

Science *in Faith*

**A Christian Perspective
on Teaching Science**

**Christian
Schools' Trust
Science
Curriculum
Team**

Editor

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First published in Great Britain
in December 1998 by

The Christian Schools' Trust
(<http://www.christianschoolstrust.co.uk/>)

Registered Charity No 293315

ISBN: 0-9535502-0-6

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Cover Design and photography by Bernard Cope MCSD

Printed by J&P Reprographics Ltd. Merseyside

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Foreword

Epistemology and the philosophy of science have been in upheaval in the past 30 years. And gradually such words as "worldviews," "paradigms," and "conceptual frameworks" are becoming commonplace in our language. As well, there is a growing recognition that our thinking is shaped in part by our backgrounds and even our psychological makeups. But it would seem that there has been a significant lag in incorporating these new understandings into certain branches of academia. The philosophy of education has only recently begun to wake up to the epistemological insights of postmodernism. Science itself is still by and large in the grip of the Enlightenment ideals of rationality, empiricity and objectivity. And my hunch is that the traditional model of science still holds complete sway in the teaching of science.

Science in Faith attempts to overcome these weaknesses. Arthur Jones and his curriculum team are to be commended for their work on this monograph which so ably shows how science is shaped by worldviews, and how science can and should be taught from a Christian perspective. It is refreshing to see the language of cause and effect combined with talk of purpose – a recovery of ancient and medieval approaches to science. It is delightful to see the grand Reformed (and biblical) themes of creation, fall and redemption, integrated into discussions of scientific concepts and theories. And the reader will sometimes be surprised to see a detailed scientific analysis include talk of God and His will for His creation. And this is done, not in a superficial way, as is sometimes the case with attempts at developing a Christian curriculum. Here theology, philosophy, and science are integrated into a meaningful whole, at times very successfully.

In reading this monograph, I could not help but recall my own, at times rather painful journey from science to philosophy during my last year of undergraduate studies. My final course in the sciences was Physics 351 – an Introduction to Modern Physics. I had told my professor that I was considering switching my major from physics to philosophy. And he understood me. He loved to tease the class by pushing the boundaries of science into discussions of philosophical assumptions underlying nuclear physics. I loved it, and it made my transition to philosophy easier. But Professor Montalbetti was a bit ahead of his time.

Of course, with integrating science and philosophy and theology, questions, and answers to scientific questions, become less precise. And, to acknowledge that scientific theories are shaped by worldviews brings with it the dangers of isolationism and incommensurability. Can a Christian scientist work together with the non-Christian scientist? Does a scientific theory shaped by a Christian worldview have anything in common with a scientific theory shaped by a secular worldview? These are questions that are raised by the repeated contrast of the secular and Christian approaches to science as found in *Science in Faith*. While I would agree that there are significant differences between a Christian and a secular approach to science, I'm not sure that we need to say that we are living in a culture whose public life and approach to science is controlled by "a totally different vision of reality" (Lesslie Newbigin quoted in the Introduction to Chapter 5). We are after all forced to grapple with the same external reality. And might it not be the case that our visions of reality

overlap somewhat? But these are huge questions. Perhaps Arthur Jones and his curriculum team might want to address them in a subsequent monograph.

I would hope that this work would serve to stimulate further dialogue on the nature of a Christian approach to science. It is in such a dialogue that we begin to capture the ideal of a community of scholars. Indeed, this book serves as a model of such an ideal in being the result of the work of Arthur Jones and the Science Curriculum Team of the Christian Schools' Trust.

October 1997

Elmer John Thiessen

Professor Thiessen teaches philosophy at Medicine Hat College, Medicine Hat, Alberta, Canada, and is the author of the ground-breaking *Teaching for Commitment: Liberal Education, Indoctrination and Christian Nurture* (Montreal: McGill-Queen's University Press, 1993).

Preface

The Christian Schools' Trust (CST) Science Curriculum Team (SCT) exists to support the teaching of the sciences in the new independent Christian schools, and Christian science teachers everywhere.

SCT has sought to work with a distinctively Christian worldview. Our curriculum resources seek to show that the meaning of the sciences lies with the God who faithfully creates and upholds His world. This involves an understanding of

- God's loving provision - reflected in the purposefulness, design, and order of His creation - which evokes awe and wonder, and draws us into worship;
- the diversity in unity of creation, with its rich pattern of relationships;
- the radical effects of human sin, through which the relationships have been spoilt, and the creation distorted and abused;
- how those alienated from God, from each other, and from the creation, may be reconciled, so that the healing of every marred relationship within the creation may begin;
- how the worldview commitments of all scientists shape and influence every aspect of their work;
- the need to combat the faith in secular reason, and the deification of science, technology, and economics.

This book has been written to illustrate the nature and fruitfulness of the approach that has been developed. It begins with two overview chapters: first, a general chapter that places science in the wider context of Christian community, culture, and education, and, second, a chapter that tackles head-on the vexed question of evolution and creation. This is followed by chapters addressing specific topics in the secondary school curriculum. The book concludes with a wide-ranging annotated bibliography and an appendix containing useful contact addresses. It is our hope that this material will be of value to all those concerned with curriculum development and in-service training (INSET).

The topics covered in this book are addressed at greater depth in the series of curriculum papers being produced by the CST curriculum team leaders (CST Central Curriculum Resources) and the SCT (SCT Curriculum Resources). For further information contact CST at the addresses given in the Appendix.

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The editor also thanks the large number of people who have made this project possible by contributing their time, skills and finance. Special thanks go to the CST trustees for their support and encouragement, to Barbara Lord who has co-ordinated the whole project, to Barbara Massam for her painstaking editorial advice, to Keith Elmitt and Steve Bishop who also read and commented on the whole manuscript, and to Elmer Thiessen who made several very helpful suggestions for revision as well as kindly writing the Foreword. So many others have been involved in discussions with the editor over the years that he has no idea where much of the inspiration came from! However, the final acknowledgement must go to Richard Russell who started it all more than 30 years ago. He has much to answer for.
