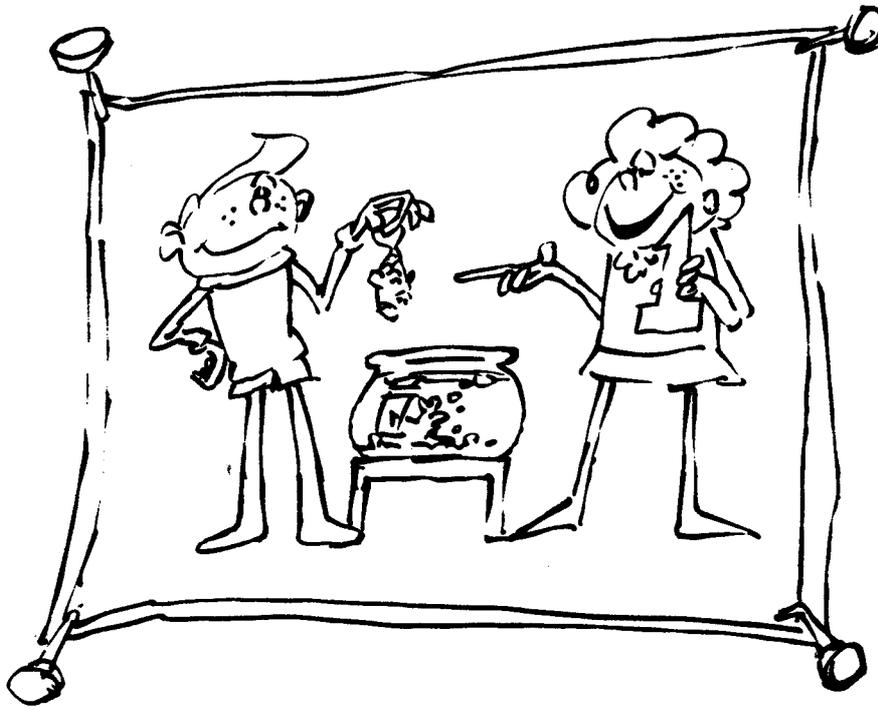


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PEER TUTORING:

An Organizational Option
when Time is Precious.

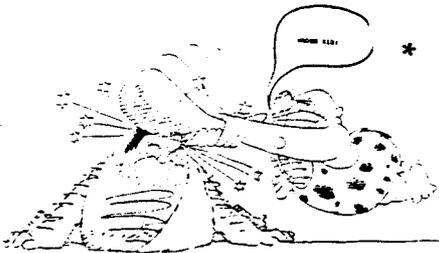




Peer teaching enables children to share their strengths, gives children more immediate feedback on their work, lets children learn from each other rather than being completely dependent on an adult, and gives a teacher an opportunity for more varied use of time.

I hope this resource will give you some points to think about in regard to peer teaching as well as offer you a structured peer tutoring programme to implement. Some of the points you may like to consider in implementing a peer tutoring programme are as follows:

- * *Can you see potential for beginning to to implement this idea in your classroom?*
- * *How will you explain peer teaching so children will understand what is being expected of them and why?*
- * *Can you foresee any problems you will have to solve first? For example, how can you make sure that the children doing the coaching don't overemphasise the partner's mistakes through overpersistent coaching of an unpleasant area of difficulty for the partner?*



As usual I have used many and varied texts and articles, such as the work by J Stowitschek and A Hecimovic, in compiling this resource. If I can be of any further assistance please do not hesitate to contact me on 420 4876.

*JULIE GLANVILLE
EDUCATION SUPPORT BRANCH*

May 16, 1985

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1.0 HOW DOES A TEACHER IDENTIFY TUTORS?

