

KD Module 2: Curriculum & Assessment

Unit 1: Subject-Specific Tools



Objectives:

Teachers identify key concepts and processes in the subject area, describe the function and purpose of subject-specific tools and how they support students' understanding of these key concepts and processes, and their application to the world outside the classroom (KD.2.a).



Duration:

Total of 3 notional hours – 1 hour lecture and 2 hour practical session, preferably at a computer.



A] Lecture (Total 1 hour)

Notes to Facilitator

During the lecture you should provide definitions and a brief description of the concepts 'key competencies' and 'functional skills', explaining their importance for employment and personal well-being. You should highlight the fact that there are key concepts in specific subjects/learning areas that naturally align with personal development and provide examples. For example, the subject English provides participants with communication skills. The facilitator should help in-service teachers understand that in order for their students to be effective citizens outside of the school context, functional skills teaching must be relevant and allow students to engage with real situations in the real world. ICT, wielded appropriately by the teacher, can provide a meaningful context for academic content.

Key Competencies and Functional Skills

What's in a word or phrase? In the United Kingdom, subject teaching that emphasises behaviours required to function effectively in the real world is referred to as '*Functional Skills*' whereas in New Zealand it is referred to as '*Key Competencies*'. Basically, key competencies and functional skills are the core elements that provide individuals with the skills and abilities needed to

- '*Live and learn today and in the future*'
- '*Operate confidently, effectively and independently in life, their communities and work*'.

To be effective, functional skills teaching must be relevant and allow learners to engage with real situations in the real world. Learners need opportunities to:

- Apply their skills in plausible contexts or use their skills for real purposes;
- Engage with the world beyond the classroom;
- Integrate learning by linking knowledge within and between the functional areas;
- Spend time planning and developing their work;
- Make choices and decisions, think creatively and act independently;

- Experience success in real situations as a result of using their skills effectively¹ [CC: BY-NC-ND].

The New Zealand Curriculum (NZC) identifies five key competencies:

- Thinking
- Using language, symbols and text
- Managing self
- Relating to others
- Participating and contributing² [CC: BY-NC-ND].

Mary Chamberlain, from the Ministry of Education in New Zealand, provides a brief description of the key competencies, explaining their importance for employment and personal well-being. [Watch Video]³ [CC BY-NC-ND].

At first you might consider these five competencies something over and above what you have already been tasked to perform, namely teach the curriculum! We argue that in fact, encouraging students to acquire these skills can enhance their understanding of your subject. Look at this justification used in British education.

Specific to Learning Areas⁴ [CC: BY-NC-ND]

The key concepts in specific subjects underpin the functional elements, including competence (English, Mathematics) and capability (ICT); critical understanding (English, Mathematics) and critical evaluation (ICT). The key concept of creativity (English, Mathematics) also has an important role to play in developing the aptitudes, attitudes and behaviours that enable young people to play a full role in the workplace, in education and in their wider communities. In its widest sense, creativity is concerned with flexibility of thinking, responsiveness to unfamiliar situations and ideas and the ability to use skills and critical thinking in appropriate ways.

Functional English skills

Individuals with functional English skills are confident and capable when using the skills of speaking, listening, reading and writing. They are able to:

- Communicate effectively, adapting to a range of audiences and contexts
- Explain information clearly and succinctly in speech and writing
- Express a point of view reasonably and persuasively
- Use ICT to communicate effectively
- Read and understand information and instructions, then use this understanding to act appropriately
- Analyse how ideas and information are presented, evaluating their usefulness, for example in solving a problem
- Make an oral presentation or write a report

¹ Qualifications and Curriculum Development Agency (QCDA). (2011). *Functional skills*. Retrieved from <http://curriculum.qcda.gov.uk/key-stages-3-and-4/skills/functional-skills/index.aspx>.

² New Zealand Ministry of Education. (2010). *Key competencies*. Retrieved from <http://keycompetencies.tki.org.nz/What-are-KCs>.

³ New Zealand Ministry of Education. (2010). *Key competencies*. Retrieved from <http://keycompetencies.tki.org.nz/What-are-KCs>.

⁴ Qualifications and Curriculum Development Agency (QCDA). (2011). *Functional skills*. Retrieved from <http://curriculum.qcda.gov.uk/key-stages-3-and-4/skills/functional-skills/index.aspx>.

- Contribute to discussions and use speech to work collaboratively to agree actions and conclusions.

Functional Mathematics Skills

Individuals with functional mathematics skills understand a range of mathematical concepts and know how and when to use them. They:

- Have the confidence and capability to use mathematics to solve increasingly complex problems
- Are able to use a range of tools, including ICT, as appropriate
- Possess the analytical and reasoning skills needed to draw conclusions, justify how these conclusions are reached and identify errors or inconsistencies
- Are able to validate and interpret results, judging the limits of the validity and using the results effectively and efficiently.

