

THE UNIVERSITY OF MANITOBA

A MODEL OF PROCEDURE FOR THE CONSTRUCTION
OF SLIDE SERIES BY THE TEACHER FOR THE
PURPOSE OF STUDENT CONCEPTUAL DEVELOPMENT

by

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FOR OLIVE HOGUE

ABSTRACT

Resources directly influence the objectives or goals of a curriculum. The resource being discussed is the visual medium in the form of slides. This medium must be constructed to provide a learning experience for conceptual development for the student. With the curricular revisions in the Social Studies, specifically history, and the emphasis upon conceptual development, expository learning materials such as commercially produced slides are inadequate for this task. New resources must be constructed and the teacher, who realizes the needs of the students, must assume responsibility for this construction.

The learning goal and objectives are established from the concepts to be developed and the learning processes to be utilized by the student. The problem was one of how to construct resources to achieve the required objectives. On that basis the teacher makes the selection of slides for slide series production. Therefore, the major purpose of the study was to construct a procedural model that can be applied to the history courses at the junior high level to provide an answer to the problem. The second purpose was a practicum aspect which implemented the procedure in a practical application and utilized the suggested technical skills in the construction of seven slide series.

The procedure was organized in the following manner. The concepts to be developed through the use of slides as a learning strategy were selected. The content data necessary for concept development was prescribed by the junior high Course of Study guidelines. The learning

goal and specific learning objectives were determined by each slide series. The learning processes utilized were dependent upon the cognitive structures of students at a junior high school age.

The outcome of the procedure was the actual slide selection. The transactions within the procedure were the selection of content and learning processes, based upon a diagnosis of student cognitive structures. The slides selected did not simply meet content demands but were selected to provide a learning experience to achieve learning objectives and goals. The outcome of the application of the slides to the classroom would be the actual creation of a learning experience for the student to interact with and exhibit the desired and determined behaviors.

TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM	1
Introduction	1
Background to the Problem	3
Statement of the Problem	4
Limitations of the Study	5
Delimitations of the Study	6
Theoretical Assumptions	7
Definitions	8
Significance of the Study	14
Plan of the Study	16
II. RELATED LITERATURE AND RESEARCH	18
Introduction: Part I	18
Media and the Social Studies	18
Still Visuals and other Media and Learning Effectiveness ..	25
Considerations other than Learning for Media Selection	37
Toward a Definition of Concept	42
Perception and Conceptual Development	46
Learning Objectives	58
Summary and Conclusion	62
Introduction: Part II	64
The Camera and the System	64
Slide Film	67
Graphics	69

CHAPTER	PAGE
III. ANALYSIS OF THE COMPLETED SLIDE SERIES	71
Introduction	71
The Slide Series	71
Summary of Visual Content	74
Grade Application of Completed Slide Series	79
IV. A PROCEDURAL METHOD FOR THE CONSTRUCTION OF SLIDE VISUALS FOR LEARNING OBJECTIVES	80
Introduction	80
Relationships between Topics and Concepts	82
Relationships between Content and Learning Goals	87
Relationships between Learning Goals and Learning Processes	88
Sequence within the Slide Series	92
Procedural Variables and Individualization	103
Outcome of Procedure	107
V. COPYING TECHNIQUES FOR SLIDE REPRODUCTION	109
Introduction	109
Copying Stand	109
Copying Techniques	114
Summary of Procedure	116
Slide-analysis: Technical Quality	117
Adaption to Filmstrips	119

CHAPTER	vii
	PAGE
VI. CONCLUSIONS AND IMPLICATIONS	120
Introduction	120
Conclusions Related to Procedure and Completed	
Slide Series	120
Implications for Education	122
Suggestions to Further Study	124
BIBLIOGRAPHY	126
APPENDIX A: Sources for the Visuals	136
APPENDIX B: Technical Literature	138
APPENDIX C: Representative Slide Series	140

LIST OF FIGURES

FIGURE	PAGE
1. Depth of Field	10
2. Audiovisuals and the Instructional Process	20
3. Instructional Technology and the Instructional Process	20
4. Effectiveness of Social Studies Project Media	28
5. Points on a Realism Continuum in accordance with the Realism Theories	35
6. Three Kinds of Perceptual Recognition and Conceptual Organization in a Graduation from Simple Sensing to Conceptual Maturity	48
7. Levels of Conceptual Distance from the Sensory World	50
8. Cue Summation Research	54
9. Possible Roles of Verbal Stimulation	56
10. Parallax	64
11. Schematic of Procedure: Relationships between elements of Procedure in Slide Selection for the Purpose of Conceptual Development	104
12. Schematic of Procedure: Relationships between elements of Procedure in Slide Selection for the Purpose of Conceptual Development	105
13. Schematic of Procedure: Antecedents or Preconditions of Procedure for a Given Student or a Given Course	106
14. Diagnosis and Prescriptions in the Procedural Method for Slide Selection for Conceptual Development	108

110	15. Copy Stand and Camera
111	16. Copying Stand
112	17. Support Stand
113	18. Copy Board

