NATIONAL CERTIFICATES (VOCATIONAL)

SUBJECT GUIDELINES

ART AND SCIENCE OF TEACHING

NQF Level 4

April 2008

ART AND SCIENCE OF TEACHING - LEVEL 4

CONTENTS

INTRODUCTION

A. What is Art and Science of Teaching about?

The subject Art and Science of Teaching addresses the whole context of learning and instruction, and the activities involved in being a good teacher. It is the science and theory of educating and learning.

The focus of this subject is on the art and science of teaching children, adolescents, adults and senior adults.

B. Why is Art and Science of Teaching important in the Education and Development programme?

The rationale for including the Art and Science of Teaching in the Education and Development programme is as follows:
- The subject provides a foundational qualification to those who want to make teaching their career.
- By studying this subject, students will be equipped with skills, attitudes, tools and perspectives that can empower them to anticipate and prepare for a change-driven teaching world.
- The subject links closely with Human and Social Development and Learning Psychology. and will provide worthwhile linkages with subjects presented in tertiary institutions.
- Art and Science of Teaching provides a sound generic foundation for effective teaching, guiding specialisation further along teaching career paths.
- The subject provides for the initiation of a lifelong professional attitude of reflective teaching.

C. The link between Art and Science of Teaching Learning Outcomes and the Critical and Developmental Outcomes

Art and Science of Teaching enables students to:

- Identify and solve problems and make decisions using critical and creative thinking by identifying, investigating and adapting theories in order to apply them in practice
- Work effectively with others and in groups and teams using interactive strategies and discussions
- Organise themselves and their activities responsibly and effectively in order to manage their own learning
- Collect, analyse organise and critically evaluate information fundamental to understanding by researching, reporting and reflecting on various topics relevant to the subject
- Communicate effectively using visual, symbolic and/or language skills during presentations, mural displays, mind-maps, diagrams and micro-teaching
- Use appropriate technology effectively and critically to make learning resources and access information about relevant topics
- Be culturally and aesthetically sensitive across a range of human contexts by implementing anti-bias and culture-fair attitudes, values and practices that also involve role-play, displays and presentations.
- Reflect on and explore their own abilities, learning styles and strategies which are fundamental to lifelong learning.

D. Factors that contribute to achieving Art and Science of Teaching Learning Outcomes

- Communication skills
- Ability to do research
- Observational skills
- Creativity
- Problem-solving and decision-making skills
- Good group participant

1   DURATION AND TUITION TIME

This is a one-year instructional programme comprising 200 teaching and learning hours. The subject may be offered on a part-time basis provided the student meets all the assessment requirements.

Students with special education needs (LSEN) must be catered for in a way that eliminates barriers to learning.

2   SUBJECT LEVEL FOCUS

- Implementation of the art and science of teaching
- Management of challenges and problems in the learning environment
- Implementation of reflective teaching
- Aspects and essentials of assessment

3   ASSESSMENT REQUIREMENTS

3.1   Internal assessment (50 percent)

3.1.1   Theoretical component
The theoretical component forms 40 percent of the internal assessment mark.

Internal assessment of the theoretical component in Art and Science of Teaching Level 4 takes the form of observation, class questions, group work, informal group competitions with rewards, individual discussions with students, class, topic and semester tests and internal examinations. Lecturers can observe students when marking exercises from the previous day and asking class questions.

Assignments, case studies and tests can be completed at the end of a topic. Tests and internal examinations must form part of the internal assessment.

3.1.2   Practical component
The practical component forms 60 percent of the internal assessment mark.

Practical components include applications and exercises. All practical components must be indicated in a Portfolio of Evidence (PoE).

Internal assessment of the practical component in Art and Science of Teaching Level 4 takes the form of assignments, practical exercises, case studies and practical examinations in a simulated education environment.

Students may complete practical exercises daily. Assignments and case studies can be completed at the end of a topic. Practical examinations can form part of internal practical assessment.

- **Some examples of practical assessments include, but are not limited to:**

    - Presentations (lectures, demonstrations, group discussions and activities, practical work, observation, role-play, independent activity, synthesis and evaluation)
    - Exhibitions by students
    - Visits undertaken by students based on a structured assignment task
    - Research
    - Task performance in a "Structured Environment"

- **Definition of the term "Structured Environment"**

For the purposes of assessment, "Structured Environment" refers to a simulated workplace or education environment. Activities in the simulated workplace or environment must be documented in a logbook with a clear listing of the competencies to be assessed. The following information must be contained in the logbook:

- Nature of department or environment in which practical component was achieved
- Learning Outcomes
- Activities in the environment with which to achieve the Learning Outcomes
- Time spent on activities
- Signature of facilitator or supervisor and student

For the logbook to be regarded as valid evidence, it must be signed by an officially assigned supervisor.

- **Evidence in practical assessments**

All evidence pertaining to evaluation of practical work must be reflected in the student's Portfolio of Evidence. The tools and instruments used for the purpose of conducting these assessments must be part of the evidence contained in the PoE.

3.1.3 Processing of internal assessment mark for the year
A year mark out of 100 is calculated by adding the marks of the theoretical component and the practical component of the internal continuous assessment (ICASS).

