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# A Comparative Study of Visual Communication Education and Graphic Arts Curriculums in the High Schools of Illinois

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# A COMPARATIVE STUDY OF VISUAL COMMUNICATION EDUCATION AND

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# CHAPTER I

## THE PROBLEM AND DEVELOPMENT OF THE STUDY

### Origin and Significance of the Problem

The concept of visual communication education is not a
new one. It has been mentioned and discussed in the literature
of the International Graphic Arts Education Association for
more than a decade. During this period, educators and
professionals in the graphic arts field have discussed the
possibility of expanding educational programs to include
various facets of the visual communication industry. Such
changes would help enable students to understand the areas
related to graphic arts in visual communications, including
visualization of ideas, the use of photography in the
communication medium, and storage and retrieval systems for
graphic and document information. The growing concern among
progressive graphic arts educators throughout the country has
been to develop a program which will provide ideas and
directions for their students to follow, instead of the
traditional printing knowledge and skills that too often prove
obsolete before the student graduates.

In view of this increasing awareness for the need of
change in graphic arts, the Thirty-seventh Annual Conference
of the International Graphic Arts Education Association was
devoted to the theme "Graphic Arts and Visual Communication."

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It was at this conference that the decision was made to take steps to implement the changes in the schools. Shortly thereafter, the I.G.A.E.A. appointed Dr. Ray A. Schwalm, of Western Washington State College at Bellingham, Washington, to direct a proposal to the Ford Foundation for a grant to fund pilot programs in visual communications education. After revisions, the proposal was granted funding, and the work on pilot projects for ten high schools and three colleges was started in June 1965. The pilot projects were completed in August 1968.

After the completion of the pilot projects, Dr. Schwalm wrote some comments about its success:

> The VICOED pilot project has placed communication in a new perspective by relating the systems approach for solving communication problems by analysis and classification. . . . has helped to bridge the gap between formal education and the real world outside of the school. . . . [and] has given many of the teachers a new "educational life," a new way of looking at the world, and a new enthusiasm for teaching.[1]

Due to the success of the pilot projects, Western Washington State College decided to adopt VICOED as a regular course of study leading to a Bachelor of Science degree. By 1970, the enrollment in VICOED had soared 300%, and plans were being made to introduce a Master of Science program in VICOED.[2] Since that time, VICOED has been heralded by many educators and specialists in the graphic arts field as the "new direction"

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[1] Ray A. Schwalm, Visual Communication Education--A Basic Course.

[2] Dr. Thomas Jasnosz, "VICOED: A Progress Report," Visual Communications Journal, (Spring, 1971), 23.

that graphic arts instruction should follow. According to Flack:

> Graphic arts instruction, especially at the junior and
> senior high school levels, must divorce itself from an
> utter reliance on outdated technology, and accept the
> challenge of providing experiences in which students can
> discover and experiment with the creation of ideas in
> visual form, selection of the proper media and methods to
> most effectively communicate those ideas, and share in
> evaluating not only the communication but the methods by
> which it was attained.[3]

In the intrest of keeping abreast of current trends in
graphic arts, this study has attempted to ascertain the extent
to which visual communication education has been implemented
in the graphic arts curriculums in Illinois.

## Statement of the Problem

Are the secondary schools in the state of Illinois
teaching the basic concepts of visual communications education
in their graphic arts curriculum in industrial arts?

## Hypothesis

There is no difference between the basic concepts of
visual communication education and those basic concepts taught
in the graphic arts classes in industrial arts at the secondary
level in the state of Illinois.

## Definitions of Terms

The following terms used in the study are defined as
follows:

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[3]William Flack, "Graphic Arts in Visual Communication,"
al Communications Journal, (1970, 5.

Industrial Arts. "Instructional shopwork which provides general education experiences centered around present-day industrial and technical life."[4]

Graphic Arts. "One of the curriculum areas of industrial arts education in which the student studies and has experiences with the processes, materials, tools, energies, systems, and products of graphic arts technology, all of which contribute to the accomplishment of the purpose of industrial arts education."[5]

Secondary Level. Depending on the grade arrangement of the school, grades nine or ten through twelve.

Visual Communications Education. As an educational area, is characterized by teaching: (1) the visualization of ideas and concepts through the use of symbols; (2) the reproduction of visual information; (3) the methods and techniques for visual information presentation; and, (4) the recording, storing, retrieval, and rapid reproduction of the information.[6]

Basic Concepts. Those ideas, the purposes of which are to impart information.[7] For the purposes of this study, basic concepts are divided into two entities: (1) basic concepts of VICOED;

[4]Ray W. Roberts, Vocational and Practical Arts Education, pp. 422-23.

[5]Robert A. Banzhaf, "The Technology of Graphic Arts: A Curriculum Resource Study for Industrial Education," (unpublished Ed.D. dissertation, North Carolina State University at Raleigh, 1972), p. 7.

[6]Ray A. Schwalm, To Develop and Implement the Concept of Visual Communication Education.

[7]Graphic Arts Research Center, Graphic Communications Publication, 1972.

and, (2) basic concepts of graphic arts curriculums in industrial

arts. Definitions are as follows:

## Basic concepts of VICOED

1. The process of understanding and being understood through the sense organs of sight is the key to efficient and artistic communication and serves as an instrument of cultural penetration and assimilation.

2. Symbols are the means by which ideas are translated into visual images, and the arrangement of these symbols and the design elements are important in creating an effective visual communication entity.

3. The criteria used in selecting a reproduction system and the basic steps common to all reproduction systems are important for the efficient reproduction and dissemination of visual information to meet the ever increasing demands upon the industry.

4. The medium or media selected, the methods and procedures for preparing the information materials, and the techniques for presenting or displaying the information to small or large audiences are important in encouraging extensive literacy.

