



Continuing Professional Development Needs Analysis Report

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5/15/2012

PROFESSIONAL DEVELOPMENT NEEDS ANALYSIS DRAFT REPORT

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ABBREVIATIONS

(BES) Basic Education Support

(BETD) Basic Education Teachers Diploma

(CPD) Continuing Professional Development

(DNEA) Directorate of National Examination and Assessment

(EGRA) Early Grade Reading Assessment

(EMIS) Education Management Information System

(ETSIP) Education Training Sector Improvement Program

(ICT) Information Communication and Technology

(IOL) Institute for Open Learning

(MASTEP) Mathematics and Science Teachers Extension Program

(MEC) Ministry of Education and Culture

(MoE) Ministry of Education

(NANTU) Namibia National Teachers' Union

(NIED) National Institute for Educational Development

(NPST) National Professional Standards for Teachers in Namibia

(SACMEQ) Southern Africa Consortium for Monitoring Educational Quality

(SAT) Standardised Achievement Test

(UNAM) University of Namibia

Executive Summary

This report presents the results of a qualitative study of the capacity building of educators, education managers and school inspectors in Namibia. The study was conducted between January to March 2012 and it employed a document review approach to collect the information on the various CPD programmes undertaken in Namibia in the last ten years (2002-2012). The aim of the study is to assess the training and capacity building needs of educators, education managers and school inspectors, and guide the development of capacity building plan for the CPD Unit and its stakeholders, namely, National Institute for Education Development, UNAM Faculty of Education and Programme Quality Assurance Directorate.

The study found that once the educators have been appointed in their respective positions, they receive very little if any capacity building to enable them to perform in their new positions. The CPD stakeholders have conducted a number of capacity building programmes over the past ten years, in an attempt to improve performance of the educators and subsequently, the learners' performance. However, the impact of these programmes has not been assessed.

The study recommends that capacity building interventions focus on the following areas:

- The SACMEQ Study III recommends that Grade 6 teachers undertake CPD course to improve general education and pedagogy.
- EGRA- Grades 1, 2, and 3 teachers need teacher development in terms of reading pedagogy, measuring the impact of their own teaching and of using the findings to inform their teaching strategies.
- SAT data should be used to inform educators' instruction in Maths and English as the findings show that a number of teachers lacked teaching skills in mathematics as well as content. There is a need to train these teachers in teaching mathematics and also equip them with the necessary content.
- ICT Foundation Level Curriculum for Literacy and Curriculum for the Integration of ICT for educators (ICTED) should be introduced to educators in order to enhance their knowledge and skills in ICT.
- A monitoring and evaluation plan for the NNITP should be developed in order to determine the impact this programme might have made on novice teachers in areas of need. The findings thereof may be used to inform intervention programmes for novice teachers.
- There is a need to train Advisory Teachers in the following areas: Professionalism of AT, compilation of evaluation reports, teaching higher order thinking skills (HOTS),

workshop facilitation skills, curriculum development and implementation, realisation of learner-centred approaches in classrooms, conducting mini research, integrating ICT into the curriculum and improving own computer skills amongst other skills.

1. Introduction

This document presents a synthesis of national needs analysis reports collected through a desktop review and recommendations for further work to be undertaken in continuous professional development. The aim of this report is to provide an overview and synthesis of the situational needs assessment of some parts of the Namibian education system over the last ten years. In addition, the document provides results or conclusion deduced from existing reports and studies done with respect to continuing professional development for teachers, teacher educators and education managers. The word teacher will be used throughout this document to mean practicing teachers, teacher educators, school principals and education managers. The principal objective of this report is to identify areas of need with respect to professional development in the education sector.

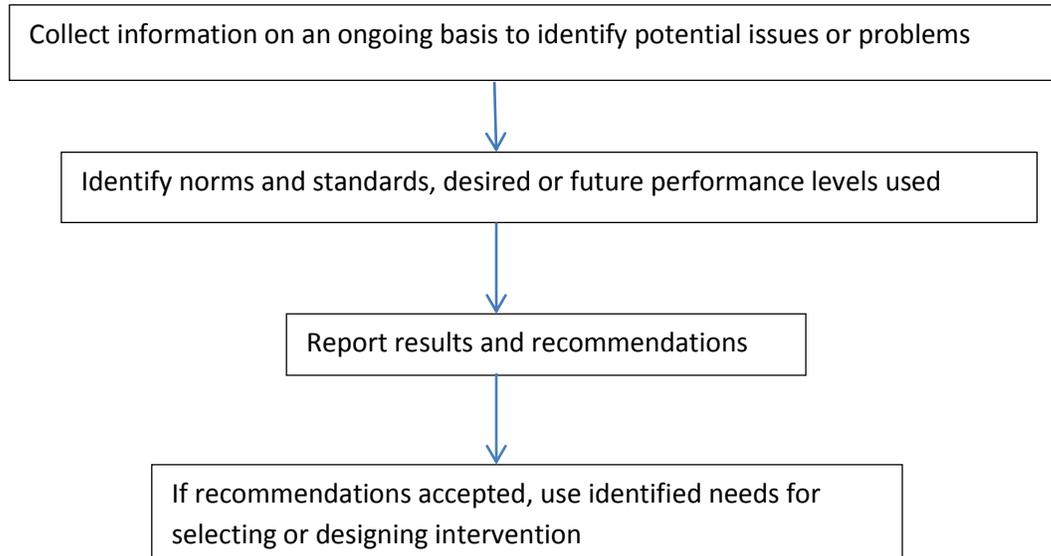
It is expected that the needs analysis will help teachers design effective learning experiences; prepare plans to guide teaching and learning; promote the usefulness of teaching and learning initiatives; help teachers keep their activities in step with current developments; help individual teachers realize their career aspirations and organisations realize their strategic human resources plans; and inform strategic plans of improving individual, group and organizational performance.

