

DOCUMENT RESUME

ED 478 384

SP 041 646

AUTHOR Anderson, Stephen C.
TITLE Learning for All: Giving Effective Directions and the Peg System of Memorization.
PUB DATE 2002-02-00
NOTE 12p.; In: An Imperfect World: Resonance from the Nation's Violence. 2002 Monograph Series, Proceedings of the Annual Meeting of the National Association of African American Studies, the National Association of Hispanic and Latino Studies, the National Association of Native American Studies, and the International Association of Asian Studies (Houston, TX, February 11-16, 2002).
PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS Elementary Secondary Education; *Learning Strategies; *Memorization; Rote Learning ; Serial Learning; *Teaching Methods
IDENTIFIERS *Directions

ABSTRACT

This paper examines two methods to help teachers accomplish learning for all in the classroom: giving effective directions and peg memorization. The paper asserts that giving effective directions may be the most important skill that can be taught to aspiring teachers, and when teachers give effective directions, they give all students a greater chance to learn. Eight elements help in the process of effective directions: giving one direction at a time, being able to see the teacher, step checking, being clear and concise, making sure every part of the presentation says the same message, directionalizing, using a four-part sequence for mobilizing directions, and specifying the response. The peg system is a way to memorize and retain information from a list using interesting associations and movement. It is a mental filing system involving a series of pre-memorized concrete nouns that correspond with numbers. Each of the elements is assigned to a peg so it can be memorized. Students memorize a set of pegs or hooks that are used to attach the information to be memorized. The system requires making associations between two lists, the permanent pegs and the material to be memorized. When practiced, the pegs should involve some movement, because incorporating movement can strengthen learning. (SM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

**LEARNING FOR ALL:
GIVING EFFECTIVE DIRECTIONS AND THE PEG
SYSTEM OF MEMORIZATION**

**DR. STEPHEN C. ANDERSON
TARLETON STATE UNIVERSITY-CENTRAL
TEXAS
KILLEEN, TEXAS**

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

Lemuel Berry, Jr.

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Learning for All: Giving Effective Directions and the Peg System for Memorization

Introduction

Teachers must attempt to teach all students in their classrooms. It no longer suffices to teach to the middle of the bell curve and hope that the students at each edge of the curve will get something out of the lesson. Classrooms are now more diverse than in years past. Learning for all describes what should be taking place in today's classrooms. Learning for all means that all students in every classroom can and should learn. Two ways teachers can accomplish this involve giving effective directions and the peg memorization technique.

In his book, *Impact Teaching*, Rich Allen states that effective directions are an art form (Allen 2002). Giving effective directions is taught in few teacher education programs. It may be the most important skill that can be taught to aspiring teachers, given the problems that can occur as a result of poor directions (Allen). Giving clear directions involves planning and precise oral presentation (Chilcoat and Stahl, 1986). A lack of clarity in directions can present a variety of problems in the classroom,

including confusion. Giving effective directions will make a teacher's life much easier, no matter what level they are teaching. When teachers use effective directions, they give all students in their classrooms a greater chance to learn.

Memorization is vital to the learning process. Memory is the mental faculty of retaining and recalling our past experiences (Hamachek, 1991). Students who cannot recall facts or concepts haven't learned them. The stronger the memory input, the greater the possibility of accurate recall at a later time (Hamachek, 1991). One successful memorization technique is the peg system (Higbee, 1976; Roediger, 1981; Hartman and Nowak, 1982; Hamachek, 1991; Gruneberg, 1997). A peg system is a way to memorize and retain information from a list using interesting associations and movement. An example of such a list is the elements of giving directions. In the peg system, each of the elements is assigned to a peg, so it can be memorized. Each technique, effective directions and a peg system for memorization can reach all learners.

