Title	Multiple uses of microcomputers in the classroom
Author(s)	Yeong, Kum Tien
Source	*Teaching and Learning, 6(2)6-8*
Published by	Institute of Education (Singapore)

This document may be used for private study or research purpose only. This document or any part of it may not be duplicated and/or distributed without permission of the copyright owner.

The Singapore Copyright Act applies to the use of this document.

MULTIPLE USES OF MICROCOMPUTERS IN THE CLASSROOM

YEONG KUM TIEN

The microcomputer is a very versatile and efficient teaching aid. It helps the teacher to do multifarious routine jobs with great speed and accuracy. Described below are some of the common ones.

CLASSROOM INSTRUCTION

Computer Aided Instruction

In the process of computer aided instruction, the microcomputer meticulously carries out the instructions given in the program. A fully automated program includes greeting the learner, requesting the learner's particulars, indicating the learning objectives of the lesson, presenting the lesson with both text, sound and graphics, providing drill and practice to consolidate the concepts learned, conducting a test when the learner is ready, and reporting the results to both the teacher and the learner. In some programs, the learner is directed to revise the lesson when an error is made in the answer before he/she makes another attempt.

Such a program provides the teacher with more time to concentrate on the subject matter, individualised instruction and constant evaluation of class performance.

Drill and Practice

When the fully automated program is not available, the teacher may have to teach the lesson content and use the microcomputers to provide drill and practice or quizzes. There are also numerous computer software for enrichment in various subjects. However the teacher needs to preview them so as to select the most appropriate materials to fulfil the learning objectives.

Pre- and Post-tests

Computer programs can be written for the teacher to carry out the above tests with high speed and accuracy. Such tests enable the teacher to self-evaluate the instructional strategy adopted for the subject. Systematic collection of data will facilitate classroom research.

Simulation Games

There are numerous simulation games which can be used to motivate the uninterested learners in various subjects. They also train the learners to develop psychomotor skills and problem-solving minds. Careful selection and judicious use of games enhance the effectiveness of teaching and learning strategies.

COMPUTER BASED CLASSROOM MANAGEMENT

Electronic Class Register

There are several computer software such as Lotus 1-2-3, Multiplan, Supercalc etc. that can be used to store the class register. The greatest advantage in using this method is the speedy sorting in alphabetical order and retrieval of information.

Electronic Marksheet

The computer software mentioned above can also be used to design a marksheet for keeping and calculating marks scored by all pupils in the class for different subjects. The computer will compute the total and the average mark and then arrange in order of merit and print out the final marksheet for analytical study.

Electronic Catalogue or Inventory

The microcomputer can help teachers to keep a proper catalogue of class library books or inventory of audiovisual aids. The larger the number of books or items of articles the greater is the advantage of using the microcomputer.

Word Processing or Cover-design Printer

All microcomputers can be used as word processors and art design printers. Whatever documents to be typed can more easily and speedily be done using the microcomputer than a typewriter. Various typefaces and fancy fonts are now available to produce a high quality professional printout.

Conclusion

The microcomputer is a productive tool for teaching and learning. Skilful use of the equipment will enhance instructional effectiveness and efficiency. It is also a reliable instrument for measuring the degree of success in the teaching and learning task. Regular use of the instrument provides accurate data collection for classroom research.

Advanced knowledge and skill in the use of microcomputer for teaching and learning will boost the image of the teaching professional.