PAGE

FIGURE

LIST OF TABLES

TABLE	PAGE
I. Social Science Curriculum Project	26
II. The Relative Effectiveness of Different Types of Instructional Media for Various Types of Learning Objectives	30
III. Considerations Related to Various Instructional Media	39
IV. Rating Chart for Media Selection	41
V. Close-up Lens Table	66
VI. Classification of Film Types	68
VII. Grade Application of Completed Slide Series	79
VIII. Suggested Film Types for Continuous Tone and Line Tone Originals	116
IX. Slide Analysis: Technical Quality	118

LIST OF MATRICES

MATRIX	PAGE
1. Relationship between Content and Concepts	73
2. Relationship between Content, Concepts and Generalizations ...	85
3. Relationship between Content and Learning Goals	89
4. Determination of Specific Performance Objectives	93
5. Matrix Base for Instructional Performance Objectives	94
6. Example of Matrix Base for Determining Instructional Performance Objectives and the Specific Application of Learning Processes to Specified Content Areas - Elizabethan England: A Stage for Man	95
7. Elizabethan England: A Stage for Man	96
8. Change: The Price of Time	97
9. The Grandeur and Might that was: Rome: The Thirteen Hundred Years	98
10. Questions of Our Time	99
11. The Absolute and The Peasant	100
12. Refuge from a Hostile World	101
13. From the Devine to the Man	102

CHAPTER I

THE PROBLEM

Introduction

Material resources are increasingly being utilized in the Social Studies classroom. Resources, and their particular orientation toward teaching and learning, directly influence the objectives or goals of the curriculum. New curricular projects developed for the Social Studies in the last decade state that the development of concepts through skills in inquiry, critical thinking and problem solving is a major objective in learning and in curricular planning. Resources designed for the purpose of presenting content data in a general sense for no specific curricular objectives are inadequate for achieving objectives of conceptual development. Materials must be constructed to satisfy objectives of a particular curriculum.

One type of material resource is the visual medium. This medium is generally regarded as a 'visual aid' to teaching and learning. Consequently, visuals are placed in the position of acting as a stimulus to learning or as a reinforcer for internalized learning. Visuals can become more than this; they can become an integral part of the teaching-learning process.

Education with its theories of teaching and learning is in a process of change demanding creation or revision of curriculum. An important element in the change in existing Social Studies curricular projects will commence with a revolution of the materials and their

uses. (Fenton, 1967) New curricula are needed to meet the changing demands of the 1970's, the demands of the student, of society and of the knowledge explosion. This revolution must be met, influenced and controlled by the classroom teacher. One aspect of this control is the assumption of responsibility for determining what resources enter the classroom, their construction and their application.

The majority of the visuals, such as slides, available to today's classroom are of the commercially produced variety. They are marketed for a mass audience with a major aim being the realization of profit. They are designed for multi-level usage and have not been produced for the objectives of a specific curriculum. The trend in these slides has been to display factual information to a non-participating audience.

Factual content in the new Social Science curricular projects is not being taught as an end in itself, but for the development of concepts. This is especially the case in history. Visually displayed data in commercially produced slides is not geared for conceptual development or for the use of inquiry skills by the student. If the displayed data from commercially produced visuals is applied to the learning of concepts for a given curriculum and grade level, much of the information will be irrelevant, with needed information not supplied. Because of the orientation toward a diverse range of grade levels, content supplied by the commercial product will not be directed to conceptual development of a given student or classroom group. This may create interference to learning as the result.

Many of the slides used in the Social Studies classrooms of Manitoba are produced in the United States and are oriented to an American audience, with American philosophies of education influencing construction of the materials. The slides reflect the individual company's interpretation of these philosophies in light of their profit motive. It cannot be denied that commercially produced slides will provide learning experiences, but their function in providing experiences for conceptual development is limited. The role of the teacher is relegated to a secondary position in the choice of the content displayed. Most important, the needs of the students are not considered in the process. The student is considered as a consumer of a product, rather than as an individual involved in learning.

Background to the Problem

The visual medium used within the classroom must be developed to achieve the learning objective of conceptual development through the use of inquiry skills. With the curricular revisions in the Social Studies and their emphasis upon conceptual development and critical thinking, expository teaching strategies and expository materials utilized for the objective of the simple acquisition of knowledge alone, are not satisfactory. New materials are needed to satisfy changing objectives and changing teaching strategies. To meet these changing demands, new materials must be constructed to meet these objectives, and the teacher must assume the responsibility of constructing these materials.

Statement of the Problem

In Manitoba the teacher is provided with a course of studies by the Department of Education, which outlines the history courses offered at the junior high school level. Each outline lists the content and topics that are suggested coverage for that specific course. The teacher must determine the concepts to be developed as determined by the learning objectives and the learning resources to be utilized in a selected instructional strategy that are necessary for the student to achieve these objectives. These determinants are dependent upon the immediate needs and previous learning experiences of the students.

