

# **COMPUTER SKILLS IN AFTER-SCHOOL PROGRAMS: THE ST. LOUIS WEST END COMMUNITY CENTER**

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## **I. THE WEST END AFTER-SCHOOL PROGRAM**

The St. Louis West End After-School Program (WEAS), first established in 1996, is located in the West End Community Center in St. Louis city. The after-school program operated on a limited basis for several years until it was expanded with national funding from the Children, Youth, and Families at Risk (CYFAR) Project in 1999. University Outreach and Extension runs the WEAS program in collaboration with the Department of Recreation and Better Family Life, which are also located in the West End Community Center. The WEAS program provides children and youth with a structured, supervised, and positive environment in which they can participate in constructive activities. A primary objective of the WEAS program is to provide participants with access to computers and information technology, including the Internet.

A computer lab was introduced at WEAS in 1997, when the University of Missouri and the State 4-H office donated several older computers. When CYFAR funding became available, it was used to purchase new computers. Currently there are 14 computers, seven of which are up-to-date. Seven of the computers are connected to the Internet. The computer lab is in a large room and is open from 3:00 pm to 8:30 pm Monday through Friday. Program participants generally do their homework when they arrive, then take turns playing and working on the computers until they leave.

Program staff supervise the lab on Mondays, Wednesdays, and Fridays. On Tuesdays and Thursdays, a computer specialist supervises the lab from 3:00 pm to 6:00 pm, providing technical and skills development support. The specialist's specific duties include monitoring computer use, working with children and youth on special projects, helping children and youth to set up e-mail accounts, computer maintenance, loading software, and teaching basic computer skills to students who are new to the program. The computer specialist has also conducted several small group trainings during which he has trained children and youth to use e-mail, make CDs, and search the Internet.

One of the anticipated impacts of the WEAS program is an improvement in participants' computer skills.<sup>1</sup> This skills development process is expected to occur in one of three ways. First, participants are expected to gain skills simply through hands-on use. In other words, they acquire skills just by spending time using the computers and Internet. Second, participants are expected to gain skills through one-on-one tutoring from the computer specialist and small group trainings. Third, participants may gain skills through interaction with other participants who have higher skill levels.

The purpose of this study is to test the assumption that computer labs in after-school programs can have a positive impact on participants' computer skills. The approach used

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<sup>1</sup> In addition to improvements in participants' computer skills, other anticipated impacts of the program include an increase in after-school adult supervision for children and youth, increased rates of homework completion, better grades, reductions in risky and illegal behavior, and observing and becoming positive role models for others. These impacts, along with the inputs, activities, and outputs of the ICCL program are detailed in a program logic model, which can be viewed at the following web address: <http://outreach.missouri.edu/fcrp/evaluation/plms.htm>.

was to measure participants' computer skills twice over a six-month period and analyze the changes that occurred. The next section describes how participants' computer skills were measured. Section III describes the results of the study, which indicate that participants do gain skills over time and that computer labs in after-school programs such as the WEAS program can have a positive impact on participants' skills development.

## **II. MEASURING AND ANALYZING COMPUTER SKILLS**

To measure the change in computer skills over time, a skills assessment test was developed. This test was given to as many eligible WEAS participants as possible in December 2001 and again in June 2002. The results from the two tests were analyzed to determine whether any changes in computer skills had occurred. This section describes the procedures that were followed in measuring and analyzing computer skills.

### **The Computer Skills Assessment Instrument**

To measure the level of participants' computer skills, they were each given a test. The test is referred to here as the *computer skills assessment instrument*.<sup>2</sup> The full instrument is included as an appendix to this document. It is a task-based assessment, meaning that the person being evaluated must complete a series of multi-step tasks to demonstrate competence in each skill area. A trained evaluator conducts the assessment by reading the tasks to the person taking the test and recording whether or not the person is able to complete each of the 96 distinct tasks.

The instrument is designed to measure skills in four common areas:

- General operation of the computer,
- Word processing,
- Using the World Wide Web, and
- Electronic mail.

The instrument is designed to start with very basic tasks, such as turning on the computer and opening a file, and progress to the more difficult tasks. It is organized into six sections: 1) basic computer and operating system, 2) World Wide Web, 3) electronic mail, 4) basic word processing, 5) advanced word processing, and 6) advanced operating system. Word processing skills were tested using Microsoft Word.

