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INDIVIDUALIZED INSTRUCTION: A CONCEPT OF PACKAGE ART

INSTRUCTION

by

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B.F.A., University of Colorado, 1970

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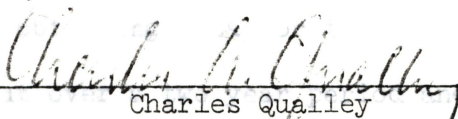
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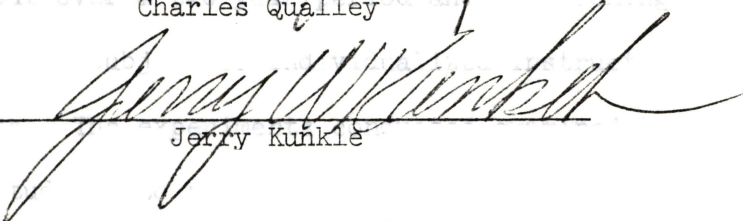
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Individualized Instruction: A Concept of Package Art Instruction

Thesis directed by Professor Charles A. Qualley

The demand for change in education is becoming more pronounced every day. Individualized instruction has been proposed as a replacement for traditional methods of instruction. This study proposes that individualized instruction would be especially suitable in replacing traditional methods of instruction in art. The study also suggests methods of dealing with shortcomings found in the traditional methods, by adopting certain principles of packaging not previously employed in the fabrication of instructional materials like textbooks.

Methods of obtaining data for this study were through experiments carried out over a two year period and researching books and articles on the subject of individualized instruction and related subjects. The experiments conducted examined the response of individual students to problems assigned on a group, and an individual basis. A comparison of product and attitude towards assignments was made to determine if individualized instruction made a difference in the art product and the learning of specific tasks. The effects of this type of instruction upon the various types of students was also examined. An experiment involving differing methods of packaging and presentation over the same period was also conducted. Data on advertising, marketing and packaging in very basic terms was reviewed and checked for compatibility with the idea of packaging art instruction.

The findings of this study suggest the change from the traditional method of instruction to individualized instruction would benefit both student and teacher. The application of the principles and methods of individualized instruction would better serve the needs and interests of the student. The application of the principles of packaging would generate higher levels of interest, motivation and success. The combination of individualized instruction and packaging ideals will change education in a positive direction.

This abstract is approved as to form and content.

Signed

Charles H. Groat ²⁹

TABLE OF CONTENTS

	Page
ABSTRACT	iii
CHAPTER ONE..... Introduction To Individualized Instruction	1
CHAPTER TWO	11
Instructional, Behavioral and Performance Objectives From the Cognitive and Affective Domains	
CHAPTER THREE	20
The Use of Packaging Technology for the Packaging of Instructional Materials for Art	
CHAPTER FOUR	29
Evaluation of Individualized Instruction Packages	
CHAPTER FIVE	32
Conclusion	
BIBLIOGRAPHY	34
APPENDIX A	35
B	37
C	40

CHAPTER ONE

INTRODUCTION TO INDIVIDUALIZED INSTRUCTION

The major purpose of education is to draw out of a person what is there, even though it is not visible to the individual, and to awaken sleeping interest and to reveal to him talents he did not know he possessed.¹ This should be true for every student involved in the educational process, whether he is "turned on" or "turned off"; he should not be "turned out".

The principal instructional dilemma which teachers face is defined by two stubborn facts of educational reality: 1) optimal learning rates can be achieved only when the nature and difficulty of the learning content is appropriate to the abilities, needs and interest of the individual, and 2) in any classroom group there exists a formidable difference in students with respect to their abilities, needs and interests. These basic differences significantly affect the way the students conduct themselves in the learning situation. Some of these differences which affect the behavior of the student are: self concept, attitude towards peers, attitude of peers towards the individual, and attitude towards school activities.² It should also be noted that investigation into the effects of the dependence proneness of children suggests this characteristic has significant effects on learning behavior.³

¹ Fowler, Don W., Preface of: A Handbook For Developing Individualized Instruction In Continuation Education, Fresno County Schools, California, 1970

² Perkins, Hugh V., Human Development and Learning, Stratford Press, Inc., Belmont, California, 1969

³ Perkins, Hugh V., Human Development and Learning, Stratford Press, Inc., Belmont, California, 1969

The effects of low self concept on academic achievement has been examined in the traditional classroom environment and was found to have significant bearing upon academic achievement.⁴ Therefore all the above mentioned factors should be taken into consideration in evaluating the child's behavior in the classroom.

"It is difficult to state with assurance that individualized instruction is indisputably superior to traditional forms of schooling. Measured by a traditional type of standardized achievement test (Iowa test of basic skills), the results show a general stand off in performance. We have been unable to find suitable tests in such important areas as creativity, improvement in study habits, growth and acceptance of responsibility."⁵

Currently in individualized instruction, programs and projects are being carried out with existing media and instructional materials. These materials are not designed for individualized instruction, nor the processes or evaluation that accompany them. Therefore there is a definite need for development of materials and evaluative instruments for individualized learning programs.

