

PRECISE PROGRAM EVALUATION USING
LEARNING PICTURE REPORTS

or

"YOU OUGHTA BE IN PICTURES"

Deborah L. Wood and Dina Fisher
Sherwood Center

Abstract: Learning Pictures and Learning Picture Reports provide a new approach to program evaluation. The implementation of this approach at Sherwood Center for autistic children in Kansas City, Missouri was described.

The process of precise program evaluation was conducted in two (2) steps. First, learning pictures formed by the most recent celebrations of each child's charted academic assessments were recorded and categorized as GROWTH, MAINTENANCE or REGRESSION on a Learning Picture Report form. Each teacher also recorded revisions she chose to make in instructional programs as well as criterions reached by the children. Second, the Program Director summarized these Learning Picture Reports, charting the frequency of GROWTH, MAINTENANCE and REGRESSION pictures, as well as program revisions and criterions reached.

Periodic celebrations of the summarized data measured the overall effectiveness of the academic program for each term of the 1978-79 school year. These celebrations indicated that the instructional program was more effective during the second term with respect to both Learning Pictures and criterions reached. The authors suggest that this approach provides sensitivity to changes in overall instructional effectiveness and a precise program evaluation. They further suggest that Learning Picture Report data have the potential to answer detailed questions regarding instructional effectiveness.

Checklists, peer panels, controlled comparisons and standardized tests all have been used to measure the effectiveness of instructional programs (Stake, 1972). Dissatisfaction with these methods has led school administrators to seek new alternatives.

Sherwood Center, Inc. is a private, not-for-profit school for autistic children located in Kansas City, Missouri. Program evaluation is conducted using the Standard Behavior Chart, Learning Pictures and Learning Picture Reports. A description of this new approach and the results of the first year of implementation are reported.

METHOD

Subjects. Eight (8) female teachers and 36 autistic children participated in the study. The children included 9 girls and 27 boys ranging in age from 2-15. Each child had been diagnosed as autistic/developmentally

disabled. The children had been placed at Sherwood Center for speech, language, social and academic training. They were grouped into 8 classrooms according to language and social skills.

Procedure. Prior to the start of school, a Sherwood Center staff development workshop was conducted in which data collection and reporting procedures were taught. The staff learned how to pinpoint behaviors and chart data on the Standard Behavior Chart. Throughout the school year, these procedures were used to conduct weekly assessments of each child's performance on his/her academic curriculum tasks. The teachers learned to summarize these assessments by drawing celeration lines through charted frequencies correct and incorrect, forming two-line learning pictures.

Each child's learning pictures were described and categorized in a Learning Picture Report form (Wood, 1978) which was designed specifically for Sherwood Center after a similar model developed by Sokolove (1978). As recommended by Sokolove (1978), the Learning Picture Report form was developed inductively, that is, from learning pictures exhibited by the children. Model pictures were chosen to represent 50 distinct learning pictures exhibited by the children at Sherwood Center.

As shown in Figure 1, the Sherwood Learning Picture Report (Wood, 1978) categorized learning pictures as GROWTH (OK), MAINTENANCE (WATCH) or REGRESSION (CHANGE). GROWTH pictures are those that show frequencies correct and/or frequencies incorrect changing in the desired directions, that is, frequencies correct accelerating and/or frequencies incorrect decelerating. MAINTENANCE pictures are generally those in which frequencies correct and incorrect parallel one another. Frequencies correct and incorrect may be changing, but they are changing in the same direction at the same rate. REGRESSION pictures are those in which frequencies correct are decelerating and/or frequencies incorrect accelerating.

Every week teachers completed a Learning Picture Report on each child. As shown in Figure 1, teachers recorded the specific curriculum tasks and their learning channel teaching procedures. For each procedure, the learning picture formed by the most recent celerations was recorded in the appropriate column. The number of weeks the child had spent on the curriculum/procedure and the number of weeks since the last program revision were also recorded. If a child reached criterion on a curriculum/procedure, the teacher recorded this, as well as the task the child was to perform next. Finally, the teacher indicated what program revisions, if any, she intended to make to transform MAINTENANCE and REGRESSION pictures into GROWTH pictures. One copy of this report was submitted to the Program Director and another sent home to the parents.

In order to measure the overall effectiveness of the academic program at Sherwood Center, the Program Director summarized the weekly Learning Picture Reports for all children. She recorded and charted the frequency of GROWTH, MAINTENANCE and REGRESSION learning pictures, criterions reached and program revisions on the Weekly Standard Behavior Chart.