### **Participants and Assessment Rates**

The initial, or baseline, assessment was conducted in December 2001, and the second round of the assessment was conducted in June 2002. All participants who had attended the WEAS program between January and June were considered eligible for the assessment. The number of people eligible for the assessment increased from 35 people

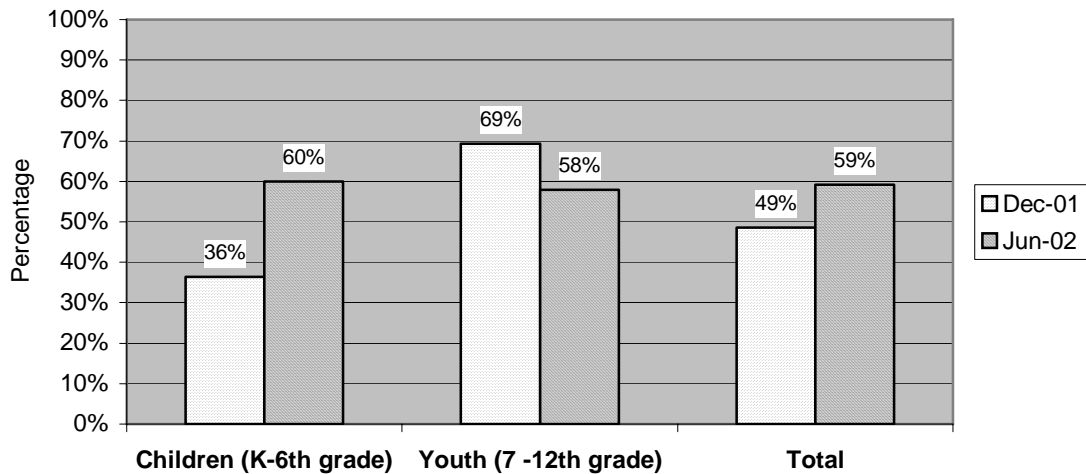
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<sup>2</sup> The full task-based computer skills assessment instrument and instructions for evaluators are included as appendices to this report.

in December to 49 people in June. However, not everyone who was eligible participated in the assessment.

In the first round of the assessment, the participation rate was 49 percent, meaning that 17 out of 35 eligible participants took the test. The assessment participation rate increased to 59 percent in the second round, when 29 out of 49 eligible participants took the test. Figure 1 indicates the percentage of eligible participants who took the test in each age group, where children are defined as those in pre-K through sixth grade and youth are those in seventh through twelfth grade.

**Figure 1: Assessment Participation Rates by Age Group**



### Attempt Rates

The assessment instrument was organized so that similar types of skills were grouped together. For example, word processing skills were grouped together and electronic mail skills were grouped together. If a person had never used a specific skill area, such as electronic mail, then the tasks in that skill area were not attempted.

**Table 1. Attempt Rates by Skill Area and Age Group**

Skill Area	Children		Youth		Total	
	12/01 (n=8)	6/02 (n=18)	12/01 (n=9)	6/02 (n=11)	12/01 (n=17)	6/02 (n=29)
1: Basic Operating	100	100	100	100	100	100
2: WWW	75	50	89	91	82	66
3: E-mail	13	6	44	73	29	31
4: Word processing	0	11	56	73	29	34
5: Advanced WP	na	na	44	73	24	28
6: Advanced operating	0	11	44	73	24	34

Table 1 indicates the attempt rates by age group and skill area. Predictably, attempt rates declined as the difficulty level of the instrument increased: while everyone attempted the first skill area, only 24 percent of participants in December and 34 percent of participants in June attempted the sixth (and highest) skill level. In addition, children were less likely than youth to attempt more advanced skill areas. It should be noted that no children under 12 years of age were asked to complete the advanced word processing (skill area 5), because of the advanced spelling and keyboarding skills required.

### III. THE ASSESSMENT RESULTS

There are two important questions that can be answered with the assessment results:

1. What were the skill levels of lab participants in December 2001 and June 2002?
2. Were there any changes in skill levels for people who took the test in both December and June?

These questions can be answered by looking at lab participants' scores on the December and June tests. Test scores are simply the percentage of tasks completed correctly. An individual's score is calculated by dividing the number of tasks completed correctly by the total number of tasks in the assessment (95 tasks).

#### Skill Levels of Lab Participants

The scores indicate the overall skill levels of lab participants (table 2). There were 17 people who took the test in December and 29 people who took the test in June. As might be expected, skill levels were lower for children than for youth.