DEFINITION OF TERMS AND TERMINOLOGY

(Due to unfamiliarity of the concept of individualized instruction, it will be necessary to introduce a lengthy glossary of terms as follows:)

Individualized instruction: the modification of instruction procedures to fill the specific learning requirements of an individual.

⁴ Perkins, Hugh V., Human Development and Learning, Stratford Press, Inc., Belmont, California, 1969

⁵ Esbensen, Thorwald, Conclusion of Working With Individualized Instruction, Fearon Publishers, Palo Alto, California, 1968

Individualized instruction is instruction that has been packaged so there are alternatives that make them adaptable to the learning characteristics of a wide range of individuals. Individualized instruction incorporates the concepts of independent study and small group study; it is not instruction on a one to one basis.

The concept of packaging for the purposes of this study relates to the adaptation of the packaging, marketing and advertising principles to the packaging of instructions in art.

The instructional package is laid out in sequential form, from one step to the next. This allows the student to reflect and to make use of his newly acquired knowledge or skills. The student will be able to gain insight from the application of his skills and knowledge which will motivate him to learn more. Because learning has been proven to be an enjoyable experience, the student has a better chance of relating to it as something that he can achieve success in. This success is made possible because the learning is tailored to his particular interest, needs and abilities.

Package: the assemblage of all of the instructional material and media, including supplementary material, into one cluster (or packet).

Packaging industry: industries concerned with the presentation, as well as advertisement and marketing of products.

Packaging, advertising and marketing principles and concepts: ideas which are the concern of those involved in promotion, advertisement and marketing of products for the consumer.

Education packaging industry: industries concerned with the presentation, promotion, advertisement and marketing of education materials, especially textbooks and related instructional materials.

Adaptation: the modification of an instructional item or process to fit a new condition or circumstance.

Unit: one complete educational sequence or part of the instructional package.

Materials of instruction: all materials utilized in the educational process.

Objectives: specific statements of the means of attaining the prescribed goals.

The main concern of innovators in education, has been that of meeting the needs of the individual. To meet these needs, they have turned their attentions to the individualization of instruction. In these methods a great amount of importance is placed on the objectives, they tell the student in very concise terms; what he is to learn, why he needs to learn it, how well he is to learn it and under what conditions he is to demonstrate what he has learned. Writing the objectives require that the language be concise and specific enough for the student to understand. The behavioral change required by the objective must be observable, whether they are objectives of the cognitive or of the affective domains.

Supplementary materials: materials utilized to aid in the understanding of verbal instruction.

Visual materials: the visual and audio-visual materials used to supplement verbal instruction to aid the student in his understanding; usually picture references.

Self actualization: a condition achieved by the student which allows him to direct and initiate his own learning to fulfill special personal needs or interests.

Learning activity: the end toward which the instruction is directed; the lesson or event in which the student is taking part.

Goals: the ends towards which instruction is aimed; goals are to be achieved at the end of some prescribed period.

Program: the broad heading encompassing the whole process of teaching from the initial concept to the accomplishment of the final goal.

Multifaceted package: a package that can serve the needs of groups of individuals with similar but different levels of attitudes, needs and habits.

Multi-graded school: a school having a sequence of grades as opposed to a non-graded or no grade arrangement.

Innovator: one who makes changes or introduces new things or uses old things in a new way.

Classroom group: a small group of students in the classroom set up specifically to individualize the content of instruction and make it easier for the student to participate in the learning activity.

Independent study: an activity where the individual student studies a body of information related to his specific need or

interest entirely on his own.

Learning package: a sequence of units of instruction under the heading of a specific subject.

Types of learning packages: are I.D.E.A. (Institute for Development of Educational Activities); P.C.U. (plan contract units); L.A.P. (learning activity package); I.P.I. (individualized programmed instruction); T.L.U. (teaching learning unit); P.L.A.N. (program for learning in accordance with needs); UNIPAC

"The terminology of UNIPAC eventually evolved from U.N.I.P.A.C. being developed as a reference to something other than a "unit" but something more than a "package"."⁶

Contract: an agreement between the student and the teacher for a specific amount of work to be performed by the student for a specific grade, within a specific time.

Instructional tools: the implements utilized to aid the teacher in teaching and the student in learning.

Teacher roles: the type of approach the teacher uses in relation to the work the students are doing: the teacher as director role, where the teacher directs all learning activities; the teacher as assistant role, where the teacher assists the student with the learning activities assigned; and the teacher as guide role, where the teacher guides the student through the learning activities.

⁶ Weisgerber, Robert A., Developmental Efforts in Individualized Learning, F. E. Peacock Publishers, Inc. 1971

Student directed learning activities: student initiated learning activities with periodic conferences with the teachers.