Elements of Effective Directions

In discussing effective directions Rich Allen lists eight elements that help in this process (Allen, 2002). They are as follows:

1. **One at a time**—Teachers will achieve maximum results if they give one direction at a time and wait until it has been completed before giving another direction.
2. **See me**—Being able to see the teacher helps students to understand and recall instructions and directions, and focus and pay attention.
3. **Step check**—A way to verify if students are following the directions that are given. For example “If you have located the chart on page 6, raise your hand.”
4. **Clear and concise**—The goals in giving effective directions are clarity and conciseness, avoiding any unnecessary words. “I want you to turn to page 11”, is better said, “Turn to page 11.”
5. **Congruence**—Make sure every part of the presentation, including choice of words, pacing, physical movement, use of pauses, eye contact, and tone of voice, says the same message.
6. **Directionalize**—The teacher chooses an object everyone can see, and includes it in the directions for clarity. For example, “Groups one and two stand by the window and groups three and four stand by the television.”
7. **The four-part sequence for mobilizing directions**—First, establish a time frame when the movement is to occur. Second, imbed a trigger that will signal the start of the movement. For example, “In fifteen seconds when I say “move...;” the time frame is the trigger.

8. **Specify the Response**—In situations where the audience is being asked a question, teachers should clearly state how they are expecting the audience to respond. For example, “If you have answered the question, please raise your hand.”

Using these elements of effective directions can ensure that students will feel more confident and comfortable in the classroom. Rich Allen elaborates on each of these elements in his book, *Impact teaching*. Another technique that allows educators to reach all learners in the classroom is the peg system. An examination of the peg system demonstrates to learners a way to memorize these techniques for giving effective directions.

The Peg System of Memorization

The peg system is a mental filing system consisting of a series of pre-memorized concrete nouns that correspond with numbers (Higbee, 1976). One memorizes a set of pegs or hooks that are used to attach the information to be memorized (Roediger, 1981). Think of a peg-board with pegs on it and people hanging clothes or tools on it (Hodges, 1982) The system requires making associations between two lists, the permanent pegs and the material to be memorized (Hartman and Nowak, 1982) The pegs when practiced should involve some movement, because incorporating

movement strengthens the learning (Jensen, 1998). An example of a peg-board is given below:

1. **The sun**—Arms are held over the head in a circle signifying the shape of the sun.
2. **Two eyes**—Two fingers of one hand are held out and pointed toward the two eyes.
3. **Triangle**—Using two hands make the shape of a triangle in the air.
4. **Stove with four burners**—Make four motions in the air to touch the four burners on the normal stove.
5. **Five fingers**—Hold a hand straight out and wiggle all five fingers.
6. **Pick up sticks**—Bend over and simulate picking up sticks.
7. **Seven up**—Simulate taking a drink of a bottle of seven up.
8. **Octopus**—Extend both hands in front and wiggle fingers, simulating the tentacles of an octopus.
9. **Line**—Make a straight-line symbol in the air by moving hand from high to low in a straight up and down motion.
10. **Hen**—Tuck hands into chests and flap arms like a chicken.
11. **Picket fence**—Hold index fingers straight up next to each other simulating a picket fence
12. **Dozen eggs**—Simulate breaking an egg in a bowl.
13. **Black cat**—Draw the shape of a black cat in the air.

14. **Heart**—Draw the shape of a heart in the air to remember Valentine’s Day.
15. **Fifteen Minutes of Fame**—Extend arms out to sides, one arm up and one down like as if performing on stage.
16. **Driving**—Simulate driving a car by gripping an imaginary steering wheel and moving hands as if driving.
17. **Magazine**—Simulate reading Seventeen Magazines.
18. **Vote**—Make a check in the air with one hand as if voting.
19. **Remote**—Simulate changing channel with a remote while watching TV.
20. **20-20 Vision**—Make two circles with fingers and place them in front of eyes, simulating perfect vision.

Once the framework of a peg-board has been established, the learners are paired off and start practicing each peg. First in order, then backwards, then randomly, making sure that each time the learners practiced a peg they included the motion that goes with it. Then it would be time to demonstrate how a list like the elements of effective directions could be learned. In order to do this, each element must be linked to a peg, attaching the first element to the first peg and so on. Each link must have a unique description and some motion included with it. For example:

1. **Sun—One at a time**—imagine one person walking into the sun. At the same time make a circle with arms

to simulate the sun and then wiggle the index finger and middle of one hand in a walking motion as if it is walking in to the sun.