**Table 2. Full Sample Average Scores by Skill Area and Age Group (in percentage)**

Skill Area	Children		Youth		Total	
	12/01 (n=8)	6/02 (n=18)	12/01 (n=9)	6/02 (n=11)	12/01 (n=17)	6/02 (n=29)
1: Basic Operating	74	66	91	91	83	76
2: WWW	32	28	64	79	49	47
3: E-mail	10	4	44	45	28	19
4: Word processing	0	10	52	73	27	34
5: Advanced WP	na	na	35	70	19	26
6: Advanced operating	0	7	32	63	17	28
Overall Average	21	21	55	72	39	40

Average scores for the group as a whole did not change: participants successfully completed 39 to 40 percent of the tasks in the assessment. This means that the 29 people tested in June had about the same skill levels on average as the 17 people tested six months earlier (in December). Among children, the average score held steady at 21 percent for both the first and second rounds. The average score among youth increased from 55 percent to 72 percent. However, this increase was only marginally significant in a statistical sense ( $p=.14$ ).

In summary, the average skill levels for the children and youth attending the program in December were similar to those attending the program in June. It is important to remember that the scores for the full sample provide information on the overall skill levels of lab participants at any particular time. These skill levels should not be interpreted as impacts of the WEAS program, since several new participants were tested in the second round. For example, over twice as many children were tested in the second round as in the first. The next section analyzes the impacts of the lab on participants' computer skills by focusing only on the results for those participants who took the test in both December and June.

### Changes in Skill Levels Over Time

In order to analyze the impact of the computer lab on participants' skill levels, it is necessary to look at the scores of people who took the test in both rounds. There were seven people who took the test in both December and June. These are the people who have been using the computer lab at least six months. In this group, there were three children and four youth.<sup>3</sup> This group of participants is referred to as the "paired sample" because each individual's score from the first round is "paired" with his or her score in the second round for the statistical analysis.

The results indicate that lab participants improved their computer skills over the six-month period between December and June. As can be seen in table 3, the average score for the group as a whole increased from 39 to 54 ( $p < .05$ ). These increases were primarily attributable to improvements among the youth. The scores for youth increased over 40 percent, from an average of 51 in December to an average of 73 in June ( $p < .10$ ). The children in the paired sample also experienced improvements, from 25 to 30, but the difference was not statistically significant ( $p = .30$ ). Of course, the very small sample size reduced the possibility of finding statistically significant results.

**Table 3. Paired Sample Average Scores by Skill Area and Age Group (in percentage)**

Skill Area	Children		Youth		Total	
	12/01 (n=3)	6/02 (n=3)	12/01 (n=4)	6/02 (n=4)	12/01 (n=7)	6/02 (n=7)
1: Basic Operating	90	79	92	93	91	87
2: WWW	39	48	59	84	51	69
3: E-mail	0	0	25	29	14	16
4: Word processing	0	26	44	75	25	54
5: Advanced WP	na	na	39	71	22	41
6: Advanced operating	0	15	25	73	14	48
Overall Average	25	30	51	73	39	54

<sup>3</sup> In fact, there were three children, three youth, and one individual who was difficult to classify. This individual was on the border between youth and child. However, this individual had been tested (and did quite well) on module 5, while the other children were not tested on module 5. Therefore, the individual's scores were included with the scores for the youth.

#### **IV. SUMMARY AND CONCLUSION**

The results indicate that the WEAS computer lab has had a positive impact on the computer skills of participants. The computer skills of youth, in particular, increased significantly over the six-month period between assessments. Youth who took the assessment in both rounds were only able to complete about half of the tasks in the first round, but could complete almost three-quarters of the tasks in the second round. While children's scores were also moving in a positive direction, the increases were not as large, and they were not statistically significant.

Low assessment rates were an important constraint to evaluating the impact of the program. Less than 60 percent of eligible program participants completed the computer skills assessment. Only seven children and youth took the assessment in both rounds. This resulted in a small sample and made it difficult to say with confidence that any changes in scores were due to systematic improvements in skills. The low assessment rates were probably a factor in not being able to identify program impacts on children.

In addition, not all increases in skills should necessarily be attributed to the WEAS program. It is possible that some of the gains in computer skills were due to computer instruction in school, rather than being entirely due to participation in the WEAS program. This appears to be a more important possibility for the youth, as they demonstrated the largest increase in skills.

Even with these limitations in mind, the WEAS program appears to be having a positive impact on the computer skills of program participants, particularly the youth. By coming to the lab, using the information technology provided there, receiving informal tutoring from the computer specialist and advice from each other, youth are improving their skills. By offering a well-equipped, Internet-connected lab with regular operating hours and qualified staff, the West End After-School program is helping to bridge the digital divide affecting at-risk youth.