The problem is one of how to construct resources to achieve the required objectives. Specifically, on what basis does the teacher make the selection of visual materials for the slide series in order to satisfy predetermined learning objectives where the learning objectives are the development of concepts through the use of inquiry skills by the student? The concepts are drawn from the Social Science disciplines and the Junior High history courses provide the content materials necessary for the development and application of the concepts.

The major purpose of the study is to construct a procedural model that can be applied to the history courses at the junior high level to provide an answer to the problem. This procedure will be determined by

answering the following questions:

1. What are the concepts to be developed through the use of a visual resource as a teaching strategy?
2. How are the learning goals or objectives determined and what is their role in the procedure?
3. What is the procedure for the construction of the visual resource, a slide series, to satisfy the learning objectives?
4. What are the technical skills and tools required by the teacher to construct the slide series?

The second purpose of the study is the practicum aspect of the procedure which utilizes the technical skills in the construction of seven slide series. Each slide series is designed to provide learning experiences for the development of a concept. This will allow for an assessment by the reader of the procedural method established in the study.

Limitations of the Study

1. If commercially produced visuals are developed for a specific learning objective and are developed by educators and technical specialists, then these visuals will be of a superior nature to achieve conceptualization. This will be due to the fact that the classroom teacher has limited time, resources and facilities to achieve production of a highly sophisticated nature.

2. The individual slides provided for demonstration of the procedure in operation were selected on the basis of their interpretation by the author. This interpretation is partially an affective decision made by the teacher who decides that the visual image presented by the slide would achieve the learning objective.
3. The slide series developed were not implemented in the classroom due to time limitations and the belief that this implementation would assume, in totality, the nature of a further and complete research topic.

Delimitations of the Study

1. Only the cognitive domain of learning will be dealt with in the learning objectives established for the purpose of the paper.
2. The course topics provided in the course of study guides established by the Department of Education limited the choice of concepts and limited their application to what was prescribed by the curriculum branch. Admittedly, other history guides exist at the junior high level, for example Indian and Metis studies. As well, many schools do not follow the guides in their entireties due to adaptations made for specific needs of a given area.
3. The technical procedures outlined are based upon methods and tools found most effective with a minimum of skills required, although other methods and other types of tools are available.

4. No reference in the study is made to the junior high geography course, which is the other discipline area of the complete Social Studies course for junior high studies.

Theoretical Assumptions of the Study

1. A major weakness of commercially produced slides is in their classroom application. Unless a teacher edits, deletes or provides supplementary material to reduce weaknesses, the series, shown in its entirety will, in fact, be in control of the experience. Irrelevant visuals not necessary for the achievement of the goal will distort the learning goal. Omission of visuals necessary for the student to achieve the goal will influence goal attainment.
2. Visually presented material creates an experience for the learner. This experience provides a basis for conceptualization to occur. It is not guaranteed as to what the experience will be in totality but the slide experience is one of guided discovery or guided experience in which the teacher must assume the responsibility of predicting the behavior of the student. No matter what the teaching strategy, the learning experience is subject to variables which exert their influence.
3. The atmosphere of the classroom is one in which learning through visually displayed materials is accepted and appreciated; one where through the presentation, the student feels

he has touched reality and has experienced something that is tangible which he can relate to. Visuals bring into the classroom the inaccessible—events, things and people far removed in space and time.

A Statement of Definitions

The following definitions are explained in specific reference to their use in the paper, Included are terms of a technical nature as well as those concerned with education, specifically cognition.

Aperture. The opening in a camera lens diaphragm through which light passes, the f-stop.

ASA (American Standards Association). Film speed, indicates the films sensitivity to light. The higher the number, the more sensitive the film requiring either a smaller f-stop or shorter exposure time.

Close-up lens. A supplementary lens that is placed in front of the camera lens to enable it to focus at closer than its normal range.

Cognitive Structure. The sum total of the learner's knowledge at a given time, specifically the totality and organization of one's learnings; totality meaning content and organization meaning classification system.

Color Balance. Refers to the ability of film to reproduce color as the eye sees it. Color films are balanced to certain light sources such as photolamp illumination, tungsten illumination or natural light illumination.

Color Sensitivity. Describes the response of a film to various colors. Color films respond to all colors (in various degrees depending on the film type) although the response can be affected by using a film not geared for a certain illumination.

Black and white films are divided into four general sensitizing classes:

1. Non-color sensitized or blue-sensitive films sensitive only to ultra-violet and blue-violet light.
2. Orthochromatic films sensitive to green light, ultraviolet or blue-violet.
3. Panchromatic films sensitive to all visible colors as well as invisible ultraviolet radiation.
4. Infrared films-sensitive to ultraviolet, blue-violet, deep red and invisible infrared radiation.

Continuous-Tone Original. Materials that have a graduation of tones between light and dark with few defined lines. Photographs and paintings are examples of continuous tone originals.

Copyboard. An illuminated board or easel set up to which the original is attached for copying through a close-up procedure.

Depth of Field. Distance between points nearest and farthest from the lens that may be considered to be rendered acceptably sharp.

(Refer figure 1)