



**SUBMISSION ON THE NATIONAL CURRICULUM AND
ASSESSMENT [POLICY STATEMENTS FOR ALL SUBJECTS
LISTED IN THE NATIONAL CURRICULUM STATEMENT GRADES
R -12 (No. 784 of 2010)**

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General Comments

Last year we welcomed Minister Motshega's efforts to simplify the curriculum and provide more guidance to teachers. However, after examining the much anticipated Curriculum and Assessment Policy Statements, we are very concerned that these are inconsistent and patchy. We are also concerned that in spite of an extension there is very little time available for public comment.

Each of the subject documents opens with background and overview section and provides the general aims of the curriculum. The document explains the commitment to social transformation and to fostering critical thinking. The commitment to progression from grade to grade and to the development of more complex knowledge is also highlighted. However, these elements are missing in most of the draft curriculum documents, and this may lead to confusion and disparities across subjects.

A key aim of producing the new documents was to provide more specific guidance for teachers. Teachers need to know what the level of difficulty is and how best to prepare learners for exams. This is not provided in the documents. The guidance across subjects is very varied and the cognitive challenge dimension is only taken note of in some subject documents. The organizing principles of the particular curriculum are not spelled out.

The curriculum documents themselves are all very different and there has been no attempt to standardize these documents. In some documents there is no page numbering in making it difficult to follow the document.

It is essential to provide teachers with guidance on how to work with the new documents. The key concepts, depth, scope and range needs to be specified in each of the documents and more guidance needs to be provided on levels of cognitive challenge.

The guidance offered on assessment varies from subject to subject. Some documents offer broad guidelines while others are more specific. It is a pity that so little use has been made of assessment examples in the documents.

Finally, we are concerned that there is very little time to finalize these documents before next year, and to prepare teachers to implement the changes. This could once again lead to further teacher confusion and anxiety.

This submission was prepared after consultation with schools around the country and we offer their comments, as practitioners are best able to give critical insight into the proposed changes. Teachers welcomed the attempt to streamline and package the curriculum so that struggling teachers have a clear plan of delivery. However, there are contradictions with regard to the intention of the changes and the actual changes; for

instance, the items that are prescribed as a part of the school-based assessment marks continues to be onerous in terms of the number of assessments that are required. The Curriculum needs more work before it can be implemented and more consultation with grassroots personnel is needed. Additional time to develop text material is essential. There is a real concern that there is insufficient time to execute this before the start of 2011.

We have ordered this submission by subject under the following headings for each phase:

- General Comments
- Time Allocations
- Strengths
- Concerns.

We have only included subjects on which we received comment. Some subject comment is more comprehensive than others.

(a) FOUNDATION PHASE

1. General comments

The CAPS are user friendly and easy to understand and follow. The simplicity and precision makes it easy for new and inexperienced teachers to follow.

There is good content which allows teachers to be creative and also gives leeway for teachers to apply their own ideas.

Enough focus on critical outcomes makes it easier for teachers to work towards such outcomes.

There is sufficient emphasis on physical movement in the curriculum which is good.

Too much time is allocated for First Additional language and therefore not enough time is allocated for Generic Home language.

It is very disturbing that Religion Education is not incorporated in any systematic way into life skills although there is a possibility of this being included in the 'New Beginnings' section of Life skills.

2. GENERIC HOME LANGUAGE

2.1 General Comments

As provided for in the foundations for learning programme, lesson preparations should be given on a day to day basis to ensure that teachers synchronize their ideas as well as put together activities to be done in class.

Extensive workshops need to be held to make sure that teachers have full knowledge of the changed delivery of the curriculum and what is expected of the teachers when they engage with the learners. Contact time is of paramount importance and the teachers focus needs to be teaching.

The overview of the new curriculum does not stipulate all the language aspects to be covered in each term.

2.2 Time Allocation

Time allocation of six hours a week for the home language is insufficient. At least two hours a day is required to ensure that all areas in literacy are adequately covered especially in grade three.