# APPENDIX 1: TASK-BASED COMPUTER SKILLS ASSESSMENT INSTRUMENT

Evaluator Name \_\_\_\_\_

**Note:** Check [4] the blank for successfully completed tasks and place an **X** in the blank for tasks that are not completed successfully

Participant Name \_\_\_\_\_

Date \_\_\_\_\_

## Skill Area 1: Basic Computer and Operating System Skills

\_\_\_\_\_ Skill Set 1.1: Identifying basic components of the computer

- \_\_\_\_\_ Step 1: Identify the CPU [main part of the computer]
- \_\_\_\_\_ Step 2: Identify the keyboard
- \_\_\_\_\_ Step 3: Identify the mouse
- \_\_\_\_\_ Step 4: Identify the monitor
- \_\_\_\_\_ Step 5: Identify the printer

\_\_\_\_\_ Skill Set 1.2: Turning on the computer, opening a program, using the mouse

- \_\_\_\_\_ Step 1: Turn on the computer
- \_\_\_\_\_ Step 2: Open the Internet Explorer program
- \_\_\_\_\_ Step 3: Exit the program

\_\_\_\_\_ Skill Set 1.3: Multi-tasking: running two programs at once, closing programs

- \_\_\_\_\_ Step 1: Open the Internet Explorer program
- \_\_\_\_\_ Step 1: Open Word without closing Internet Explorer
- \_\_\_\_\_ Step 2: Without closing Word, return to Internet Explorer
- \_\_\_\_\_ EVALUATOR: Instruct the person to exit both programs

\_\_\_\_\_ Skill Set 1.4: Opening and closing files

- \_\_\_\_\_ EVALUATOR: Tell the person how to open the *Computer Skills* folder on the desktop then open the *St. Louis Rams* folder so the document *Marshall Faulk* can be seen
- \_\_\_\_\_ Step 1: Open the document named *Marshall Faulk*
- \_\_\_\_\_ Step 2: Close the document

\_\_\_\_\_ Skill Set 1.5: Saving files to a disk

- \_\_\_\_\_ EVALUATOR: Give the person the formatted disk
- \_\_\_\_\_ Step 1: Insert a disk
- \_\_\_\_\_ Step 2: Save the document named *Marshall Faulk* to the disk

\_\_\_\_\_ Skill Set 1.6: Finding and opening files on disk

- \_\_\_\_\_ Step 1: Open the document named *A Very Short Story* on the disk
- \_\_\_\_\_ Step 2: Close the document and remove the disk
- \_\_\_\_\_ EVALUATOR: Instruct the person to exit Word.

\_\_\_\_\_ Skill Set 1.7: Using the CD-ROM drive

- \_\_\_\_\_ Step 1: Insert the \_\_\_\_\_ CD
- \_\_\_\_\_ Step 2: Start the \_\_\_\_\_ program
- \_\_\_\_\_ Step 3: Exit the program
- \_\_\_\_\_ Step 4: Eject the CD [take the CD out]

## Skill Area 2: World-Wide Web

**EVALUATOR ASKS:** *Have you ever used the World-Wide Web [internet] before?*

Yes \_\_\_\_\_ No \_\_\_\_\_ [If the answer is no, do not administer this skill area. If yes, continue.]

\_\_\_\_\_ Skill Set 2.1: Connecting to the world wide web [if not a dedicated line]

- \_\_\_\_\_ EVALUATOR: Skip this Skill Set if you have a full-time connection
- \_\_\_\_\_ Step 1: Connect to the internet
- \_\_\_\_\_ Step 2: Check your connection status

\_\_\_\_\_ Skill Set 2.2: Searching the web by using a search engine, following links, and going backwards.

- \_\_\_\_\_ EVALUATOR: Make sure the computer is connected to the internet
- \_\_\_\_\_ Step 1: Open Internet Explorer [get on the internet]
- \_\_\_\_\_ Step 2: Go to the Yahoo search engine
- \_\_\_\_\_ Step 3: Find a web site about your favorite musical group or artist
- \_\_\_\_\_ Step 4: Go back to the Yahoo page

\_\_\_\_\_ Skill Set 2.3: Going to a specific URL, setting a bookmark, returning to your homepage, and using a bookmark

- \_\_\_\_\_ Step 1: Go to **www.nfl.com**
- \_\_\_\_\_ EVALUATOR: Tell the person that the URL [web address] is on the index card
- \_\_\_\_\_ Step 2: Use the Rams “logo” link to find the St. Louis Rams page
- \_\_\_\_\_ Step 3: Bookmark the site [add to “Favorites” in Internet Explorer]
- \_\_\_\_\_ EVALUATOR: If the site is already book marked, have the person overwrite the previous bookmark.

