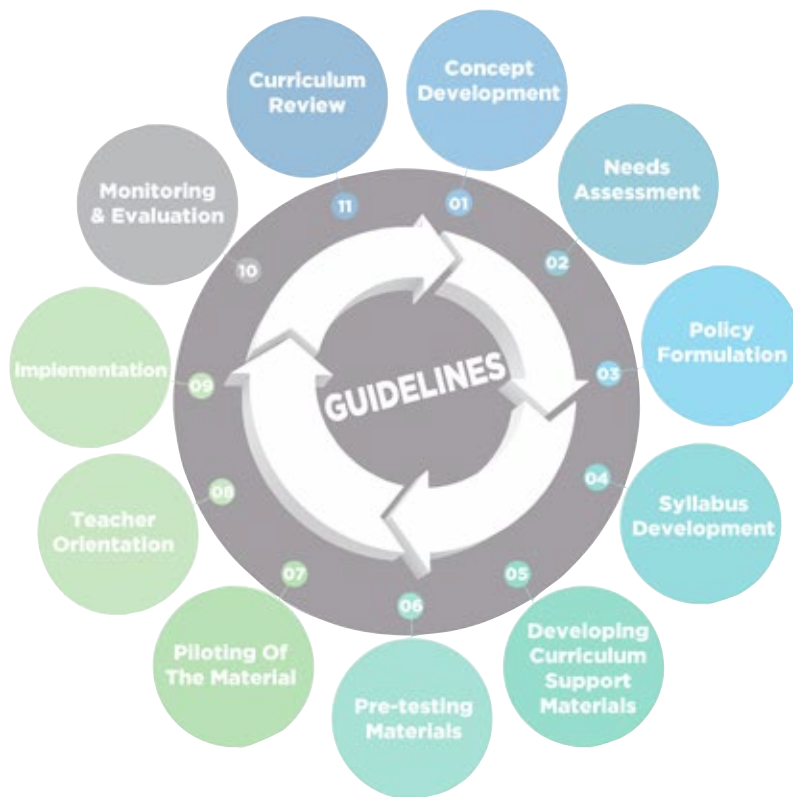


GUIDELINES TO THE **CURRICULUM DEVELOPMENT CYCLE**



NCDC
NATIONAL CURRICULUM
DEVELOPMENT CENTRE



GUIDELINES TO THE **CURRICULUM DEVELOPMENT CYCLE**



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FOREWORD

The National Curriculum Development Centre (NCDC) is committed to ensuring that all the key stages in curriculum development cycle are followed so that the products from this process are of a quality high enough to meet both national and international standards in education.

NCDC aims at building a firm foundation of excellence in curriculum and instructional materials development.

The Guidelines are meant to document and guide on the key stages which are followed before, during and after the curriculum development process. These Guidelines, as a reference material, will help the curriculum developers as they execute the mandate of the Centre and provide information to educators on the work done at NCDC. I therefore recommend the curriculum specialists to always refer to these guidelines during the curriculum and instructional materials development process.



Prof George Openjuru

Chairperson
Governing Council

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The National Curriculum Development Centre (NCDC) appreciates all those who worked tirelessly towards the development and production of the *NCDC Guidelines on the Curriculum Development Cycle*. The Centre recognises the contribution of the members of the Quality Assurance and Publishing Department who put together the information in the Guidelines.

Gratitude goes to the departments under the Directorate of Curriculum Review and Instructional Materials Development and the members of the Academic Steering Board for their invaluable contributions towards the improvement of the Guidelines.

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NCDC takes responsibility for any shortcomings that might be identified in this publication and welcomes suggestions and amendments to the material for effectively addressing whatever inadequacies there might be. Such comments and suggestions may be communicated to NCDC through P. O. Box 7002 Kampala or email admin@ncdc.go.ug or through our 'Contact Us page' on our website at www.ncdc.go.ug.