The type of tutors that can be used in a coaching situation can fall into the following categories and they are as follows:

- 1.1 Those children who are at a comparable skill level and task difficulty as the partner and have not mastered the task. Suitable tasks would include those tasks that do not require advance knowledge to determine correctness of the required responses, eg. basic number facts. With basic maths facts the answers to the problems can be supplied on the reverse side of flashcards.
- 1.2 Those children who have already mastered the task to be taught. This does not mean that the tutor has to be older or more proficient on all tasks. It simply means that the tutor must have enough knowledge regarding the learning tasks to provide an accurate assessment of the correctness of the answers the learner is giving. An example of a task requiring the tutor to have a higher level of proficiency in the task than the learner would be the reading of sight vocabulary.
- 1.3 Teacher Aides (if you are fortunate to be allocated one)
- 1.4 Parent Volunteers (an untapped resource)

2.0 WHAT ASPECTS OF YOUR PROGRAMME COULD CHILDREN WORK TOGETHER IN PAIRS?

Perhaps the best starting point is the language and literacy area:-

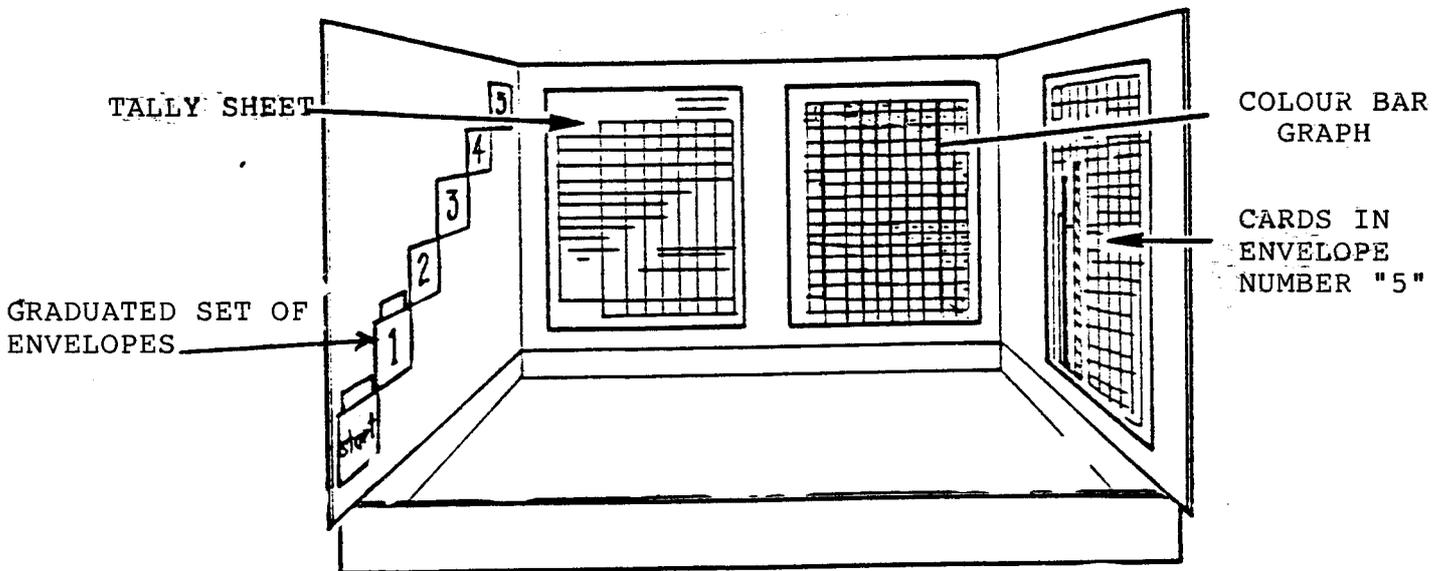
- 2.1 Preteaching activities as in the Direct Instruction programmes.
- 2.2 Reading eg. decoding difficulties, sight vocabulary, reading of phrases, short sentences or take turns in sight-reading aloud a carefully chosen text to each other.
- 2.3 Language Awareness Activities, eg close activities use of pronouns etc.
- 2.4 Spelling eg. spelling words orally or in written form from a teacher's diary record of a child's spelling difficulties during conference writing sessions, etc.
- 2.5 Mathematics eg. number recognition, money skills, telling of the time, multiplication tables etc.

