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ABSTRACT

Designed to offer individuals in the role of unit leaders some guidelines for assuming the leadership role in planning inservice education for members of the school staff, the booklet provides information on learning styles, assessment of learning style, sample rating scale, developmental tasks and education, teacher observations, directed classroom observations, provision for learning styles inventory, and a glossary. Learning styles are first discussed in terms of individualization of instruction. In order to identify learning styles, the teacher is said to need to focus on what is learned, the way in which one learns, and one learns to learn. Four tests are suggested to be used by the unit leader and teachers in helping to make an educational evaluation of the child. Guidelines questions are then provided to help the leader determine how the child learns and how the leader gets the child's attention. Developmental tasks are then listed from infancy to 65 years and over. A sample learning style inventory is included. (CB)

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LEARNING STYLES

A Booklet for Unit Leaders,
Teachers, Administrators
and other interested
Professionals.

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FOREWORD

The purpose of this booklet is to offer to those individuals in the role of "unit leaders" some guidelines for assuming the leadership role in planning inservice education for members of the school staff. These staff members may be serving in professional or paraprofessional capacities.

During the period of time we have been involved in working with teachers and paraprofessionals, many other professionals have in some way contributed to our professional growth. From them we have learned a great deal about children and have attempted to provide the programs which are so necessary in order to meet the individual needs of children. It is hoped that this booklet will document some of the knowledge and information we have acquired on LEARNING STYLES, and will give the unit leaders a place to start in their search for practical information on methods and techniques used in determining learning styles.

Jean Sanders
Linda Zalk

LEARNING STYLES

SCOPE AND PURPOSE

Learning styles are discussed in the context of the central problem of education -- the individualization of instruction. Within the traditional self-contained classroom, a narrow range of instructional options is provided, a limited number of ways to succeed are available. Alternative paths that can be selected for students with various learning styles and characteristics are restricted according to Glaser. "The limited paths available require particular student abilities, and these particular abilities are emphasized and fostered to the exclusion of other abilities." When we design only a relatively fixed set of instructional alternatives we are rewarding and reinforcing only a limited set of behaviors and a "wide range of background capabilities and talented accomplishments might be lost from view because of the exclusive reliance upon selection for survival in a particular setting."

IGE offers a possibility to adapt educational environments to various learning styles (one type of individual difference). However, learning style is not synonymous with individual differences and should not be used as another excuse for grouping children "homogeneously". In IGE, one outcome is the "degree to which the following are considered when students are assigned to learning activities:

- * peer relationships
- * achievement
- * learning style
- * interest in subject area
- * self-concept."

The educational environment can provide for a wide range and variety of instructional processes and opportunities for success. Alternative means of learning are adaptive to the individual's strengths and weaknesses to derive an appropriate "learner/materials" match. The success of the teacher's diagnostic planning can be seen in the extent to which the student experiences a match between his unique abilities and interests, and the activities prescribed for him.

The teacher, in order to identify learning styles, should focus upon:

- * what is learned
- * the way in which one learns, and
- * one learns to learn

The I/D/E/A filmstrip on performance testing and observation, the Wisconsin Design filmstrip on the same topic, and the I/D/E/A pamphlet on Learning Styles are invaluable resources for this area of study. In addition, the next two pages on educational testing will offer some ideas as well as the bibliography to this paper.

ASSESSMENT OF LEARNING STYLE

Performance testing and observation are by far the best ways to determine a pupil's learning style. Various checklists, such as those included in this booklet, are helpful to the teacher in establishing criteria to determine learning styles. Self-assessment instruments and interest inventories are often very revealing.

The following tests are suggested to be used by the Unit Leader and teachers in helping to make an educational evaluation of the child. This list in no way precludes the use of other similar tests, nor does it intimate that all of these tests are used with every child. The decision to use various tests will be determined by the Unit Leader and teachers who will consider (1) test information already available on the pupil; (2) the type of information desired; (3) the preferences of the professional staff.

