Physical Science Teachers' Experiences of the Junior Secondary Revised Curriculum for Grades 8 and 9, Oshikoto Region, Namibia

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Main Research question: How does the grade eight and nine physical science teachers at both a private and a public school in Namibia experience the implementation of the Revised Science Curriculum of Physical Science (RPSC)?

Background

Before Namibia gained its independence in 1990, schooling in Namibia (the former South West Africa) in general was a privilege, reserved for a minority – whites who were a 'historically advantaged society' (HAS). For instance, education in Mathematics and Science was mostly for white children, who constituted a very small percentage of the population. Furthermore, the former South West Africa/Namibia (SWA/Namibia) government's policies of apartheid and colonialism advocated education for black Namibian people, the historical disadvantaged society (HDS), as a vocational utility intended to supply semi-skilled and unskilled labour (Kandumbu, 2005:1).

After Namibia gained its independence in 1990, the current democratically elected government in Namibia considered it necessary to replace the unfair colonial education system with one system that is inclusive and democratic. The curriculum revised every fifth year after independence. Therefore, the current grades eight and nine implemented their fifth revised curriculum in 2017 and 2018 respectively.

Aim

This study aimed to explore Physical Science teachers' experiences on the Revised Physical Science curriculum for grades eight and nine in both public and private schools in Namibia for the academic years 2017 and 2018. The study is guided by an interpretive theory, driven uniquely by a hermeneutic concept that advocates for the establishment of the understanding by interpreting written or interview texts, or otherwise from various literature, in order to obtain the meaning of the whole.

Methodology

Interpretive approach was used as a research paradigm to get a better understanding of Physical Science teachers' experiences. It is my understanding that interpretative theory attempts to answer the question, 'why do things happen the way they do?' therefore, interpretative theories used as an attempt to answer the research questions.

I employed the theory of hermeneutics that draws on the work of Gadamer's theory, which draws attention to the importance of meanings for the social sciences – that they must be interpreted and understood.

Methods

The study employed document analysis and semi-structured interviews to collect data. The semi-structured interviews helped me to set the tone/motions of the research through an introduction, and the participants articulated their new understandings.

The framework of policy documents analysis help me to justify, confirm or understand what teachers' experiences was during the implementation of the Revised Physical Science curriculum. I employed a conceptual analysis to gain a better understanding of the teachers' experiences in the implementation of the Revised Physical Science curriculum.

Sampling

The study focuses on six Physical Science teachers of grades eight and nine, of which two were Heads of Departments and four were teachers. Heads of Departments do mentor other teachers in the subject/level of their speciality. They are also Physical Science curriculum implementers. Physical Science teachers for grades eight and nine are catalysts in driving the implementation of Physical Science curriculum in the classroom.

Findings and analysis

Documents like the Physical Science Syllabus for Junior Secondary Phase (Old and New curriculum for grades eight and nine) were analysed to justify, confirm or understand what teachers' experiences was during the implementation of the Revised Physical Science curriculum. For example, the study found that grade nine have semi-external examinations to be written at the end of grade nine as from 2018 and no Junior Secondary Certificates issued for grade nine, learners only receive school reports.

Other findings form participants' interviews were : more content in the new curriculum than old one, some topics in the revised curriculum covered more content than in the old curriculum, grade nine assessment differ from the old one, no or lack of textbooks, a lack of extensive teacher training or capacity building, a lack of experimental materials and equipment, overcrowded classes, and inadequate time allocated to cover all specific objectives in the Physical Science lessons for grades eight and nine.

Participants did not only indicate the challenges in curriculum implementation, they also revealed the positive impact on the curriculum implementation as follow: the participants felt that the revised curriculum was a learning curve for both teachers and learners, the curriculum was good, and it had a lot of information.

Recommendation

I recommended to the Ministry of Education to allocate funds specifically for ordering equipment and materials needed for practical investigations, and distribute them to schools through Chief Education Officers in the regions.

I recommend a further study to investigate the factors affecting curriculum implementation, and the best practices supporting teachers to implement the curriculum successfully.

Conclusion

The curricula in Namibia have undergone several reforms and transformations since independence. I have learnt more about the content of curriculum implementation and about other scholars in this field.