3.0 WHAT MATERIALS COULD BE INCLUDED IN A PEER TUTORING PROGRAMME?

The following materials could be included in a peer tutoring programming:

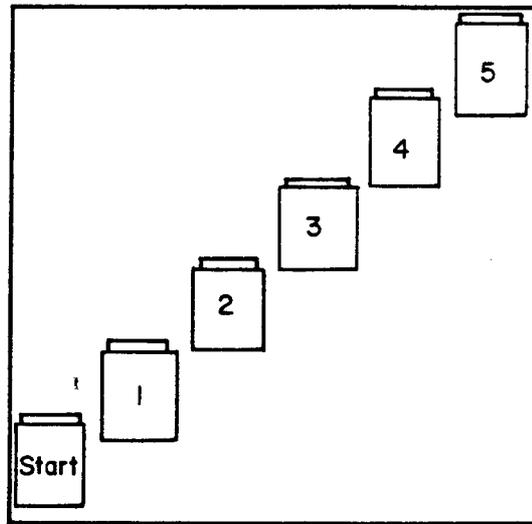
3.1 A Three-sided Fold-up Desk-top Carrel

- o Everything the tutor and learner need is contained on the sides of the carrel.
- o When the tutorial session is over, the entire carrel is folded up and put away, with the flashcards, graphs, etc, left in place, thus reducing problems of "set up" and "take down" time as well as loss of materials.



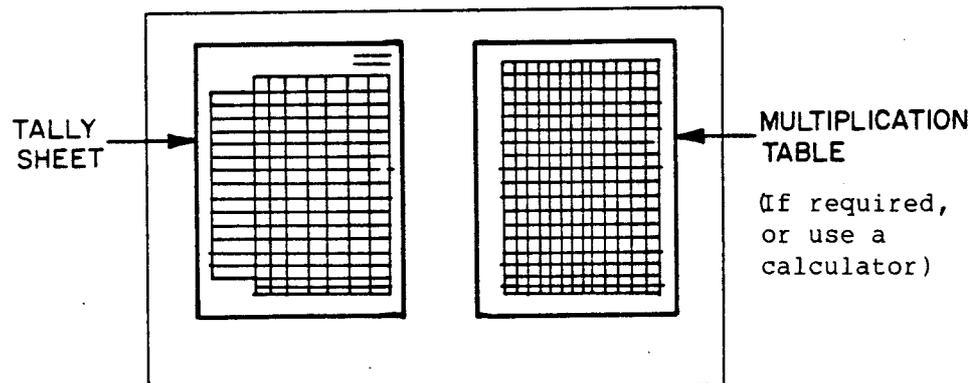
3.2 A Graduated Set of Envelopes

- o The set of envelopes is labelled "start" and numbered from "1" to "5". These envelopes are used to distribute the cards to be learned, according to the correctness of the learner's responses and the number of consecutive correct responses.
- o It is suggested that twenty-five cards be used at a time.
- o All of the cards start in the envelope labelled "start" and are moved along the succession of envelopes as the learner responds correctly to them. Those cards that are missed are moved back to the "start" envelope.



3.3 Tally Sheet (see appendix F)

- o This is located on centre of the carrel.
Tape, pin or place graph in plastic envelope on panel.
- o The tally sheet is used for recording of daily progress.
- o Computational aides for tallying can be used if necessary.



