STAN Basic Science and Technology for Primary Schools 2

UBE Edition

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Preface

The composition of the STAN Basic Science and Technology textbook Writing Team reflected the combination of expertise, experience and geographical spread. This was predicated on the need to achieve relevance and so ensure that the books possess the cultural as well as environmental flavour of the different parts of the country.

The thematic approach is used and each theme is broken down into chapters and units which have been carefully sequenced and arranged.

Books 1, 2 and 3, meant for the lower basic level (years 6–8), are mainly pictorial with simple, verbal statements or expressions being progressively introduced. Books 4, 5 and 6, meant for the middle basic level, are also clearly illustrated and are written in simple English that is easy to read and understand.

There is a corresponding pupils' workbook for each year. There is one teachers' guide for Books 1 to 3 and another for Books 4 to 6.

The authors are aware that science and technology (computer studies; and physical and health education inclusive) at the basic level or any other level for that matter is a human activity and relies heavily on the process approach which deals with observation, manipulation, inquiry/raising questions, experimenting, classifying or grouping, etc.

We expect the teacher to use the child's immediate environment as a major teaching/learning resource. Teachers should possess desirable professional attitudes, which predispose them to instil in the pupils (through teaching and modelling) positive attitudinal changes.

The teacher's role remains that of a facilitator of learning. The teacher organises the interactions between the pupils and the objects or learning resources. The teacher contrives situations and learning activities that are capable of stimulating pupils to ask questions and provide 'answers' to these questions. The teacher should allow the pupils to discuss among themselves or in groups and communicate their results in ways appropriate to their level of thinking.

Specialists and well-prepared teachers for primary school science and technology, which now comprises four subject areas: *Basic Science; Basic Technology; Physical and Health Education*; and *Computer Studies*, are most desirable. These are expected to be resourceful, committed, skilful and be prepared to make collections of objects/specimens, improvise charts, aquarium, animal cages, mounted pictures, models (e.g. machines), etc. Intellectual freedom in the science and technology classroom should be permitted by teachers.

I wish to commend all members of the Writing Team for their hard work, cooperation, devotion to duty and their strong determination to complete the project on schedule. We are all grateful to the Science Teachers' Association of Nigeria (STAN) Executive Board for giving us this opportunity to contribute to the development of effective basic science and technology education in Nigeria.

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2016.