2. Design of the professional development needs analysis

This section presents the method used to conduct the professional development needs analysis. The professional development needs analysis is conducted through a desktop review as the documents are readily available and the exercise is cost effective. The desktop review is an exercise to crystalize the national studies that have been conducted in the last ten years since 2002. It is believed that studies conducted in the last ten years may be valid as the situation might not have changed, especially in the remote areas of Namibia. The process followed during the needs analysis is presented below:

The needs-analysis process

A generic process approach to needs was used to ensure that needs are identified and reported. These needs were selected based on the series of key steps followed for a desk review.



3. Document review

This section addresses curriculum issues as highlighted in the Namibian related literature. It reports on the SACMEQ III Project (2007-2010), Early Grade Reading Assessment (EGRA), and Multi Grade Teaching, Standardised Achievement Test (SAT), Mathematics, Information Communication and Technology (ICT), Teacher Education, National Professional Standards for Teachers and Advisory Teachers' Needs are presented in that order.

3.1 The SACMEQ

Namibia participated in two SACMEQ studies first in 2000 and in 2007. The SACMEQ studies have provided valid and reliable data on which important decisions could be based. Specifically, SACMEQ II provided relevant, high quality data about the academic profile of teachers, the level of performance in the areas assessed, school management and other aspects that are relevant for policymaking. A comparative analysis, using cross-national study is important for the Ministry of Education in order to have an overview of the performance of teachers and pupils in other

school systems within the SACMEQ countries. By identifying the weaknesses and the strengths in each system, all SACMEQ countries can learn from one another. However, the results of this analysis should be used with caution, taking into consideration the history, location, economy and culture of each country. SACMEQ II can be considered to be of importance for Namibia's education system since it provides the country with important data to promote a reflection on its primary education sector, to identify the position of Namibia's education system within the region, and to work towards its improvement. For the purpose of this study, SACMEQ III will be discussed in detail.

The SACMEQ III highlights the characteristic of Grade 6 teachers in terms of their personal attributes (such as age and gender), their general education, and their professional training and teaching experience as compared to their counterparts in 2007. The SACMEQ report reveals that on average the participating teachers are 37 years old and most are female (62.4%). Teachers' education and training level varied between Primary (10.5 %, 8.6%) Secondary (83.9%, 84.4%), Teacher training (3.2%, 2.5%) and had teaching experience of 12 years in line with the experience of their counterparts in other countries. The test scores by both the teachers and learners revealed an increase of 11 points in the mean score of 728 and 739 obtained during SACMEQ II and III respectively, showing the overall performance of teachers in the education system. SACMEQ data (UIS, 2006) reveal that in several other Southern African countries tested, teachers do not perform significantly better than their Grade 6 pupils on the Grade 6 test. The results of SACMEQ III report are pending, making it difficult to determine the implication on professional development of teachers in Namibia. However, the general results for all SACMEQ countries revealed that:

- Generally, the teaching force was relatively young given that the retirement age is around 55 to 60 years in most countries. Thus, there would be ample time for any new policy interventions involving these teachers to bear fruit before the teachers reach retirement.
- Teachers should be encouraged to attain desirable (higher) levels of both general education and relevant pedagogical training so that they can be more effective in their teaching.
- The achievement results in reading for both teachers and learners showed large variation. Thus, there is a need for further research on the relationship between the achievement

levels of teachers and the achievement level of pupils in order to ensure that there is a balance between subject matter knowledge of teachers and pedagogical training.

In conclusion of this section, the SACMEQ III study showed that there is a large number of young teachers, especially females with ample time to undertake CPD targeted courses to improve general education and pedagogy. A positive outcome of the targeted CPD programmes may ultimately lead to improved learners' outcomes.

3.2 Early Grade Reading Assessment (EGRA)

The curriculum for the Lower Primary Phase (2005) and the National Curriculum for Basic Education (2010) report on the gaps and inconsistencies in the curriculum. Particularly, the role of phonics in reading is minimally addressed in the English version curriculum of Grade 1 and 2 but lacking in Grade 3. Thus, there is no progression in reading competence between grades. These inconsistencies are being addressed as the curriculum is under review and that the revised curriculum is scheduled to be introduced in 2013. In the meantime, the EGRA is being introduced as an intervention programme to enhance learners reading skills in a long term. It is believed that the EGRA instrument development process will contribute to curriculum review and improvement, especially with regard to the African languages. Also, findings from the EGRA pilot are likely to provide information about reading competencies and reading pedagogy that will reliably inform the curriculum review process.

The EGRA proposal will not only focus on the English curriculum but also points out a need to include the African Languages syllabi; Khoekhoegowab and Oshindonga in the first instance. These have been identified as the languages for the pilot. The EGRA Toolkit (2009) and the recently updated toolkit, Guidance Notes for Planning and Implementing EGRA, (2011) have been of great value in terms of setting the scene globally as to developments with EGRA. A possible divergence between the proposed use of EGRA in Namibia and information in the EGRA toolkit is regarding the uses of the findings generated by EGRA. EGRA might not be an appropriate tool for the generation of systemic information across different languages, because of the different characteristics of each language, nor for making comparisons across countries, as is the case with the SACMEQ and PIRLS trend studies. Rather, the study will focus on establishing 'systemic measures of early reading'. It is also noted that there is a great interest in the use of EGRA by teachers as a means of understanding the component parts of reading

pedagogy, of measuring the impact of their own teaching and of using the findings to inform their teaching strategies. Fortunately, the EGRA instrument is flexible and cost-effective enough for it to be used both as a system diagnostic tool and at classroom level. The lack of understanding of the EGRA concept by teachers might require teacher development regarding the purpose and use of the tool.

