

## **4-H COMPUTER GUIDELINES**

Helping youth develop life skills is part of the goal of 4-H. The following are suggested guidelines for providing learning experiences in the computer project area and making it a more educational and consistent type of program.

### **GENERAL GUIDELINES FOR ALL MEMBERS**

- Understand the basic components of a computer and how they work.
- Learn the BASIC programming language or other language.
- Learn some fundamental operating commands.
- Develop structured logic for writing BASIC programs or programs in other language.
- Develop an understanding of computer applications for today's lifestyles.

### **EXPERIENCE GUIDELINES**

The suggested experience guidelines are:

Basic Skill:	1-2 years in the project
Intermediate:	3-4 years in the project
Advanced:	5 years and over in the project

These are determined by the number of years of experience a member has had in the computer project and are flexible depending on the member's ability. Any member enrolled in computers for the first time must take the basic skill project, unless he/she has had previous experience. The skill level should be determined by the leader. For example, the 4-H'er who has no computer experience should start at the basic skill level, and if they are older or perhaps more coordinated they can move into the more advanced levels quicker. On the other hand, a new computer project member who has done computer work could go right into the intermediate or advanced level. The level should best meet the needs and experience of the member. Be sure to know the guidelines for each experience level.

### **Beginning or Basic Skills:**

- 1) Learn some Basic or introductory language programming.
- 2) Learn the components which constitute a computer and how they work.
- 3) Learn some basic computer operating commands.
- 4) Learn how to write/run simple programs in BASIC or introductory language.
- 5) Learn how to alter a formatted output in BASIC program or introductory language.

### **Intermediate:**

- 1) Expand knowledge of introductory language programming syntax.
- 2) Expand knowledge of computer operating commands.
- 3) Write an interactive program.
- 4) Write a formatted output program.
- 5) Learn structured programming.

### **Advanced:**

- 1) Learn advanced programming syntax.
- 2) Learn advanced structured programming and concepts.
- 3) Design and write a structured formatted output BASIC program or program in other language.
- 4) Design and write a structured interactive BASIC program, or program in other language.

### **Ideas for BASIC Programming Projects**

The materials available at the Extension Office are for BASIC programming. The project is not limited to BASIC language but here are some ideas for member projects. You as a leader can guide members in their selection. Here is a listing of some suggested projects. BASIC programming at the beginning or basic skill level does not lend itself to diversification or independence due to the nature of programming. The following projects should be attempted by members with intermediate skills or above.

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|------------|-------------------|-------------------|
| 1. Games   | 5. Address Labels | 9. Write a system |
| 2. Music   | 6. Calendar       | 10. Calculations  |
| 3. Graphs  | 7. Pictures       |                   |
| 4. Reports | 8. Forecasts      |                   |

An idea for beginning members would be to do 10 Basic statements and hierarchy of computation.

### **4-H Fair Class For Computers**

DIVISION - Other Individual Member Exhibits

CLASS - Computers

For the fair, member may exhibit a program, poster, chart, report, item or article showing activities and accomplishments related to the project. Computers may be brought in for running programs, etc. for the judging. Content and complexity of the exhibit should reflect the age of the member and the amount of experience in the project.