SHERWOOD LEARNING PICTURE REPORT

Figure 1

CURRICULUM	PROCEDURE	OK				WATCH			CHANGE			WEEKS ON		PROGRAM REVIEW/REVISION	
		1	2	3	4	5	6	7	8	9	10	11	Curr. #		Prog. #
					other LP							other LP			
Cutting F (circle)	...do	✓	✓	✓									3	3	No Change
Writing Shapes	look-wri								✓				3	3	Step back to lines
	...trace									✓			3	1	No change yet
Writing Numerals 0-10	...trace						-						3	3	Increase # of teaching sessions
General Information II	listen-answer			✓									3	3	Criterion met/Next: Gen Info III
Numeral I.D. 11-26	look-say		✓										2	2	No change
	listen-find	✓											2	2	No change
	look-find			✓									2	2	Criterion met
	listen-say		✓										2	2	No change
Picture I.D.:															
	Animals D	look-say		✓									1	1	No change
	listen-find	✓											1	1	No change
Articulation 2 syl. C	look-say							+							Move up to set III, retain missed item
Toys & Recr. A	look-say	✓											2	2	No change
	listen-find			✓									2	2	No change
Playskill-18 pc puzzle	...do												3	3	Criterion met/Next?

9
Curricula

11
Growth

2
Maintenance

2
Regression

Try Lincoln Log house

STUDENT _____

MCH
MANAGER _____

DATE 1-30-79

Figure 1, Sherwood Learning Picture Report

RESULTS

Chart 1 illustrates periodic celerations by term of the total number of learning pictures, as well as GROWTH, MAINTENANCE and REGRESSION pictures for all children at Sherwood Center. During the first term, MAINTENANCE pictures accelerated faster than all other pictures. During the second term, GROWTH pictures accelerated, while MAINTENANCE and REGRESSION pictures decelerated. These celerations indicate that instruction was more effective during the second term.

Chart 2 combines MAINTENANCE and REGRESSION pictures and even more clearly illustrates increased instructional effectiveness during the second term. Chart 2 also shows the celeration of program revisions and indicates that teachers made more revisions at the beginning than at the end of each term.

Chart 3 illustrates the almost identical celerations of the total number of learning pictures and the total number of criterions reached during both terms. The ratio between total learning pictures and criterions reached was x5 during the first term and x4 during the second term. This indicates increased instructional effectiveness during the second term.

DISCUSSION

The overall effectiveness of the academic program at Sherwood Center increased from the first to the second term during the 1978-79 school year as demonstrated by charts of Learning Pictures and criterions reached. These charts enabled the Program Director to be sensitive to changes in instructional effectiveness, while providing a precise program evaluation.

Many questions were raised during the school year as a result of the Learning Picture Report data. How do curriculum tasks, learning channel teaching procedures, instructional programs and functioning level of the student affect learning pictures? How often do program revisions change MAINTENANCE or REGRESSION pictures into GROWTH pictures? What types of program revisions are most effective? Learning Picture Report data have the potential to effectively answer these questions.