3.1.4 Moderation of internal assessment mark
Internal assessment is subject to internal and external moderation procedures as set out in the *National Examinations Policy for FET College Programmes*.

3.2 External assessment (50 percent)
A national examination is conducted annually in October or November by means of a paper(s) set and moderated externally. The practical component will also be assessed.

External assessment details and procedures are set out in the *Assessment Guidelines: Art and Science of Teaching Level 4.*

4 WEIGHTED VALUES OF TOPICS

TOPICS	WEIGHTED VALUE
1 Implementation of the Art and Science of Teaching	30%
2 Management of Challenges and Problems in the Learning Environment	30%
3 Reflective Teaching	10%
4 Assessment	30%
TOTAL	**100**

5 CALCULATION OF FINAL MARK

Internal assessment mark: Student's mark/100 x 50 = a mark out of 50 (a)

Examination mark: Student's mark/100 x 50 = a mark out of 50 (b)

Final mark: **(a) + (b) = a mark out of 100**

All marks are systematically processed and accurately recorded to be available as hard copy evidence for, amongst others, reporting, moderation and verification purposes.

6 PASS REQUIREMENTS

A student must obtain at least fifty percent in internal continuous assessment and fifty percent in the examination to achieve a pass in this subject.

7   SUBJECT AND LEARNING OUTCOMES

On completion of Art and Science of Teaching Level 4, the student should have covered the following topics:

Topic 1:   Implementation of the Art and Science of Teaching
Topic 2:   Management of Challenges and Problems in the Learning Environment
Topic 3:   Reflective Teaching
Topic 4:   Assessment

7.1   Topic 1: Implementation o the Art and Science of Teaching

7.1.1 Subject Outcome 1: Identify and analyse the sources needed and used for the implementation of the curriculum

Learning Outcomes:

The student should be able to:
- Explain the meaning of curriculum.
- Outline the National Curriculum Statement (NCS).
- Demonstrate knowledge of education policies, procedures and systems.
- Demonstrate knowledge of school policies and development plans for teaching.
- Use appropriate language, terminology and concepts of subjects and learning areas effectively.

7.1.2 Subject Outcome 2: Analyse and interpret the elements and functions of programmes, work schedules and lesson plans

Learning Outcomes:

The student should be able to:
- Access sources of information in the relevant fields of knowledge.
- Analyse and interpret curricular knowledge in practice.
- Develop learning programmes, work schedules and lesson plan frameworks.
- Review and adapt learning programmes, work schedules and lesson plan frameworks.

7.1.3 Subject Outcome 3: Create and manage a learning environment to mediate learning according to the needs and interests of students

Learning Outcomes:

The student should be able to:
- Describe and select a range of the most appropriate learning and teaching support materials available or needed.
- Create learning environments conducive to learning and creative thinking.
- Create learning environments that are sensitive to cultural, linguistic and gender differences.
- Perform duties required for the effective management of learning environments.

7.1.4 Subject Outcome 4: Plan, develop and present learning programmes appropriate to areas of specialisation. *Range: Programmes for children, adolescents, adult and senior adult students*

Learning Outcomes:

The student should be able to:
- Plan and develop a lesson plan and learning and teaching support materials to mediate learning.
- Present and implement a lesson plan appropriate to areas of specialisation.
- Review lesson plans in order to improve practice.

7.1.5 Subject Outcome 5: Implement teaching styles and methods in ways that are appropriate to the students in diverse contexts

Learning Outcomes:

The student should be able to:

- Analyse diverse contexts.
- Link teaching methods and learning styles to the implementation of a lesson plan in diverse contexts.
- Implement appropriate teaching styles and methods in a variety of contexts.
- Reflect on the linking of teaching styles and methods.

7.2   Topic 2: Management of Challenges and Problems in the Learning Environment

7.2.1 Subject Outcome 1: Investigate and explain management skills to apply in diverse contexts.

Learning Outcomes:

The student should be able to:

- Investigate and describe skills that are required and necessary to manage challenges and problems in the learning environment.
- Justify the use of management skills in diverse contexts in order to deal effectively with challenges in the learning environment.

7.2.2 Subject Outcome 2: Analyse general learning environment management principles and their implementation in practice.

Learning Outcomes:

The student should be able to:

- Identify general management principles that may support and guide a teacher's ability to effectively manage challenges in the learning environment.
- Analyse and report on the general management principles for the learning environment.
- Formulate strategies to implement the principles in practice.
- Reflect on the practical strategies to implement general management principles for the learning environment.

7.2.3 Subject Outcome 3: Investigate and implement various approaches to learning environment management.

Learning Outcomes:

The student should be able to:

- Examine various approaches to learning environment management.
- Implement various approaches to the management of the learning environment.
- Evaluate various approaches to learning environment management.
- Present a report on the effectiveness of the various approaches.

7.2.4 Subject Outcome 4: Describe and develop effective ways of dealing with problems in various learning environment contexts.