Twenty minutes a day for guided reading for two groups is unrealistic, each reading group would ideally require 20 minutes, taking into consideration flash, phonic, comprehensions and discussion of the material. The quantity of time spent during the guided reading ensures good progress in all other learning areas.

2.3 Strengths

Outcome and targets are clearly outlined and gives the teacher the suggested contact time for this to be achieved. Resources are indicated and ideas for assessment are suggested under every outcome expected of the learner. This acts as a good structural guide for the teacher to perform his or her task.

The home language curriculum specifies the expected outcomes in all three grades. In these grades the curriculum specifics are divided into, listening, speaking, phonics, reading, handwriting, writing skills and language.

The curriculum gives clear and precise guideline for teachers to follow in order to achieve what is required at the end of foundation phase.

2.4 Concerns

Teacher resourcing/ skills/ retooling to help effective implementation of CAPS is important. We cannot assume that all teachers know what is expected of them. A number of terms used in the CAPS document need unpacking and clarification for teachers e.g. modals, orthography, disjunctive, conjunctives, register, spelling

rules. A backup teacher's guide or resource manual that is user friendly and simple would be key when implementing the curriculum.

3. FIRST ADDITIONAL LANGUAGE

3.1 General Comments

In Schools where the medium of instruction is English, more time will be needed to teach the home language especially in lower grades. Specific skills stipulated in the home language should also be applicable in the first additional language.

More emphasis in grade one should be given to oral work and word recognition. In grades two and three written work should take precedence in order to apply what is learnt orally.

3.2 Time Allocation

Four hours per week might have serious implications on staffing; additional staff might be needed to meet time requirements.

3.3 Strengths

The curriculum gives good guidelines for teachers to follow in order to achieve what is required at the end of the foundation phase.

3.4 Concerns

The nature of the curriculum requires teachers to have special skills and knowledge. Proper and successful implementation of the curriculum will require teachers to obtain these skills.

4. NUMERACY

4.1 General Comments

Much thought and planning has been given to numeracy and all grade requirements to be followed each term are clear and concise. The numerical ranges have remained and there is more emphasis on oral work.

4.2 Overview

Good overviews and preparations have been provided for each term and oral and written activities are well planned in the lesson preparation. Good examples have been clearly noted. Not much of the existing content area in numeracy has changed.

4.3 Time Allocation

The allocated time of seven hours a week in numeracy has not changed and is sufficient for the desired requirement.

4.4 Strengths

The content area is very specific and is divided into five main areas to be taught throughout the year. The five main areas to be taught throughout the year are: Number operations, patterns, functions and algebra, space and shape (Geometry). The content focus guides the teacher on what to teach in the five main mathematics' areas.

The assessment guidelines are still 100% Continuous Assessment, a total of 12 assessments per year; three per term would be more feasible. The assessment should ideally consist of one oral, one practical and one written assessment during the term.

(b)INTERMEDIATE PHASE

1. General comments

CAPS is prescriptive and informative which is good in that every school will know what has to be covered. The content given is good but there seems to be too much in all subjects. Teachers question whether the content has to be covered in the prescribed order. This concern arises out of the absence of a link between the intermediate and senior phase. A further concern was that if workbooks are the only resource for learners it will inhibit good learning. Learners cannot work only out of a workbook but need textbooks as well.

Schools which offer a third Language will have time related issues which will impact directly on time given to other subjects.

It is pleasing to see that Religion Education has a place in the intermediate curriculum albeit a muddled one.

2. GENERIC HOME LANGUAGE

2.1 General Comments

The curriculum covers a lot of work in great detail; clear guidelines on what is to be covered in the curriculum are clearly shown in the curriculum.

2.2 Time allocation

The volume of work in the home language is a concern. Given the time allocated, it will be difficult for teachers to cover all the necessary work needed for learners to progress to higher levels.

2.3 Strengths

The detail covered in grade five home languages is sufficient and is helpful to the learners in progression from one grade to the next.

