# Preliminary Study of the Achievements of Key Skills in CBC

Don Kannangara
Department of Business Computing
Waiariki Institute of Technology
Rotorua, New Zealand
Kannangd@waiariki.ac.nz

## ABSTRACT

The Key Skills are general skills that can help to improve learning and performance of students. Key Skill units provide underpinning knowledge required for General, Vocational, and Occupational Qualifications. Such units are being used in Tertiary Education Programmes in most of the countries in the world.

This paper was based on the result of a preliminary study conducted to investigate the achievements of basic Key Skills by the students of Certificate of Business Computing (CBC) programme at Waiariki Institute of Technology, Rotorua. The prescriptions of the three basic Key Skill units of the British Qualifications and Curriculum Authority (QCA) were used as the basis of this study.

## 1. INTRODUCTION

The Qualifications and Curriculum Authority (QCA) introduced Key Skill units in British General, Vocational, and Occupational courses about 10 years ago. The basic Key Skills include Information Technology, Application of Number and Communication. In addition, wider Key Skills have been identified as Working With Others, Improving own Learning and Performance, and Problem Solving. Each Key Skill unit has five levels (1-5) of competencies

The New Zealand version of Key Skills was listed in the 1993 New Zealand Curriculum Framework as “Essential Skills”. The Essential Skills have already been introduced in primary and secondary schools. The Essential Skills refer to the eight skill sets that underpin the curriculum in our primary and secondary schools. They are Communication, Numeracy, Information Technology, Problem-solving, Self-management and Competitive, Social and Cooperative, Physical, and Work and Study skills. These skills are expected to enhance an individual’s ability to function effectively as a full member of the New Zealand society.

The Key Skills or Essential Skills have not yet been introduced in Tertiary Education Programmes in New Zealand. Instead, we use “generic skills” as the term to describe skills that are relevant to a range of different environments. Although, modules or units that are similar to Key Skill units are not found in

New Zealand Tertiary Education programmes, most of the skills may be achieved by students from some other modules.

The CBC (Certificate in Business Computing) is a one-year national diploma course taught at Waiariki Institute of Technology. The students are expected to complete 10 compulsory modules and 8 optional modules to complete the CBC. I wanted to find out if our CBC students had achieved the Key Skills. The result of the study could be useful for the curriculum developments of the CBC programme.

## 2. METHODOLOGY

The first part of this study was to compare the prescriptions of the CBC compulsory modules with that of Key Skill units. This was not possible due to precise nature of the key skill unit prescriptions.

I used a questionnaire to collect tutors' opinions of the level of achievement in each of the basic Key Skills of CBC students. Each of the basic Key Skills specified in the prescription of the QCA at levels 1 - 3 was included in the questionnaire as it is the same level expected in similar programmes in the UK. The expected skills in Communication, Application of Number, and Information Technology at each level were included as separate sections(See APPENDIX).

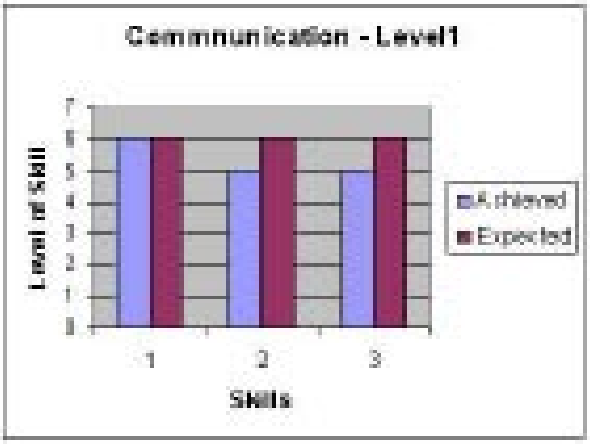
In order to quantify the level of the achievement of each skill, seven options were given for each question. The tutors had to choose an option based upon his/her general opinion about the level of skills acquired by the students at the completion of his or her module.

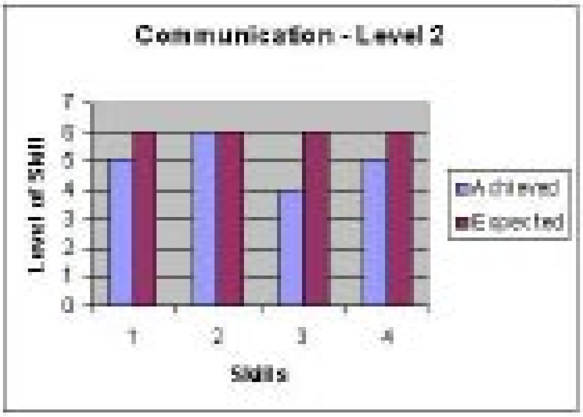
**The options were:**

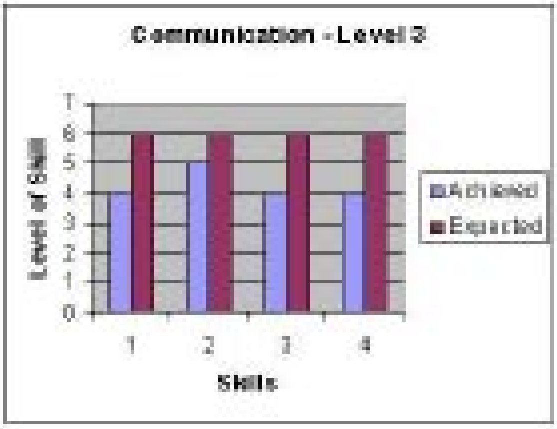
**All**
**Most**
**Some**
**Few**
**Very few**
**None**
**Don't know**

The weightings given to options were All-6, Most-5, Some-4, few-3, Very few-2, none -1, and don't know-0. A copy of the questionnaire was sent to each of the nine tutors who taught in the CBC programme last year. All of the tutors completed and returned the questionnaire.

