

Microware Review

Len Proctor

Keyboarding Primer and MECC Keyboarding Master

For those computer users who cannot type, the greatest single barrier to the use of the microcomputer is most likely to be their keyboarding skills. Screen menus may help the inept user to make a particular program function more easily, but original data or text entry still has to be done from the keyboard. Anyone who has watched a frustrated user labor intensively over what should be a relatively effortless process will appreciate the magnitude of this barrier in the efficient use of all types of computers.

The traditional approach to solving this problem has been to defer the introduction of students to touch typing until they were in a secondary or tertiary level school setting. However, with the introduction of microcomputers into elementary schools, the timing of the teaching of these skills needs to be reconsidered. Secondly, the proliferation of computers throughout almost every sector of society, suggests that the voluntary aspects of the acquisition of keyboarding skills may be an expensive luxury. Politics aside, answers to these kinds of questions are almost self-evident. The opportunity to acquire keyboarding skills should be available to every student and every student should be encouraged to learn proper keyboarding techniques as early as possible in their academic careers.

While questions regarding why and when keyboarding skills should be developed are usually dealt with by external agencies, practical questions of how to implement programs to develop these kinds of skills are usually foremost on the mind of someone charged with the task of delivering instruction. In this case there is help. Two packages, the MECC Keyboard Primer (A-1 30) and MECC Keyboarding Master (A- 13 1) are available to help teachers teach keyboarding. These programs are part of MECC's (Minnesota Educational Computing Corporation) Computing and Information Collection and are available both to institutional MECC members and non-institutional members. The price for each package for non-members is \$84.00 Cdn.

The first package, MECC Keyboarding Primer, contains an on-line introduction to the keyboard and eighteen lessons, each of which is designed to teach students the location of the keys and the correct stroking of alphabetic, numeric and special function

Len Proctor is an Associate Professor of Educational Communications at the University of Saskatchewan, Saskatoon, Saskatchewan.

keys. Through the use of a variety of games and drills, the second program, Keyboarding Master, builds on the basic skills developed in the Keyboard Primer and helps students to increase both their typing speed and their keystroke accuracy. If a structured approach to the development of keyboarding skills is desired, a teacher management utility disk is available with each package. It can be used to track the progress of up to three classes of 1 to 48 students. The Keyboarding Primer and Keyboarding Master will also run on a Corvus hard disk system.

In the introductory lesson of the Keyboarding Primer, students are presented with the following topics: pressing the space bar, body position and posture, home row finger placement and the function of the cursor. In an unstructured setting, students are allowed to choose any lesson in any sequence that they wish. In the structured environment, students are expected to either choose the next lesson in the sequence or review a lesson that they have completed earlier in the course.

Several design factors have been taken into account when these packages were developed. For example, when deciding the order in which to present the keyboard, such elements as the ease of making the keystroke, the frequency of key use, the need to present potentially competing responses close together, and the need to present the most commonly used function keys early were considered. Second, each of the lessons follow a consistent pattern of presentation. A preview of the skills to be addressed in the lesson is shown, then a graphic illustration of the proper finger position on the keys is given. Practice exercises are then presented and finally, after the completion of the lesson, a speed check taken.

No mention of errors is made to the student unless three or more errors are made in one content line. It is suggested in the reference section of the documentation that one area in which learning to keyboard is hindered is the premature placement of emphasis on accuracy. While the end goal of keyboarding is certainly accuracy, in the early stages of learning keyboard skills, it is felt that emphasis should be placed on speed rather than accuracy.

The only known way to improve accuracy is by practicing. The Keyboarding Master contains drills and games that encourage the development of accuracy by pacing students at a rate which is slightly below their maximum speed. Students who complete these exercises should be able to build their typing speed up to a minimum of twenty words per minute and reduce their error rate to no more than three uncorrected errors per minute.

In summary, the content of these two packages is appropriate for students in the Grade 4-9 range. With some teacher input into the practice paragraphs, either package could be easily adapted to accommodate the needs of a Grade 10 and above. The sequential development of keyboarding skills is appropriate as they are presented. But, in the event that there are special learner needs present in a group, the program is flexible enough to be easily adapted to serve the needs of special learners. While not designed to be a totally stand alone package, instructions to the student are well explained, and consistent. No programming errors have been detected thus far. Feedback is immediate, positive and relevant to the user. The documentation is available, clearly-written and adequate for the purposes for which it was intended. Reference lists are supplied for those teachers who wish to pursue the topic further.