Dr Grace K. Baguma

Director

National Curriculum Development Centre

ABBREVIATIONS AND ACRONYMS

| | |
|-------------------|---|
| ASB: | Academic Steering Board |
| HoD: | Head of Department |
| MoES: | Ministry of Education and Sports |
| NCDC: | National Curriculum Development Centre |
| QA: | Quality Assurance |
| QA&PD: | Quality Assurance and Publishing Department |
| SENs: | Special Educational Needs |
| SIGs: | Special Interest Groups |



DEFINITION OF TERMS

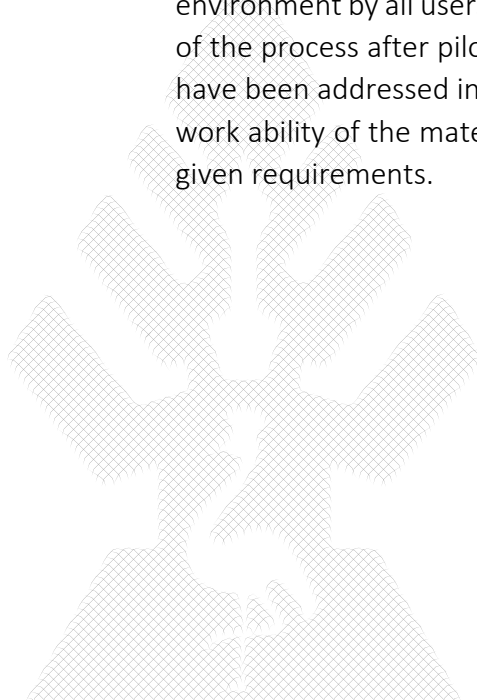
| | |
|---|---|
| Learning outcomes: | Measurable changes in what the learner can do as a result of receiving instruction |
| Quality assurance: | Management practices in an organisation or institution that are directed towards meeting or even exceeding the expectations and satisfaction of the stakeholders reliably and consistently. It is a practice of fitness for purpose. |
| Special educational needs: | Approach which seeks and takes cognizance of learning difficulties or disabilities and mitigates them as barriers to learners' active participation in learning, so as to widen the learning opportunity in accordance with their potential |
| Learners with special education needs: | Learners whose capacity and pace of learning, comprehension, or retention of educational content is partly hindered by one or several deficiencies on their body and/or mind |
| Alpha testing: | Part of the curriculum development process, where parts of the developed curriculum materials are pre-tested in the user schools to establish the strengths, weakness/gaps that inform improvement of those materials before finalisation of their development. |

Pilot testing:

When the developed curriculum materials are given to a selected group of teachers (for a relatively longer time) to use them as they identify particular gaps, to inform improvement in those materials. The feedback from the users is obtained after a given period of time.

Beta testing:

Testing of the materials in the user environment by all users, done at the very end of the process after pilot testing and the gaps have been addressed in order to establish the work ability of the materials in relation to the given requirements.



1.0 INTRODUCTION

1.1 Background

The National Curriculum Development Centre (NCDC) is a corporate autonomous statutory institution under the Ministry of Education and Sports (MoES), established by the NCDC Act Chapter 135, Laws of Uganda, and as amended 2021. It is responsible for the development of educational curricula for Pre-primary, Primary, Secondary and some Tertiary institutions in Uganda. The Centre's functions include, inter alia; initiating processes for curricula research, review and/or reform, updating, testing and coordinating the implementation of educational curricula at Pre-Primary, Primary, Secondary and Tertiary, as well as promulgation of guidance for the implementation of improved educational curricula and pedagogy.

A curriculum is intended to provide a country with a strategic and measurable plan for delivering and achieving quality education. It helps in identifying the learning outcomes and the competencies that the learners require for progression to higher education levels. And so, curriculum development requires attention to key steps and principles, through implementation to monitoring, evaluation and review. Through strict adherence to these steps, one can come up with quality curricula and support materials.

These Guidelines will therefore support curriculum developers in the four (04) key phases of curriculum development: the planning, content development, implementation, and monitoring and evaluation to inform curriculum review as well as help in the development of syllabus documents and curriculum support materials such as textbooks, teacher's guides, reading books and non-textbook materials in a smooth and harmonised manner.