Traditional classroom school: a school that utilizes standard methods and means of teaching and does not utilize the concepts of: team teaching, independent study, contracts, small group instruction and packaged instruction or learning units.

Continuation education: learning activities which take place outside of the regular school for those who cannot or do not fit into the regular school program.

Instructional objective: a statement expressing, in a concise manner, the intent of the instruction.

Behavioral objective: a statement expressing, in a concise manner, the desired behavior to be observed in the person having experienced the instruction.

Performance objective: a statement specifying the type of measurable, observable performance that is expected as a result of the instruction.

Cognitive domain objectives: statements relating to the development of knowledge, awareness and judgment.

Affective domain objectives: statements relating to the cultivation of feelings and emotion.

Sequential steps: the organization of learning materials into consecutive or numerical order reflecting the sequence of learning.

Learning characteristics: the qualities which make each learner unique; slow readers, poor listeners, and learners with physical handicaps or mental handicaps.

Diagnostic assignments: initial assignments given new students in order to determine their appropriate level of instruction.

Maximum fulfillment of the individual: a point reached when the individual has all the intellectual and attitudinal equipment necessary to learn anything he desires throughout his life entirely on his own.

RATIONALE FOR THE INDIVIDUALIZATION OF INSTRUCTION IN ART

Art, like any other subject matter area has a certain body of basic information that is essential for every student. However, because this body of information is essential, does not imply that it can be successfully transmitted to all individuals with equal ease of understanding. Therefore, varied techniques of presentation and communication should be sought and utilized in order to reach an optimal level of understanding with the greatest number of individuals. In a program of individualized instruction the characteristics of an individual's learning habits and difficulties can be determined by a diagnostic assignment. This is aimed at finding the strengths and weaknesses of the student, and enables the teacher to choose the proper instructional course. The learning activities for the individual are then structured to build strengths and success in what was a difficult area, and the learning activities geared to the success of the student; failure is kept to a minimum. Another factor in this form of instructional program is that of directing behavior towards the long range goal of self directed learning. This means

that the individual's behavior will have to be altered so that learning will be a rewarding and worthwhile experience if he is to be self motivated and self directed.

The reasons for instituting a program of individualized instruction are as many and varied as are the methods of individualization. In order to simplify the problem of discussing these reasons, it may be said that the traditional school is not a place for dealing with the individual; it is a place for dealing with numbers and space. When we look at the product of the traditional school we see a direct reflection of this process of dealing with numbers and space, which make up the traditional educational system. The product (the child) carries a certain amount of information about the process. The ineffectiveness of the process to deal with individuals is pointed out by the high dropout rate, low reading level, low mathematics skills and low spelling and verbal skills. The changes needed are ones that will make it possible for more individuals to be successful and overcome their educational handicaps and allow them to strive for their maximum fulfillment as individuals.

Most often in the traditional school the student is made to fit the curriculum and the curriculum not to fit the needs of the student. Individualization allows the individual to set his own learning pace and to learn the things that he feels he needs.

The rationale for the individualization of instruction in art is basically the same as for any other subject matter area. The art student comes into the art environment with specific needs, abilities and problems. Through diagnostic teaching and the

processes of individualization the student's experiences are more likely to be successful; this, in turn, results in the success of the whole art program.

CHAPTER TWO

INSTRUCTIONAL, BEHAVIORAL AND PERFORMANCE OBJECTIVES FROM THE COGNITIVE AND AFFECTIVE DOMAINS

The objective is an important part of the concept of individualized instruction and other forms of packaged instruction. The objective communicates to the student what, when, and how much he is expected to know, also how well he is expected to know it and how he is expected to demonstrate his knowledge of the required task.

Instructional, behavioral and performance objectives direct the learner's activities toward achieving the goals established for the whole art program. The central theme today in regard to the goals of American education, centers around the ideal of maximizing the teacher's efforts toward fulfilling the individual student needs. Diversities in our complicated society will not allow us the luxury of having a few general goals for all of the students in the country as we have in the past. Uncertainty about the future occupational needs, make it necessary to seek and utilize the newest and most inovative methods of education. Presently, the direction points to the individualization of instruction. Individualization seems to be as good or better a method of preparing students for the uncertainties of the future as the traditional means. Through individualized instruction we can hope to equip each student with a basic package of information that will allow him, through self directed learning, to acquire the skills essential for meeting the new social demands of the future. Individualization may also be the key concept to

self-actualization and the full development of individual potential, skills, ability and appreciation.

In the effort to achieve individualization of educational objectives, the following important factors should be considered:

1. We must write objectives that will be specific enough to be evaluated and become a functional part of the curriculum.
2. The objectives must be flexible enough to be adaptable to the needs of a wide range of students.
3. Objectives must be adaptable to individual learning systems and the requirements that go along with those systems if the student is to realize his full potential and achieve maximum fulfillment as an individual.