2. **Eyes—See me**—lace index and middle fingers in front of eyes, drop the hand and stare straight ahead, as if seeing someone.
3. **Triangle—Stop check**—imagine a person at a bank teller's window not being allowed to cash a check. The cashier's window is inside a triangle. Move hand toward the teller with an imaginary check in it, and then move hand back when the check is refused.
4. **Stove with four burners—Clear and concise**—imagine a stove with a clear piece of glass in front of it. Make an imaginary motion to touch each burner on the stove, and then make a circular motion with a hand as if cleaning the class.
5. **Five fingers—Congruence**—hold one hand in front and wiggle fingers, then bring the other hand up, move both hands forward and join them together in congruence.
6. **Pick up sticks—Directionalize**—make a motion to pick up sticks and then a motion to point the sticks at an imaginary compass.
7. **Seven up—The four-part sequence for mobilizing directions**—imagine four people in a room taking a drink of a bottle of seven up. A teacher then tells them to move to the other side of the room and take another drink. Simulate taking a drink by putting hand to mouth in a drinking motion and use fingers to simulate the four people waking to the other side of the room.
8. **Octopus—Specify the response**—extend hands with thumbs tucked in and wiggle all eight fingers simulating octopus tentacles. Imaging a class of octopuses responding to a teacher's questions

Learners again pair off and begin practicing the combined list of pegs and elements of effective directions, first in order, then backwards, and finally randomly. This learning technique can be done with any list. The key words of the elements of effective directions, when memorized, lead into a more detailed understanding of each element.

Conclusion

Both of these techniques increase the amount of learning in the classroom. Giving clear effective directions is an “art”. Successful teachers know that a good grasp of how to give effective directions improves the quality of their teaching. Even in conventional learning situations, many directions are needed. Rich Allen believes that giving effective directions may be the “golden key” to effective instruction (Allen, 2002). Memory and recall are two crucial elements in the learning process. The only way teachers can verify that students have learned something occurs when they demonstrate recall of the material to be learned. Students are happy to learn a technique of memory that can increase their success in the classroom. Today’s teachers are mandated to teach all learners in every classroom. Giving effective

directions and the peg system of memorization can help teachers accomplish this task.

Bibliography

- Allen, Richard Howell. (2002). *Impact teaching: Ideas and strategies for teachers to maximize student learning*. Allyn and Bacon: Boston.
- Gruneberg, Michael M. (Ed), & Morris, Peter E. (Ed) (1997). *Aspects of memory*, & Vol. 1: *The practical aspects* (2nd ed.). (pp. 168-195). Florence, Kentucky, US: Taylor, Francis/Routledge.
- Jensen, Eric. (1998). *Teaching with the brain in mind*. Alexandria, Virginia: Association for Supervision and Curriculum Development.
- Hamachek, Alice L. (1991). *Enhancing comprehension through the development of strategies for reading, learning, and remembering*. ERIC (Feb.1992).
- Hartman, Thomas G. & Nowak, Norman. (1982). *Memory magic*. Paper presented to the Working Group on the Psychology of Learning in Academic Settings. ERIC (Sept. 1983).
- Higbee, Kenneth L. (1976). *Mnemonic systems in memory: Are they worth the effort?* Paper presented at the Rocky Mountain Psychological Association Meeting, Phoenix, AZ. (ERIC, Jan. 1978)
- Hodges, Daniel L. (1982). A teacher's guide to memory technique. Focus on Productivity, spring, 1982, 23-27.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC REPRODUCTION RELEASE

I. Document Identification:

Title: An Imperfect World: Resonance from the Nation's Violence (2002 Monograph Series)

Editor: Lemuel Berry, Jr., Ph.D.

Corporate Source:

Publication Date: 2002

II. Reproduction Release:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please check one of the following three options and sign the release form.


Level 1 - Permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) and paper copy.

Level 2A - Permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

Level 2B - Permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no option is marked, documents will be processed at Level 1.

Sign Here: "I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: 

Printed Name: Lemuel Berry, Jr.

Address: PO Box 325
Biddeford, ME 04005-0325

Date: 5/20/03

Position: Executive Director

Organization: NAAAS, NAHLS, NANAS, IAAS

Telephone No: 207-282-1925-839-8004

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: info@ericfac.piccard.csc.com
WWW: <http://ericfacility.org>