1.2 Rationale for the Guidelines

The purpose of the Guidelines is to provide guidance and basic information about the curriculum development processes to the curriculum developers at the NCDC in form of a checklist to ensure systematic flow of the work and adherence to all critical development stages.

The Guidelines will also be helpful to other stakeholders in education, such as curriculum implementers, policy makers, education researchers, politicians, and the general public, in the understanding of the curriculum development process.

1.3 How to Use the Guidelines

The Guidelines provide information on curriculum development and all stages of the curriculum development process. Before you start developing curricula or curricula support materials, the departments under the supervision of the Managers will need to read through the Guidelines to get familiar with the process and ensure that no step is missed from the initial stage to approval and roll out of the materials. It is the responsibility of the Managers to ensure that the guidelines are followed.

1.4 Role of a Curriculum Developer

It is important to begin by understanding the role of a curriculum developer, since he/she is the central player in the curriculum development process. The roles in a summary are to:

- i) Identify gaps in the subject area that need to be addressed
- ii) Develop a concept paper spelling out the gaps, how to address them and the impact it will make
- iii) Come up with a working document that will constitute the point of discussion by the panel
- iv) Convene panel meetings and act as secretariat
- v) Fine-tune the panel's output and produce the first draft and
- vi) Present the first draft from the panel to the Manager of the user department, for quality assurance.

2.0 CURRICULUM PLANNING, DESIGN AND DEVELOPMENT

2.1 Curriculum

The term curriculum is sometimes used to refer to the planned sequence of instruction. As such, a curriculum contains much more than just the syllabuses that the learners study at a particular institution.

A standard curriculum consists of a statement of the purpose, the intended learning outcomes, the essential resources to be used in the teaching and learning process, the suggested teaching approaches, assessment criteria, the methods for verifying the effectiveness of the teaching and the course syllabus.

2.2 Key Attributes of a Curriculum

The quality and value of any curriculum is seen in the ease and efficiency with which it is implemented. In the process of curriculum development, the developer should be reminded of some of the following key attributes of a curriculum:

- i) Promotes the national aims of education.
- ii) Promotes interdisciplinary approaches where appropriate.
- iii) Establishes a clear philosophy and goals that guide the curriculum.
- iv) Establishes sequence between the levels and coherence in progression between levels/grades.
- v) There flexibility and with allowance for experimentation, innovation and room for amendment and/or improvement.
- vi) Has methods of assessment for achievement of the goals, aims and learning outcomes.
- vii) Provides for cultural and religious diversity, and emerging issues such as generic skills (critical thinking, creativity and innovation, communication, collaboration, problem-solving, digital literacy, ICT integration, SNE).
- viii) Guides on resources required for implementation.

2.3 Curriculum Planning

Curriculum planning is a systematic practical plan of action that is created with a list of strategies, expected learning outcomes that are generated for any subject or learning area, and clearly spells out where teaching and learning activities should be focused and how to get there.

In this case, therefore, curriculum developers are concerned with making critical, careful and informed decisions about what the learners should learn, why it should be learnt and how the teaching and learning processes should be organised. This should take into consideration aspects like assessment strategies, satisfaction of stakeholder needs, the available resources, and the key emerging issues. After executing careful planning for the prospective curriculum, the curriculum developer will then embark on the task of curriculum development.

2.4 Curriculum Development

Curriculum development is the construction of a syllabus and coming up with a practical plan of action and strategies for developing effective delivery methods (Chiu, 2020). This process helps to come up with a workable and relevant curriculum for particular levels of learning. A typical curriculum development process involves activities like concept development, needs assessment, policy formulation, syllabus development, development of curriculum support materials, alpha testing, pre-testing the materials, piloting the materials, orienting teachers, actual curriculum implementation, monitoring and evaluation and, lastly, reviewing the curriculum.

2.5 The Curriculum Development Process

The process of curriculum development is cyclical in nature, with iterative back-and-forth processes, to ensure that all the crucial stages are followed.

The curriculum development process can be categorised into five basic steps:

1. Needs assessment
2. The planning session
3. Content development
4. Pilot delivery and revision
5. The completed curriculum package

Ideally, the entire curriculum design process should take a minimum of 12-18 months.