The most extensive effort at preparing a somewhat universal set of objectives in recent years has been a national assessment of educational needs, under the auspices of the Exploratory Committee on the Assessment of Progress in Education.⁶ The committee must be supplied with more detailed information of the skills and abilities possessed by the student at various levels of development in order to determine the student's needs at the next level and particularly the requirement for effective participation in the roles and activities which are likely to be open to them.⁷

⁶ Tyler, R. W. The Objectives and Plans for a National Assessment of Educational Progress, Journal of Educational Measurement, Vol. 3 (1966), pp 1-4.

⁷ Flanagan, John C., Individualizing Education, pp 4-10, Chapter 1; The Goals of Project Plans, Development Efforts In Individualized Learning, Robert A. Weisgerber, American Institute of Research, Palo Alto, Calif., F. E. Peacock Publishers, Inc., Staoca, Ill.

A leading expert, Ralph W. Tyler (1951) suggests, "studies of learners and the demands of life outside of the school, the views of subject matter, scholars, philosophers and studies of the psychology of learners are a source of the required information."

There are two principal types of information gathering procedures: First, the collection of information at several levels such as, 4th, 8th and 12th grade and five years after graduation. This would represent an intensive longitudinal case study of an individual's development. Following individuals through time with relatively complete information about their initial status and their progress, would provide a basis for a better understanding of achievements required at a particular level. This information would insure success in the appropriate activities at the next level.⁸ Experience has shown that it is quite difficult to say what will be a worthwhile experience for this year's fourth graders. It is much easier for a competent observer to agree on a specific program for a particular boy, given the detailed facts about his background, abilities, interest, values and recent experiences. "The facts usually point quite clearly, to what the school can best do for the student's development in the coming year."⁹

⁸ Tyler, R. W. The Function of Measurement in Improving Instructional Educational Measurement, Wash., D.C., American Council of Education., 1951.

⁹ Flanagan, J. C. A Survey of Educational Programs of the Hicksville Public Schools, Pittsburg; American Institute for Research, 1966.

A second type of information gathering procedure is the critical incidence report.¹⁰ Specific behavior observed by the teacher, parents and other observers would be recorded in a critical incident report. These critical incidents would include specific observed behavior which indicates particular deficiencies. Here again, it has been found that there has been little difficulty getting two observers of a specific behavior of a child to indicate that this behavior is either something that should be encouraged or something that has to be corrected. Such specific observations would be of great value to those involved in making decisions about the educational future of the student. The critical incident report would be given to a committee composed of lay citizens, teachers, educational administrators, subject matter specialist and scholars in philosophy and human learning and development.

However, in these procedures for collecting information and in the committees established for making curriculum assessments and recommendations for changes in education, there is no student input. There seems to be little concern for the individual; the main concern is still mass education. The emphasis is still on preparation for known factors and known jobs that may very well be obsolete when today's students are ready to assume their roles in society. Efforts should be directed much more specifically, finding the essential information that will allow the individual to extend his knowledge in any direction according

¹⁰Flanagan, J. C. "The Critical Incidence Technique" Psychological Bulletin, Vol., 5 (1954) pp. 327-58.

to his needs, by means of self-directed learning activities.

When the individual has received a sound package of basic information, he can operate at any level he chooses and will be able to act upon information about occupations that are currently open to him and may be open to him in the future.

There has been considerable controversy in recent years over the form in which educational objectives should be presented to the teacher and to the student. The recent stress on terminal objectives has exposed the emphasis in current education on many trivial aspects of subject fields. Thus the nature of the objectives themselves becomes an important part in the educational plan.

In an individualized instruction program the objectives are written for two major categories: 1) Affective objectives are directed primarily at influencing behavior in terms of feelings and attitudes. There will obviously be changes that cannot be directly observable, but for the purpose of evaluating behavior, there must be some directly observable action. 2) Cognitive objectives are those related to skills or knowledge (including awareness and judgment). The evaluation of cognitive objectives can be observed directly through performance.

Objectives of both types should include the following:

- 1) A precise statement of what the student is to do. His activities should be directly observable and measurable.
- 2) The objective should specify both long and short range instructional intent in either cognitive or affective domains.
- 3) The objective should always be stated in behavioral

terms; conditions and standards may be implied, if they are needed to clarify the instructional intent, and they should be stated.¹¹

The samples of terminology of behavioral objectives can be broken down into three categories:

Motor Performance

Draw	Duplicate
Construct	Manipulate
Apply	Measure

Verbal Performance

Name	Explain
Quote	Repeat
Reproduce	Define

Discrimination Performance

Discern	Decide
Compare	Distinguish
Isolate	Judge

There are several components to the terminology of the instructional objectives. For clarification and isolation of function these components are listed separately.