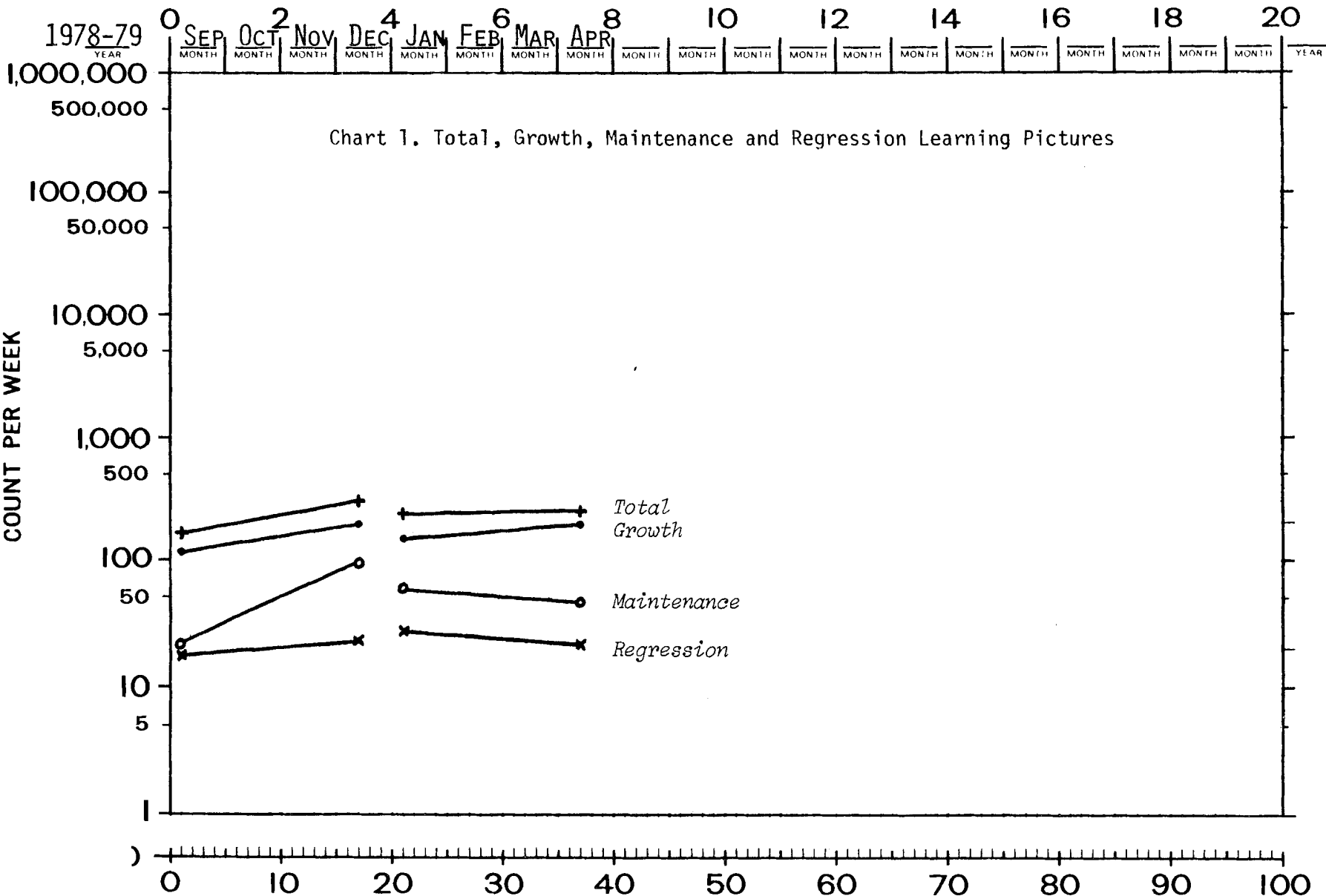
REFERENCES

- Pennypacker, H. S., Koenig, C. H., & Lindsley, O. R. *Handbook of the Standard Behavior Chart*. Kansas City, Kansas: Precision Media, 1972.
- Sokolove, Henri. *Blueprint for productive classrooms*. Shawnee Mission, Kansas: Shawnee Mission School District, 1978.
- Stake, R. E. The countenance of educational evaluation. In *Evaluating action programs: Readings in social action and education*, Carol H. Weiss (ed.). Boston: Allyn and Bacon, Inc., 1972.
- Wood, Deborah L. *The Sherwood Learning Picture Report*. Unpublished document. Kansas City, Missouri: Sherwood Center, Inc., 1978.

Deborah L. Wood, Program Director, and Dina Fisher, Executive Director, are co-founders of Sherwood Center for the Exceptional Child, Inc., 1617 West 45th Street, Kansas City, Missouri 64111.