1. Concept development

At this stage, the curriculum specialist/developer starts by writing a concept paper on the proposed curriculum material, indicating the need for establishing the existing gaps in the society vis-à-vis the existing curriculum. This concept goes through the required stages of approval, up to the NCDC Governing Council.

2. Needs assessment

The process of curriculum design and development at NCDC begins with a research into the society aspirations, so as to gather information about the needs of the society and to analyse the performance of the existing curriculum *vis-a-vis* the stakeholders' needs.

Data from a needs assessment helps the curriculum design and development team to fully understand the existing gaps and expectations for the completed curriculum. It should answer the following questions:

- i) What are the societal expectations of the material at a given level?
- ii) What are the weaknesses or gaps which need to be addressed?
- iii) What are the strengths that need to be maintained?
- iv) What are the global and regional benchmarks to borrow from?

Planning:

The process of planning helps to come up with a workable and relevant curriculum at particular levels of development. Typical outcomes from a planning session should include:

- i) Overall expected programme outcomes
- ii) Outline of major content focus areas (as specific as possible)
- iii) Suggested instructional and assessment strategies for each content area
- iv) Draft outline of the training programme agenda (including tentative blocks of time for each content area)
- v) Draft performance objectives for each content area
- vi) Content development assignments with frames for completion.

3. Policy formulation

The gaps identified in the needs assessment lead to the demand for policy formulation, in order for these gaps to be transformed into Government programmes, because they may directly influence the development of the country. The curriculum developers can equally have a benchmark on the existing policies.

4. Syllabus development/Curriculum review

a) Content development

This is the work that is generated as a result of the Planning Session, and it is the heart of the curriculum development process. In this step, performance objectives are finalised for each content area, instructional strategies are developed for each performance objective, and as a result, lesson plans, participant materials and

training aids are developed by the team to guide participants to successfully meet the expected programme outcomes and module performance objectives. This is the lengthiest activity of the curriculum development process.

The activity includes identification of the writing panels, writing of the instructional and assessment strategies, and the development of the content. The detailed activities under this stage are as follows:

- i) At department level, the subject specialist prepares a working document such as the learner's book, teacher's guide training manual or the syllabus-scope and sequence commonly referred to as the zero draft.
- ii) The working document is presented to the writing panel for fine-tuning, to come up with the first draft.
- iii) The specialist fine-tunes, harmonises the first draft, alpha tests it (after developing the alpha testing tools, identifying schools, training teachers on the material, and printing the material that is going to be used) and uses the feedback from this test to come up with the second draft.
- iv) The second draft is presented to the writing panel for fine-tuning, in preparation for presentation to the Manager of the user department for quality checking, so as to come up with the third draft.
- v) The third draft is presented to the line Directorate for recommendation for quality assurance.
- vi) The material is subjected to the quality assurance process and the reports from quality assurance are sent to the department through the line Directorate for actions.
- vii) After attending to the comments from quality assurance, the Manager of the user department verifies whether the comments have been addressed or not and writes a compliance report to the line Directorate.
- viii) The fourth draft is presented to QA&P Department for editing in preparation for presentation to the NCDC Top Management and ASB for discussion and recommendation to the Governing Council for approval.
- ix) The final document, with an action matrix and a compliance report signed by the ASB review committee, is presented to the NCDC Governing Council for approval.
- x) Final editing and styling of the document by QA&P Department is done.
- xi) The document is presented to the Research Directorate for layout and design.

xii) Proofreading and checking the dummy is then done before printing and distribution.

b) Development of the support materials

Developing the curriculum support materials, such as orientation manuals, textbooks, science material, digital material, braille material, sign language, kits, handbooks etc. follow the same steps highlighted in 4 above.

c) Trialling of the materials

Pre-testing of the materials, both the syllabus document and support materials, is very useful in helping to establish the reliability and validity of the materials. This is conducted during the writing stages and helps in providing information such as in relation to the appropriateness of the time allocated to a topic and the suitability of the content and suggested assessment strategies, to the level of the learners.