To date, this study has not been conducted in Namibia. Results of EGRA in other countries do not have bearing or any association with the EGRA study in Namibia and therefore the results are missing in this version. Once the pilot study is conducted, results thereof could be used to inform CPD programmes targeted towards teacher development in terms of reading pedagogy, measuring the impact of their own teaching and of using the findings to inform their teaching strategies.

3.3 Multi grade teaching

In 2011, the Research Unit at NIED conducted a study on monitoring and evaluation of multi-grade teaching in Namibian schools. The Namibian education system is faced with challenges such as providing quality education, especially to learners in sparsely populated and remote areas. In these areas, the teacher/learner ratio does not meet the specifications as stated in the staffing norms as the number of learners is lower per grade than expected. This problem has necessitated the introduction of multi-grade teaching systems, a concept that became more prominent in the Namibian schooling system after independence in 1990. Multi-grade teaching is a term used to describe the teaching in primary education of children from a number of grades usually in one class. The purpose of the study was to determine the impact of training workshop in multi-grade teaching.

Because multi-grade teaching is not usually included in pre-service programmes, Schaffer (1999) identified a need for in-service and pre-service teacher education to cater for multi-grade teaching and offer support, advice and training in coping with an approach which is fundamentally different from the traditional single grade. These teachers are often left alone to find their way in terms of delivering content to more than one grade at the same time. Many teachers gain experience through practice. Teacher educators need to acknowledge the existence of multi-grade teaching in order for them to prepare teachers adequately in this area. The training

programme should contain material design, creativity and innovativeness as these teachers may be the only source of information especially in rural areas.

The NIED officials developed manuals and conducted training to equip advisory teachers with knowledge and skills necessary for assisting the multi-grade teachers in the regions. This was followed by teacher training on the following topics:

- Definition of multi-grade teaching and the need for its existence.
- Advantages and challenges for multi-grade teaching.
- The organizational approaches in multi-grade teaching.
- The teaching and learning strategies.
- Classroom organization and management.
- Assessment in multi-grade teaching.

The training was followed by monitoring and evaluation workshop in multi-grade teaching in order to explore the knowledge gained during the training was implemented and used to teach the combined grade using the curriculum designed for mono grades.

The study revealed that both teachers and learners did not like the concept of multi-grade teaching. The teachers were faced with problems such as the fact that the 40 minute period was insufficient to teach the combined grades, no teaching material and that classrooms were overcrowded. No visits by advisory teachers and the absence of the multi-grade teaching curriculum exaggerated the problems.

The study recommended that:

- NIED needs to re-emphasise the training on multi-grade teaching with regard to teaching approaches, for example, subject grouping, subject staggering and integrated day which teachers did not use during classroom visits and how to assess learners in multi-grade settings.
- Training model should be changed from traditional cascade training model to capacity building whereby school based practical training should be offered by a trained teacher and co-facilitated by NIED and Advisory services.

- Provision of multi-grade related CPD is essential for improving teaching and learning in multi-grade classrooms. Consider offering on-site CPD with demonstrations for teachers.
- Workshop facilitators need to consider multi-grade teaching during subject related workshops.
- The multi-grade training should be conducted once a term rather than once a year.

3.4 Standardised Achievement Tests

The American Institution for Research has been providing technical assistance to the Directorate of National Examinations and Assessment (DNEA) since 2008, first with funding from USAID (until 2011) and now from Millenium Challenge Account (MCA) Namibia. The National SATs are administered to all Grade 5 and 7 learners nationwide in alternate years. Grade 5 focuses on English and Mathematics whilst Grade 7 focuses on English, Mathematics and Natural Science. The first Grade 5 and 7 tests were administered in 2009 and 2010 respectively. The second (follow up) Grade 5 tests were administered in 2011.

The main purpose of SAT is to monitor the progress of Namibian learners, in the basic skills and competencies required for improved learning outcomes. The tests are short, easy to administer, and come in three parallel forms for each subject and grade. The forms generate national norms and indicate expected levels of performance. The tests focus on key skills in literacy and numeracy in primary grades, and extend to information skills as well as at secondary school level. Form (A) remained in the school, for annual use; Forms B and C remain in the Ministry of Education for regular external use, and a Form D may be required in the future

The rationale for doing the SAT is because there is little monitoring and evaluation of learning outcomes in Namibian primary and lower secondary schools, against national and international benchmarks. In the absence of such benchmarks, teachers, learners and their parents have only limited understanding of how well learners are acquiring key skills, and whether achievement levels are improving over time, in the nation as a whole, and in individual schools. The study has two broad objectives:

- Providing schools with diagnostic information
- Keeping track of the schools' growth from year to year.

The specific objectives of this study are to:

- Show teachers how well their learners are achieving, relative to national norms.
- Help diagnose difficulties of weaker students for remedial action.
- Identify areas of strength and weakness in a class.
- Provide a school baseline against which to set targets for future growth.
- Enable schools to communicate another set of dependable indicators to parents.
- Provide incentives for teachers to work towards improved learner performance.
- Provide models of formal tests for teachers who need assistance with assessment.
- Operationalize the achievement standards and targets required for determining the success of the ETSIP Programme.
- Show teachers how much learning had taken place in their class in one year.

The study claims that these functions are not currently being served at all by the Grade 7 Examinations. The SAT results help teachers use CA marks more realistically by guiding the development of learning activities.