Assessment guides are clear and easy to follow.

2.4 Concerns

Generic home language in grade four is too prescriptive and the volume could impact on the thoroughness of teaching and learning. This prescriptive nature limits teachers and, due to the curriculum's stringency, teachers are not given the chance to be creative. This might have a detrimental impact on the ability of learners to imagine and construct ideas in their minds.

There is no assessment weighting, making it difficult for the teacher to know what subject matter to emphasize while teaching.

Expectations for grade fours' in the first few weeks are totally unrealistic. There is also too much language in the intermediate phase.

3. MATHEMATICS

3.1 General Comments

A clear comprehensive guideline and structure has been prescribed making it easy for teaching and assessment of learners. This covers all aspects as per previous departmental work schedules.

3.2 Time Allocation

The six hours per week time allocations are clearly stipulated but flexibility is acknowledged, making it easier for teachers to focus and stress on the most important matters without any pressure.

3.3 Strengths

Mathematics being a practical subject requires more assessment exercises to help gauge the learners' level of understanding. This helps the teachers to focus on the aspects with which the learners are having difficulty grasping.

The final mark is not included as a Continuous Assessment mark, this is essential in Mathematics, because it will make learners work hard and strive to understand most of the subject matter covered.

The content outlined has a sequence and very cleverly provides clarification and notes, this will undoubtedly be invaluable guidance to teachers as far as continuity and progression is concerned.

3.4 Concerns

While we are generally happy the mathematics in grade four is too prescriptive and there is a lot to cover. This could impact on the thoroughness of teaching and learning.

4. NATURAL SCIENCE AND TECHNOLOGY

4.1 General Comments

There seems to be an overlap between Geography and the Natural Sciences. This should be reviewed and changed to ensure that learners do not confuse the subject matter. The four key areas of knowledge are listed precisely and clearly which is helpful for the teachers. This outlines what learners are supposed to know and have covered by the end of the academic year.

The sequence for teaching of knowledge is good and caters for any learner that is transferred and for uniformity in schools.

4.2 Time Allocations

The time allocation of 3.5 hours inclusive for both science and technology is insufficient; more time needs to be allocated to incorporate both sections of the subjects since the science section and the technology section might have to be taught separately.

4.3 Strengths

A good guideline for assessment is given; various skills and expected outcomes of the exercises are listed making it easier for the teacher.

Instructional strategies for practical work are given which allows for freedom of expansion of concepts and organizing learning experiences according to local circumstances.

The flow diagram included is good in aiding the integration of science and technology.

4.4 Concerns

Earth and beyond is very detailed and would be difficult for teachers without full knowledge and understanding to teach.

Projects are complicated for learners and can pose challenges especially for under resourced schools.

5. HUMAN AND SOCIAL SCIENCES

5.1 General Comments

The document clearly and simply outlines the objectives that Social Science should cover for the year.

A number of new interesting topics have been introduced which makes it informative for the teacher and learner. This is especially true for long serving staff members who have taught the same topics year after year.

5.2 Time Allocation

Time allocation of 3.5 hours per week is clearly stated, this curriculum shares similar time allocations with the previous curriculum. 15 hours a term for Geography and History respectively is a good indication of weighting detail in each topic.

Good time management is displayed; each topic and subtopic is given individual time frame for the teacher to follow

Time allocations for assessment are insufficient; there is a need to allocate more assessment time since learners are more likely to be assessed separately in Geography and History.

5.3 Strengths

The curriculum has new content; urbanization, reasons for rural urban migration, reasons for the emergence of squatter camps. The new document clearly states the resources needed for teaching.

5.4 Concerns

Weighting of assessment for the end of the year is too high taking into consideration CASS, learners' results might not reflect the learners' ability due uneven weighting.

No textbook has been recommended, the curriculum seems to require learners to own a textbook for the subject. Teachers are encouraged to make use of the internet, how about rural schools which do not have access?

