DOCUMENT RESUME

ED 357 549 EC 302 092

AUTHOR Young, Eileen Boyle; Kerr, April
TITLE Using Computers in Summer Fun in the City.
PUB DATE Mar 93
NOTE 7p.
PUB TYPE Reports - Descriptive (141) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Computer Assisted Instruction; Computer Literacy; Computer Uses in Education; Elementary Education; Elementary School Students; *Integrated Curriculum; *Mainstreaming; *Mental Retardation; Pilot Projects; Recreational Programs; *Summer Programs; Urban Education
IDENTIFIERS LOGO Programing Language

ABSTRACT

Summer Fun in the City was a pilot inclusion project of the Council for Retarded Citizens of Jefferson County, Kentucky. It was a 2-week recreational educational program for students, ages 7 to 14, with diverse abilities and disabilities. One component of the program was the use of computers, with children using LogoWriter as their tool. The program's teachers, who were simultaneously enrolled in a graduate education course, reviewed research on the use of Logo with special needs students, learned how to use LogoWriter and Macintosh computers as learning tools, and learned how to use computers as an integral part of the curriculum. Students were divided into small integrated groups to complete individual and small group writing and drawing activities. Computer activities were integrated into the curriculum by having students use the computers to create name badges to wear on field trips, draw and label scenes seen on field trips, and compose thank you letters to field trip hosts. (JDD)

Using Computers in Summer Fun in the City

Eileen Boyle Young, Ed.D.
Professor of Education
Spalding University
851 South Fourth Avenue
Louisville, Kentucky 40203
phone: 502-585-7121 X283
fax: 502-585-7156

April Kerr, MSW
Assistant Executive Director
Council for Retarded Citizens
1146 South Third Street
Louisville, Kentucky 40203
phone: 502-584-1239

"An important theme of Logo research is the idea that individuals can--and in some cases must--follow very different learning paths." Seymour Papert

Introduction

Summer Fun in the City, a pilot inclusion project of the Council for Retarded Citizens of Jefferson County, Kentucky, was a two week, all day recreational educational program for students in special and regular education--children ages seven to fourteen with diverse abilities and disabilities.[1] This presentation discusses one activity of the program: using computers.

This was a learning experience for both teachers and children; the teachers who worked with the campers using computers were, at the same time, enrolled in a workshop at Spalding University in Louisville, Kentucky, earning three graduate education credits. Because this program activity involved both campers and their teachers using computers, the working hypothesis was threefold:

- Using LogoWriter[2] as their tool, all children can benefit from interaction with the computer;
- Working with learners in a Logo environment, teachers can increase their own understanding of how children think;
- As learning and social interaction tools, computers and LogoWriter can be integrated into any curriculum (even a recreational one).

The program created an opportunity for success for learners, especially for those who do not often experience success. The Logo environment provided participants with structured yet open motivation, a means of verbal and visual communication, a framework for writing and drawing, and a medium for playing and exploring.

---

[1] Summer Fun in the City Training Module is available from the Council for Retarded Citizens of Jefferson County, 1146 South Third Street, Louisville, KY 40203. The module includes information about the program: a description, planning process, daily activities, learner and teacher outcomes, and the evaluation process. A video of the program in action is available, also.

[2] Logo Computer Systems Incorporated (LCSI)

As a result of their experience in this introductory level project, campers should be able to use computers as tools to think, communicate, and learn in their own individual ways; teachers should be able to use computers as tools to think, communicate, and learn with all students in the students' own individual ways.

Learner Activities
For Teachers
Each day teachers spent two hours with their instructor in a "round table setting" reviewing the preceding day's progress with students and preparing the next day's agenda. This "project" approach integrated computer work with the rest of the day's planned activities. In the process, the teachers learned how to work with students using computers as an integral part of the curriculum and how to use LogoWriter and Macintosh computers as learning tools.