5. The computerization of document and graphic information by abstracting, imaging, index coding, and storing for rapid retrieval , viewing, manipulation, and reproduction is essential for the systematic subdivision and analysis of knowledge and experience.

6. An understanding of the industry and an awareness of the internal and external environment of the business enterprise are essential for interpreting the role and the function of the visual communication industry within the context of the social order.[8]

## Basic concepts of graphic arts curriculums in industrial arts

Those concepts that the completed information forms reflected.

### Assumption of the Study

For the purposes of this study, it was assumed that the

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[8]Schwalm, Visual Communication Education--A Basic Course.

responses to the information form reflected the basic concepts of the graphic arts curriculums in industrial arts.

## Limitations of the Study

This study was limited to:

1. Graphic arts programs in industrial arts on the secondary level in the state of Illinois, during the spring semester of 1974.

2. The relative accuracy of the responses to the information form.

# CHAPTER II

## THE RESEARCH OF PREVIOUS STUDIES

### Review of Related Literature

An investigation of completed studies revealed that there had been no previous research comparing visual communication education to graphic arts programs in a given area or state. However, an excellent source of information was found in the book _Visual Communication Education--A Basic Course_, by Ray A. Schwalm. This book was designed to be an introduction to VICOED, with ideas for graphic arts instructors to use in implementing a program of visual communications.

_Visual Communication Education--A Basic Course_ includes an introduction to visual communications, a review of the pilot projects in visual communication education, and a sample outline for an introductory course in visual communication education. Schwalm also lists in his book the objectives and basic concepts of VICOED, as well as anticipated student achievements for each of the six units. In order to justify the breadth and depth of the VICOED program, there were listed desirable employee characteristics most frequently mentioned by industrial and educational leaders in the field of visual communications.

This book proved to be most helpful in the construction of the information form. The listing of the six basic concepts

of visual communication education, with a sample outline
covering each, was instrumental in the development of questions
covering the basic concepts.

CHAPTER III

STRUCTURE OF THE STUDY

## Sources of Data

For the purposes of this study, it was decided that the
population could be most effectively surveyed by mailing
information forms to all the secondary schools in Illinois
having graphic arts programs in industrial arts.  For this
reason the Illinois Division of Vocational and Technical
Education was contacted in an effort to secure a listing of
schools meeting these requirements.  It was learned that such
a listing did not exist.  As an alternative, the Graphic Arts
Teachers Association of Illinois was contacted and a mailing
list of its members was secured.  From this listing graphic
arts teachers in high schools were chosen, specifically
excluding teachers in vocational schools, area vocational
centers, trade schools, junior high schools, and colleges. This
resulted in a listing of 190 graphic arts teachers to be used
in the study.

## Preparation of the Information Form

The information form used in this study was prepared
using Visual Communication Education--A Basic Course as a
guide.  Since this book contains unit outlines covering each

of the six basic concepts of a course in visual communication

education, the form was assumed to be valid with respect to

these concepts.  Once a rough draft was completed, the form

was submitted to the director of the proposal, Dr. Strandberg,

and to the author's graduate advisor, Dr. Erwin, both of whom

made suggestions as to the form of the final draft.  These

suggestions were then implemented in writing the final draft

of the information form.

The information form consisted of multiple-choice

discrimination items in six general categories relating to the

six basic concepts of visual communication education.  Since

the number of items in each category differed , a coding system

consisting of two digits for each item was formulated.  The

first digit of the code represented the basic concept being

discriminated (the number corresponds with another, preceding

one of the basic concepts of VICOED in the definition), and

the second number designated the order of items in a given

category.  The responses on the information form were divided

into four categories.  The choices of response were: "always,"

"periodically," "when needed," and "not included."  On each

item, the respondent was presented with a certain content

area of VICOED, and asked if this area was included in his

graphic arts classes.  Since the items on the information form

are directly related to the content (and basic concepts) of a

course in visual communication education, the degree to which

the instructor's class content agreed with the items determined

how closely the basic concepts of his graphic arts classes are

consistent with those of VICOED.[9]

An introductory letter, to explain the information form
and the purpose of gathering data was included in both mailings.[10]
In addition to the introductory letter and information form, a
follow-up note was included in the second mailing.[11]

## Data Gathering Procedures

On March 6, 1974, information forms were mailed to the
190 teachers on the revised list. This first mailing resulted
in the return of 65 forms, while 3 letters returned due to a
change in the addresses of the teachers. Of the 65 returned,
57 were completed, the remaining 8 were not completed because
the respondent was not presently teaching graphic arts.

In an attempt to secure a larger percentage of returns,
122 additional forms were mailed on April 2, 1974, to those
teachers not responding to the first form. This second mailing
of the information form produced 41 returned forms, 25 of which
were not completed as the teacher was not presently teaching
a graphic arts class. Three letters were returned lacking a
forwarding address. Therefore, the sample was reduced to the
184 people having correct addresses. From this sample there
was a total return of 106, or approximately 58 per cent of the
available sample. Of these, a total of 73 forms were completed,
and their data used in this study.

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[9]See Appendix A, copy of information form.

[10]See Appendix A, copy of introductory letter

[11]See Appendix A, copy of follow-up note

# CHAPTER IV

## PRESENTATION AND ANALYSIS OF DATA

### Method of Analysis

The data gathered by the information forms was manually
tabulated on a master chart. Responses to each item were
placed in four groups, corresponding to the choices on the
information form. In addition, a fifth group representing
no response to the item was included. Once the data was
tabulated, the percentages for each of the five groups of
responses in each item were determined using a portable
calculator. These percentages were rounded off to whole
numbers, totaling one hundred per cent for each item. Tables
were then constructed for every item, giving the item number
and content area, the number responding to each choice group,
and this number's percentage in relation to the total number
of responses to the item.