CAPS recommends that each Social Science class should have various Audio Visual equipment. This could prove to be a challenge and a further challenge would be the resources such as printed posters, maps and other diagrams for under resourced schools. The department will need to prescribe a list of resources such as DVDs, CDs and maps to be used to ensure uniformity in all schools around the country. These will need to be provided to the under resourced schools.

Population Geography is a vital topic in Africa and has been omitted in the CAPS. Grade 5 learners need sufficient knowledge about rural-urban migration as a foundation for senior and FET Geography.

(c) SENIOR PHASE

1. GENERIC HOME LANGUAGE

1.1 General Comments

CAPS for Home Language is thorough and well planned but there needs to be improvement when it comes to teaching structure; i.e. “what needs to be taught first?”

1.2 Time Allocation

No time has been allocated specifically for Language rules. What happens to vocabulary, spelling and grammar rules? Languages need to be taught interactively but rules are important. Teachers expressed concern about the rigidity of the CAPS. An example of this would be: Sentence structure needs to be taught earlier in the term in association with conjunctions, phrases and clauses could be moved to a later term.

1.3 Strengths

CAPS covers all aspects that are expected to be covered at this level of learning, it is essential for a language curriculum to be comprehensive since Language is of the utmost importance in the future of learners when progressing to higher grades.

1.4 Concerns

The content of the Home Language consists of many tasks. In some cases the tasks and mark allocations do not tally. The conversion of marks might pose a problem for teachers, how should one get back to the 40/60 totals. Continuous assessment is 40% of the final mark and the end of year examination is 60%. How will “at risk” learners fare if the emphasis is on exams?

Will schools be allowed to adjust the CAPS document to suite special needs in their respective schools?

2. NATURAL SCIENCE

2.1 General Comments

There seems to be an overlap between Geography and Natural Sciences, this might cause confusion for learners, when dealing with either of the subjects. The four knowledge areas are clearly listed; this is a good guide for the teacher since it assists the teacher in knowing what the expected outcomes.

2.2 Time Allocations

Sufficient time has been provided for teaching, assessment and projects; the content is brief and might need the teacher to be creative in expanding on the content to make sure that learners have a three dimensional understanding of the content, fortunately enough time will be available for such since the content is rather manageable.

2.4 Strengths

A good flexible assessment guide is helpful for the teacher; the flexibility of the guide allows for the teacher to be creative in teaching the content and also because of the manageable time allows for individual student attention in schools where student numbers are small.

2.3 Concerns

The content in grade seven provides a good idea on aspects that need to be covered, however this is rather brief, and some guidance with continuity will be helpful.

Natural Sciences at this level have little scaffolding of concepts and little progression. This is a serious problem. It seems that sections were thrown together, rather than the development of a coherent, progressive curriculum.

Resources and textbooks will need updating to include all recommended content and teachers will have to be guided with regard to suitable material to be used. Will the department be able to update text books and train teachers on the updates on CAPS before the implementation dates? Weak workbooks will hamper adequate delivery of CAPS.

3. HUMAN AND SOCIAL SCIENCES

3.1 General Comments

The content of the subject matter is interesting, relevant and well structured. New and revised textbooks will need to be made available to make sure that the subject matter is covered sufficiently. The curriculum has the potential of opening a revised view in the learners' consciousness of our social situation in the past and present.

3.2 Time Allocation

Weekly time allocations are precise and reasonable similar to the 2010 time allocations. Assessment for each term is clearly mentioned together with the time allocation of two hours for revision and feedback; time allocation for revision and feedback has been shortened. Not enough time has been given for project work, though projects are meant for learners to execute on their own a time. Guidance and teaching on how research is done is needed to ensure quality projects.

3.3 Strengths

The CAPS document clearly outlines the objectives that the social Sciences should cover in the course of the academic year. Assessment structure is clearly laid out with the breakdown of percentage marks. Local map work section is very relevant, practical and useful. It is good because it focuses on making the learner use maps in their vicinity other than fearing them as some remote abstractions.