3.4 A Colour Bar Graph (Appendix G)

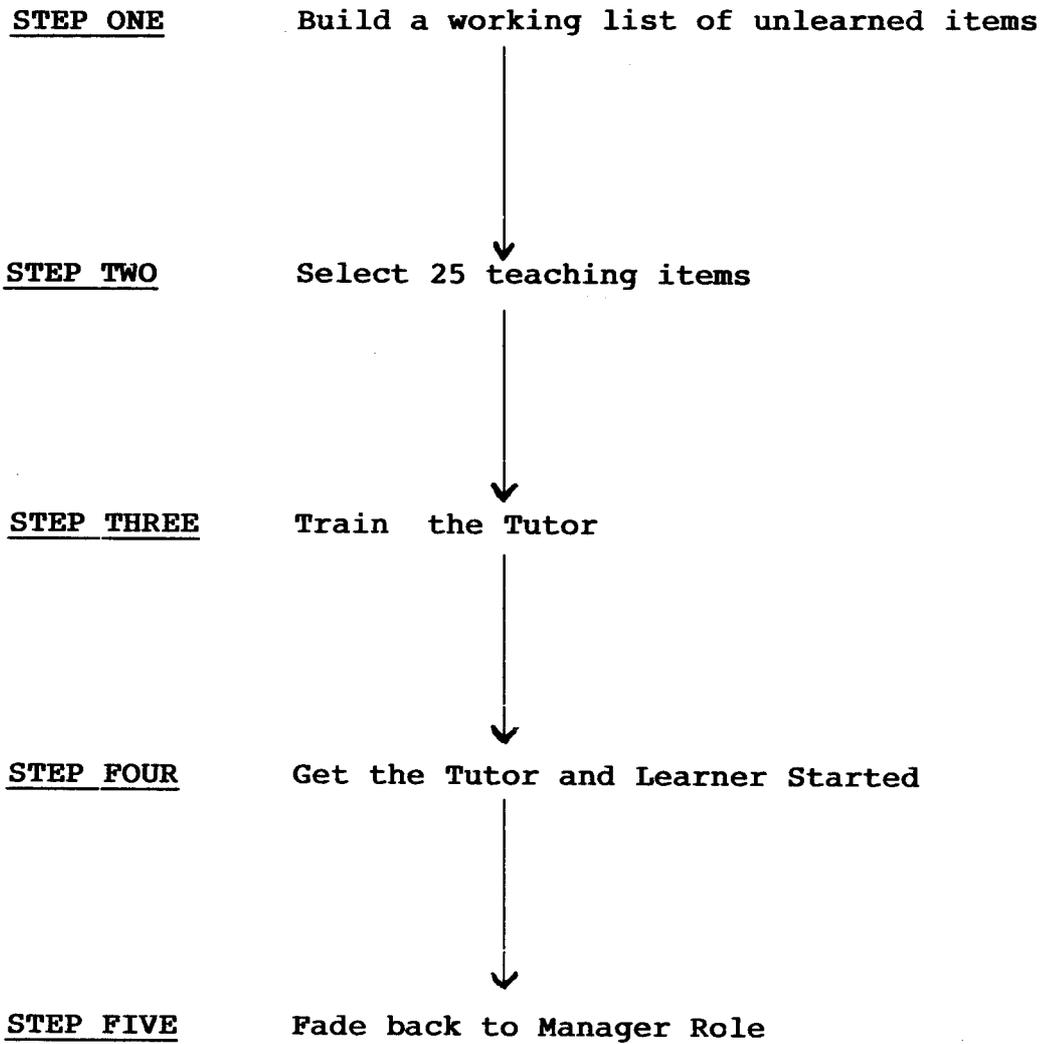
- o This can be located on the right hand panel of the carrel. Some children like to see a visual representation of their daily progress.

3.5 Card number "5" Graph (see appendix H)

- This is located on the centre panel of the carrel as well. Tape, or pin or place graph in plastic envelope on panel.
- The tutor and student record the number of points that correspond to the distribution of cards in envelope number "5" at the end of each session.
- This graph signals to the teacher that it is time to review the cards in envelope number "5" in order to determine mastery and next instructional steps.

4.0 IMPLEMENTING THE PROGRAMME

STEPS IN IMPLEMENTING A PEER
TUTORING PROGRAMME



4.1 Step One Build a pool of items

4.1.1 **A Working List**

- ° A working list of unlearned items must be built-up so that the teacher can draw from them throughout the teaching programme. Whether it be spelling words missed on weekly tests, maths facts erred on a pretest or sight words missed on flashcard drills, a pool of 75-150 items should be developed before the tutor starts teaching the learner.
- ° This item pool will allow the teacher to keep ahead of the tutor in supplying new items.

4.1.2 **An Item Pool List (Appendix A)**

- ° An item pool list can be used to keep track of which words are not mastered and which have been mastered through the programme.
- ° The left side of the list can be used for writing the items found to be not yet learned.
- ° To begin with all items in the pool will be in this section, or column. You may also wish to record the date. As items are mastered they are crossed out from the left column and written in the mastered item column.