In analyzing the data with respect to the hypothsis,
the information form responses of "always," "periodically,"
and "when needed" were interpreted to be in support of the
hypothesis. The response "not included" was interpreted to be
a rejection of the hypothesis. Omitting the question ( "no
answer" in the tables) was interpreted as neither supporting
or rejecting the hypothesis. Simple majorities prevailed in

determining support or rejection of the hypothesis with respect to the responses in each item, and to items in a category. Consequently, if a majority of responses in an item were in support of the hypothesis, then the item was considered to be in support of the hypothesis. And if a majority of the items in a category (concept) were in support of the hypothesis, then the category was considered to be in support of the hypothesis.

In cases where the response "no answer" interfered with the determining of a majority of responses within an item, then the "no answer" percentage was subtracted from the total, and a majority was computed to the remainder. If responses in an item were evenly divided between support and rejection of the hypothesis, then the item was considered to be neither in support or rejection of the hypothesis.

## Presentation of the Data

The data used in this study is presented in six groups, corresponding to the six concepts that were discriminated by the information form. The conclusions drawn from the data precede each concept group.

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## Data for Basic Concept #1

Questions 1-1 through 1-9 on the information form were
related to the first basic concept of VICOED in the definition.
These were content questions, concerned with the goals of
communication, and methods for the dissemination of information.
As the following tables demonstrate (see Tables 1 through 9),
the majority of responses to each item in this concept
indicated that the teachers incorporated these content areas
in their graphic arts classes. Therefore, the first concept
is understood to be in support of the hypothesis.

TABLE 1

RESPONSES TO ITEM 1-1: METHODS, GOALS, AND
PROCESSES OF COMMUNICATION

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 28 | 39 |
| Periodically | 14 | 19 |
| When needed | 20 | 27 |
| Not included | 8 | 11 |
| No answer | 3 | 4 |
| Total | 73 | 100 |

TABLE 2

RESPONSES TO ITEM 1-2: VARIABLES AFFECTING THE
SUCCESS OF COMMUNICATION

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 9 | 12 |
| Periodically | 18 | 25 |
| When needed | 23 | 32 |
| Not included | 20 | 27 |
| No answer | 3 | 4 |
| Total | 73 | 100 |

TABLE 3

RESPONSES TO ITEM 1-3: THE HISTORY OF WRITING

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 10 | 14 |
| Periodically | 7 | 9 |
| When needed | 21 | 29 |
| Not included | 33 | 45 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 4

RESPONSES TO ITEM 1-4: THE HISTORY OF PAPER
AND PAPERMAKING

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 25 | 34 |
| Periodically | 11 | 15 |
| When needed | 16 | 22 |
| Not included | 17 | 23 |
| No answer | 4 | 6 |
| Total | 73 | 100 |

TABLE 5

RESPONSES TO ITEM 1-5: THE HISTORY OF
PRINTING METHODS

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 43 | 59 |
| Periodically | 19 | 26 |
| When needed | 8 | 11 |
| Not included | 3 | 4 |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 6

RESPONSES TO ITEM 1-6: COLD TYPE METHODS

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 48 | 66 |
| Periodically | 13 | 18 |
| When needed | 9 | 12 |
| Not included | 3 | 4 |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 7

RESPONSES TO ITEM 1-7: THE EFFECTS OF VISUAL
MATERIALS UPON DAILY LIFE

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 23 | 31 |
| Periodically | 25 | 34 |
| When needed | 13 | 18 |
| Not included | 10 | 14 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 8

RESPONSES TO ITEM 1-8: THE VARIOUS VISUAL COMMUNICATION
MEDIA, AND HOW TO INCREASE THEIR EFFECTIVENESS

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 13 | 18 |
| Periodically | 23 | 31 |
| When needed | 18 | 25 |
| Not included | 15 | 21 |
| No answer | 4 | 5 |
| Total | 73 | 100 |

TABLE 9

RESPONSES TO ITEM 1-9: HOW VARIOUS SUBJECT AREAS
ARE RELATED TO VISUAL COMMUNICATIONS

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 9 | 12 |
| Periodically | 21 | 29 |
| When needed | 18 | 25 |
| Not included | 22 | 30 |
| No answer | 3 | 4 |
| Total | 73 | 100 |

## Data for Basic Concept #2

The second basic concept of VICOED was used as a guide in formulating questions 2-1 through 2-12 on the information form. These questions were concerned with teaching areas such as symbol usage, design elements, and photographic procedures. As Tables 10 through 21 indicate, a majority of responses to each item were in support of the hypothesis. Thus, the second concept is understood to be in support of the hypothesis.

TABLE 10

RESPONSES TO ITEM 2-1: USAGE OF SYMBOLS
IN COMMUNICATION

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 11 | 15 |
| Periodically | 19 | 26 |
| When needed | 26 | 36 |
| Not included | 16 | 22 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 11

RESPONSES TO ITEM 2-2: AUDIENCE CONSIDERATIONS IN
THE USAGE OF SYMBOLS

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 6 | 8 |
| Periodically | 10 | 14 |
| When needed | 21 | 29 |
| Not included | 32 | 44 |
| No answer | 4 | 5 |
| Total | 73 | 100 |

TABLE 12

RESPONSES TO ITEM 2-3:   HOW TO STIMULATE
IDEAS AND CREATIVITY

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 33 | 45 |
| Periodically | 17 | 23 |
| When needed | 13 | 18 |
| Not included | 9 | 13 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 13

RESPONSES TO ITEM 2-4:   THE ELEMENTS OF DESIGN

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 43 | 59 |
| Periodically | 20 | 27 |
| When needed | 10 | 14 |
| Not included | -- | -- |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 14