d) Implementation or roll out of the material to the schools

Teacher orientation/preparation is meant to build the capacity of teachers on how to understand and interpret the curriculum for its effective implementation. This activity begins with the development of the training manuals and the materials required during the training. This can be carried out using the cluster model or at school level, which is also known as school-based training. After the orientation, the teachers start teaching following the rolled-out curriculum.

e) Monitoring and evaluation

During the implementation or roll out, it is important to monitor and offer support to the implementers of the new material. This is meant to not only help the implementers get accustomed to the material, but also the curriculum developer to identify the training needs and future review areas. The data from the monitoring gives information on the performance of the material, that is, whether it is succeeding or not. The key focus areas on which to collect data on the performance of the curriculum include but are not limited to:

- i) Does the curriculum meet the learning needs of the audience around this/these issue(s)? (Mechanisms to collect this are end-of-day reaction sheets/tools, end-of-course evaluations, and trainer observation of learners.)

- ii) Is there an end-of programme product such as an Action Planning tool to implement changes around curriculum focus issue(s)?
- iii) Are the lesson plans and other trainer materials complete, enough to guide their effective use with a group in training? (That is, are the instructions clear and complete?)
- iv) Are all materials sequenced with the participant manual and materials?
- v) Do the training aids and other visuals enhance learner focus and retention?
- vi) Do the piloted instructional strategies help learners to successfully complete the performance objectives?
- vii) Do they need to be modified/revised/changed to be effective?
- viii) What is the actual number of trainers/facilitators needed to effectively deliver the programme as designed?
- ix) What types of expertise and experience should the team have to be effective?
- x) Was the time for each module/topic/unit sufficient?
- xi) Was the sequencing of the learning appropriate?

3.0 The Completed Curriculum Package

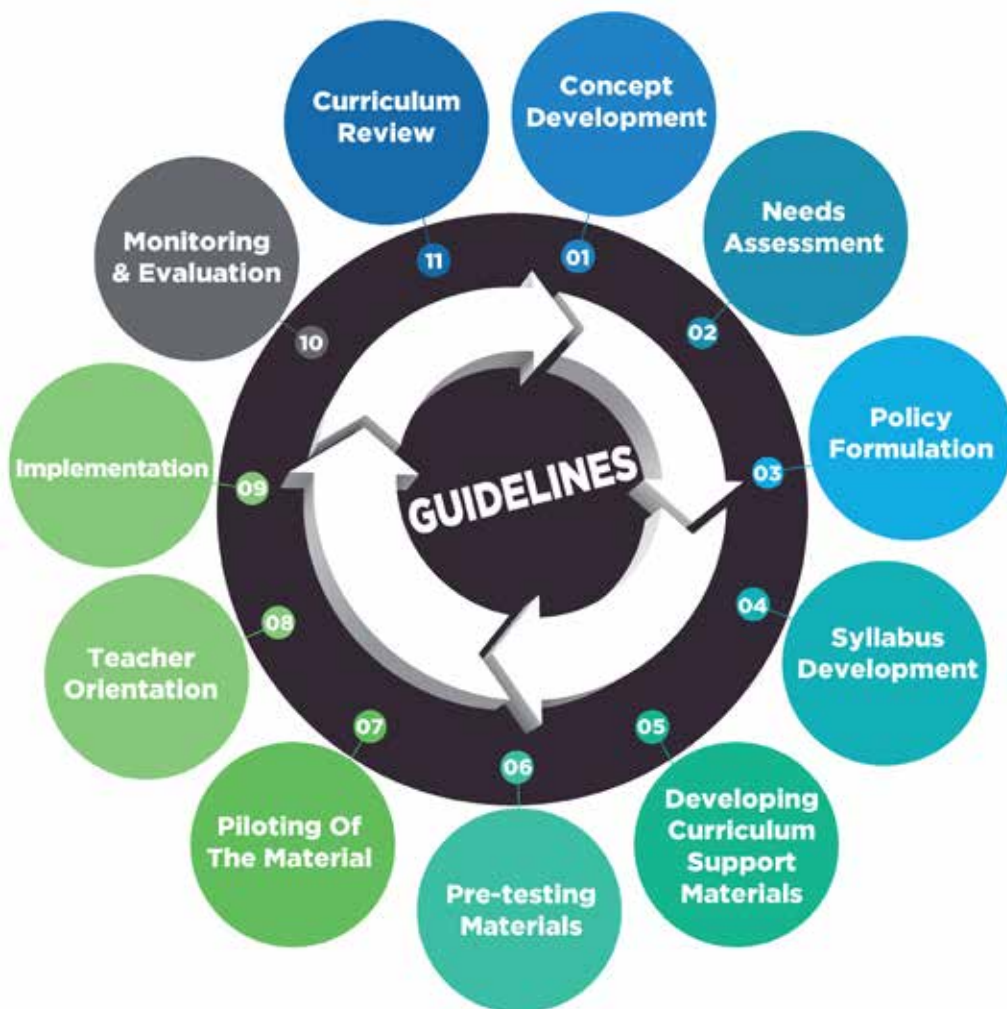
The validated curriculum package contains all materials required to deliver the curriculum to its target audience. A comprehensive package should include the following:

- i) Master copies of all schemes of work, lesson plans, and trainer materials (including suggested preparation methods, trainer qualifications to deliver the programme, etc.)
- ii) Participant manual and complementing materials
- iii) Training and visuals aids developed for the curriculum (slide shows, transparencies, etc.)

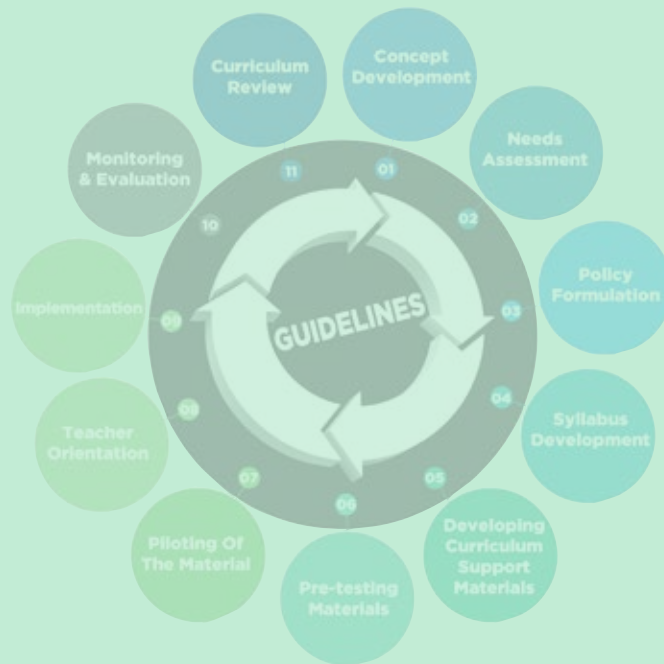
BIBLIOGRAPHY

- Bishop, G. (1985). *Curriculum Development: A Textbook for Students*. Macmillan Publishers Ltd. London and Basingtoke. ISBN 0333391187
- Doll, C, R. (1996). Curriculum improvement. Decision making and process. 9th Ed. *A Simon & Schuster Company*. Needham Heights, M.A 02194 United States of America.
- Marsh, C, J., & Willis, G. (2007). Curriculum. Alternative approaches, ongoing issues. 4th Ed. *Pearson Education Inc*. ISBN 0-13-171510-0
- National Curriculum Development Centre, (2017). *NCDC Publishing Guide*. 1st Edition. Published by National Curriculum Development Centre. ISBN: 978-9970-00-176-7
- Ornstein, A.C., & Hunkins, F, P. (2018). Curriculum: Foundations, Principles, and Issues. 7th Ed. *Pearson Education Limited*. Essex, England.
- Pratt, D. (1994). *Curriculum planning. A hand book for professionals*. Harcourt Brace College Publishers. ISBN 0 15 501098 0.
- Schiro, M, S. (2013). Curriculum theory. Conflicting visions and enduring concerns. 2nd Ed. *Sage Publications Ltd*. London, United Kingdom. ISBN 978-1-4129-8890-2

APPENDIX: Graphical illustration of the NCDC curriculum development process



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