Functional ICT Skills

Individuals with functional ICT skills are confident and capable when using ICT systems and tools to meet a variety of needs in a range of contexts. They are able to:

- Use ICT to find, select and bring together relevant information
- Develop, interpret and exchange information for a purpose
- Apply ICT safely to enhance their learning and the quality of their work.

The above argument focuses exclusively on the teaching of language, maths and computer skills, but all subjects can support the adoption of functional skills. After all, the skills or competencies described here – thinking, deep understanding, creativity, capability/skill, etc. – are things we strive for when we ask our students to move beyond simple comprehension and engage in higher order thinking skills. The trick, however, is to demonstrate that our subject is relevant and should not be seen as content or skills to learn in isolation.

History teachers, for example, know that they need to develop students so that they move from simply remembering dates and sequences to being critical commentators of the past. They want the senior students to be able to construct an argument from the facts. Where do we do this in the real world? Every time we pick up a newspaper and argue with our colleagues about the latest political issue we deploy the same skills our history teachers are trying to instill. Every time we scan an advertisement we have our ‘bias detectors’ engaged, another ‘history’ skill. This is true of all our subjects, though. The trick is to find a way to link the specialised subject skills to contexts where their function has a relevancy in the world around us.

So how might we do this? ICT has provided us teachers with a tool where we can harness content, ideas, examples, case studies, etc., to our needs. We will investigate examples of how these tools can support our teaching in the following tutorials and subsequent units.



B] Computer Practical (Total 2 hours)

Notes to Facilitator

Participants should be divided into pairs (2 members per group). The team members in each group should have a particular teaching level and area of focus/or subject in common. If for some reason they cannot access their own subject's curriculum statements use these example files: Samoa's [English](#) or South Africa's [Mathematics](#) curriculum statements for this exercise. Each group will require access to a computer with PowerPoint to enable them to prepare a presentation of their findings and ideas. The activity will provide participants with an opportunity to review the appropriate curriculum guide and analyse the key competencies and functional skills that should be considered important.

Once completed, the participants will be able to draft a list of key competencies and functional skills that should be considered when teaching their particular teaching level and area of focus or subject, brainstorm technology tools that could potentially support the teaching of the competencies and skills listed and prepare a PowerPoint presentation that incorporates the findings and ideas of the team. Also on completion the facilitator should coordinate a presentation session and facilitate discussion. Participants should be encouraged to revise their presentations based on feedback received from other team members and save a copy of the revised presentation.

Task 1: Select Curriculum Guide

Working in tutorial groups (2 members per group), select a Curriculum Guide that is relevant to your groups' particular teaching level and area of focus or subject. If for some reason you cannot access your own subject's curriculum statements use these example files: Samoa's [English](#) or South Africa's [Mathematics](#) Curriculum Statements for this exercise.

Task 2: Key Competencies and Functional Skills

- In tutorial groups, analyse the key competencies and functional skills that should be considered important when teaching your particular teaching level and area of focus or subject. In other words, those concepts and processes that enable learners to *'live and learn today and in the future'* and to *'operate confidently, effectively and independently in life, their communities and work'*.
- Draft a list of key competencies and functional skills that should be considered when teaching your particular teaching level and area of focus or subject.
- Consider technology tools that could potentially support the teaching of the key competencies and functional skills listed.
- Prepare a PowerPoint presentation that incorporates the findings and ideas of the group.
- Revise the PowerPoint presentation based on feedback received from other team members in the class and save a copy (either on the computer hard drive or on a removable storage device).

Task 3: Integrating ICTs

1. Draft a list of key competencies and functional skills that should be considered when teaching your particular teaching level and area of focus or subject.
2. Consider technology tools that could potentially support the teaching of the key competencies and functional skills listed. For example are there areas in your subject that should be taught using technology e.g. Word Processor for languages, Book keeping software for Accounting etc.

3. Prepare a PowerPoint presentation that incorporates the findings and ideas of the group.
4. Revise the PowerPoint presentation based on feedback received from other team members in the class and save a copy (either on the computer hard drive or on a removable storage device).



Resources Used in this Lesson Unit

New Zealand Ministry of Education. (2010). *Key Competencies*. Retrieved from <http://keycompetencies.tki.org.nz/What-are-KCs>.

Qualifications and Curriculum Development Agency (QCDA). (2011). *Functional skills*. Retrieved from <http://curriculum.qcda.gov.uk/key-stages-3-and-4/skills/functional-skills/index.aspx>.

Dept. of Education, South Africa. (2003). National Curriculum Statement Grades 10-12 (General) – Mathematics. Retrieved from <http://www.education.gov.za/Curriculum/CurriculumStatements/FurtherEducationandTraining/NCSSubjectStatements/tabid/246/Default.aspx>

Ministry of Education, Sport & Culture, Samoa. (2004). English Years 9-13 Samoa Secondary School Curriculum. Retrieved from http://mesc.gov.ws/index.php?option=com_content&view=article&id=83:secondary-curriculum-statements&catid=37:curriculum-secondary&Itemid=124