INDAR MONTHS



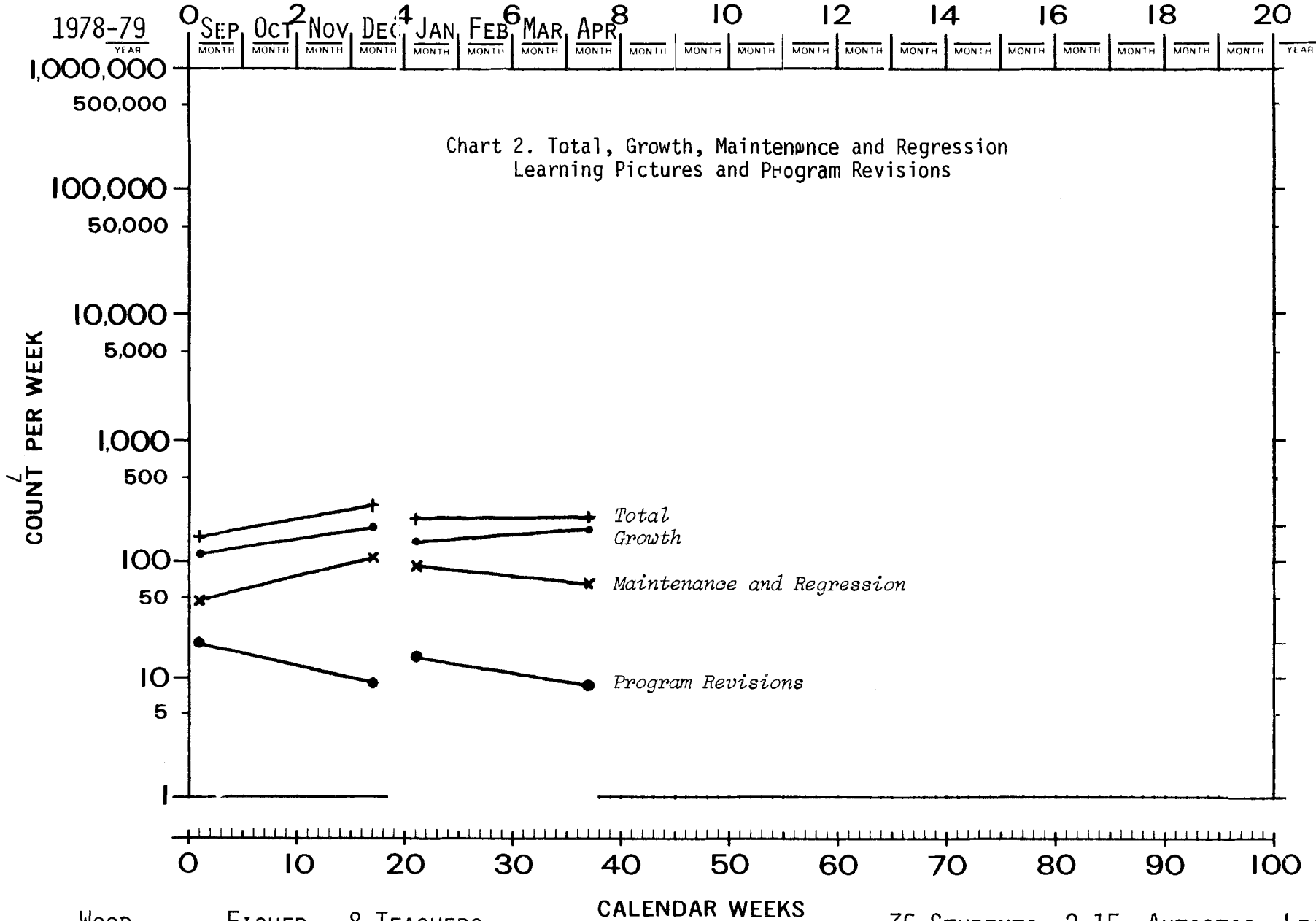
9

Wood, Deborah L. and Fisher, Dina. Precise program evaluation using learning picture reports. *Journal of Precision Teaching*, Volume 1, Number 1, April, 1980.

WOOD	FISHER	8 TEACHERS	CALENDAR WEEKS	36 STUDENTS	2-15 AUTISTIC	LEARNING
SUPERVISOR	ADVISER	MANAGER		BEHAVIOR	AGE LABEL	COUNTED
SHERWOOD CENTER	KANSAS CITY, MISSOURI			WOOD		PICTURES
DEPOSITOR	AGENCY	TIMER	COUNTER	CHARTER		



CALENDAR MONTHS



Wood, Deborah L. and Fisher, Dina. Precise program evaluation using learning picture reports. *Journal of Precision Teaching*, Volume 1, Number 1, April, 1980.