Date	Not Mastered	Date	Mastered
2/4	here	6/4	here
"	that	"	that
"	with		

4.2 Step Two Select 25 Teaching Items

- From the total pool of items, pick 25 items for the beginning teaching set. These 25 items will be taught to mastery and replaced by another set of 25 from the next pool.
- A mixture of "easy" and "difficult" is advisable.

4.3 Step Three Train the Tutor

In training the tutor the teacher does the following

- 4.3.1 Familiarizes the tutor with the materials and teaching procedures (Appendix B).
- 4.3.2 Role-plays the tutoring process with tutor - teacher role-plays the tutor's responsibilities (First Role-play Session - Appendix C).
- 4.3.3 Role-plays the tutoring process with the tutor role-playing the teaching process (Second Role-play Session - Appendix D).
- 4.3.4 Brings the tutor and learner together (First Tutoring Session - Appendix E).

4.4 Step Four Get the Tutor and Learner Started

The main drawbacks to successfully carrying out a tutoring programme include the following:

- 4.4.1 schedule interruptions.
- 4.4.2 inappropriate tutor or learner behaviour
- 4.4.3 lack of follow-up on daily programmes.

- Scheduling

The most crucial factor of the programme is that it be carried out everyday and at a consistent time. The best tutor in the class will be of little assistance if tutoring does not occur frequently and regularly. Here are some scheduling suggestions to help you.

- * Pick a definite and regular time of day.
- * Pick a time of day where there are likely to be few interruptions.
- * Pick a time of day that is compatible with both tutor and learner.
- * Make sure that the tutor and learner do not spend more than the allotted time (5-10 minutes per day).
- * Schedule at least 4 days per week, but preferably 5 days per week.
- * Schedule an extra 10 minutes of back-up time per day to be used when a regularly scheduled session is skipped (due to illness, holidays, special events, excursions, parties, etc.).
- * Do not let the schedule deteriorate. There is a tendency for this to happen when the tutor is

not strongly encouraged and reinforced by the teacher.

° Inappropriate Tutor or Learner Behaviour

A prerequisite for this programme to run smoothly is that the teacher have disciplinary control over both tutor and learner. Inappropriate behaviour on the part of either can waste considerable time and effort. The following suggestions may be considered if inappropriate behaviour occurs:

Tutor

- * Identify a desirable positive consequence (eg. free time, a privilege, teacher's helper, reading, going to recess early, etc.) which the tutor may work for.
- * Tell the tutor that if s/he correctly uses the tutoring strategy for the entire session s/he will earn the agreed consequence.
- * After the session, check with the learner for a report on the tutor's behaviour. (Use indirect questions).
- * If there is a reported substantial decrease in inappropriate behaviour, award the consequence to the tutor.
- * Continue with this strategy but gradually increase the requirements. (No inappropriate behaviour over more sessions in order to earn the consequence).
- * Switch to a different consequence (selected by the student) or to a stronger consequence (eg. more free time) if inappropriate behaviours do not decrease and maintain at a low level.
- * Be sure to express your approval of the desired tutoring behaviour along with the delivery of the specific consequence.

Learner

- * Use the same strategy described above for the learner. Have the tutor report on the learner's behaviour after each session and have the tutor deliver the specified consequence along with the tutor's verbal approval.

° Follow-Up

- * Be sure to check on the tutor and learner after every session. Check for progress, (cards moved

up to higher envelopes), accuracy of the tutor (counting, placement of cards in envelopes, etc.) and see that records are up-to-date.

4.5 Step Five Fading Back to Programme Manager

- 4.5.1 Recording and graphing will provide a visual display of daily results for the tutor, the learner and the teacher.
- 4.5.2 Recording and graphing is on-the-job training for the tutor. After each session the teacher should model the recording and graphing process until the tutor can independently complete the task.
- 4.5.3 The teacher stands to gain the most from recording and graphing for the following reasons:
 - ° A teacher can use the results diagnostically to decide whether the tutor needs more training.
 - ° The teacher can use the results to decide when to administer a review test and/or assign new teaching items.
- 4.5.4 The tutor may gain satisfaction from the increased responsibility of performing the recording and graphing process.
- 4.5.5 The learner may be encouraged by seeing the results of his or her efforts each day.

