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A Short Note on Science Education and its Importance

David Makwerere*

Department of Social Science, Julius Nyerere Social Sciences Great Zimbabwe Universit, Masvingo, Zimbabwe

Short Communication

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***For Correspondence:** David Makwerere, Department of Socio Science, Julius Nyerere Social Sciences Great Zimbabwe Universit, Masvingo, Zimbabwe

E-mail: dmakwerere@buse.ac.zw

INTRODUCTION

Science education is the teaching and learning of science to school children, college students, or adults within the general public. The field of science education includes work in science content, science process (the scientific method), some social science, and some teaching pedagogy. The standards for science education provide expectations for the development of understanding for students through the entire course of their K-12 education and beyond. The traditional subjects included in the standards are physical, life, earth, space, and human sciences [1].

Education sciences or education theory (traditionally often called pedagogy) seek to describe, understand, and prescribe education policy and practice. Education sciences include many topics, such as pedagogy, andragogy, curriculum, learning, and education policy, organization and leadership. Educational thought is informed by many disciplines, such as history, philosophy, sociology, and psychology [2].

DESCRIPTION

Faculties, departments, degree programs, and degrees on education sciences are often called simply faculty of education etc. It is likewise still common to say she is studying education, which is only very rarely expressed as studying education science(s) and was traditionally called studying pedagogy (in English) in most European countries. Similarly, educational theorists may be known as pedagogues depending on the country [3]. For example, a cultural theory of education considers how education occurs through the totality of culture, including prisons, households, and religious institutions as well as schools. Other examples are the behaviourist. Theory of education that comes from educational psychology and the functionalist theory of education that comes from sociology of education. The earliest known attempts to understand education in Europe were by classical Greek philosophers and sophists, but there is also evidence of contemporary (or even preceding) discussions among Arabic, Indian, and Chinese scholars. Science and technology are present in our daily life [4]. In addition, we have recently seen how political decision making draws on science. Indeed, it is important to understand how scientific knowledge is

constructed, and distinguish between scientific and everyday knowledge, and especially tell it apart from fake news and disinformation. Science education aims to increase people's understanding of science and the construction of knowledge as well as to promote scientific literacy and responsible citizenship [5]. We can use science communication to increase science related knowledge among adults, in particular. Popularised non fiction books, exhibitions, science events, and science blogs are excellent ways to improve adults' scientific knowledge. Children and youth receive science education at school, but in addition to this, there are, for instance, various workshops, camps and lectures available to them. Along with these, children and adolescents can learn, among other things, cognitive skills and problem-solving while better understanding the construction of knowledge and the scientific process. These skills help them manage better in our present society. Science education can also generate an interest in university studies, and increase positive attitudes towards science in society [6].

The process of science is a way of building knowledge about the universe constructing new ideas that illuminate the world around us. Those ideas are inherently tentative, but as they cycle through the process of science again and again and are tested and retested in different ways, we become increasingly confident in them. Furthermore, through this same iterative process, ideas are modified, expanded, and combined into more powerful explanations. For example, a few observations about inheritance patterns in garden peas can over many years and through the work of many different scientists be built into the broad understanding of genetics offered by science today [7]. So although the process of science is iterative, ideas do not churn through it repetitively. Instead, the cycle actively serves to construct and integrate scientific knowledge. And that knowledge is useful for all sorts of things: From designing bridges, to slowing climate change, to prompting frequent hand washing during flu season. Scientific knowledge allows us to develop new technologies, solve practical problems, and make informed decisions both individually and collectively [8].

CONCLUSION

Despite the fact that they are subject to change, scientific ideas are reliable. The ideas that have gained scientific acceptance have done so because they are supported by many lines of evidence. These scientific explanations continually generate expectations that hold true, allowing us to figure out how entities in the natural world are likely to behave (e.g., how likely it is that a child will inherit a particular genetic disease) and how we can harness that understanding to solve problems (e.g., how electricity, wire, glass, and various compounds can be fashioned into a working light bulb). For example, scientific understandings of motion and gases allow us to build airplanes that reliably get us from one airport to the next. Though the knowledge used to design airplanes is technically provisional, time and time again, that knowledge has allowed us to produce airplanes that fly.

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