WOOD FISHER & TEACHERS
 SUPERVISOR ADVISER MANAGER

SHERWOOD CENTER KANSAS CITY, MISSOURI
 DEPOSITOR AGENCY

CALENDAR WEEKS

36 STUDENTS 2-15 AUTISTIC LEARNING
 BEHAVIOR AGE LABEL COUNTED

WOOD
 CHARTER

PICTURES



CALENDAR MONTHS

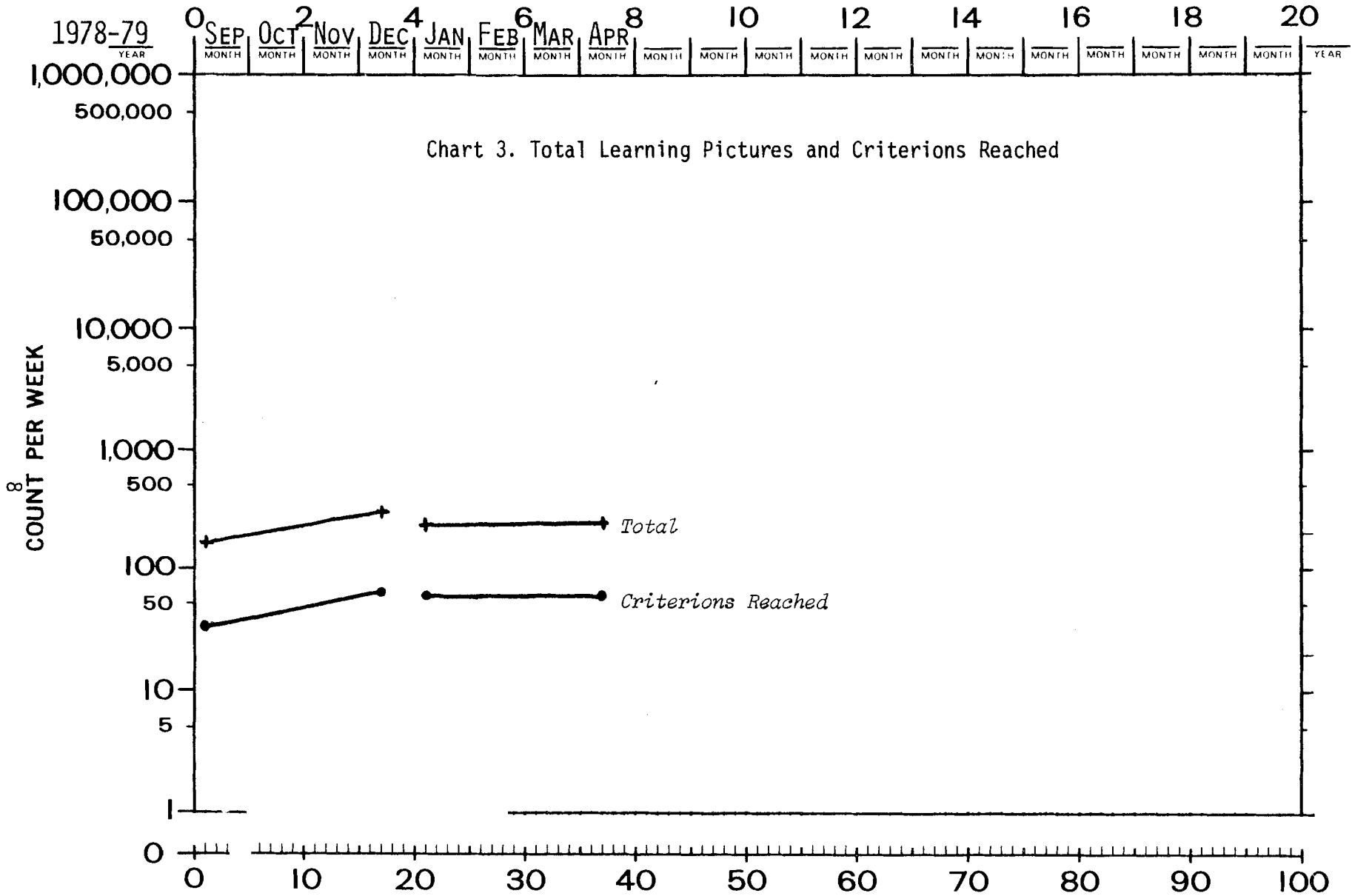


Chart 3. Total Learning Pictures and Criteria Reached

Wood, Deborah L. and Fisher, Dina. Precise program evaluation using learning picture reports. *Journal of Precision Teaching*, Volume 1, Number 1, April, 1980.

WOOD SUPERVISOR	FISHER ADVISER	8 TEACHERS MANAGER	36 STUDENTS BEHAVER	2-15 AGE	AUTISTIC LABEL	LEARNING COUNTED
SHERWOOD CENTER DEPOSITOR	KANSAS CITY, MISSOURI AGENCY		WOOD CHARTER			PICTURES