Action word: the kinds of action described in an instructional objective should be classified as specifically observable behavior; thus the behavior oriented curriculum developer starts

¹¹ The material presented here on the technical aspects of preparing behavioral objectives relies heavily on material drawn from R. F. Mager, Preparing Instructional Objectives, but has been adapted specifically for the art teaching situation. All technical terminology is that of Mager.

with the question, what will the learner be doing when he demonstrates that he has learned or achieved the task necessary for the objective? In asking this question, observable data must be obtained in order to determine if learning has occurred. Choice of an action word for use in an instructional objective is to be determined in part by the extent to which the term describes observable behavior.

Context or Signal: should be stated as specifically as possible, therefore, the objective will be specific as opposed to something that is vague or general and does not specify any important condition as indicated in the following examples, where the context is not stated.

Objective 1) perform a line drawing

Objective 2) construct a collage

Objective 3) construct a mold

NOTE: A statement of the condition under which the behavior should occur is absent.

Context Stated

Objective 1) Given the direction, throw a cylinder on the potter's wheel, with uniformly thick walls and bottom; the student is able to carry out the operation.

Objective 2) Presented with the appropriate materials, the student will construct a stretcher and stretch a canvas on it in a neat and professional manner.

NOTE: (Context and criterion of performance are stated in specific terms.)

Specific Context

Objective 1) Presented with the statement, "regroup the following pictures alphabetically according to the last names of the artist," the student arranges the pictures alphabetically according to the last name of the artist.

NOTE: (Context and test are both included.)

General Context

Objective 1) Given a definition of gesture drawing and a demonstration of gesture drawing and told to do a gesture drawing, the student does a gesture drawing.

Criterion of performance is usually stated in two forms; percentages of correct response and answers stated.

Behavioral objective identification must precede curriculum development in order to write the objectives and facilitate evaluation; this projection of objectives must be the first step in the development of a curriculum.

Objectives must be specific and identified in terms of behavioral language in order to provide the same meaning to all those who may be involved in the instructional process and contributing to the development of what the learner is expected to accomplish. These objectives must also fit into a sequence or order so that a continuum in learning can take place. To establish this order or sequence, the final and most complex objective should be established first and the remaining objectives worked backward to the first of the program. The sequence must be connected so that the student may make a smooth transition from one learning objective to the next and so the student may gain more and more

insight into the subject matter area as he progresses. Instructional objectives should proceed from concrete to abstract knowledge and might use vocations as a context for learning; this would also be a way of providing young people with occupationally relevant experiences.

The "behavioral component" of the objective is usually written in the form of "the ability to do," or "able to do".

The second component of the objective, which is the specific content usually comes from the formal learning experience, e.g. "throw a pot" or "make a collage".

Objectives should always be public because of the advantages to both student and teacher of having criterion available for discussion and understanding. Availability is also of value to the teacher in deciding where emphasis should be placed along the lines of content. When all of the criteria is available for the student, he knows immediately what he is expected to do, how well he is to perform and the level of proficiency he is expected to achieve.

CHAPTER THREE

THE USE OF PACKAGING TECHNOLOGY FOR THE PACKAGING OF INSTRUCTIONAL MATERIALS FOR ART

The use of information from the packaging industry in the presentation of instruction material for art, should be very much worthwhile just as information from art is utilized to produce packages to sell products. Why not use what the packaging industry has learned to package and sell instructional materials to the consumer-learner (the student)?

The package of instructional materials, usually the textbook, should be given some of the same consideration as the commercial cereal box; it appears that much of the sparkle goes out of packages, the closer they come to having educational uses. The child of the twentieth century is accustomed to a great deal of flash when he is introduced to a new toy, a game, or new cereal; a lot of eye catching art work is put into the package, and a tremendous amount of advertising is carried out. The result is that the child feels he must have the product; the goal of the advertising and packaging industry is to create a desire to own or use a product.

An extraordinary amount of innovation and creativity goes into packaging of goods; learning materials should get the same amount of consideration, particularly those materials which are now textbook in nature. Basically the package of instructional materials should be engineered in much the same way as any other package. The packaging engineer has to make efficient use of the principles of packaging in order to respond to the consumer needs,

attitudes, habits and desires. This is certainly compatible with the aims of the individualized instruction, which seeks to respond to the same criteria in the learner.

The learner is the consumer of the product (instructional material). The needs of the student and his attitudes are what we should examine, and we should package instructional materials accordingly. For years we have used much the same format for text books, and at this point we should do what is periodically done in the packaging industry. We should run extensive evaluation of the consumer market to consider the possibility of developing a new package or re-design the old one. The "Educational Packaging Industry" should re-tool and produce not just a new package but a new concept of packaging such as the multifaceted package, that can serve the needs of groups of individuals with similar but different levels of attitudes, needs and habits. Such a concept is presented here.