- \_\_\_\_\_ Step 4: Return to your homepage [wherever you started]
- \_\_\_\_\_ Step 5: Use your bookmark to return to the St. Louis Rams page
- \_\_\_\_\_ EVALUATOR: Keep the person on the St. Louis Rams page for the next Skill Set. If they could not find it, tell them how to get there.

\_\_\_\_\_ Skill Set 2.4: Saving images from the web and viewing them

- \_\_\_\_\_ Step 1: Save the picture that you see on the Rams page to the desktop
- \_\_\_\_\_ EVALUATOR: If the person knows how to save the image but cannot find the *desktop*, tell them how to get there
- \_\_\_\_\_ Step 2: View the picture that you saved and then close it
- \_\_\_\_\_ EVALUATOR: If there is a full-time internet connection, ignore step 3
- \_\_\_\_\_ Step 3: Disconnect from the internet
- \_\_\_\_\_ EVALUATOR: Instruct the person to delete the graphic from the *desktop*

**Skill Area 3: Electronic Mail**

**EVALUATOR ASKS: *Have you ever used email before?***

Yes \_\_\_\_ No \_\_\_\_ [If the answer is no, do not administer this skill area. If yes, continue.]

\_\_\_\_\_ Skill Set 3.1: Sending and receiving e-mail

- \_\_\_\_\_ Step 1: Open the \_\_\_\_\_ e-mail program
- \_\_\_\_\_ EVALUATOR: If using Yahoo mail, tell the person that the ID and Password for access and the email address are on the index card
- \_\_\_\_\_ Step 2: Compose a new mail message [make, create, open]
- \_\_\_\_\_ Step 3: Address the message to the address on the “cue card”
- \_\_\_\_\_ Step 4: Type “test” in the subject line
- \_\_\_\_\_ Step 5: Type some words into the main part of the message
- \_\_\_\_\_ Step 6: Send the message
- \_\_\_\_\_ Step 7: Check for new messages
- \_\_\_\_\_ Step 8: Open the message with subject line “test”
- \_\_\_\_\_ Step 9: Close and delete the message
- \_\_\_\_\_ EVALUATOR: Keep the email program open for the next Skill Set

\_\_\_\_\_ Skill Set 3.2: Sending an attachment and downloading an attachment

- \_\_\_\_\_ EVALUATOR: Make sure the email program is still open. Instruct the person to create a new mail message address the message to the address on the “cue card”
- \_\_\_\_\_ Step 1: Type “file” in the subject line
- \_\_\_\_\_ Step 2: Attach the document called *Marshall Faulk* [from the folder named *Computer Skills*]
- \_\_\_\_\_ EVALUATOR: Have person send the message, then check for new ones

- \_\_\_\_\_ Step 3: Open the message with subject line “file”
- \_\_\_\_\_ Step 4: Save the attachment to the *desktop*
- \_\_\_\_\_ EVALUATOR: Instruct the person to close and delete the message, close the program, and delete the file from the *desktop*

**Skill Area 4: Word Processing Basics**

**EVALUATOR ASKS:** *Have you ever used a word processor such as Word before?*

Yes \_\_\_\_ No \_\_\_\_ [If the answer is no, do not administer this skill area. If yes, continue.]

\_\_\_\_\_ Skill Set 4.1: Entering, editing, and deleting text

- \_\_\_\_\_ Step 1: Open Word [or other word processing program]
- \_\_\_\_\_ EVALUATOR: If person cannot open Word, tell them how and continue
- \_\_\_\_\_ Step 2: Type the following: “Hello,”
- \_\_\_\_\_ Step 3: Move down the page two lines
- \_\_\_\_\_ Step 4: Type these two sentences: “You won a trip. Call for the prize.”
- \_\_\_\_\_ Step 5: Edit [change] the first sentence to read “You have not won a trip.”
- \_\_\_\_\_ Step 6: Delete [erase] the second sentence and type “Try again.”
- \_\_\_\_\_ EVALUATOR: Instruct the person to close the document without saving