The tutors' opinions of the achievements were fed in to a database as weightings. The maximum weighting was taken as the final outcome of the achievement as it was assumed that the tutor who teaches a skill, gives the highest and accurate weighting to that skill. The processed results were used to create bar charts.

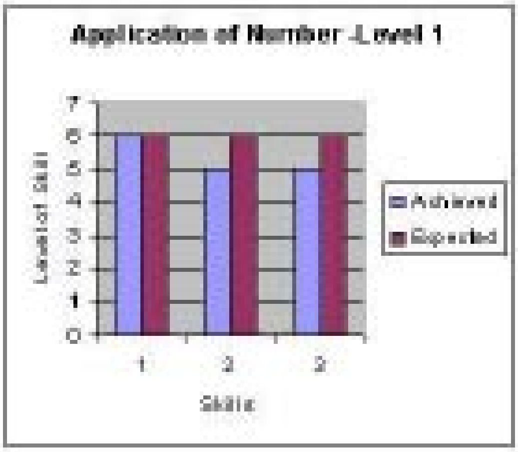


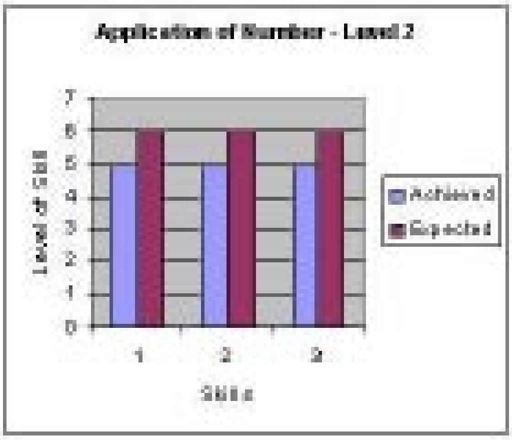


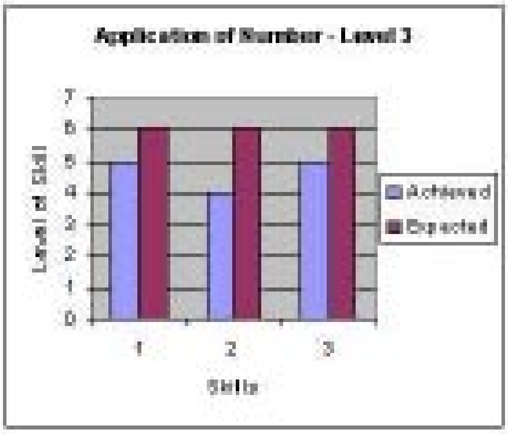


# 3. RESULTS

## 3.1 Communication Key Skills







## 3.2 Application Of Numbers

## 3.3 Information Technology

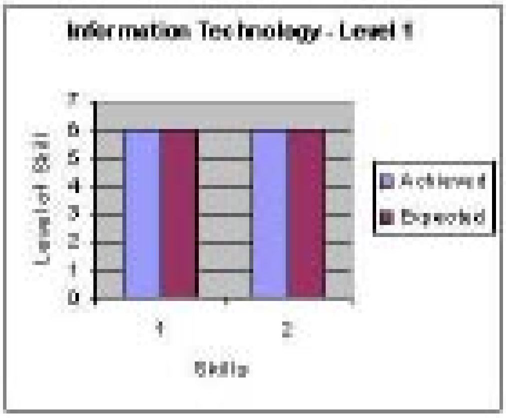
The expected level of achievement (weighted as 6) and the level achieved for each skill are shown as two bars on the charts.