The definition of a package and the process of packaging should be re-emphasized here in order to clarify the intent of packaging as it relates to this study on the individualized instruction (see p. 5). For this purpose, packaging is defined as the presentation of preassembled units of instructional material through a multifaceted package. Packaging is also concerned with the assemblage and synthesis of instructional materials and the cycling of that material for presentation in a concise and sequential form. The package, in terms of physical characteristics, should be small to moderate (book size or larger) depending upon materials being presented. As nearly as possible the package

should be preassembled, attractive, and appeal visually to the consumer-learner, both in groups and individually.

When we view the packaging industry, a wide range of things explain why the industries exist. The over-all scope of the packaging industry is great. All products manufactured in some way undergo the process of packaging, not just in the United States but everywhere. The packaging industry does not operate on an independent basis, but is closely tied to the marketing and advertising industries as well. Looking at it from the outside, one might consider it to be one operation, but there are three essential steps the product must go through before it reaches the consumer.

Everything we use in our daily life has undergone packaging. The whole purpose behind advertising, marketing, and packaging of products is to get information about the product to the consumer. In most cases, information is very diverse and is presented in a broad manner: advertising in magazines, billboards, television and radio. The same information is presented so repeatedly that the consumer feels this product is one he must try; there is an image that has been established through marketing, advertising and packaging. The three create a desire to own or use the product.

Instructional materials might be marketed for the consumer-learner in much the same fashion as pantyhose, toothpaste and deodorant. If the same vigor that is applied to the selling of

toothpaste, toys or cereal were applied to instructional materials

it would change the whole complexion of education. The application of theories and practices that relate to the creation of the package should be adapted to the packaging of instructional

materials. The package should help sell the product of instruction to the learner, considering his needs, attitudes, desires and abilities. In the case of individualized instruction, the package should make the use of instructional material easy and convenient. The package should be visually attractive to the student and should create the desire and motivation to seek out and use the material it contains. By advertising, the many possible areas of instruction in a course and the presentation of these products in the educational setting can generate and sustain interest in the instructional material. This is the same in education as it is in industrial product success and popularity.

Packaging is very important to individualized instruction. It is a vehicle that can present the information that will yield success for more individuals in the art environment. We can tailor the "package" for small groups of individuals as well as for the individual with specific learning difficulties; the possibilities are almost infinite. Specifically, the information can be presented in a manner that will help the student solve problems rather than creating more problems. The concept of packaged instruction is to make learning a more enjoyable experience by providing levels of structured learning activities that will ensure the success of individual students.

DEVELOPING AN INSTRUCTIONAL PACKAGE

In writing an instructional package we should start with a brief complete sentence stating what idea, attitude, process or skill the student is to learn. This can generally be obtained directly from the course of study. The package should utilize

concise, basic language. It will probably be necessary to break the major goal into smaller segments for the packaging of instruction.

The concepts are reduced to their simplest verbal equivalents, to maximize the scope of communication. Each of the instructional concepts should be heavily supplemented with visual materials related to the idea. The aim here is to saturate the student as much as possible with a visualization of the concept. In addition to the visual supplements, personalization through classroom demonstration, should be injected to supplement the instructional package. The demonstrations for the entire class can be video taped and re-used, but "in-person" demonstrations should be given to small groups or individuals.

The environment for the utilization of packaged instruction should be one in which the student is constantly subjected to visualization of concepts to be studied. Initially the packages dealing with the most fundamental information which all students should master can be established in sequence. Other areas of study can be undertaken in a way appropriate to the student's interest or need.

Any idea, skill, attitude or process that can be stated can become the basis of an instructional package. At this point it should be re-emphasized that teaching isolated facts is not sufficient and each concept should be related to a broader fundamental structure of art.

As an example, this segment of the package for the use of clay in ceramics, might be written in the following:

WHAT YOU ARE TO LEARN

The wedging of clay is essential for making ceramic projects.

- 1) The process of wedging, rids the clay of air pockets.
- 2) Wedging of the clay distributes the moisture throughout the clay, insuring a mass of clay with equal plasticity.
- 3) Wedging of the clay reduces the possibility of having air pockets in the clay which would cause it to explode during firing in the kiln.

These statements of learnable ideas and their true components become the basis of a package containing three lessons which could introduce the student to the process of wedging clay.

Relevancy is the cry from today's students in all segments of education and it is particularly essential for individually instructed students; what the students are asked to learn must be current and related to thier "way of life". It is important they perceive this information to be of some use to them as individuals. An example of this part of the package should be as follows:

WHY YOU NEED TO LEARN THIS

The process of wedging clay is very basic to the making of most ceramic forms. In all of the projects required for this course it is necessary that the clay be wedged thoroughly, whether a project is thrown on the wheel or is hand built.

Many students react negatively to doing assignments in areas in which they are either already knowledgeable or which are too difficult. Therefore, in art, as in any other area, before learning activities are initiated the students should be given a pre-test to determine which learning activities may be exempted and which ones are suitable for individuals in the class to undertake. The student should be given an explanation of the purposes of the pre-test; (For example, the pre-test is designed to determine if you have enough knowledge about clay to undertake an advanced project, or whether you should work on the basic problems.) For this package an example of the pre-test would consist of a demonstration by the student of his ability to properly wedge the clay.