\_\_\_\_\_ Skill Set 4.2: Selecting, cutting, copying, and pasting text

- \_\_\_\_\_ EVALUATOR: If it is not still open from Skill Area 1, instruct the person to open the document called *Frog and Toad* in the *Computer Skills* folder. You may have to tell them how step-by-step.
- \_\_\_\_\_ Step 1: Go to page 2 and select [highlight] the text on page 2
- \_\_\_\_\_ Step 2: Cut the selected text and paste it at the bottom of page 1 [move it to the bottom of page 1]
- \_\_\_\_\_ Step 3: Copy the title of the story so you can paste it somewhere else
- \_\_\_\_\_ Step 4: Paste [put, insert] the title at the bottom of the page
- \_\_\_\_\_ EVALUATOR: Leave the document open and go to the next skill set

\_\_\_\_\_ Skill Set 4.3: Selecting all of the text, undoing and redoing changes

- \_\_\_\_\_ EVALUATOR: Use the document *Frog and Toad* from the last skill set
- \_\_\_\_\_ Step 1: Select [highlight] all of the text [words] and delete [erase] it
- \_\_\_\_\_ Step 2: Undo the deletion [get the words back]
- \_\_\_\_\_ Step 3: Redo the deletion [erase the words again without using delete key]
- \_\_\_\_\_ EVALUATOR: Instruct the person to undo the deletion again. Leave the document open and go to the next skill set.

\_\_\_\_\_ Skill Set 4.4: Previewing and printing documents

- \_\_\_\_\_ EVALUATOR: Use the document *Frog and Toad* from the last skill set
- \_\_\_\_\_ Step 1: Use the print preview feature to view how the document will look when it's printed
- \_\_\_\_\_ Step 2: Close print preview
- \_\_\_\_\_ Step 3: Print the document
- \_\_\_\_\_ EVALUATOR: Leave the document open and go to the next skill set

\_\_\_\_\_ Skill Set 4.5: Saving files with a new name and deleting documents

- \_\_\_\_\_ Step 1: Save the document as [save it with a new name] *Frog* on the desktop
- \_\_\_\_\_ Step 2: Close the document named *Frog* and delete [erase] it

**Skill Area 5: Word Fundamentals [FOR PERSONS 12 AND OLDER ONLY]**

**EVALUATOR:** If the person skipped Skill Area 4 because they have no experience with word processors, skip this Skill Area too.

\_\_\_\_\_ Skill Set 5.1: Changing text alignment, font type, size, color, and style; and underlining text

- \_\_\_\_\_ EVALUATOR: Instruct the person to open the document called *A Very Short Story* in the *Computer Skills* folder
- \_\_\_\_\_ Step 1: Select [highlight] the title line that says "A Very Short Story"
- \_\_\_\_\_ Step 2: Center the title line
- \_\_\_\_\_ Step 3: Change font type to Arial
- \_\_\_\_\_ Step 4: Change font style to bold, italic, and underlined
- \_\_\_\_\_ Step 5: Change font size to 24 point
- \_\_\_\_\_ Step 6: Change font color to blue
- \_\_\_\_\_ EVALUATOR: Leave the document open and go to the next skill set

\_\_\_\_\_ Skill Set 5.2: Checking spelling and using the thesaurus, finding and replacing words

- \_\_\_\_\_ EVALUATOR: Use the document *A Very Short Story* from last skill set
- \_\_\_\_\_ Step 1: Check document spelling
- \_\_\_\_\_ Step 2: Use the "find" feature to find the word "glob"
- \_\_\_\_\_ Step 3: Use the thesaurus to find a word that means the same as "glob" and replace "glob" with the word that you choose
- \_\_\_\_\_ Step 4: Use the "find and replace" feature to find the next occurrence of "glob" and replace it with the same word that you chose earlier
- \_\_\_\_\_ EVALUATOR: Leave the document open and go to the next skill set

\_\_\_\_\_ Skill Set 5.3: Viewing documents using the *normal* and *print layout* views [*“page layout in earlier versions of WORD* ], using the “page setup” feature to change margins and paper orientation

\_\_\_\_\_ EVALUATOR: Use the document *A Very Short Story* from last skill set

\_\_\_\_\_ Step 1: Change view to normal

\_\_\_\_\_ Step 2: Change view to page [or print] layout

\_\_\_\_\_ Step 3: Open the “page setup” feature

\_\_\_\_\_ Step 4: Change the left and right margins to 1.5 inches

\_\_\_\_\_ Step 5: Change the paper orientation from “portrait” to “landscape”