Teachers spent additional time outside of class researching the topic "What the research shows about Logo and Special Needs Students", reading Sylvia Weir's Cultivating Minds and Seymour Papert's Mindstorms: Children, Computers, and Powerful Ideas, and thinking about how children think. Teachers also had access to **Logo Exchange Journal** (1983-1992) and **The Computer Teacher Journal** (1982-1992) for teaching/learning ideas.

The Research and Development Lab of the Council for Retarded Citizens, then housed at Spalding University in Louisville, Kentucky, provided the site for the using computers portion of **Summer Fun in the City**, with 6 Macintosh computers linked to a LaserwriterII printer.

For Campers
Getting Acquainted
Before they came to work in the Lab, students were given riddle questions and time to think, discuss and form answers. The riddle answers were mounted on the walls of the Lab for students to find and match on their first visit to the Lab. This activity served the dual functions of ice-breaker and assessment tool. The teachers were able to gauge students' levels of cognition and to adjust the first day's activities accordingly. These same or other riddles were used in later computer work; students used them as patterns in dialogue writing.

General Operating Procedures
Students were divided into small groups of three (two with cognitive impairments and one with no cognitive impairment) or four (two and two), based upon chronological age. Each group was

assigned to a computer and a teacher. Each teacher followed the same lesson plan, making allowance for individual learner differences within her small group of students. Each day's activities included individual and small group writing and drawing and an opportunity to share with the large group. Students began their **Summer Fun in the City** day with the two hour using computers activity in the Lab.

Usually, students worked with teacher-made LogoWriter procedures. The teachers learned to create the procedures as part of their course work. Working with students, the teachers used LogoWriter's wordprocessing capabilities for regular text; they also used Logo primitives: label, shape and setsh(ape), fill, shade, stamp, hide and show turtle, slow and fast turtle, clearing text, graphics, and the command center. Some students worked with classic turtle graphics, others with sound (tone), and all students learned the concepts "name, save, get, and new page" and "print screen.

Students were encouraged to use the printer to produce paper copies of their writings and drawings and to use the copy machine to make bulletin board exhibits, and other resources at the work table to further enhance their work. Worktables for off-computer activities contained construction and plain paper, crayons, markers, hole punches, scissors, yarn, clear tape, and other resources such as selected children's books including Bennett Cerf's Riddle Books, Shel Silverstein's A Light in the Attic and Where the Sidewalk Ends, Eric Carle's Animals, and Jack Perlusky's Something Big Has Been Here.

Click, Point, Drag

A Quick Tour of the Macintosh (point, click, drag activities only) allowed students to practice these three necessary skills until they mastered them. KidPix [3] reinforced mastery of point, click, and drag. Even the more cognitively impaired students recognized the icon on the harddisk drive and understood how to open and use KidPix. Given our use of this resource, the public domain edition was adequate. Another time, we would consider use of the full edition and the newly available KidPix Companion. Ability to use the mouse was the only prerequisite skill asked of the students for successful participation in the Lab Logo activities

Integration with Rest of the Day

Thank You Notes--Each day, students used LogoWriter to produce small group text and graphics notes to send to the previous day's field trip host. In the process, the small groups brainstormed about what each member enjoyed most and decided which items to include in their note. They used shapes and stamps to decorate

[3]A product of Broderbund Software. A Public Domain version is available.

their text. Using the same skills, the students created "Invitations for Parents" to attend the Closing Ceremony of the program.

Instant Logo-- Using teacher-made procedures students were able to explore with Logo primitives such as forward, back, right, left, penup, pendown, cleartext, cleargraphics, and stop. This introductory exercise could have been extended to focus on directionality using mazes.

Scenes from Observations in the City--Using experiences such as riding TARC (city bus system), visits to the Museum of Natural History and Science, the Kentucky Derby Museum, and Speed Art Museum, swimming, playing ball in the park, and eating lunch on the Ohio River Belvedere, students worked in small groups using LogoWriter in immediate mode to draw scenes and label them.