WHAT YOU ALREADY KNOW

Teacher: Demonstrate one process of wedging clay.

Student: By folding the clay upon itself, forcing the air out.

Teacher: Demonstrate another technique of wedging.

Student: Putting the clay into slabs and compressing the slabs by slamming them down onto the table forcing the air out.

Teacher: What do you check for when cutting the lump of clay?

Student: Air pockets.

The most difficult part of the learning package for the teacher to prepare is the learning objectives. Telling the student exactly what will be expected of him, has not historically been a part of teacher practices, but this is an essential element of the learning package. (See pps. 15-19.)

A well written instructional objective should say three things:

- 1) What the student who has mastered the objectives will be able to do. (Performance)
- 2) Under what set of circumstances the student will do this. (Condition)
- 3) The acceptable level of performance expected of the student. (Extent)

Performance terms which are frequently used include the following:

Identify: Select, by pointing to, touching, picking up or naming the correct object.

Name: Supply the correct name (orally or in written form) for a class of object or event.

State a Rule: Make a statement which conveys a rule or principle.

Examples of expressions used to state conditions would include:

Given a list of tools.....

Given a problem of the following type.....

Given two yards of canvas.....

The extent, or level of performance, can be expressed in a number of ways:

1) By stating a limit: (e.g., Make at least (10) pinch pots using natural forms as a source of ideas.)

2) By specifying the number of correct or acceptable responses: (e.g., Make a series of (10) pots.)

3) By defining the important characteristics of performance: (e.g., To be acceptable, the series of pots must resemble a form taken from nature.)

The learning package should allow the student to spend the major portion of learning time on activities which provide permanency of learning. The use of individualized learning packages does not preclude the use of standard teaching methodology, such as lecture, teacher demonstrations, large and small group techniques and discussion. While not as simple to use as directed independent study and the student-teacher conference, these methods should be utilized if the need or opportunity arises.

CHAPTER FOUR

EVALUATION OF INDIVIDUALIZED INSTRUCTION PACKAGES

The evaluation of packaged individualized instruction cannot be accomplished in the same fashion as the evaluation of the traditional school program, because of the differences in methods and goals.

One aspect of evaluation is to determine inadequacies in the instructional process and make recommendations to eliminate these inadequacies. Evaluation of an individualized instruction program is easier because student progress can and should be observed throughout the instructional process. One of the main advantages of continuous observation of the students is that if instruction is not effective it can be changed at any time.

What parts of the instructional program can be evaluated? The whole program, as well as all of its component parts are subject to evaluation. First, the teacher, one of the program components, may be evaluated on such points as: a sincere desire to help the student acquire knowledge and develop a positive self concept; the ability to work with large or small groups of students needing a variety of instructional material and approaches; be capable and versatile in using a wide range of materials and subject matter; organization and management of content and ability to communicate with the student. A knowledge of the dynamics of human relationships, as well as subject matter is essential. These are some important aspects on which the teacher in an individual program must be evaluated.

The diagnostic and assessment phase of the program is the second component that is essential to individualization and important to evaluate, for it is here we seek those things that have created problems in learning for the student. Attempts to restructure learning activities for his future success, and the motivational phases of individualized instruction are tied to the illustrations in the previous chapter on packaging. The design and content of the package are largely responsible for motivating the student to enroll in the class and also to do the work involved in the class after enrollment. An evaluation of motivation is essentially an evaluation of the whole program; one of the strongest motivational techniques employed in individualized instruction is the student involvement in the planning and learning objectives for his specific needs. The variety of material and media available, flexible curriculum, and innovative and creative instructional methods should also be evaluated in terms of their effectiveness, as well as the experimental aspects of the program seeking to improve overall educational effectiveness.¹²

Eisner provides some suggestions for contexts for evaluation:

1) Self-judgments aimed at ascertaining the extent to which students' competencies, sensibilities, and understanding have grown from a previous point in time.

2) Comparison of students' performance with those of his classmates, within the limits imposed by individualization.

¹² A Handbook for Developing Individualized Instruction in Continuation Education, Fresno County School, Calif. pp

3) Comparison of students' performance with the established criteria in the given area of work.¹³

These are some of the areas in which evaluation should occur and some of the criteria for evaluation. The overall purpose of evaluation should be to recommend changes which will make the program more effective for the individuals involved.

¹³ Eisner, Elliot W., adapted from Chapter 8, Children's Growth in Art and Can Be Evaluated, Education Artistic Vistion, The MacMillan Co., New York.

CHAPTER FIVE

CONCLUSION

This study of individualization of instruction shows that the application of the theories and principles of individualized instruction can fill definite needs in the educational process of today and be of benefit to the student and teacher.