3.4 Concerns

The document stipulates that each class should have specific resources such as up-to-date maps, text book per learner, audio visual equipment and internet access. Poor schools might have a difficulty meeting these requirements and this would result in the content not being taught properly. A comparative study between first world and third world countries should be included in Social Sciences. This would be relevant in the inevitably globalizing village in which we find ourselves.

There are specific assessment requirements for both Geography and History per term which might require learners to be assessed separately in both areas of Social Science. Marks in Geography and History must be indicated separately in learner reports together with the overall mark obtained in the learning area. New reports should accommodate for this. No objectives for this have been started.

4. VISUAL ARTS

4.1 General Comments

This document does not improve on the previous one; it does not create enough of a link to the FET phase. The idea of *Pathways* in which schools select two art forms for study in grade 8 and 9 is welcomed. It is practical but the number of tasks is ambitious for the time allocation.

4.2 Time Allocation

We suggest that these two art forms should be taught *throughout the year* rather than in modules for the purpose of regular practice to build skills for the FET phase subjects. These subjects both need at least a *one hour period* per week due to the practical nature of these subjects. The idea of a *generic class* which will allow for those not interested in either pathway subject as an FET subject choice is welcomed.

Time allocated is too short – etching takes many hours; especially when a whole class needs to print.

The time allocation for the practical exam should be more open-ended. 18 hours limits top achievers.

4.3 Strengths

Two pathways in grade 8 and 9 are good as it takes into consideration the availability of trained, expert staff. It also links to the subjects that are offered in the FET phase.

4.4 Concerns

Final exhibitions are reliant on facilities and space and are not a practical way to assess.

The final exam carries a lot of weight but is not detailed.

Some tasks are not feasible (etching) in terms of expense, facilities and time.

To prescribe a pinch pot with clay lid is problematic as this requires a kiln to which not all schools have access. In addition a pinch pot is very basic - coil or slab maybe.

The tasks are prescriptive; teachers need to be creative in interpreting tasks. There seems to be no scope for this.

Design is stressed but may not be offered at all schools as an FET subject even though it is on the designated list.

Etching is not simple unless it is a simple image that is meant; dry point etching is simple BUT it still requires expensive tools like copper plates/ acrylic or Perspex

sheets, etching needles, ink, and thick paper and expensive equipment – ink rollers and a printing press. Traditional etching requires chemicals, extractor fans, heating plates and resin boxes for aquatint in addition. How many schools will have access to these?

Research is mentioned but there is no indication in the assessment of where it would be assessed. The limitation of only South African art in Grade 12 is of a concern. The links to international art are forced in places

Nation building can be too prescriptive and limiting.

5. TECHNOLOGY

4.4 General Comments

The content to be covered is clear and easy to follow for both the teachers and learners.

The four basic areas covered are; structures, mechanical and electrical systems and control. Underpinning the basic area are the Design Process Skills which must be used in covering the basic content. The layout of the teaching plan for each term clearly spells out the specifics to be covered under each topic in each term. The layout of the teaching plan is clear and precise but needs a prescribed textbook to ensure flawless implementation.

4.5 Time allocation

Only practical application of the new curriculum will prove whether the time allocated for technology is sufficient or no. Two hours per week seems enough but might also be a concern.

4.6 Strengths

Assessment guide is clearly laid out for the teacher in each term; this is helpful for the teacher since the teacher will know exactly where to put more emphasis when teaching.

4.7 Concerns

The break-down of marks and topics for the final summative paper needs to be spelt out since teachers should know which aspects on which to put more emphasis when teaching and to ensure uniformity across schools.

Will the material needed for teaching this subject be made available for both teachers and learners to access on time? Failure to deliver such material on time might result in difficulty when teaching especially in rural schools which do not have internet access.

The requirement that all learners should have a textbook is a good one; however the textbook should be standardized to ensure uniformity. All learners should be supplied with the necessary stationery needed to execute the subject fully in due time. Will this be possible before the start of 2011?