Working with Basic Geometric Shapes--Using the set of teacher-made procedures, students worked with plane figures: square, triangle, rectangle, rhombus, and trapezoid to form shapes and designs. This computer activity related to their visit to the craft shop to decorate tee shirts with geometric designs. Also, with fill and shade Logo primitives they were able to simulate their tie-dyeing experience. Given more time, this could have been extended to include traditional Logo activities on the computer such as making quilts or working with tangrams and pentominoes.

ID Badges--Using teacher-made procedures students and teachers created individual name plates. They used available Logo stamps and the Logo primitives shade and label to personalize their badges. After a visit to the work table to add finishing touches and cut them out, the badges either appeared on yarn around their necks or with double sided tape attached to their shirts. Also, students used LogoWriter to word process and decorate "I poems" (I like...).

Planetarium Sky--Students created the big dipper and other starry skyscapes. Also, many created a special ID badge of stars to wear on their field trip to the Rauch Planetarium.

Louisville Zoo--The trip to the Zoo gave the students an opportunity to think about animals. Their task was to observe one animal so they could describe that animal in regular text using LogoWriter; the other students, were to guess what animal they had described. Also, they wrote their response to the lead "If I were a(n)." They shared what they knew about where the animal lived, its size, eating habits.... Lab use of The National Zoo videodisc before the field trip heightened the students' anticipation, and

the day after the field trip renewed their memory of the animals seen in the Zoo.

Evaluation
For summative evaluation at the last session students were asked to complete these tasks:

·Using LogoWriter individually answer "What I liked most about Summer Fun in the City", "What I liked least about Summer Fun in the City" and "What I think about using the computer".
·Using LogoWriter describe yourself in words.
·Using KidPix draw your picture.
·Using the laserprinter make hardcopy; then use the copy machine for bulletin board copies.

The teachers completed formative evaluations daily in "round table" sessions with their instructor. A video tape of a typical lab session is available.

Recommendations
Next summer we will make some changes in our "lessons".

·Make sure students know how to observe and how to mentally note their observations or provide them a memory "scaffold." Our experience indicated that students cannot make connections unless their skills of observation and memory are fine tuned.
·Adapt what teachers know about the writing process for use with students with a diversity of abilities and disabilities in an inclusion setting.
·Reduce Lab time to ninety minute settings to better maintain focus.
·Make computers available during other times of the day for a more integrated experience.
·Create an ongoing workshop during the academic year to prepare teachers to work with students in this setting.

Project Replication Notes
Any form of Logo can be used. However, the use of the mouse and the Macintosh allowed the teachers and students to begin as soon as they mastered "point, click, and drag." No special key combinations are needed to operate in this environment. LCSI LogoWriter implemented on the Macintosh gives users immediate on-screen access to help with primitives.

Summer Fun Technology Please click the mouse	April Kerr, MSW Ass't Executive Director Council Retarded Citizens Eileen Boyle Young, Ed.D Professor Spalding University please click mouse	Agenda √ Overview √ Planning √ Using Computers √ Evaluation Please click mouse
Project Goals Philosophical Basis please click mouse	"Planting the seed" Planning Committee Funding Please click mouse	Program Description please click mouse
Using Computers Daily Program Activities please click mouse	√ Click, Point, and Drag: KidPix √ Instant Logo √ Writing and Illustrating Observations and Opinions √ Basic Geometric Shapes √ ID Badges √ Planetarium Sky √ Louisville Zoo √ Derby Museum √ Museum and Belvedere √ Exploring Park and Pool	Student Outcomes Teacher Outcomes please click mouse
Evaluation Replication please click mouse	Council for Retarded Citizens of Jefferson County Kentucky 1146 South Third Street Louisville, KY 40203 502-584-1239 please click mouse	Training Module $15.00 Video $ 7.50 please click mouse