RESPONSES TO ITEM 2-5:   GRAPHIC TECHNIQUES

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 32 | 44 |
| Periodically | 20 | 27 |
| When needed | 18 | 25 |
| Not included | 3 | 4 |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 15

RESPONSES TO ITEM 2-6:   PHOTOGRAPHIC TECHNIQUES

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 29 | 40 |
| Periodically | 16 | 22 |
| When needed | 9 | 12 |
| Not included | 18 | 25 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 16

RESPONSES TO ITEM 2-7:   THE TYPES OF LAYOUT

| Choices | Number of Responses | Percentage |
|---------|--------------------|-----------|
| Always | 49 | 67 |
| Periodically | 14 | 19 |
| When needed | 10 | 14 |
| Not included | -- | -- |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 17

RESPONSES TO ITEM 2-8: PASTE-UP PROCEDURES

| Choices | Number of Responses | Percentage |
|---------|--------------------|-----------|
| Always | 60 | 83 |
| Periodically | 6 | 8 |
| When needed | 6 | 8 |
| Not included | 1 | 1 |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 18

RESPONSES TO ITEM 2-9:   THE USES OF PRINTED MEDIA

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 34 | 47 |
| Periodically | 19 | 26 |
| When needed | 14 | 19 |
| Not included | 5 | 7 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 19

RESPONSES TO ITEM 2-10:   THE USES OF PROJECTUALS,
TRANSMISSIONS, AND DISPLAYS

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 19 | 26 |
| Periodically | 18 | 25 |
| When needed | 18 | 25 |
| Not included | 15 | 20 |
| No answer | 3 | 4 |
| Total | 73 | 100 |

TABLE 20

RESPONSES TO ITEM 2-11:  GENERAL PHOTOGRAPHY AND ITS USES

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 41 | 56 |
| Periodically | 13 | 18 |
| When needed | 6 | 8 |
| Not included | 11 | 15 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 21

RESPONSES TO ITEM 2-12:  ANALYZING MESSAGES TO BE
COMMUNICATED, AND THE CHOOSING OF AN
APPROPRIATE MEDIUM

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 11 | 15 |
| Periodically | 18 | 25 |
| When needed | 23 | 32 |
| Not included | 20 | 27 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

## Data for Basic Concept #3

The third basic concept of VICOED was used in designing questions 3-1 through 3-5 on the information form. These questions were concerned with the techniques and steps in producing visual information, and the selection of a suitable reproduction system. In this category, the first three items had a majority of responses in support of the hypothesis (see Tables 22 through 24). The remaining items had a majority of responses in rejection of the hypothesis (see Tables 25 and 26). Therefore, the third concept was interpreted to be in support of the hypothesis because a majority of the questions in this concept were.

TABLE 22

RESPONSES TO ITEM 3-1:   VARIOUS TYPES OF DISPLAY
MEDIA AND CRITERIA FOR THEIR SELECTION

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 13 | 18 |
| Periodically | 20 | 27 |
| When needed | 21 | 29 |
| Not included | 18 | 25 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 23

RESPONSES TO ITEM 3-2:   TEAMWORK AND STEPS IN
PLANNING A PRESENTATION

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 11 | 15 |
| Periodically | 8 | 11 |
| When needed | 24 | 33 |
| Not included | 26 | 36 |
| No answer | 4 | 5 |
| Total | 73 | 100 |

TABLE 24

RESPONSES TO ITEM 3-3:   GRAPHIC AND PHOTOGRAPHIC TECHNIQUES
USED IN PREPARING A PRESENTATION

| Choices | Number of Responses | Percentage |
| --- | --- | --- |
| Always | 11 | 15 |
| Periodically | 15 | 21 |
| When needed | 25 | 34 |
| Not included | 21 | 29 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 25

RESPONSES TO ITEM 3-4:   HOW TO NARRATE AND
EDIT A PRESENTATION

| Choices | Number of Responses | Percentage |
| --- | --- | --- |
| Always | 3 | 4 |
| Periodically | 6 | 8 |
| When needed | 17 | 23 |
| Not included | 45 | 62 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 26

RESPONSES TO ITEM 3-5:   THE PRE- AND POST-
PRESENTATION PROCEDURES

| Choices | Number of Responses | Percentage |
|---------|:-------------------:|:----------:|
| Always | 3 | 4 |
| Periodically | 7 | 9 |
| When needed | 15 | 21 |
| Not included | 46 | 63 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

## Data for Basic Concept #4

Items 4-1 through 4-25 on the information form were constructed using the fourth basic concept of VICOED as a guide. These questions were concerned with the visual communication media to be selected in presenting information, and the methods and procedures in their usage. The first nine questions in this category dealt with the teaching of duplicating methods and photocopying processes (see Tables 27 through 35). In all of these items except one (see Table 30), a majority of the responses were in rejection of the hypothesis. The remaining sixteen items were questions on the teaching of the principles of printing processes and their selection. With the exception of one item in rejection of the hypothesis (see Table 47), and one item neither in support or rejection of the hypothesis due to an even distribution of responses (see Table 46), all of these items received a majority of responses in support of the hypothesis. Since over one-half of the items in this category had a majority of responses in support of the hypothesis, the fourth basic concept is understood to be in support of the hypothesis.