5.0 RECORDING (See Appendix F for copy of Tally Sheet)

- 5.1 Have the tutor and learner count the cards in each envelope starting with envelope number one. Make sure they replace the cards in the previous envelope before taking the cards from the next envelope.
- 5.2 As they call out the number of cards in each envelope, the teacher writes the number in the correct box on the Tally Sheet. This is repeated for all five envelopes each day.

TALLY SHEET
WEEK OF _____

Monday	Tuesday	Wednesday	Thursday	Friday
1 x 4 = <input type="text" value="4"/>	"Four cards in envelope number one".			
2 x 6 = <input type="text" value="12"/>	"Six cards in envelope number two".			
3 x 9 = <input type="text" value="27"/>				
4 x 4 = <input type="text" value="16"/>				
5 x 2 = <input type="text" value="10"/>				
Total 69	Total _____	Total _____	Total _____	Total _____

- 5.3 Use conversion tables for multiplication or a calculator if the tutor is not proficient in multiplication.
- 5.4 Next, add the product number for each envelope for that day. This total can be used to show progress for the learner even when no cards have reached the number 5 envelope. Again a conversion table or calculator may be used here.
- 5.5 A bar graph may be used for children who prefer to see visual representations of their daily progress, (see Appendix G).

5.6 Fading from Recording

- o It is important for the teacher to verbalize each step of the recording process during the first week of the programme. At the start of the second week, the teacher should begin to let the tutor write in the multiplication products for each envelope and the totals for all envelopes as s/he continues to verbalize the answers. For Example,

Teacher: "There are six cards in envelope number two, so the multiplication table for two times six should be twelve. Write that in beside envelope number two".

Student writes: $2 \times 6 = \underline{12}$

Teacher: "Good. Now add the totals for all envelopes. Let's see, 4 add 12 add 27 add 16 add 10 is 69.

Student writes: ... Total 69 (this figure can be recorded on the colour bar graph if desired)

(Note: Students who are not able to add as above, may require continual assistance on this portion of recording).

- o By the end of the second week the tutor should be doing all of the tutoring and recording without assistance. The teacher should make it a point to check the accuracy of the recording each week.

6.0 GRAPHING (Card Number "5" Graph - see Appendix H)

- o This graph is for the ultimate score of items correctly responded to five times in a row. So the graph on the centre panel of the carrel is the number of cards in envelope number five.