Grades 5 and 8 were selected to participate in this study. Grade 5 represents the beginning of a new phase of schooling, and the learners in this grade have had at least one year of instruction in English. To test a Grade 4 would produce results which were too strongly influenced by poor English. Testing below this level would require the development of many language test forms, which would be costly, and of doubtful equivalence across languages. Grade 8 also represents the beginning of a new phase of schooling. Teachers at this level would benefit from accurate information about the learners that they are responsible for, at a time when they know least about them.

The SAT tests for 2011 were administered by using three test forms (each containing 40 operational questions) in each subject area. Over 80% of the competencies in the curricula were tested. Test forms were administered in each school using a spiral procedure.

In total, 60 000 learners from 1 142 schools participated in the SAT. Of the total population, 49% were girls and 51% were boys. More rural schools (82%) participated than urban schools (18%).

Of the total schools, 95% were public schools. The majority of learners came from Ohangwena region whilst the lowest number came from Omaheke region (3%).

The Grade 5 SAT revealed that in general, the majority of the schools have shown some improvement in English in 2011 as compared to 2009. This finding is not necessarily true for mathematics results for 2009 have shown no significance with that of 2011 (Below basic 46, 43; Basic 44,47; Above basic 8,8; Excellent 2,2). Some schools have improved with 56% scores over the 2009 test whilst other schools have scored lower by 36%.

To respond to the CPD needs, UNESCO sponsored a workshop which offered teacher educators the opportunity to work with the SAT scores. The workshop focused on how to interpret SAT scores and use them to plan their pre-service instructional programmes. This exercise could be cascaded to teachers to learn the same skills: how to interpret the SAT data to inform their own instruction in maths and English. More validity studies need to be conducted to understand the changes and the implications these might have on CPD.

3.5 Mathematics

A number of authors have highlighted that teachers and learners face problems in learning and teaching mathematics in spite of financial and human inputs that the nation had engaged in improving the Mathematics performance in Namibia (Nambira, Kapenda, Tjipueja & Sichombe, 2009; NIED, 2004; DNEA, 2004; SACMEQ, 2004; MASTEP, 2002). Reasons for poor Mathematics performance as confirmed by these reports are: teachers' competencies in mastering the curriculum content, miss allocation of subjects to teachers in the phases as a result of shortage of Mathematic teachers, availability of teaching materials, methods of presentation, learning environment, lesson preparation, gender, and motivation to learn.

These studies showed that learners at Upper Primary phase perform poorly in basic Mathematics skills. SACMEQ II (2004) reported the low performance of the Namibian learners and teachers in Mathematics comparing to the performance of the same group of learners and teachers in the Southern African countries. This study contributed significantly to changes in policy directives, modifications in curriculum and teacher training programmes. SACMEQ II report advanced a number of suggestions addressing the Mathematics problems the Nation is experiencing:

1. to teach Mathematics at Upper Primary phase in education regions;

2. subject specialists from NIED and advisory teachers should arrange training workshops for Mathematics teachers in these regions to address the problem;
3. Mathematics teacher trainers in teacher training colleges and teacher in-service training course providers should emphasise the teaching of higher competencies.

Based on these reasons, NIED conducted two studies with regard to poor performance at Upper Primary Mathematics at national in 2010 and at district levels in 2007 respectively. At national level, the study aimed to investigate reasons for low performance in Mathematics and evaluates the Mathematics syllabus implementation at Upper Primary Phase in Namibia schools. At district level, the aim of the study was to find out the performance of learners in Mathematics in Grades 5-7. More specifically, the study intended to explore reasons for low performance in Mathematics.

The study at national level asked the following questions?

- a) How competent are Grade 5, 6 and 7 teachers in teaching mathematics?
- b) Are there any differences between the regions, gender, teacher qualification, teaching experience and subject specialization on teachers' competence in identifying learners' difficulties in mathematics?
- c) Is there any relationship between teachers' qualification, teaching experience, and field of study, the region where they teach and gender with the competence in teaching mathematics?

The study employed a mixed method approach, using a questionnaire and interviews with teachers and document analysis. Documents such as promotion schedules and CA marks sheets were collected and analysed. A sample for the study comprised of 36 schools and 117 Upper Primary Mathematics teachers. Survey questionnaire were administered to teachers who were later interviewed.

The study showed the following with respect to CPD:

- There seemed to be a consistent pattern between the teachers' gender on topics which were difficult to learners. More female teachers (Grade 6 and 7) conceived that learners

encountered problems in learning and understanding mathematics concepts and skills compared to male teachers. It might be interpreted to mean that female teachers were more careful and patient in observing learners' performance while teaching and assessing them in different competencies compared to their male counterparts. There were slight differences between male and female teachers on learners' understanding and learning the mathematics competencies.

- Some of the teachers in this study did not major in mathematics. Some took mathematics as a minor subject while others did not take the subject as part of their teaching qualification. The findings showed that the teachers who majored in mathematics had the impression that learners did not have problems in learning different mathematics topics and competencies compared to those who had mathematics as a minor. It was most probably or perhaps logical assuming that teachers who majored in mathematics experienced less problems in teaching different topics and competencies to learners and found it easier helping them understand and attain the basic competencies.
- Regarding the teaching experience, the findings revealed that teachers with 1-5 years teaching experience identified a number of topics and competencies on which learners faced difficulties. This could have meant that beginner teachers encountered problems in teaching various topics and competencies as well as solving mathematical problems that learners faced.
- There have been significant differences in the learners' performance based on gender. Overall, the findings revealed that the performance of girls was better than that of boys on a number of topics and competencies in Grades 6 and 7. However, the differences noted in Grade 5 were mainly due to region variations than gender.
- In general according to the results of classroom observations, the quality of teaching mathematics was less impressive. More significant was the fact that teacher who majored in mathematics as field of study demonstrated more competencies in teaching mathematics than those who did not. Competency regarding to lesson planning and preparation depended more on teachers' qualification and the region where teachers came from. Considering specifically the regional differences, the results showed that regions were administered differently – a

situation that contravened the efforts towards attaining equal and quality education for all, synchronising the discrepancies and reducing regional differences in administering teaching and learning processes.

