasekar  
Dr. S. Arulsamy







ISBN: 978-81-8316-519-8

## About the Book

Information and Communication Technologies (ICT's) are making dynamic changes in society and influencing all aspects of life. The influences are being felt more and more at educational institutions. ICT's provide both students and teachers with more opportunities in adapting learning and teaching to individual needs. Society is therefore insisting the institutions to aptly respond to this technical innovation. Use of technology has permeated all areas of knowledge, and Education is no exception. This accessible and easy-to-read book, emanating from authors who have distinguished themselves as teacher educators and devised several educational innovations that encompass a broad spectrum of areas in educational technology. It focuses on the modern trends and innovations in Educational Technology to equip the student teachers and in-service teachers with the necessary skills in this area. This book confines to the restructured pattern of syllabi of different universities as per NCTE suggestions and encompasses the entire gamut of ET & ICT tools being used in the classrooms today. This book covers some of the emerging aspects of the Education Technology i.e. Emergence of Educational Technology as a discipline, Nature of Educational Technology, Educational Media, Instructional Technology, Instructional Designs, ICT in Education and Multimedia. Authors have tried their best to include most of the significant aspects of Educational Technology in the book.

## About the Authors

**Dr. Vanaja, M.**, a post graduate in Science Education, completed her Doctoral work as UGC JRF in Education and is currently working as an Associate Professor, Dept. of Education and Training, Maulana Azad National Urdu University, Hyderabad. Prior to this, she worked in Acharya Nagarjuna University, Guntur and IASE, S.V. University, Tirupati, teaching Physical Science Methodology to B.Ed. students and Research Methodology and to M.Ed. Students. She has authored more than 12 books on Education. To her credit she has 25 research papers in National and International Journals/Edited books and presented 40 research papers in International and National Seminars/Conferences/Workshops. She has guided 6 Scholars for their doctoral and 20 for their M. Phil. Degrees in Education. 6 Ph.D. Scholars are pursuing their research work under her guidance.

**Dr. S. Rajasekar**, is presently working as a Professor in the Department of Education, Annamalai University. He got his M.Sc. and M.Phil. Degrees in Physics and Ph.D. in Education. He has published as many as thirty research papers in the field of education in various reputed journals. His areas of interest are Information Technology Enabled Services, Computer Education, Educational Technology and Science Education. He handled subjects like Computer Education, Methodology of Teaching Computer Science, Methodology of Teaching Physical Science and Educational Technology. He also acted as a resource person in various UGC Orientation and Refresher Courses and has given lectures on Information Technology.

**Dr. S. Arulsamy** is an Assistant Professor in Education, Department of Educational Technology, Bharathiar University, Coimbatore (Tamil Nadu). His main area of specialization is Multimedia CD-based Learning, Instructional Technology and School Administration. He holds M.Sc., M.Phil.(Zoo), M.Ed., M.Phil(Edu), Ph.D., P.B.Ed. D.S.A., degrees. He published more than fifteen articles in national and international journals. He presented research papers in various academic seminars and he is the author of 'Application of ICT in Education'.

www.neelkamalbooks.com

ISBN: 978-81-8316-519-8



9 788183 165198



## INFORMATION & COMMUNICATION TECHNOLOGY (ICT) IN EDUCATION

Dr. Vanaja, M.  
Dr. S. Rajasekar  
Dr. S. Arulsamy

© All rights reserved.

First Edition : 2014

Reprint : 2015

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher.

ISBN: 978-81-8316-519-8

Price: ₹ 225/-

### NEELKAMAL PUBLICATIONS PVT. LTD.

Sultan Bazar, Hyderabad - 500 095.

☎ 24757140, 24757197, 24757944, Fax: 040-24757951

#### Delhi Office:

BG5/9B, Paschim Vihar, New Delhi-110 063,

☎ 011-25285894

website : [www.neelkamalbooks.com](http://www.neelkamalbooks.com)

e-mail : [neelkamalbooks@gmail.com](mailto:neelkamalbooks@gmail.com)

Published by *Suresh Chandra Sharma* for  
*Neelkamal Publications Pvt.Ltd.*, New Delhi, Hyderabad

## Preface

Today's educational environment is a complex interplay of goals, needs, competing requirements, pressures, and dwindling resources. We are now living in a world of computers, internet, laptops, mobiles, ipads and other technological inventions. We need an educational system that will give the training and skills to students to use technology and its inventions as a tool for teaching and self-improvement. Educationists hold a responsibility for creating an educational environment that improves student outcome and supports opportunities for all. Education needs to utilize and enhance its functions by making use of these technological advancements.

Information and Communication Technologies (ICT's) are making dynamic changes in society and influencing all aspects of life. The influences are being felt more and more at educational institutions. ICT's provide both students and teachers with more opportunities in adapting learning and teaching to individual needs. Society is, firmly asking the institutions to aptly respond to this technical innovation. Most questions about Information and Communication Technologies (ICT) in education have shifted from how to use technologies to understanding how to teach and learn with technologies. While there is an increasing recognition of the role of ICT in transforming both the teaching and learning practices, it was identified that the lack of pedagogical knowledge amongst educators and practitioners is the foremost reason why emerging technologies remain unexplored in education or under utilised, which lead to its inclusion in the teacher-education curriculum.

21st century education promotes the expansion of the definition of literacy beyond the reading, writing, and arithmetic that may have guided what we learnt in school. Literacy now includes topics such as finances, media, social/emotional development, physical fitness/ health, ecology, and creativity. The need for information and knowledge before was provided by the books, print media, radio, and later the television. In recent times, much advancement has been made in the field of technology. This book is designed to provide leader-tested strategies, exemplars, and practical advice about specific ways that technology can be leveraged to support the journey of successfully leading 21st century Schools. If students are to use technology as a learning tool, teachers then will have to also learn how to use this tool. Previously, teachers did all the thinking for students. They taught what they knew and their students absorbed it. This book is designed to