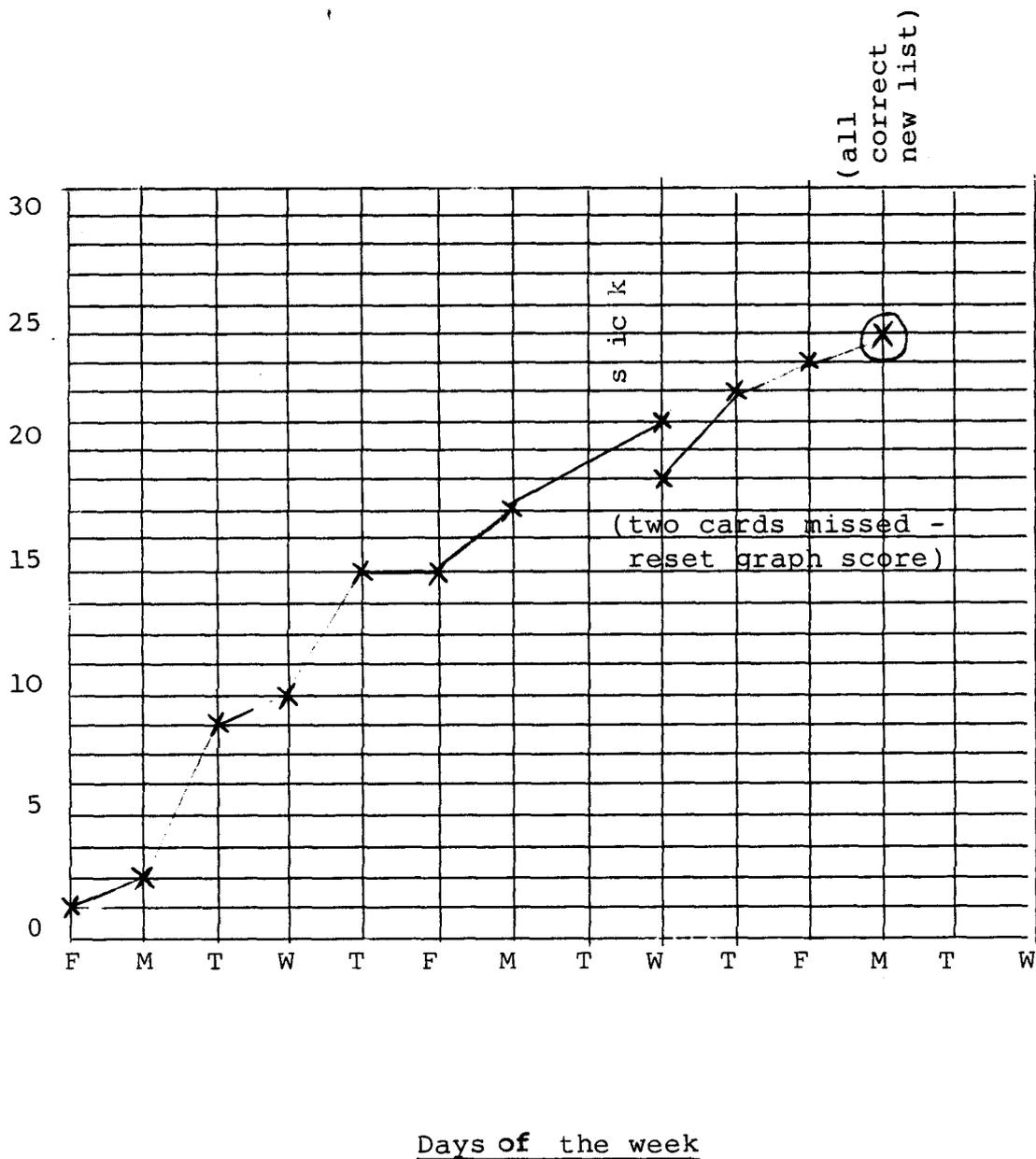
Teacher: "Lets see, there are two cards in the number five envelope on Monday, 7th, so the x goes here". (Teacher points to correct position on graph).

Tutor: Draws an x at the correct position.

Teacher: "And we need to draw a line from Friday's x to Monday's x".

Tutor: Draw a line connecting the x's

By the end of the third week the tutor should be doing all of the tutoring, recording and graphing without assistance.
The teacher should make it a point to check the accuracy of the graphing each week.



7.0 MANAGING THE PROGRAMMES

By the end of the third week the teacher should be able to check the student's work once per week and provide appropriate encouragement and feedback. From this point on the teacher's major responsibilities are:

- 7.1 to give review tests at the end of each week,
- 7.2 to introduce a new teaching set,
- 7.3 to solve problems that hinder progress.

° Review Tests

At the end of each week, take the cards in envelope number five, and probe the learner on those items. Any items that are missed are returned to envelope labelled "start" and the x on the graph for that day is re-drawn at the correct level. If all cards are responded to correctly, simply circle the x on the graph.

° Assign a New Teaching Set

When all 25 cards in the old teaching set have successfully passed the review test, select a new set of 25 cards from the Item Pool List. A teacher may wish to place new Tally Sheets and graphs on the carrel. As a final step, cross out the old set from the "unmastered side" of the Item Pool List and write them in on the "mastered side".

° Problem Solving

The following is a list of some possible stumbling blocks and their possible remedies.

<u>Problem</u>	<u>Possible Remedy</u>
The learner doesn't appear to be learning new material.	<ul style="list-style-type: none">- Check that the tutor is correctly following the tutoring procedure.- Check that the material selected is not too difficult for the learner in relation to his/her present level of ability.- Consider adding an additional reward for learning new items.
The tutor isn't following the tutoring procedure as trained.	<ul style="list-style-type: none">- Retrain the tutor in the activity or activities presenting difficulty.- Reward the tutor for following the procedure as specified.- Reconsider your selection of the tutor

The tutor isn't providing appropriate feedback and/or correct answers

- Provide the answers on the back of the flash-cards.
- Coach the tutor in the correct answers.
- Use a different tutor.