Psychoeducational Inventory of Basic Learning Disabilities
(Robert Valett) Fearon Publishing Company

Mills Learning Methods Test
Mills Center, Ft. Lauderdale, Florida

Pupil Behavior Rating Scale
(Myklebust: Grune and Stratton)

Evanston Early Identification Program
(Follett)

ASSESSMENT OF LEARNING STYLE
continued

Measures of individual differences within an IGE framework are "valid to the extent that to define alternate paths that result in optimizing immediate learning, as well as long-term success." We must reflect whether the particular selective tests and sorting out devices that we presently use fail to consider abilities and talents that might emerge as important in a more interactive environment where the teacher allows for adjustment between abilities and modes of learning and learning styles. Instead, we need to locate measures that will:

- * determine the different ways in which different students learn best
- * measure basic processes that underlie various kinds of learning
- * assess prerequisite performance capabilities required to learn a new task or skill
- * determine who will learn better from one curriculum or method of learning than from another

SAMPLE RATING SCALEGROUPING IN SOCIAL STUDIES*

Name of Pupil _____ Date _____

Unit _____ Teacher _____

| | Always | Sometimes | Never |
|---------------------------|--------|-----------|-------|
| One to one instruction | | | |
| Pairing with Other Child | | | |
| Small Group with Adult | | | |
| Small Group without Adult | | | |
| Independent | | | |

*Source

Performance Testing and Observation.
I/D/E/A-Kettering filmstrip.

HOW DOES HE LEARN?

Dr. H. Ozer
Children's Hospital,
Washington, D.C.

| 1 | 2 | 3 | 4 | 5 |
|-----------------------|------------------------|---------------------------|----------------------|---------------------|
| Always Ineffective | Usually Ineffective | Effective 1/2 the time | Usually Effective | Always Effective |

I. How effective would motor, kinesthetic and tactile techniques be in helping him to learn when:

- _____ he can touch, handle and learn how to use a thing by direct experience with it.
- _____ the task involves body movement such as climbing, hopping, clapping, skipping, rhythms
- _____ the kinesthetic system of movements are used to teach cutting, pasting, forming letters
- _____ discriminations of form, shape, texture, size, quantity and weight are made by sense of touch.

II. How effective would combined visual and auditory approaches to learning be when:

- _____ he both sees and has explained verbally one small step at a time before he responds in each task
- _____ he is told what to do, waits to see what is expected; or, is shown what to do then needs to have it explained
- _____ he is asked to follow verbal directions concerning material seen when the task is familiar
- _____ he is asked to learn a new task quickly by following visually what is being explained

III. How effective would visual presentations of new material be when:

- _____ all distractions are removed, to enable him to perform simple one to two step familiar visual tasks without auditory clues
- _____ it is a simple visual task of two or three operations and has been demonstrated
- _____ visual directions are familiar and fine visual discriminations are required in completing a new task
- _____ he must seek and use information from an unrelated source to solve a new problem requiring multiple operations.

HOW DOES HE LEARN?
continued

IV. How effective would auditory-verbal methods alone be when:

- _____ he is asked to identify objects, pictures, colors, forms, letters, sounds by name
- _____ the task has a two or three part verbal direction to be completed quickly
- _____ he is read to and asked to understand and remember in sequence the stories heard
- _____ he is asked to understand the main idea from a spoken or read paragraph composed of complex sentences

WHAT WORKS?

Developed by Dr. Mark Olson
Children's Hospital
Washington, D.C.

Please indicate response by assigning a number from the scale to EACH of the four parts of every question.

HOW DO YOU GET HIS ATTENTION?

- I. How effective are these ways of getting his attention via physical contact?
- a. placing one hand on his hands and the other holding his chin so that he faces you.
 - b. holding his hand, putting an arm around him, or seating him next to you
 - c. touching him
 - d. asking a student nearby to alert him by touching him
- II. If you wanted to gain his attention by motor involvement, how effective would it be to:
- a. help him physically to respond
 - b. train him to give an immediate motor response to each stimulus or request
 - c. demonstrate the desired motor response which he must imitate
 - d. alert the class to give a response that the group has learned (sit up, stand)
- III. How effective would it be to alert him visually by:
- a. decreasing visual distractions and increasing the interest value of material presented directly to him
 - b. placing material directly in front of him, such as on his desk
 - c. pointing directly at the thing to which he is to attend which is at some distance
 - d. placing material within his range of vision on the board, on a chart, held up for class
- IV. If you wanted to gain his attention by auditory means, how effective would it be to:
- a. speak directly to him at close range
 - b. call his name
 - c. use an alerting stimulus - "Look", "Listen", use a bell or rap on table
 - d. give verbal directions to the group

| 1 | 2 | 3 | 4 | 5 |
|--------------------|---------------------|------------------------|-------------------|------------------|
| Always Ineffective | Usually Ineffective | Effective 1/2 the time | Usually Effective | Always Effective |

X - Don't know: have never tried this

DEVELOPMENTAL TASKS AND EDUCATION

Robert J. Havighurst
 Second Edition
 Longmans, Green and Co.
 New York . London . Toronto
 1952

"A developmental task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by society, and difficulty with later tasks."