- There were obvious discrepancies among regions on the way teachers delivered lessons, prepared lessons, assessed learners and the availability of teaching materials. Regions were not equally serviced thus jeopardising the efforts towards quality and standard education provision in general and mathematics teaching in particular.

Further, NIED conducted a study on performance of learners in mathematics at Upper Primary Phase in Okahandja district in 2007. The aim of the study was to investigate reasons for low performance in mathematics and evaluates the mathematics syllabus implementation at Upper Primary Phase in Namibian schools. The research focused on the following research questions with regard to CPD:

- How competent are Grade 5, 6 and 7 teachers in teaching mathematics?
- Are there any differences between the regions, gender, teacher qualification, teaching experience and subject specialization on teachers' competence in identifying learners' difficulties in mathematics?
- Is there any relationship between teachers' qualification, teaching experience, and field of study, the region where they teach and gender with the competence in teaching mathematics?

The study employed a survey approach using a questionnaire. The questionnaire was administered to 117 Upper Primary Mathematics teachers. This was followed by interviews with some teachers.

The study revealed the following with respect to CPD:

- Teachers performed very well on lesson delivery. It was deduced from classroom observation that lesson planning and preparation, classroom management, teaching strategies, learners' engagement, assessment and evaluation, classroom as a friendly learning environment, written work and assessment done by teachers was performed satisfactorily. It was also observed that teachers did not apply learner centred approach in

their classes. Inconsistencies in the systemic assessment and evaluation of learners' work were observed in Mathematics classrooms. In addition, rural schools had lack of teaching materials.

- The correlation analysis revealed that qualifications correlated moderately to lesson delivery indicating that the qualified teachers were more capable of delivering effective lessons than unqualified teachers. Improved Mathematics performance in specific teaching competencies depended on the strength of relationship between effect variables and the area of competencies.

The study recommended the following actions amongst others (see Nambira et al., 2009):

- Revisit the assessment of learners in Mathematics in schools.
- Develop mentorship programme for beginning teachers.
- Improve the monitoring and evaluation of teaching and learning.
- Conduct curriculum audits.
- Equip teachers with both subject content knowledge and subject pedagogical knowledge.
- In monitoring teaching and learning emphasis should be placed on lesson preparation, methods of presentation, creation of a friendly learning environment, developing of learning support materials, the use of various assessment procedures, classroom management and organizational skills amongst others.
- Enforce the teaching of higher order competencies.
- Training teachers on the content and pedagogical skills specifically on competencies that learners associate in order to enhance the weaker topics and competencies.
- Teachers who specialized in Mathematics should teach the subject
- The Ministry of Education recruits qualified Mathematics teachers.

These reports have been useful in identifying the needs for Mathematics teachers. The results and recommendations have been summarized as reported. However, it should be noted that the reports lack reliability tests for the quantitative data, raising questions about the quality of the data obtained.

3.6 ICT integration

In all the regions of the world, the introduction of ICT in schools has led to a major transformation of the education systems. To date, there is no consensus as yet regarding the actual benefits of technology in ensuring quality teaching and learning, rather ICT is seen as an integral part of modern education systems. There is a need to ensure alignment between the development of ICT in society, their integration in schools and their use in pedagogy. A number of studies have focused on ICT related issues in Namibian schools as per the policy for ICT requirements.

In Namibia, a National ICT Policy for Education was first introduced in 1999. A review of this policy took place in 2005 resulting in a new National ICT Policy for Education (Ministry of Education, 2005) and the National ICT Policy Implementation Plan (Ministry of Education, 2006). Policy also clearly articulates the relevance, responsibility, and effectiveness of integrating ICT in education to meeting challenges of the twenty first century. The policy recognises that ICT has a role to play in education as a subject and indirectly as a tool to assist in educational delivery and management. It is believed that ICT will bring many more benefits to the classroom and the education process can provide new opportunities for teaching professionals.

The policy stipulates that pre-service and in-service teacher education institutions would be priority areas for ICT deployment, followed by schools with secondary grades (Ministry of Education, 2005). The policy also proposes a detailed implementation plan, curricula, teachers' guides, deployment criteria and technical standards be developed as an addition to this policy. Particularly, the policy is explicit about curriculum reform with respect to ICT integration in Education. It suggests that curricula should promote skills of accessing, managing, and processing information, collaborative working skills, problem solving, and learning to learn concepts. It further proposes that the curriculum be explicit in providing guidance to all teachers and that ICT curriculum be developed as and suitable guidance for the use of ICT in areas of education.

The policy also proposes consideration of curriculum change for pre-service training of teachers. It identifies content development and content software as crucial to teaching and learning and therefore the need to have these developed. Institutions could acquire content when suitable and

cost effective, adapt existing content when cost effective and or develop local Namibian content when needed in subjects such as history, social studies, geography, language and literature. The policy proposes to promote the content through a range of platforms such as websites, audio, video and digital library after a thorough evaluation process to assess the quality of the content.

For purposes of this report, the policy alludes to staff training which encompasses the development of teachers, lecturers, principals, administrative staff and other stakeholders who would require varying levels of training to integrate the use of ICT in their workplaces. In-service, pre-service teachers and education managers are required to have confidence in using ICT including communication via email, understanding the value of integration ICT in learning and teaching, develop confidence in the use of ICT and preferably work towards an ICT qualification, search for, retrieve, prepare and present materials using a computer, understanding of management and administrative ICT systems.