Historically, individualized instruction is not a new concept but one that has been developing and on-going in nature. Many facets of this mode of instruction have been assembled through the years since the start of multiple grades, small group teaching, and independent study. It is from these ideas and as a result of research in educational processes, that they have been brought together to form the concept of individualized instruction.

The importance of the objectives to the process of individualization was discussed. Methods for writing objectives of the several types needed in a program of individualized instruction were outlined and examples were given to illustrate how they function. A model unit of instruction was also included for purposes of illustration. (See Appendices A and B) The problem of evaluation for a program or project of individualization of instruction was also introduced.

Throughout this study, various examples of projects and programs of individualized instruction were cited as examples of problems encountered in practice and implementation.

Principally, to the already valid concept of individualization of instruction, the concept of packaging was added; the

process of packaging instructional information in a dynamic container with supplementary materials has been proposed. This bringing together of two powerful concepts could change art education in a significant way in the near future of the field.

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APPENDIX A

(TEACHER SAMPLE) The Learning Package

Before the student is given the learning package he should be prepared for the activities in accordance with the philosophy of the learning package and the student must have certain levels of basic subject matter information in order to be successful.

With this statement in mind, the learning package can be presented in this fashion: 1. Presentation: The initial presentation of information to the group of students should be broad and dynamic enough to draw in the attention of the whole group. Audio-visual materials; slide tapes, video tapes, commercial television and film loops can be used. Alternate methods of presentation are: guest artist speakers, field trips and workshops. These methods offer a dimension of excitement to the presentation of new methods and materials to the students.

2. Demonstration and Simplification of Methods: The importance of the teacher being competent in the material and technique cannot be over-stressed. The teacher has to find a method that will make the task easy for the student to learn; perhaps a short lecture and demonstration on technique should follow the presentation. A requirement of the learning package is that it include little verbal information, and be as clear and accurate as possible. The main reason for this attitude is the intensive desire on the part of the student to do art, not read about it.

3. Distribution of Packages: The students are given the learning packages and

tools as well as any other information needed to start the learning activity. As the teacher observes the students' involvement in the activity it may be necessary to re-demonstrate the techniques to small groups or individual students.

APPENDIX B

What you are to learn

How do you wedge clay for the making of ceramic objects? You will learn several methods of wedging clay. You will adopt the method most comfortable for your own use, so long as it gets the job done properly.

Why you need to know this

Knowing what effect the action of wedging has upon the clay is important to the person making ceramic objects because:

- 1) wedging clay moves the moisture throughout the mass of clay equally, so that the mass of clay will be of equal plasticity.
- 2) wedging gets rid of pockets of air in the mass of clay.
- 3) wedging lessens the chance that an air pocket in the body of the clay will cause loss of the project on the wheel or in the kiln.
- 4) knowledge and the practice of wedging increases chances of success in the manufacturing of ceramic projects.
- 5) projects undertaken in this class require that you wedge your clay.

Note: The air (gas) trapped inside the air pocket in the wall of a ceramic form expands during the firing and may explode.

What you already know

This is the area where those who have experience in ceramics can show their knowledge and advance to the next stage. Those who can demonstrate the necessary skills in wedging clay must do

the following: 1) Demonstrate how to wedge in two different ways as shown in the class demonstration. 2) Demonstrate the techniques for checking the clay for air pockets and pinholes.

Note: These are the things you will have to know to complete this unit.

Time

The amount of time needed to master the techniques shall be two class periods (in addition to the remainder of the presentation period). Most students should expect to complete this unit the first day after presentation.

Performance

Wedging the clay should be done as neatly and quickly as possible; normally about fifty strokes should be sufficient to thoroughly wedge the clay. Check the clay for air pockets, then round the clay into balls, for later work on the potter's wheel.

Condition

Wedging should be carried out on strips of canvas at your work table, on counter tops covered with canvas, or on concrete slabs provided for wedging.

Extent

You can only reach the acceptable level of performance when you check yourself to make sure the work has been done correctly; ask questions when in doubt.

Evaluation

Evaluation will be carried on throughout the learning activity. When necessary, suggestions on how performance can be improved will be given you by the teacher.

Grades

Grades will be awarded on learning packages after a conference with the teacher. Grades will also be awarded on products, contributions to class efforts and class-shop duties. Twenty-five percent of the grade will be based on each of the above areas, for each activity.

Student Evaluation of Unit

(Student completes this section)

Student Evaluation of Material

(Student completes this section)

Student Comment or Suggestions for Improvement

(Student completes this section)

APPENDIX C

ADDITIONAL SOURCES OF RELATED MATERIALS

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In partial fulfillment of the requirement
for the degree M.A. in Art Education

has submitted this creative thesis
as a supplement to the written thesis


1 Salt Glazed Vase


19" x 6"
Size


Vaginal Pot
Title

which is the permanent possession of the
University of Colorado and recorded with
The Department of Fine Arts

Approved by


Chairman of Committee


Co-Chairman of Committee


Chairman, Fine Arts
Department