TABLE 27

RESPONSES TO ITEM 4-1:   STENCIL DUPLICATING METHODS

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 11 | 15 |
| Periodically | 8 | 11 |
| When needed | 6 | 8 |
| Not included | 45 | 62 |
| No answer | 3 | 4 |
| Total | 73 | 100 |

TABLE 28

RESPONSES TO ITEM 4-2:   SPIRIT DUPLICATING METHODS

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 18 | 25 |
| Periodically | 6 | 8 |
| When needed | 7 | 10 |
| Not included | 38 | 52 |
| No answer | 4 | 5 |
| Total | 73 | 100 |

TABLE 29

RESPONSES TO ITEM 4-3:   GELATIN DUPLICATING METHODS

| Choices | Number of Responses | Percentage |
|---------|---------------------|------------|
| Always | 3 | 4 |
| Periodically | 1 | 1 |
| When needed | 5 | 7 |
| Not included | 57 | 78 |
| No answer | 7 | 10 |
| Total | 73 | 100 |

TABLE 30

RESPONSES TO ITEM 4-4:   SILVER HALIDE PHOTOCOPYING PROCESSES

| Choices | Number of Responses | Percentage |
|---------|---------------------|------------|
| Always | 38 | 52 |
| Periodically | 3 | 4 |
| When needed | 4 | 5 |
| Not included | 26 | 36 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 31

RESPONSES TO ITEM 4-5:   THERMAL PHOTOCOPYING PROCESSES

| Choices | Number of Responses | Percentage |
|---------|---------------------|------------|
| Always | 5 | 7 |
| Periodically | 5 | 7 |
| When needed | 5 | 7 |
| Not included | 51 | 70 |
| No answer | 7 | 9 |
| Total | 73 | 100 |

TABLE 32

RESPONSES TO ITEM 4-6:   DUAL SPECTRUM PHOTOCOPYING PROCESSES

| Choices | Number of Responses | Percentage |
|---------|---------------------|------------|
| Always | 3 | 4 |
| Periodically | 3 | 4 |
| When needed | 6 | 8 |
| Not included | 54 | 74 |
| No answer | 7 | 10 |
| Total | 73 | 100 |

## TABLE 33

RESPONSES TO ITEM 4-7:   DIAZO PHOTOCOPYING PROCESSES

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 7 | 10 |
| Periodically | 7 | 10 |
| When needed | 8 | 11 |
| Not included | 47 | 64 |
| No answer | 4 | 5 |
| Total | 73 | 100 |

## TABLE 34

RESPONSES TO ITEM 4-8:   IRON SALT PHOTOCOPYING PROCESSES

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 6 | 8 |
| Periodically | -- | -- |
| When needed | 7 | 10 |
| Not included | 52 | 71 |
| No answer | 8 | 11 |
| Total | 73 | 100 |

TABLE 35

RESPONSES TO ITEM 4-9:   ELECTROSTATIC PHOTOCOPYING PROCESSES

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 4 | 5 |
| Periodically | 10 | 14 |
| When needed | 11 | 15 |
| Not included | 45 | 62 |
| No answer | 3 | 4 |
| Total | 73 | 100 |

TABLE 36

RESPONSES TO ITEM 4-10:   CONTACT PRINTING, PROJECTION
PRINTING, AND DEVELOPMENT

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 45 | 62 |
| Periodically | 10 | 14 |
| When needed | 6 | 8 |
| Not included | 11 | 15 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 37

RESPONSES TO ITEM 4-11:   HALFTONE AND LINE PHOTOGRAPHY
FOR USE IN CONVENTIONAL PRINTING METHODS

| Choices | Number of Responses | Percentage |
|---------|---------------------|------------|
| Always | 59 | 81 |
| Periodically | 6 | 8 |
| When needed | 2 | 3 |
| Not included | 5 | 7 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 38

RESPONSES TO ITEM 4-12:   LETTERPRESS IMAGE CARRIER ASSEMBLY

| Choices | Number of Responses | Percentage |
|---------|---------------------|------------|
| Always | 64 | 88 |
| Periodically | 6 | 8 |
| When needed | 3 | 4 |
| Not included | -- | -- |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 39

RESPONSES TO ITEM 4-13:  LITHOGRAPHIC IMAGE CARRIER ASSEMBLY

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 43 | 59 |
| Periodically | 7 | 10 |
| When needed | 6 | 8 |
| Not included | 16 | 22 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 40

RESPONSES TO ITEM 4-14:  PHOTO-OFFSET LITHOGRAPHY IMAGE
CARRIER ASSEMBLY

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 64 | 88 |
| Periodically | 3 | 4 |
| When needed | 2 | 3 |
| Not included | 3 | 4 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 41

RESPONSES TO ITEM 4-15:   SCREEN PROCESS IMAGE CARRIER
ASSEMBLY

| Choices | Number of Responses | Percentage |
|---------|--------------------|-----------|
| Always | 54 | 74 |
| Periodically | 7 | 10 |
| When needed | 7 | 10 |
| Not included | 5 | 6 |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 42

RESPONSES TO ITEM 4-16:   GRAVURE IMAGE CARRIER ASSEMBLY

| Choices | Number of Responses | Percentage |
|---------|--------------------|-----------|
| Always | 11 | 15 |
| Periodically | 10 | 14 |
| When needed | 19 | 26 |
| Not included | 30 | 41 |
| No answer | 3 | 4 |
| Total | 73 | 100 |

## TABLE 43

RESPONSES TO ITEM 4-17:  LETTERPRESS IMAGE TRANSFER

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 62 | 85 |
| Periodically | 4 | 6 |
| When needed | 5 | 7 |
| Not included | 1 | 1 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

## TABLE 44

RESPONSES TO ITEM 4-18:  LITHOGRAPHIC IMAGE TRANSFER

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 45 | 62 |
| Periodically | 2 | 3 |
| When needed | 6 | 8 |
| Not included | 20 | 27 |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 45

RESPONSES TO ITEM 4-19:  PHOTO-OFFSET LITHOGRAPHY
IMAGE TRANSFER

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 64 | 88 |
| Periodically | 5 | 7 |
| When needed | -- | -- |
| Not included | 3 | 4 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 46