In order to effect all the suggestions, the Ministry of Education reserved funds for ICT in education in the National Budget from 2006/2007 onwards. In addition, stakeholders such as the Global e-School Initiative (GeSCI), SchoolNet Namibia, Namibia Education Training Academy (NETA) and Computer Education Community Service (CECS) have been supporting ICT development by donating ICT resources to schools mostly located in the rural areas. These non-governmental organisations (NGOs) also provide teacher training with regard to ICT implementation in schools.

However, the policy and the implementation plan spells out how monitoring and evaluation is to be conducted. To date, there has been limited M&E done on projects and programmes on ICT in Education in Namibia (Ngololo, 2011, Isaacs, 2009). The most recent evaluations include an independent evaluation of Global eSchools and Communities' activities in Namibia, conducted in 2008 and a review of the implementation by GeSci in 2009. In addition, the studies aforementioned revealed the following with regard to CPD:

- That with regard to teacher preparation for ICT, a foundation level curriculum for literacy and curriculum for the integration of ICT for educators (ICTED) were developed.
- That a number of capacity building courses were executed by the Namibian e-Learning Centre (NeLC).

- That the localized ICT syllabi for secondary school learners were developed and approved
- That the impactful partnerships (e.g with ICDL) for ICT Literacy development have been achieved.

These findings need further monitoring and evaluation to determine if indeed the statements have been implemented in schools and other education institutions. The recommendations will enhance CPD for teachers, school inspectors and education managers in terms of equipping them with the necessary skills that will enable them to perform pedagogically as well as administrative duties.

3.7 Teacher education

In 2001, universal staffing norms for primary and secondary education in Namibia was introduced in the education system in order to establish staffing needs and ensure an efficient and utilization of teachers across the country. The Ministry of Education has noticed with concern significant inefficiencies and inequities of teachers in relation with financial constraints currently experienced. This problem necessitated a study on the demand and supply of teachers in Namibia in 2008. The study had the following aims:

- Assess whether the current status of teacher supply, utilization and demand is appropriate in terms of Vision 2030.
- Ascertain where there is a projected over or under-supply of teachers.
- Assess and correct inconsistencies in policy that affect teacher supply, utilization and demand.
- Assess the utilization of lecturers at initial teacher training institutions and whether such staff is appropriately qualified with an aim to the need for a detailed review of teacher staffing.

With regard to CPD, the study revealed the following:

- Around three quarters of BETD survey teachers have completed or are currently undertaking further studies in order to acquire additional qualifications. Teachers study

independently without formal support or guidance from the Ministry of Education. Only 3-4% of the survey teachers have ever been granted study leave. The majority of the survey teachers (40%) are dissatisfied with the opportunities available for upgrading professional qualifications. The senior management is concerned that qualification upgrading is oriented towards and supply driven and that it may not meet the human resources needs of the education system. There is a need for a training needs assessment and analysis of the course content of the most popular qualifications on offer in order to reach a conclusion about the relevance and overall value of the training courses that teacher opt for. A few teachers enroll for courses in Computing, Maths, Science and Languages and most enroll for education related courses.

- MoE and NANTU, the main teachers' union, reached an agreement in 1999 that all under qualified teachers should have obtained the BETD qualification by the end of 2007. By 2008, about 3, 600 teachers have graduated from the NIED-managed BETD INSET programme and another 900 teachers have acquired the same qualification through the Centre for External Studies at UNAM. The overall success rate of this programme is about 80% although there are questions around quality issues with regard to more recent teacher intakes in the BETD upgrading programme.
- The EMIS statistics revealed that nearly 4,900 teachers in government and private schools were still under-qualified in September 2007. It was anticipated that at least 350-400 teachers would qualify each year between 2008 and 2012 and if not replaced, the number of unqualified teachers would be around 3,000 by 2013.
- About two thirds (13,000) of the number of teachers in Namibia are studying through the Institute of Open Learning in one of the following courses: 1. The Primary Teacher Diploma, which allowed Grade 10 teachers with ECP only to access higher qualifications, principally the Advanced Certificate in Education. This course is currently being phased out. 2. The Advanced Certificate in Education is a two year-course, which is offered in six subject specialisations. BETD teachers are eligible to enroll on this course. Nearly, 30% of the BETD tracer study survey teachers have enrolled on this

course since graduating. 3. Bachelor of Education in Education. Teachers with the Further Diploma in Educational Management (which is also being phased out), the BETD plus one year if specialization and bachelor degree graduates with a Higher Education Diploma are eligible to study for the two-year B.Ed. distance learning programme. The graduation rate in these courses is low as students take much longer time to complete the qualifications. Only 40% passed in 2008.

- The survey teachers (50-60%) rated the availability of in-service training as poor. They perceived the mentoring of newly qualified teachers as weak. The University of Namibia did not act as hub for professional developing by offering in-service professional development, support and activities for schools in the region. Also, there is no system of professional licensing and accreditation of teachers. Once qualified, teachers are not required to undertake regular professional development as part of their continuing accreditation.

The study recommended the following:

- The unqualified teachers (3,000) be replaced by qualified teachers over a period of three to four years. Only able and committed unqualified teachers should be retained beyond 2012.
- Course completion rates need to be increased significantly. Teachers need support in terms of time, financial support and study leave in order to obtain higher qualifications.
- The MoE should undertake a comprehensive training needs assessment for both qualification upgrading and shorter term in service-training. A comprehensive professional development system should consider developing a structured programme of mentoring and internship for unqualified teachers which should enable teachers to be licensed; incentivize participation in CPD activities by having it linked to career progression; linking completion of a specific number of CPD activities to the accreditation and licensing of teachers and make it part of teacher appraisal and development framework; integrate professional development activities with the work of

TRC's; and establish an appropriate incentive structure for qualification upgrading should also be considered in order to ensure that teachers are guided into priority areas.