Learning Outcomes:

The student should be able to:

- Compare proactive and preventative measures with reactive restoration of order when learning environment management is threatened.
- Develop effective ways of dealing with problems in a variety of contexts.
- Identify a variety of skills for coping with disruptive behaviour.
- Establish and maintain orderly teaching and learning environments in a simulated situation.
- Reflect on the effectiveness of establishment of an orderly learning environment in a simulated situation.

7.2.5 Subject Outcome 5: Research and develop management of learning environment strategies.

Learning Outcomes:

The student should be able to:

- Identify students with special needs or barriers to learning.
- Simulate assistance to students with special needs or barriers to learning.
- Adjust teaching and learning strategies to cater for cultural, gender, ethnic, language and other differences amongst students.
- Accommodate differences in learning styles, pace and ability in the planning and use of teaching and learning strategies.

7.3 Topic 3: Reflective Teaching

7.3.1 Subject Outcome 1: Explain reflective teaching and its value.

Learning Outcomes:

The student should be able to:

- Describe the meaning of reflective teaching.
- Explain the reflexive competencies a teacher should have.
- Analyse examples of challenges that might be addressed by using reflective teaching sessions.
- Present a rationale for the values of reflective teaching.

7.3.2 Subject Outcome 2: Examine and modify techniques and tools used in reflective teaching.

Learning Outcomes:

The student should be able to:

- Examine and compare the strategies, techniques and tools for reflective teaching.
- Link a variety of strategies, techniques and tools for reflective teaching to a range of contexts.
- Modify the strategies and techniques for reflective teaching for own use, and develop own tools.

7.3.3 Subject Outcome 3: Analyse and use the steps in reflective teaching in a simulated situation.

Learning Outcomes:

The student should be able to:

- Analyse the steps for reflective teaching.
- Apply the steps in simulated practice.
- Appraise the steps using own developed tool.

7.4 Topic 4: Assessment

7.4.1 Subject Outcome 1: Explain key concepts and principles used in assessment.

Learning Outcomes:

The student should be able to:

- Describe key concepts used in assessment.
- Explain the implications of continuous assessment.
- Investigate and present assessment principles.
- Express own opinion regarding key concepts and principles of assessment.

7.4.2 Subject Outcome 2: Compare various assessment approaches and types of assessment.

Learning Outcomes

The student should be able to:

- Investigate a variety of assessment approaches and types.
- Assemble and organise methods of assessment that are most suitable for a variety of assessment contexts.
- Link assessment methods and types with people involved in assessment.
  Parents, groups, peer and self

- Reflect on assessment approaches, methods and types.

7.4.3 Subject Outcome 3: Investigate criteria for assessment.
Learning Outcomes
The student should be able to:
- Access and critique criteria for assessment.
- Describe and explain the coherence between criteria, assessment methods, tasks/instruments and tools.

7.4.4 Subject Outcome 4: Select and adapt assessment tasks and strategies appropriate for a simulated specialised context.
Learning Outcomes
The student should be able to:
- Investigate types of assessment tasks that are appropriate for a specialised context.
- Select four types of assessment tasks and design and develop appropriately for a specialised context.
- Reflect on and adapt the designed assessment tasks.

7.4.5 Subject Outcome 5: Identify and use a range of assessment strategies.
Learning Outcomes
The student should be able to:
- Investigate and identify a range of assessment strategies.
- Select and use a range of assessment strategies in simulated contexts.
- Appraise the assessment strategies used in simulated situations.
- Express own opinion of the strategies used in simulated situation.

7.4.6 Subject Outcome 6: Analyse and develop tools for recording and reporting of assessment judgments.
Learning Outcomes
The student should be able to:
- Investigate and analyse a variety of tools for recording and reporting assessment judgements.
- Develop assessment tools for recording and reporting assessment judgements.
- Reflect on the effectiveness of the tools.

7.4.7 Subject Outcome 7: Investigate and provide feedback in constructive ways.
Learning Outcomes
The student should be able to:
- Present a rationale for giving feedback.
- Explain the meaning of constructive feedback.
- Apply feedback in various contexts.

7.4.8 Subject Outcome 8: Explain key concepts and principles used in moderation.
Learning Outcomes
The student should be able to:
- Describe key concepts used in moderation.
- Describe the implications of moderation.
- Investigate and present moderation principles.
- Express own opinion regarding key concepts and principles of moderation.

8 RESOURCE NEEDS FOR THE TEACHING OF ART AND SCIENCE OF TEACHING - LEVEL 4

8.1 Physical resources

- Rooms equipped with data projectors, white boards, flip chart paper, overhead projectors, screens, TV monitors, video/DVD players
- Research and resource centres with access to computers and internet; subject related magazines and DVDs and videos
- Simulation room/learning environment for practical demonstrations, micro-teaching, presentations, etc.

8.2 Human Resources

- Librarian
- Lecturer suitably qualified with at least a B.Ed, with subject-related qualification on NQF Level 6
- Assessor / moderator

8.3 Consumables

- Stationery
- Files for Portfolios of Evidence
- Blank CDs, flash discs, video cassettes
- Writable transparencies
- Appropriate pens, pencils, erasers

8.4 Learning and teaching support materials

- Student guides
- Assessment guides
- Modules
- Policies on education, assessment, inclusion