RESPONSES TO ITEM 4-20:  GRAVURE IMAGE TRANSFER

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 14 | 19 |
| Periodically | 8 | 11 |
| When needed | 12 | 16 |
| Not included | 34 | 47 |
| No answer | 5 | 7 |
| Total | 73 | 100 |

TABLE 47

RESPONSES TO ITEM 4-21:  PRINCIPLES, CHARACTERISTICS,
AND PROCESSES INVOLVED IN
ELECTROSTATIC PRINTING

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 2 | 3 |
| Periodically | 12 | 16 |
| When needed | 15 | 21 |
| Not included | 43 | 59 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

TABLE 48

RESPONSES TO ITEM 4-22:  GATHERING AND BINDING PROCEDURES

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 42 | 57 |
| Periodically | 19 | 26 |
| When needed | 10 | 14 |
| Not included | 2 | 3 |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 49

RESPONSES TO ITEM 4-23:  SCORING, PERFORATING,
AND TRIMMING PROCEDURES

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 37 | 51 |
| Periodically | 20 | 27 |
| When needed | 15 | 21 |
| Not included | 1 | 1 |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 50

RESPONSES TO ITEM 4-24:  THE VARIOUS TYPES OF INKS AND PAPERS,
AND CONSIDERATIONS IN THEIR SELECTION,
PURCHASING, AND USE

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 30 | 41 |
| Periodically | 19 | 26 |
| When needed | 21 | 29 |
| Not included | 3 | 4 |
| No answer | -- | -- |
| Total | 73 | 100 |

TABLE 51

RESPONSES TO ITEM 4-25:  CONSIDERATIONS OF QUALITY, NUMBER OF
COPIES, AND COST IN THE SELECTION OF A
REPRODUCTION SYSTEM

| Choices | Number of Responses | Percentage |
|---------|--------------------|------------|
| Always | 35 | 48 |
| Periodically | 15 | 21 |
| When needed | 14 | 19 |
| Not included | 9 | 12 |
| No answer | --- | --- |
| Total | 73 | 100 |

## Data for Basic Concept #5

Items 5-1 through 5-6 on the information form were constructed using the fifth basic concept of VICOED as a guide. These questions were concerned with the teaching of storage and retrieval systems for graphic and document information. As Tables 52 through 57 illustrate, an overwhelming majority of responses to each item in this category were in rejection of the hypothesis. Therefore, the fifth basic concept is understood to be in rejection of the hypothesis.

TABLE 52

RESPONSES TO ITEM 5-1:   THE PREPARATION OF GRAPHIC OR
DOCUMENT MATERIAL FOR STORAGE

| Choices | Number of Responses | Percentage |
|---------|---------------------|------------|
| Always | 2 | 3 |
| Periodically | 1 | 1 |
| When needed | 9 | 12 |
| Not included | 59 | 81 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 53

RESPONSES TO ITEM 5-2:   THE USE OF PHOTOPRINTS, MICROFILM,
VIDEO TAPE, COMPUTERS, OR EMBOSSED CARDS
IN MATERIAL STORAGE

| Choices | Number of Responses | Percentage |
|---------|---------------------|------------|
| Always | 3 | 4 |
| Periodically | 2 | 3 |
| When needed | 7 | 9 |
| Not included | 59 | 81 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 54

RESPONSES TO ITEM 5-3:   THE VARIOUS INDEX CODING SYSTEMS USED
IN THE STORAGE OF IMAGED MATERIALS

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | -- | -- |
| Periodically | -- | -- |
| When needed | 3 | 4 |
| Not included | 68 | 93 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 55

RESPONSES TO ITEM 5-4:   RETRIEVAL SYSTEMS USED IN
FINDING STORED MATERIAL

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | -- | -- |
| Periodically | -- | -- |
| When needed | 3 | 4 |
| Not included | 68 | 93 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 56

RESPONSES TO ITEM 5-5:   THE USE OF MICROFORM
VIEWING SYSTEMS

| Choices | Number of Responses | Percentage |
|---------|---------------------|------------|
| Always | -- | -- |
| Periodically | -- | -- |
| When needed | 6 | 8 |
| Not included | 65 | 89 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 57

RESPONSES TO ITEM 5-6:   REPRODUCTION OF STORED MATERIAL

| Choices | Number of Responses | Percentage |
|---------|---------------------|------------|
| Always | 6 | 8 |
| Periodically | 4 | 6 |
| When needed | 6 | 8 |
| Not included | 56 | 77 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

## Data for Basic Concept #6

The sixth basic concept of VICOED was used as a guide in formulating items 6-1 through 6-5 on the information form. The purpose of these questions was to ascertain if the instructor taught the role and composition of the visual communication industry in his classes. As Tables 58 through 62 indicate, a majority of responses to all the items except one (see Table 59) were in support of the hypothesis. Thus, the sixth basic concept was interpreted as supporting the hypothesis.

TABLE 58

RESPONSES TO ITEM 6-1:  THE COMPOSITION OF THE
VISUAL COMMUNICATION INDUSTRY

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 19 | 26 |
| Periodically | 14 | 19 |
| When needed | 14 | 19 |
| Not included | 24 | 33 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 59

RESPONSES TO ITEM 6-2:  THE ORGANIZATION OF
THE BUSINESS UNIT

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 6 | 8 |
| Periodically | 15 | 20 |
| When needed | 13 | 18 |
| Not included | 37 | 51 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 60

RESPONSES TO ITEM 6-3: ORGANIZATION OF THE INDUSTRY
AND ITS DEPARTMENTS

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 23 | 32 |
| Periodically | 22 | 30 |
| When needed | 14 | 19 |
| Not included | 12 | 16 |
| No answer | 2 | 3 |
| Total | 73 | 100 |