3.8 National Professional Standard for Teachers in Namibia (NPST)

In response to some of the recommendation of the study on teachers' supply and demand, the National Professional Standards for Teachers in Namibia (NPST), as part of Education and Training Sector Improvement Programme was developed in 2007. It required the implementation of a state-mandated induction programme for novice teachers. It is believed that pre-service teachers' preparation programmes are designed to provide teachers with general knowledge, skills and attitudes needed for effective teaching but cannot totally prepare novice teachers for many of the specific problems they must deal with during their transition into in-service teaching. Many novice teachers, for instance, need assistance with adjusting to their new professional environment, organising and managing their classrooms, understanding the curriculum and obtaining teaching resources.

The basic principles of the envisaged system of teacher induction, including the goals and methods, were proposed in the supporting materials of the consultancy report for the NPST. In addition to recommendations regarding pre-service and in-service teacher training and certification policies, the report outlined detailed recommendations for a system of teacher induction. Aspects of the programme included (among others): general goals and content, length of training, out-of-school training, in-school training using professional development schools (PDSs), the use of mentor teachers to mentor the newly appointed teachers and it also proposed the roles to be played by various educational bodies and/or stakeholders. Therefore, the Ministry of Education approved the development of a system of teacher induction which includes mentoring as a component, by which novice teachers are to be supported in the initial two years of service in the teaching profession. A number of studies have concluded that novice teachers experience problems during the initial years of their teaching career, which, if not addressed, can lead to negative attitudes, poor instructional performance, and departure from the teaching profession (Scherer, 1999; Harris, 2000; Gordon, & Maxey, 2000; Brewster, & Railsback, 2001 cited in Ministry of Education, 2009). Novice teacher induction and mentoring programmes can solve or reduce the problems faced by novice teachers, improve the quality of

their instruction and thereby retain promising teachers (McCaleb, 1985 & Odell, 1990, cited in Ministry of Education, 2009).

The goals and objectives of the Namibia Novice Teacher Induction Programme are to:

- improve the teaching performance of novice teachers by identifying and encouraging effective teaching skills;
- increase the retention of promising novice teachers in the teaching profession;
- promote personal and professional growth of novice teachers;
- introduce novice teachers to and welcome them in the school- and the surrounding community;
- instill a spirit of reflective practice and continuous professional development in novice teachers;
- mould and encourage professionalism among novice teachers;
- create a sense of ownership of and passion for the teaching profession, and
- enhance capacity building.

It is recommended that the programme be delivered at two distinct levels namely, site-based and cluster-centre as described below:

- **Site-based**, i.e. in-school training which can include a combination of the following activities:
 - Face-to-face scheduled sessions with the principal, HOD, subject head or mentor teacher;
 - Classroom observations of the mentor and other teachers (best practices) by the novice teacher and observations by the mentor teacher of the novice's classes;
 - Study of the novice teacher manual and other resources.
- **Cluster Centre**, i.e. out-of-school training which include workshops, lectures and discussion groups. Out-of-school training focuses on topics directly related to situations the novice teacher will encounter at school, such as teaching techniques, preparing instructional materials, dealing with chronic truants, handling various administrative

duties, and dealing with parents. Workshops are to be followed up by discussion sessions in which teachers relate the information to their own experiences and exchange ideas.

In 2012, the training of ToTs, mentor teachers and principals is underway in four regions including Hardap, Karas, Otjozondjupa and Kunene. The following table shows statistics on the total number of trained ToTs, mentor teachers and principals across three regions, i.e. Omusati, Kavango and Omaheke.

Regions in Priority Order	Date	Training of Mentors in Schools in particular Regions		Total Mentors	Training of Trainers (ToTs)		
		Number of Teachers	Number of Principals		Inspectors	Other (Director (1), Principal (3))	Education Officers (ATs, TRC Managers, Resource Officers)
1. Omusati	July – September 2010	274	274	548	10	1	14
2. Kavango	July – October 2011	296	297	593	11	4	24
3. Omaheke	September 2011	38	38	79	2	3	10
Total		608	609	1220	23	8	48

In total, 1220 Mentors, 23 Inspectors, 1 Director, 3 Principal and 48 Education Officers were trained in the respective three regions. The training focused on the mentoring support, school environment, peer coaching, professional development, formative evaluation and the use of portfolio. Thus far, follow up has been done in only in Omusati, region in the form of a seminar. The seminar served as a monitoring exercise in that it sought to assess and evaluate the implementation of NNTIP in schools with novice teachers. The seminar brought together education practitioners such as principals, mentors, novice teachers, inspectors and advisory teachers.

Through a SWOT Analysis exercise, the seminar uncovered that implementation efforts in Omusati, during 2011 academic year, were hampered by various threats such as:

- Limited opportunities for classroom observation of the novices, their mentors, other teachers and principal.

- Lack of guidance on critical issues, e.g. designing scheme of work, translating CASS in practice.
- Lack of written job description for novice teachers in some schools
- Too many responsibilities being allocated to the novice including the following:
 - Non-promotion subjects
 - None-teaching duties, e.g. extra-curricular activities
- Misplacement of teachers outside their main fields and phase specialization in some schools.
- Not providing systematized induction to novice teachers based on subject specialization.
- Not informing novices about the NNTIP.
- Mentor teachers not fulfilling their responsibilities after they were trained.
- Failure by mentors to engage novices to determine their learning needs.
- Mentors' failure to engage the novice teacher to draw-up the annual mentoring plan.