\_\_\_\_\_ Step 6: Close page setup

\_\_\_\_\_ EVALUATOR: Leave the document open and go to the next skill set

\_\_\_\_\_ Skill Set 5.4: Inserting page numbers and inserting dates

\_\_\_\_\_ EVALUATOR: Use the document *A Very Short Story* from last skill set

\_\_\_\_\_ Step 1: Insert a page number at the bottom center of the document

\_\_\_\_\_ Step 2: Insert today’s date at the top of the page

\_\_\_\_\_ EVALUATOR: Instruct the person to close the document without saving

\_\_\_\_\_ Skill Set 5.5: Creating numbered and bulleted lists

\_\_\_\_\_ Step 1: Open the document called *Grocery List* in the *Computer Skills* folder

\_\_\_\_\_ Step 2: Using the “bullets and numbering” feature, number the items in the grocery list

\_\_\_\_\_ Step 3: Using the “bullets and numbering” feature, bullet the items in the grocery list

\_\_\_\_\_ EVALUATOR: Instruct the person to close the document without saving

## **Skill Area 6: More Advanced Operating System Skills**

\_\_\_\_\_ Skill Set 6.1: Navigating among folders, creating and naming folders, moving and copying files, deleting folders

\_\_\_\_\_ Step 1: Open the *Computer Skills* folder

\_\_\_\_\_ Step 2: Create a new folder within the *Computer Skills* folder

\_\_\_\_\_ Step 3: Name the new folder *Kansas City Chiefs*

\_\_\_\_\_ Step 4: Move the document named *Marshall Faulk* to the *Kansas City Chiefs* folder [a copy of *Marshall Faulk* should not remain in *St. Louis Rams* folder]

\_\_\_\_\_ Step 5: Copy the document *Marshall Faulk* and put it back in the *St. Louis Rams* folder [the Chiefs will never get Marshall Faulk]

\_\_\_\_\_ Step 6: Delete [erase] the folder named *Kansas City Chiefs*

\_\_\_\_\_ Skill Set 6.2: Finding files

\_\_\_\_\_ Step 1: Find the program called *Magic.exe*

EVALUATOR: If the person could not find the file, tell them how to get to it WITHOUT using the “find file” tool.

\_\_\_\_\_ Skill Set 6.3: Installing and uninstalling programs

\_\_\_\_\_ Step 1: Install *Magic.exe* on the hard drive

EVALUATOR: If necessary, tell the person which drive to install it on. However, the program itself should choose the proper drive.

\_\_\_\_\_ Step 2: Open the game, *Sean’s Magic Slate*, that you installed

EVALUATOR: If the person can’t find the game, tell them how to find it

\_\_\_\_\_ Step 3: Close *Sean’s Magic Slate*

\_\_\_\_\_ Step 4: Uninstall *Sean’s Magic Slate*

## **APPENDIX 2: EVALUATOR INSTRUCTION SHEET FOR TASK-BASED COMPUTER SKILLS ASSESSMENT**

### **1. INTRODUCTION**

This document is meant to guide the evaluator through the task-based skills assessment process. It lists the steps that the evaluator must take to prepare for each skill set. It also provides some important instructions meant to help the evaluator get ready to do the assessments.

### **2. SETTING UP**

1. First, create a folder named *Computer Skills* on the computer's hard drive. The *Computer Skills* folder and the files and folders that you place in it will be used for many skill sets.
2. From the FCRP evaluation web page (<http://outreach.missouri.edu/fcrp/evaluation.htm>), download the files "A Very Short Story.doc", "Grocery List.doc", "Letter.doc", and "Marshall Faulk.doc", "Roxys ABC Fish.exe" and "Cue Card" to the *Computer Skills* folder.
3. Within the *Computer Skills* folder, create two new folders and name them *St. Louis Rams* and *Roxy*.
4. Place the file called "Marshall Faulk.doc" in the *St. Louis Rams* folder and place the file called "Roxys ABC Fish.exe" in the *Roxy* folder.
5. Prepare a blank, formatted disk and save the document "A Very Short Story.doc" to it.
6. Using the instructions below, either type or write information needed in the blanks provided in the assessment instrument, then either print out or photocopy sufficient instruments for all participants.
7. Print out the "Cue Card".

### **Skill Area 1: Basic Computer and Operating System Skills**

- Skill set 1.1: Make sure the computer is off prior to starting.
- Skill set 1.2: If Internet Explorer and Word are not on any of your computers, select two commonly used programs on the computer and use them.