TABLE 61

RESPONSES TO ITEM 6-4: INDUSTRY RELATED ASSOCIATIONS

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 19 | 26 |
| Periodically | 14 | 19 |
| When needed | 22 | 30 |
| Not included | 15 | 21 |
| No answer | 3 | 4 |
| Total | 73 | 100 |

TABLE 62

RESPONSES TO ITEM 6-5:   CAREER OPPORTUNITIES IN THE
VISUAL COMMUNICATIONS INDUSTRY

| Choices | Number of Responses | Percentage |
|---|---|---|
| Always | 47 | 64 |
| Periodically | 16 | 22 |
| When needed | 7 | 10 |
| Not included | 2 | 3 |
| No answer | 1 | 1 |
| Total | 73 | 100 |

# CHAPTER V

## SUMMARY AND CONCLUSIONS

### Restatement of the Problem

The primary purpose of this study was to provide research evidence to indicate if the basic concepts of visual communication education had been implemented in the graphic arts curriculums in industrial arts in the secondary schools of Illinois. This was done by comparing the concepts of the graphic arts classes to those of a course in visual communication education.

### Description of Procedures Used

While the intent of this study was originally to survey the entire population secondary school graphic arts teachers in industrial arts, this was found to be impossible since such a listing did not exist. Consequently, 184 teachers that were members of the Graphic Arts Teachers Association of Illinois were surveyed by information forms. The information form asked the teachers to indicate the degree to which the content (and their concepts) of their graphic arts classes coincided with those of a course in visual communication education. The data gathered was then analyzed according to the methods previously discussed.

### Principal Findings and Conclusions of the Study

The findings of this study, based upon the population,

treatment, and conditions postulated were:

1.  The first basic concept of visual communication education was being taught by the graphic arts curriculums in industrial arts in the secondary schools of Illinois.

2.  The second basic concept of visual communication education was being taught by the graphic arts curriculums in industrial arts in the secondary schools of Illinois.

3.  The third basic concept of visual communication education was being taught by the graphic arts curriculums in industrial arts in the secondary schools of Illinois.

4.  The fourth basic concept of visual communication education was being taught by the graphic arts curriculums in industrial arts in the secondary schools of Illinois.

5.  The fifth basic concept of visual communication education was not being taught by the graphic arts curriculums in industrial arts in the secondary schools of Illinois.

6.  The sixth basic concept of visual communication education was being taught by the graphic arts curriculums in industrial arts in the secondary schools of Illinois.

<div align="center">Test of the Hypothesis</div>

Hypothesis:    There is no difference between the basic concepts of visual communication education and those basic concepts taught in the graphic arts classes in industrial arts at the secondary level in the state of Illinois.

Whereas the findings of this study indicated a difference between the basic concepts of visual communication education and those basic concepts of graphic arts classes in industrial arts in the secondary schools of Illinois, the hypothesis was rejected

## Implications for Further Research

The present study has served as a pilot study from which further research could be pursued. The following are approaches that might be used in future studies:

1. A study similar to the present one might be used to provide information as to why the storage and retrieval of graphic and document information is not taught in graphic arts classes.

2. A study comparing the success of students of visual communications to students of graphic arts in education and employment. This study might be used to provide the impetus toward implementing changes in education.

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## SELECTED BIBLIOGRAPHY

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## APPENDIX A

Copy of Information Form

Copy of Introductory Letter

Copy of Follow-Up Note

59

## Information Form Concerning Graphic Arts Curricula

Name _____ School _____

City _____ Date _____ Abstract desired ( )

Instructions: Please answer each of the following questions by checking the appropriate response following each item.

In your Graphic Arts programs, do you teach:

*Rating columns: Always / Periodically / When needed / Not included*

1. Methods, goals, and processes of communication . . . . . . ( ) ( ) ( ) ( )
2. Variables affecting the success of communication . . . . . . ( ) ( ) ( ) ( )
3. The history of writing . . . . . . ( ) ( ) ( ) ( )
4. The history of paper and papermaking . . . . . . ( ) ( ) ( ) ( )
5. The history of printing methods (letterpress, lithography, etc.) . . . . . . ( ) ( ) ( ) ( )
6. Cold type methods (photographic, strike-on, etc.) . . . . . . ( ) ( ) ( ) ( )
7. The effects of visual materials upon daily life . . . . . . ( ) ( ) ( ) ( )
8. The various visual communication media, and how to increase their effectiveness . . . . . . ( ) ( ) ( ) ( )
9. How various subject areas (physics, psychology, etc.) are related to visual communications . . . . . . ( ) ( ) ( ) ( )
10. Usage of symbols in communication . . . . . . ( ) ( ) ( ) ( )
11. Audience considerations in the usage of symbols . . . . . . ( ) ( ) ( ) ( )
12. How to stimulate ideas and creativity . . . . . . ( ) ( ) ( ) ( )
13. The elements of design (balance, rythm, etc.) . . . . . . ( ) ( ) ( ) ( )
14. Graphic techniques (line drawing, shading, letter style) . . . . . . ( ) ( ) ( ) ( )
15. Photographic techniques (35 mm., exposures, lighting, etc.) . . . . . . ( ) ( ) ( ) ( )
16. The types of layout ( thumbnail, comprehensive, etc.) . . . . . . ( ) ( ) ( ) ( )
17. Paste-up procedures . . . . . . ( ) ( ) ( ) ( )
18. The uses of printed media . . . . . . ( ) ( ) ( ) ( )
19. The uses of projectuals, transmissions, and displays . . . . . . ( ) ( ) ( ) ( )
20. General photography and its uses (continuous tone) . . . . . . ( ) ( ) ( ) ( )
21. Analyzing messages to be communicated, and the choosing of an appropriate medium . . . . . . ( ) ( ) ( ) ( )
22. Various types of display media and criteria for their selection . . . . . . ( ) ( ) ( ) ( )
23. Teamwork and steps in planning a presentation . . . . . . ( ) ( ) ( ) ( )
24. Graphic and photographic techniques used in preparing a presentation . . . . . . ( ) ( ) ( ) ( )
25. How to narrate and edit a presentation . . . . . . ( ) ( ) ( ) ( )
26. The pre- and post-presentation procedures . . . . . . ( ) ( ) ( ) ( )