(d)Further Education and Training Phase

NOTE: As insufficient comments were submitted on some of the subjects, general comments have been placed together.

1. General comments on various subjects Further Education and Training Phase

The Physical Science curriculum continues to be loaded with too much of content, rather than trying to provide a depth of knowledge. Universities have criticized the lack of preparedness of learners' in this area. It doesn't seem that school is adequate grounding for University competence. Although set out far more clearly than previously, and the order in which sections are to be taught appears more logical than the previous NCS document, the CAPS for Physical Science still results in a syllabus which is unmanageably long, especially for the Grade 12 year. Sections would have to be dealt with at a superficial level, resulting in rote learning, a loss of rigour and failure to produce the critical, creative and analytical thinkers which this document informs us is the ultimate aim.

Mathematics: In Geometry, theorems are once again back in the examinations. The value of this has been debated ad nauseum at numerous Mathematics fora and the decision to exclude the testing of theorems was met with approval and delight by the Mathematics community. What is the rationale for going back to what is a poor practice?

Afrikaans is weighted less on the oral component than was the case previously. This would not be to the advantage of learners.

The **Accounting** examination has been reduced from two examinations to one. Learners' have traditionally struggled to complete a 3-hour Accounting examination and coped much better when the examination was divide into two separate papers.

The **Information Technology** CAPS introduces Html and XHTML as new concepts, however there are no clear indication of exactly what is supposed to be done. When

assessing CAPS of IT, one gets the impression that OOP is downscaled since no mention is made of inheritance and Polymorphism. Objects of arrays are mentioned as part of the pat project but it is not clear if this will be tested in the practical exam. If object of array is not tested in the exam, how will OOP be tested in the practical exam? There needs to be clear indication of what HTML and XHTML code must be done. There also needs to be clear indication of OOP principles to be done.

2. GENERIC HOME LANGUAGE

2.1 General Comments

There seems to be less emphasis on detail and there is not much improvement for Home Language in FET phase.

2.2 Time allocation

No time is allocated to Language teaching. This is necessary since language is integral and needs to be taught comprehensively especially in grade ten and eleven.

Time allocations are sometimes unrealistically short, e.g. listening to speeches, time allocated for teaching essays, introduction, and stimulus, reading examples, recognition and analysis of components.

2.3 Strengths

The addition made to CAPS Home Language lays out all transactional types and also covers essential language components.

2.4 Concerns

The Language section is mainly about recognition of structures, there needs to be more emphasis on use, manipulation and integration.

An essay of 400-450 words is prescribed for CAPS home language in this phase. Wording should be increased per term to allow learners to express themselves better.

3. GEOGRAPHY

3.1 General Comments

This is a clear document but weak on detail making it hard to fully understand what is expected from the teacher and learners. The document needs to elaborate more. Its compactness might result in poor delivery of the subject matter.

The document provides a clear overview of the curriculum but the document seems to be lacking coherence when it comes to the way that the document has been designed.

3.2 Time Allocation:

Adequate times provided for themes, but the poor design of the curriculum remains a real worry because it might result in the time allocated for the different topics being inaccurate.

3.3 Strengths

The document is clearly laid out and easy to understand, perhaps too easy to follow and understand. The document is simple and gives teachers the drive to implement it.

3.4 Concerns

More detail is needed on the specific breadth of topics to ensure that the learners attain a full understanding of the topics in order for them to relate the topics to real life situations.

Poor grade by grade progression might be confusing for learners and might result in; *“studying for exams and forget mentality”* which defeats the entire purpose of learning which is acquiring knowledge.

4. LIFE SCIENCE

4.1 General Comment

The idea of having a single document covering curriculum and assessment issues is welcomed. The document also serves as a work schedule as the weeks are indicated. This is useful in helping teachers keep pace. The column indicating the required practical work serves to create awareness and encourage the use of practical work in teaching. It is hoped however that teachers will integrate the practical work into the teaching and learning process.