- I. Developmental Tasks of Infancy and Early Childhood (to age 6)
 1. Learning to walk
 2. learning to take solid foods
 3. Learning to talk
 4. Learning to control the elimination of body wastes
 5. Learning sex differences and sexual modesty

- II. Developmental Tasks of Middle Childhood (age 6-12)
 1. Learning physical skills necessary for ordinary games
 2. Building wholesome attitudes toward oneself as a growing organism
 3. Learning to get along with age-mates
 4. Learning an appropriate masculine or feminine social role
 5. Developing fundamental skills in reading, writing and calculating
 6. Developing concepts necessary for everyday living
 7. Developing conscience, morality, and a scale of values
 8. Achieving personal independence
 9. Developing attitudes toward social groups and institutions

- III. Developmental Tasks of Adolescence (age 12 to late teens)
 1. Achieving new and more mature relations with age-mates of both sexes.
 2. Achieving a masculine or feminine social role
 3. Accepting one's physique and using the body effectively
 4. Achieving emotional independence of parents and other adults

DEVELOPMENTAL TASKS AND EDUCATION
continued

5. Achieving assurance of economic independence
 6. Selecting and preparing for an occupation
 7. Preparing for marriage and family life
 8. Developing intellectual skills and concepts necessary for civic competence
 9. Desiring and achieving socially responsible behavior
 10. Acquiring a set of values and an ethical system as a guide to behavior
- IV. Developmental Tasks of Early Adulthood (late teens to mid-40's)
1. Selecting a mate
 2. Learning to live with a marriage partner
 3. Starting a family
 4. Rearing children
 5. Managing a home
 6. Getting started in an occupation
 7. Taking on civic responsibility
 8. Finding a congenial social group
- V. Developmental Tasks of Middle Age (approx. 40-65)
1. Achieving adult civic and social responsibility
 2. Establishing and maintaining an economic standard of living
 3. Assisting teen-age children to become responsible and happy adults
 4. Developing adult leisure-time activities
 5. Relating oneself to one's spouse as a person
 6. Accepting and adjusting to the physiological changes of middle age
 7. Adjusting to ageing parents
- VI. Developmental Tasks of Later Maturity (65 and over)
1. Adjusting to decreasing physical strength and health
 2. Adjustment to retirement and reduced income
 3. Adjusting to death of spouse
 4. Establishing an explicit affiliation with one's age group
 5. Meeting social and civic obligations
 6. Establishing satisfactory physical living arrangements

Utilizing the checklists within this booklet, the teacher is able to make some observations as to the child's learning style.

The summary sheets entitled "Directed Classroom Observation" and "Three Aspects of Learning Style" should help the classroom teacher describe in a few short sentences the appropriate observations and order these observations into a framework. This framework then is helpful in planning classroom strategies. The teacher has observed for relevant factors and can then decide what alterations and modifications or adjustments need to be made in the learning program to assist the pupil in meeting his learning needs.

The teacher should consider altering the variables of:

1. Modality of presentation

Would the pupil learn better given oral directions or auditory clues? _____

Would he learn better if given visual clues or a demonstration of what the task entails? _____

2. Nature of the task

Can I alter the task so that the pupil can evidence mastery? _____

Does he need to:

_____ recognize

_____ identify

_____ discriminate

_____ sequentialize

_____ analyze

_____ synthesize

_____ memorize

3. What is the modality of required performance?

Spoken (oral response) _____

Visual-motor response
(gesturing, marking, drawing,
writing, etc.)

SUMMARY OF OBSERVATIONS

Factors: Three Aspects of Learning Style

I. Sensory factors

Modalities

II. Human interactions

III. Timing - "interventions"

*Refer to Learning Styles, an I/D/E/A publication
(See Bibliography)

SUMMARY OF OBSERVATIONS

Factors: Three Aspects of Learning Style

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(See Bibliography)

PROVISION FOR LEARNING STYLES INVENTORY

This questionnaire asks you a number of questions concerning the unit in which you teach. There are no right or wrong answers. The way you see it is the important thing.