- Skill set 1.3: Be prepared to explain how to open the St. Louis Rams folder through the “My Computer” feature in a step-by-step fashion.
- Skill set 1.6 and 1.7: Provide the disk that contains the file “A Very Short Story”.
- Skill set 1.8: Provide a CD-ROM program that is either already installed on the computer or that runs only off the CD and write the name of the program in the blank. The program can be a popular game, an encyclopedia, or other program.

### **Skill Area 2: World-Wide Web**

- For this skill area, the evaluator must make sure that Adobe Acrobat Reader is installed on the computer that will be used for the assessment. If it is not, download it from the web and install it.
- Skill set 2.1: If the computer is on a network with full-time internet access, this skill set can be skipped.
- Skill set 2.3 to 2.5: The person being assessed will need the “Cue Card” with the FCRP URL on it.
- Skill set 2.4: Write the name of YOUR program site in the blank.

### **Skill Area 3: Electronic Mail**

- Skill sets 3.1 and 3.2: The evaluator should use a general program email account. A general account can be set up using Yahoo mail or Hotmail if one does not already exist. The person being evaluated should use this account to send and receive the email message. If you are using Yahoo or Hotmail, add the account ID and Password to the “Cue Card”.
- Skill set 3.1: Write the name of the email program to be used in the blank.
- Skill sets 3.1 and 3.2: Write the address of the general email account on the “Cue Card”.

### **Skill Area 4: Word Processing Basics**

- Skill set 4.1: Be prepared to explain how to open the Computer Skills folder through the “My Computer” feature in a step-by-step fashion.

### **Skill Area 5: Word Fundamentals**

- Skill set 5.3: In older versions of Word, there are two main “view” features: “normal” and “page layout”. In newer versions, the “page layout” view is called

“print layout”. Instruct the person being evaluated according to the version of Word you are using.

### **Skill Area 6: More Advanced Operating System Skills**

- Skill sets 6.2 & 6.3: Write the name of the hard drive in the blanks.
- Skill set 6.3: Be prepared to explain how to find the file Roxys ABC Fish.exe in the Computer Skills folder through the “My Computer” feature or “Windows Explorer” feature in a step-by-step fashion. DO NOT use the “Find File” feature.

### **3. ASSESSMENT INSTRUCTIONS**

1. Complete all of the steps described above in the “Setting Up” section before starting.
2. Try to keep distractions (noise, activities) to a minimum while giving the assessment.
3. Before starting, you must obtain “verbal assent” from the participant. Say the following (or something similar) to the person being evaluated.

“Thank you for agreeing to participate in this assessment. You do not have to participate in this assessment if you do not want to and you can stop at anytime. You will not be penalized in any way if you decide not to participate.”

4. Also before starting, you need to let the person know that he or she is not expected to know how to do everything and that it is OK if they cant do something. The main thing is to make the person understand that it’s alright if they can’t do something. You should say something like:

“This is a hard test and we don’t expect you to know how to do everything that we are going to ask you to do. If you don’t know how to do something and don’t think that you can figure out how to do it, just say so and we will move on to the next part. No big deal.”

5. Before starting, write your name and the name of the person being evaluated in the spaces provided. Make sure that both the first and last names are legible and that they are the same as the ones used in the output tracking spreadsheets.
6. Use the Evaluation Instrument as a basic script, reading each step within the skill sets as instructions to the person being assessed. For example, for skill set 1.3, you would start by saying something like “Now I would like you to find a

- document named “Marshall Faulk” on the “C” drive (or whatever drive is the main hard drive).” When the person locates the file, you will say something like “Now I would like you to open the document”, and so on. DO NOT read the Skill Area heading that tells what the area is assessing. Just start with “Step 1”.
7. When giving directions to the person being assessed, you may rephrase the instructions in order to clarify what is expected (rephrase computer jargon), but you must be careful *not to give hints about how to do it*. For example, if the person does not understand a technical term such as “cut-and-paste”, you might use “move” instead. Alternative words are provided in parentheses next to difficult terminology in the instrument.
  8. The skill areas and skill sets should be done in order.
  9. Skill Area 5: Word Fundamentals should NOT be administered to children 10 and under.
  10. It is important to remember that there are often several ways to accomplish a given task. As long as the task is accomplished (without using “HELP”), the means do not matter.
  11. Pay close attention to the notes to the EVALUATOR in the instrument itself. Especially important are the instructions that tell you what to do if a person being evaluated cannot do something basic like open Word. Remember, if you have to tell a person how to complete a step, the person does not get credit for the step.
  12. If a person struggles with a step, give him or her about 30 seconds to find a solution. If after 30 seconds he or she cannot complete the step, gently say that it is time to move on and go to the next step.