Office Duplicating Methods  (Check the methods you teach)

1. Stencil (mimeo) . . . . . . ( ) ( ) ( ) ( )
2. Spirit . . . . . . ( ) ( ) ( ) ( )
3. Gelatin . . . . . . ( ) ( ) ( ) ( )

Photocopying processes  (Check the methods you teach)

1. Silver halide . . . . . . ( ) ( ) ( ) ( )
2. Thermal . . . . . . ( ) ( ) ( ) ( )
3. Dual spectrum (3M Brand Dry Photo Copier) . . . . . . ( ) ( ) ( ) ( )
4. Diazo . . . . . . ( ) ( ) ( ) ( )
5. Iron salt (blueprints, Van Dyke, etc.) . . . . . . ( ) ( ) ( ) ( )
6. Electrostatic . . . . . . ( ) ( ) ( ) ( )

In your Graphic Arts programs, do you teach:

10. Contact printing, projection printing, and development . . . . . . ( ) ( ) ( ) ( )
11. Halftone and line photography for use in conventional printing methods . . . . . . ( ) ( ) ( ) ( )

Types of image carriers and their assembly for the following printing methods:

12. Letterpress (movable type, stereotypes, etc.) . . . . . . ( ) ( ) ( ) ( )
13. Lithographic (image reversed) . . . . . . ( ) ( ) ( ) ( )
14. Photo-offset lithography (direct image, presensitized, etc.) . . . . . . ( ) ( ) ( ) ( )
15. Screen process (silk screen) . . . . . . ( ) ( ) ( ) ( )
16. Gravure (Itaglio) . . . . . . ( ) ( ) ( ) ( )

Image transfer for the following methods:

17. Letterpress . . . . . . ( ) ( ) ( ) ( )
18. Lithography . . . . . . ( ) ( ) ( ) ( )
19. Photo-offset lithography . . . . . . ( ) ( ) ( ) ( )
20. Gravure (Itaglio) . . . . . . ( ) ( ) ( ) ( )

In your Graphic Arts programs, do you teach:

1. Principles, characteristics, and processes involved in electrostatic printing . . . . . . . . . . . . . ( ) ( ) ( ) ( )
2. Gathering and binding procedures . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ( ) ( ) ( ) ( )
3. Scoring, perforating, and trimming procedures . . . . . . . . . . . . . . . . . . . . . . . . ( ) ( ) ( ) ( )
4. The various types of inks and papers, and considerations in their selection, purchasing, and use . . ( ) ( ) ( ) ( )
5. Considerations of quality, number of copies, and cost in the selection of a reproduction system . . ( ) ( ) ( ) ( )
1. The preparation of graphic or document material for storage (microfilm, computer, etc.) . . . . . . ( ) ( ) ( ) ( )
2. The use of photoprints, microfilm, video tape, computers, or embossed cards in material storage . ( ) ( ) ( ) ( )
3. The various index coding systems used in the storage of imaged materials (MIROcode system, etc.) . . ( ) ( ) ( ) ( )
4. Retrieval systems used in finding stored material (Keysort, magnetic tape systems, etc.) . . . . . . ( ) ( ) ( ) ( )
5. The use of microform viewing systems . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ( ) ( ) ( ) ( )
6. Reproduction of stored material . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ( ) ( ) ( ) ( )
1. The composition of the visual communication industry . . . . . . . . . . . . . . . . . . . . . . ( ) ( ) ( ) ( )
2. The organization of the business unit (cooperative, corporation, etc.) . . . . . . . . . . . . . . ( ) ( ) ( ) ( )
3. Organization of the industry and its departments . . . . . . . . . . . . . . . . . . . . . . . . ( ) ( ) ( ) ( )
4. Industry related associations (trade unions, guilds, etc.) . . . . . . . . . . . . . . . . . . . ( ) ( ) ( ) ( )
5. Career opportunities in the visual communications indutry . . . . . . . . . . . . . . . . . . . . ( ) ( ) ( ) ( )

# EASTERN ILLINOIS UNIVERSITY
### SCHOOL OF INDUSTRIAL ARTS AND TECHNOLOGY
### CHARLESTON, ILLINOIS 61920

Dear Sir:

The following form is being used in conjunction with a study now in progress
in the Department of Industrial Arts and Technology at Eastern Illinois
University.  The purpose of this study is to identify the depth and direction
of Graphic Arts curriculums in the secondary schools of Illinois.

In attempting to finish this study as soon as possible, you are urged to
complete the items on this form now, while it is at hand and has your attention.
Enclosed is a stamped envelope for your convenience in returning the completed
form.

You can be sure that the information collected will not be used in any manner
that will embarrass you or your school.  If you wish, an abstract of this
study will be sent to you upon its completion.

Thank you for your time and cooperation.

<div align="right">

Sincerely yours,


Gary E. Hinkle
Graduate Assistant

</div>

Dear Sir:

Recently you were sent an information form concerned with the depth and direction of your Graphic Arts curriculums.  On the assumption that you have misplaced the form, I am enclosing another one.  Won't you please fill out the form, and return it in the enclosed envelope.

If you are not presently teaching a Graphic Arts class, would you please return the form with a note indicating such.  We are anxious to have a reply from every person.

If you have already mailed the form please disregard this letter.  Thank you very much for your cooperation in this study.

Sincerely yours,

Gary E. Hinkle
Graduate Assistant