The specific aims correlate with the current learning outcomes. The order however, has been changed. It is recommended that the following order be used:

- Specific Aim 1: Doing science/practical work
- Specific Aim 2: Knowledge/content
- Specific Aim 3: Applications of Life Sciences in everyday life

The above sequence is suggested since:

- Teachers are already using this sequence in the form of the current learning outcomes
- It forms a logical progression from generating knowledge to understanding that knowledge and then applying it in everyday

The specific aims are then further divided into what looks to be sub-aims. These seem to correlate with the current assessment standards. It is suggested that these should be called skills under which sub-skills can be elaborated to inform teaching and learning.

The content has not been sufficiently defined to guide teachers in terms of scope and depth. This would lead to the same topic being dealt with in diverse ways by different

teachers. There needs to be a common understanding, especially when it comes to external assessment tasks.

The following examples are provided:

Grade 10	Page 25	Lipids (fats and oils) – 1 glycerol and 3 fatty acids: unsaturated and saturated fats. Cholesterol in foods. Heart disease.	The statement ‘cholesterol in foods’ and ‘heart disease’ and ‘saturated and unsaturated fats’ does not give clarity on what is to be done. This can be treated superficially or in great depth.
Grade 11	Page 65	<ul style="list-style-type: none"> • uptake of water and minerals into roots □ transport of water and minerals to leaves 	These statements do not indicate whether a superficial treatment is required or whether a detailed discussion of capillarity, root pressure and transpiration pull
Grade 12	Page	Genetic engineering: stem cell research, genetically modified organisms, biotechnology, cloning	The four aspects of genetic engineering included here can be treated superficially by just providing a definition of each OR it can be done in details by including examples, advantages, disadvantages, and ethical issues surrounding each.

Although only one example has been taken from each grade, the lack of specificity is true for all topics across the three grades. Unless this is rectified, it would lead to completely different understandings of the same syllabus. This also greatly impacts on the teacher’s ability to cover all of the prescribed content. Please refer to the Grade 10 and 11 National examination guideline document that was implemented in 2009 and 2010 respectively which has successfully outlined the content in an unambiguous way. A draft exam guideline document (see attachment) has also been developed in our province for implementation in Grade 12 for 2011.

The two aspects of environmental studies in Grade 11 should be swapped. The aspect on Population ecology should now be done in the fourth term in Grade 11. It should also be assessed in the Grade 11 year so as to prepare the learners for the Grade 12 year.

If the above is achieved, then the content areas specified in the CAPS for each grade will be exactly the same as that of the new content framework being implemented currently (2009-2011). This will create a situation that teachers are familiar with and may also help in alleviating the need for new textbooks.

4.2 Suggested Implementation dates

The document does not specify implementation dates for the various grades

It is recommended that CAPS be phased in as follows:

Grade 10: 2014

Grade 11: 2015

Grade 12: 2016

The motivation for this recommendation is as follows:

The original NCS curriculum for Life Sciences was implemented as follows:

Grade 10: 2006, 2007 and 2008

Grade 11: 2007, 2008 and 2009

Grade 12: 2008, 2009 and 2010

Now after just three years, after much time, energy and money was spent by both the national and provincial departments in the training of teachers and purchase of LTSMs a Revised Life we have another change.

Sciences curriculum is being implemented as follows:

Grade 10: 2009, 2010

Grade 11: 2010

Grade 12: 2011

The rushed implementation of the Revised Curriculum also caused unnecessary pressure on all concerned. These revised Life Sciences should be allowed to run its course over five years so as not to lower the morale of both teachers and subject advisors which frequent changing of the curriculum does. It will also justify the large sums of money spent on text books which most provincial departments have recently purchased. The delayed implementation will allow enough time to debate, discuss the curriculum and iron out issues before full-scale training can begin so as to ensure its smooth implementation.