Tutor isn't computing points accurately.

- Check that points are being computed correctly.
- Review graphing procedure with tutor.
- Take responsibility for graphing from tutor.

Items need to be changed too frequently.

- Use items of increased difficulty.
 - Increase the number of items being tutored at any one time.
-

APPENDIX B

Step Three Train the Tutor

Familiarizes the Tutor with the Materials and Teaching Procedures

- o "These are the cards you will use when you teach."
(Show the 25 card set.)
- o "Here is a cubicle or a cubby-hole which we call a carrel."
(Show the left side of the carrel and put it on top of a table or desk.)
- o "All of the cards will be put here, (point to 'start' envelope to begin with and as the learner gets them right the cards are moved up to here." (Point to envelopes 1, 2, 3, 4, and 5.)
- o "If the learner gets it wrong, the card always goes back to start even if the card is in number 2, 3, or 4 envelope.
- o "To start with take all of the cards from the 'start' envelope. Later you can take cards from number 1, 2, 3, and 4 envelopes."
- o "Always mix or shuffle the cards, (demonstrate for the tutor), before starting. Be careful not to show the answers unless the learner has said the wrong answer."
- o "When your partner is correct put the card in a pile on the right side of the table." (Show the tutor)
- o "When your partner is incorrect put the card in a pile on the left side of the table." (Show the tutor)
- o "Now in your own words, tell me what you have just heard."
(Prompt the tutor to repeat the following points:)

The Tutor Says:

- 1 Take cards from carrel.
- 2 Cards start in envelope labelled "start"
- 3 Correct cards go in one pile; incorrect cards go in another pile.
- 4 Correct cards, move up to the next envelope.
- 5 Incorrect cards are placed in envelope labelled "start"
- 6 Always mix the cards.

APPENDIX C

Step Three Train the Tutor

First Role Play Session

- o The teacher role-plays the tutoring process by saying-

"Now you pretend to be your partner. I will pick up a card, ask what the answer is and you tell me the answer."

APPENDIX D

Step Three Train the Tutor

Second Role-Play Session

The tutor role-plays the teaching process by:

- o Being the tutor while the teacher pretends to be the partner
- o Selecting cards and using the tutor process describing the first role play session.
- o Improving his/her use of the tutoring strategy when the teacher provides feedback.
- o Correctly using the tutoring strategy for 10 or more consecutive cards (the teacher makes errors on at least 5 of those cards).
- o "Enthusiastically praising" every correct answer.

APPENDIX E

Step Three Train the Tutor

First Tutoring Session

After having selected the learner, testing the learner and selecting the first 25 cards, bring the partner and the tutor together at the selected tutoring location and explain the programme.

- o The tutor works through the card pile with the learner as the teacher provides corrective feedback and encouragement on the use of the tutor strategy.
- o Continue this session until the tutor uses the strategy correctly on 10 consecutive cards.

After you are sure that the tutor can correctly select the cards, use the tutor strategy and replace the cards in the proper envelopes, you are ready to have the tutor conduct the sessions on his or her own.

APPENDIX F

TALLY SHEET
WEEK OF _____

Monday	Tuesday	Wednesday	Thursday	Friday
1 x ____ = ____				
2 x ____ = ____				
3 x ____ = ____				
4 x ____ = ____				
5 x ____ = ____				
Total _____				
Monday	Tuesday	Wednesday	Thursday	Friday
1 x ____ = ____				
2 x ____ = ____				
3 x ____ = ____				
4 x ____ = ____				
5 x ____ = ____				
Total _____				
Monday	Tuesday	Wednesday	Thursday	Friday
1 x ____ = ____				
2 x ____ = ____				
3 x ____ = ____				
4 x ____ = ____				
5 x ____ = ____				
Total _____				

APPENDIX H

Cards in Envelope 5