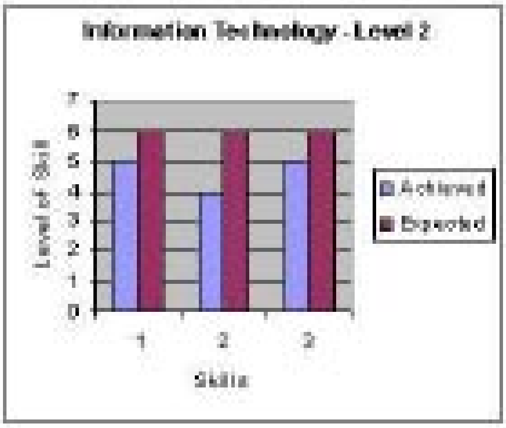
# 4. ANALYSIS

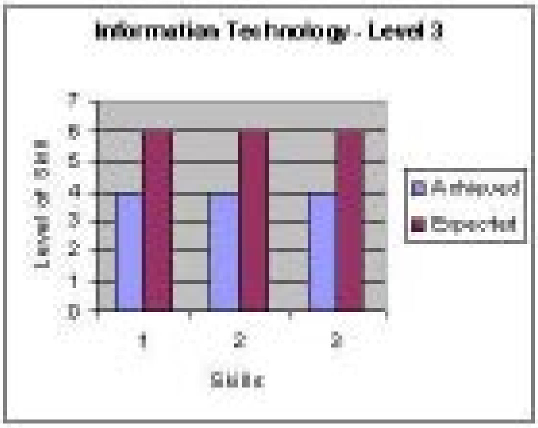
The results indicate that on average, 75% of the students achieve most of the Level 1 and Level 2 communication Key Skills. The Level 3 Key Skills, which are used in reading and summarizing information from extended documents, and dealing with complex subject areas, were found to be the least achieved. Having reviewed the prescriptions of the two CBC communication modules, Business Communication (BC 100) and Interpersonal Skills (IP100), I found out that skills such as “summarizing information from extended documents, and dealing with complex subject areas” are not specified in CBC curriculum.

In Application of Numbers, about 80% of the students achieve most of the Key Skills in all the Levels, except that of the ability to carry out multi_stage calculations, and rearrangement of formulae. Although most of the Key Skills in Application of Number are achieved, there is no specific compulsory mathematics module in our CBC programme. This is an interesting finding, which requires more detailed study.

It is tutor opinion that all the students achieve Level1







IT Key Skills. About 78% of the students achieve Level 2 IT Key Skills. The Level 3 IT Key Skills are achieved by only 66% of the students. The Level 3 IT Key Skills include planning and use of different resources, using appropriate techniques, and developing structure for presentation. Having closely examined the prescriptions of six CBC compulsory IT modules (DT100, HF100, PD100, PP100, SF100, and SO100) in order to match with Level 3 IT Key Skills, I found no reference to “planning and use of different resources, using appropriate techniques, and developing structure for presentation” in any of the module prescriptions.

## 5. CONCLUSION

This study shows tutors’ opinion of the achievements of Basic Key Skill by our CBC students. I was able to justify the correctness of findings by mapping the prescriptions of CBC compulsory modules with the Key Skill prescriptions. I believe that this study indicates the areas, which need more detailed study to find out exactly what should be included in CBC module prescriptions in order to be par with Key Skill standards.

## REFERENCES

**Front door to key skills,** School of Education , University of Nottingham ,
<http://www.keyskillsnet.org.uk/>01/01/2001

**Introduction to key skills.** Qualifications and Curriculum Authority,
<http://www.qca.org.uk/nq/ks/com_app_it2.asp>21/11/2000

**Callister Paul (1990),**Tomorrow’s Skill, New Zealand Planning Council, Wellington.

**The New Zealand Curriculum Framework 1993**, Ministry of Education, Wellington.

## APPENDIX - KEY SKILLS (QCA)

### Communication

LEVEL 1

How many of your students can:

1. take part in discussions about straightforward subjects;

2. read and identify the main points and ideas from documents about straightforward subjects;

3. write about straightforward subjects.

LEVEL 2

How many of your students can:

1. help move discussions forward;

2. give a short talk using an image to illustrate his/her main points;

3. read and summarise information from extended documents;

4. use a suitable structure and style when writing extended documents.

LEVEL 3

How many of your students can:

1. create opportunities for others to contribute to group discussions about complex subjects;

2. make a presentation using a range of techniques to engage the audience;

3. read and synthesise information from extended documents about a complex subject;

4. organise information coherently, selecting a form and style of writing appropriate to complex subject matter.

**Application of number**

LEVEL 1

How many of your students can:

1. interpret straightforward information;

2. carry out calculations, using whole numbers, simple decimals, fractions and percentages to given levels of accuracy;

3. interpret the results of his/her calculations and present findings, using a chart and diagram.

LEVEL 2

How many of your students can carry through a substantial activity that requires him/her to:

1. select information and methods to get the results he/her needs;

2. carry out calculations involving two or more steps and numbers of any size, including use of formulae, and check his/her methods and levels of accuracy;

3. select ways to present his/her findings, including use of a graph, describe methods and explain results.

LEVEL 3

How many of your students can plan and carry through a substantial and complex activity that requires him/her to:

1. plan his/her approach to obtaining and using information, choose appropriate methods for obtaining the results he/she needs and justify his/her choice;

2. carry out multi_stage calculations, including use of a large data set (over 50 items) and re_arrangement of formulae;

3. justify their choice of presentation methods and explain the results of his/her calculations

**Information Technology**

LEVEL 1

How many of your students can:

1. find, enter, explore and develop relevant information;

2. present information, including text, images and numbers, using appropriate layouts and save information.

LEVEL 2

How many of your students can:

1. identify suitable sources, carry out effective searches and select relevant information;

2. bring together, explore and develop information, and derive new information;

3. present combined information, including text, images and numbers, in a consistent way.

LEVEL 3