In the appropriate answer space, write in the number from 1 to 6 for each item. Choose the numbers you write from the answer scale printed at the top of each page.

Please complete the personal information requested below. Names are not necessary; information will be compiled for the school as a whole.

School: _____

Assignment (circle one): K 1 2 3 4 5 6 other _____

Number of years taught in this school:

1 2 3 4 5 6 7 8 9 10 over 10

ANSWER SCALE

| 1 / | 2 / | 3 / | 4 / | 5 / | 6 / |
|---|-------------|------------------------------------|-------------------------------------|--------------|--|
| Practically none; to a very low degree | Not very | Moderately (on the low side) | Moderately (on the high side) | Very much | Extremely; To a very high degree |

1. The degree to which teachers insure that each student has personal rapport established with at least one teacher.

1. _____

2. The degree to which opportunity is provided (through discussion and written communication) to insure that each teacher is fully aware of perceptions and suggestions of other teachers relating to the students with whom each has developed special rapport.

2. _____

3. The degree to which each student is involved in self-assessment procedures and analyses of the assessments.

3. _____

PROVISION FOR LEARNING STYLES INVENTORY
continued

| <u>ANSWER SCALE</u> | | | | | |
|---|--|------------------------------------|-------------------------------------|--------------|--|
| 1 / | 2 / | 3 / | 4 / | 5 / | 6 / |
| Practically none; to a very low degree | Not very | Moderately (on the low side) | Moderately (on the high side) | Very much | Extremely; To a very high degree |
| 4. | The degree to which each student accepts increasing responsibility for selection of his learning objectives. | | | | 4. _____ |
| 5. | The degree to which each student participates in selection of learning activities to pursue learning objectives. | | | | 5. _____ |
| 6. | The degree to which each student can state learning objectives for the learning activities in which he is engaged. | | | | 6. _____ |
| 7. | The degree to which assignments of staff members to student groups are made with regard to complementary strengths. | | | | 7. _____ |
| 8. | The degree to which large groups, small groups, paired situations, and independent study are provided as optional learning arrangements. | | | | 8. _____ |
| 9. | The degree to which options exist for providing a greater range of teaching-learning environments. | | | | 9. _____ |
| 10. | The degree to which the following are considered when students are assigned to learning activities: | | | | |
| | a. | Peer relationships | | | 10a. _____ |
| | b. | Achievement | | | 10b. _____ |
| | c. | Learning Styles | | | 10c. _____ |
| | d. | Interest in subject areas | | | 10d. _____ |
| | e. | Self-concept | | | 10e. _____ |

PROVISION FOR LEARNING STYLES INVENTORY
continued

ANSWER SCALE

| 1 / | 2 / | 3 / | 4 / | 5 / | 6 / |
|--|-------------|------------------------------------|-------------------------------------|--------------|---------------------------------------|
| Practically none to a very low degree | Not very | Moderately (on the low side) | Moderately (on the high side) | Very much | Extremely To a very high degree |
| 11. The degree to which teachers accumulate a variety of student learning objectives consistent with learning programs being developed. | | | | | |
| | | | | | 11. _____ |
| 12. The degree to which teachers accumulate a selection of activities whereby students may pursue each of the desired learning objectives. | | | | | |
| | | | | | 12. _____ |
| 13. The degree to which teachers select and/or develop curricular materials which include the following components: | | | | | |
| a. provision for those who learn best through books | | | | | |
| | | | | | 13a. _____ |
| b. provision for those who learn best through "things" | | | | | |
| | | | | | 13b. _____ |
| c. provision for those who learn best through auditory channel | | | | | |
| | | | | | 13c. _____ |

GLOSSARY

1. cognitive: faculty of knowing, of becoming aware of objects of thought or perception (includes understanding; reasoning)
2. cognitive style: often used for learning style
3. human interaction: the variables of interpersonal relationships
4. learning: Method of organizing many perceptions; a pooling of past experiences concerning similar situations and experiences
5. learning style: integrating factors that make learning possible so that individual is able to meet learning needs
6. perception: the process giving particular meaning and significance to a sensation.
sensory factors (modalities)
 - (a) auditory
 - (b) visual
 - (c) kinesthetic
 - (d) multisensory
7. reinforcement: modifying behaviors by presenting a reward for a specific situation

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