4.3 Concerns

The CAPS document proposes a two-paper system, one with a focus on content and the other on practical work (for Grades 10 and 11). This creates a dichotomy between content and practical work. This contradicts a statement in the CAPS document (Page 6) which states that ...'cognitive and practical skills must be taught and assessed in an integrated way...' It also prevents the principle of integrating the various specific aims within a single assessment task.

In addition even though Paper 2 will be the practical paper, learners will still have to, once again, know all of the year's content, as this underpins all of the practical work done. This makes an undue demand on the learners.

In Grade 12, the CAPS document proposes the second paper consisting of an essay or shorter paragraph questions. Once again learners will still have to know all of the year's content for both Paper 1 and Paper 2. This makes an undue demand on the learners.

The number of tasks has been increased from 7 to 16. The curriculum review process was meant to address the overload on the teachers, but this increase contradicts that intention. There was no deviation in the number of tasks proposed in the CAPS document for Physical Science.

A larger number of assessments are favorable to improving knowledge in the subject, but many of these should form part of the informal assessment component for developmental purposes. The large number of tests and practicals used in the different terms are meant for development purposes (allowing learners to make mistakes and learn from their mistakes) and it is therefore unfair to use these tasks as part of formal assessment. It is sufficient to use the controlled test/exam (which is balanced in terms of specific aims and cognitive levels) at the end of a term for formal assessment, using the other term tests as preparation for the end of term test/exam.

It was the intention that the CAPS document should be comprehensive such that it does not necessitate any supporting documents. In this regard, the CAPS document does not clearly describe each type of assessment. For example, a teacher may choose to construct all tests using only objective questions whereas another teacher may focus more on graph-drawing and essay writing. Further a teacher may have all tests out of a maximum of 10 marks as opposed to another teacher using 50 as the maximum mark. The results of the learners of these two teachers are now not comparable and therefore compromise on the issue of reliability, fairness and validity.

The nature of the practical tasks required should also be specified to avoid teachers focusing on a narrow range of skills. The range of maximum marks proposed (10-30) could result in varying quality and standards of the assessment tasks developed.

The nature of a project should also be described in terms of length, maximum marks and skills to be addressed. A project, while acceptable for Grades 10 and 11, should not be a requirement for Grade 12 in view of time constraints in the Grade 12 year.

It is firmly suggested that the current formal assessment program being used in schools be retained in terms of the number, nature and weightings of the various

assessment tasks. The current SAG document contains descriptions on the nature of each assessment type required. Teachers are familiar with the current form of the formal programme of assessment.

The essay/paragraph question that is proposed for Paper 2 in Grade 12 can still be assessed in each of the two papers we have proposed.

Format of final examination paper

The idea of a two-paper system (2 x 2 ½ hour papers = 5 hours) is practical, but propose a division into the two papers by a delineation of the content with the maximum marks of the current papers. This would allow for more detailed assessment of the topics covered in each paper in 5 hours than would be achieved in the proposed 3 hour paper. In addition, practical work will be assessed in each paper in an integrated way with the relevant topics of each paper (in line with the principle of integrating theory and practical work). The division of topics into each paper also assists the learner in planning for their preparation for the examinations. This is a further advantage to English second language learners who are in the majority.

Cognitive weighting

The CAPS document proposes three instead of the previously-used four cognitive levels without any rationale for this change. The four cognitive levels should be retained since:

- it was used in the past
- it is being used currently
- it has been proposed in the CAPS document for the Physical Sciences

Teachers have been trained over the years on the use of four cognitive levels in the setting of assessment tasks and this should therefore not be changed without sound reasons.

In addition to the above, the CAPS document conflates the specific aims with the cognitive levels. This CANNOT be done. There is not a one to one correspondence between the specific aims and the cognitive levels. Content (specific aim 1 in the CAPS) can be assessed at all cognitive levels (as was done previously and currently). What new research has led to the new position?

It is suggested that the cognitive levels, together with their weightings, be retained as is currently being used in the Life Sciences. The weightings of the specific aims are the same as the parallel learning outcomes being used currently.