The seminar concluded that there is need for monitoring and evaluation instruments to determine the outcome of this programme in the respective educational regions. Information obtained from monitoring and evaluation of this programme will be useful in informing intervention programmes for the novice teachers in areas of need pedagogically and administratively.

3.9 Advisory Teachers' Needs

The Directorate of Research at NIED conducted a study on the needs of the Namibian Advisory Teachers in 2010. Advisory Teachers are the educational officials representing the specific subject or group of subjects placed in the regional offices for each educational region- a group of experienced former teachers who advise other teachers on specific subject issues and assist in the development of the subjects at the regional and national levels. The Directorate of Programme Quality Assurance and particularly the Unit of Advisory Services have noted with concern that most advisory teachers lacked experiences on some work related issues, some have not attended any staff development, and those who were appointed long time ago needed to be updated on the current issues in their subject. It was realized that appropriate training could only be done if the advisory teachers' needs were known. The research asked the following questions:

1. What are the most important areas of training you need?

2. Suggest any topic(s) you need to be trained in.

The study employed a quantitative approach, using a questionnaire to collect data. The questionnaire was developed, piloted and distributed to the Advisory Teachers in each educational region. A response rate of 88.4% was attained. The data was analysed using Microsoft Excel.

The study although in its draft form, revealed the following:

- Eighty three percent (83%) of the respondents indicated that they would like to improve their own computer skills", while 82% of them "indicate that they needed training on how to "conduct mini research - data gathering and analysis". The training needed on the computer skills tallied well with 76% of the respondents who wanted training on how to "integrate ICT into the curriculum".
- The Advisory Teachers indicated a need for "Improving own computer skills" and "Integrating ICT into the curriculum". Other areas which came out clearly were "Teaching of the High Order Thinking Skills (HOTS) with 75% respondents; "Curriculum development and implementation" (67%); "Compiling evaluation reports" (63%); and "The qualities of and characteristics of a professional Advisory Teachers" (63%).
- The Advisory Teachers indicated a need for training in HIV and AIDS, 58% particularly on how to "assist teachers who are affected by HIV and AIDS; how to support teachers to" develop teaching materials"; and to possess "skills to facilitate workshop" were both equally considered as important and scored (55%).

In addition, the respondents have indicated their training needs in the following order:

- i) Training on the qualities and characteristics of a professional AT
- ii) Compiling evaluation reports
- iii) Teaching Higher Order Thinking Skills (HOTS)
- iv) Workshop facilitation skills
- v) Issues on curriculum development and implementation
- vi) The realisation of learner-centred approaches in classrooms
- vii) Conducting mini research - data gathering and analysis

- viii) Integrating ICT into the curriculum
- ix) Improving own computer skills

Further, provision was also made for Advisory Teachers to express more needs that were not presented in the questionnaire. The results were as follows:

- (i) Integration of environmental education in learning
- (ii) Methodologies on the teaching of reading (literacy)
- (iii) Compensatory teaching
- (iv) Thematic teaching
- (v) Multi-grade teaching
- (vi) Human right issues
- (vii) Monitoring and evaluation tools for national standards
- (viii) Subject knowledge in the teaching of African languages
- (ix) Counseling of teachers
- (x) Textbook evaluation skills
- (xi) Preparation and presentation of effective visual AIDS
- (xii) Management and leadership skills
- (xiii) Report writing
- (xiv) Teaching learners with special needs

The Needs Assessment was necessary to develop baseline data for use in designing training programmes for the Advisory Teachers within the education system in the Ministry. A number of useful observations were made from the survey. It can therefore be concluded that the majority of Advisory Teachers need training on the following areas:

- a) Training in how to conduct mini research - data gathering analysis
- b) Improving one own computer skills
- c) Integrating ICT into the curriculum
- d) Training on the qualities and characteristics of a professional AT
- e) Compiling evaluation reports

- f) Teaching Higher Order Thinking Skills (HOTS)
- g) Workshop facilitation skills
- h) Issues on curriculum development and implementation

As earlier stated, this study is still in its draft form and the recommendations were not drawn from the analysis done. It is of utmost importance that this study be completed and generate evidence based recommendations. The information will be useful to inform intervention programmes that will enhance the management and pedagogical skills of the Advisory teachers.

10. Recommendations

The SACMEQ Study III recommends that Grade 6 teachers undertake CPD course to improve general education and pedagogy.

EGRA- Grades 1, 2, and 3 teachers need teacher development in terms of reading pedagogy, measuring the impact of their own teaching and of using the findings to inform their teaching strategies.

Teachers should be trained on how to interpret the SAT data in order to inform their own instruction in Maths and English. A number of teachers have not been trained to teach mathematics as a result, these teachers lacked teaching skills in mathematics as well as content. There is a need to train these teachers in teaching mathematics and also equip them with the necessary content.

There is a need to develop courses in Foundation Level Curriculum for Literacy and Curriculum for the Integration of ICT for educators (ICTED) in order to enhance educators knowledge and skills in ICT.

There is a need for monitoring and evaluation of the NNITP to determine the impact this programme might have made on novice teachers in areas of need pedagogically and administratively. The findings thereof may be used to inform intervention programmes for novice teachers.

There is a need to train Advisory Teachers in the following areas: Professionalism of AT, compilation of evaluation reports, teaching higher order thinking skills (HOTS), workshop

facilitation skills, curriculum development and implementation, realisation of learner-centred approaches in classrooms, conducting mini research, integrating ICT into the curriculum and improving own computer skills amongst other skills.

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