

DOCUMENT RESUME

ED 091 521

CE 001 289

TITLE Graphics and Communication Media: Cluster Guide.
INSTITUTION Central Michigan Univ., Mount Pleasant.
SPONS AGENCY Michigan State Dept. of Education, Lansing. Special Needs Program.
PUB DATE 73
NOTE 239p.; For the other teaching guides in this series, see CE 001 286-288 and CE 001 290-295. For the program guide, see CE 001 296
AVAILABLE FROM University Press, Central Michigan University, Mt. Pleasant, Michigan 48859 (\$30.00 per set of 11 documents)
EDRS PRICE MF-\$0.75 HC Not Available from EDRS. PLUS POSTAGE
DESCRIPTORS Behavioral Objectives; Cooperative Education; Drafting; Employment Qualifications; *Graphic Arts; Instructional Materials; Job Skills; Occupational Clusters; Occupational Information; Photography; *Printing; *Publishing Industry; *Special Education; Task Analysis; Teacher Developed Materials; *Teaching Guides; Vocational Education
IDENTIFIERS *Michigan

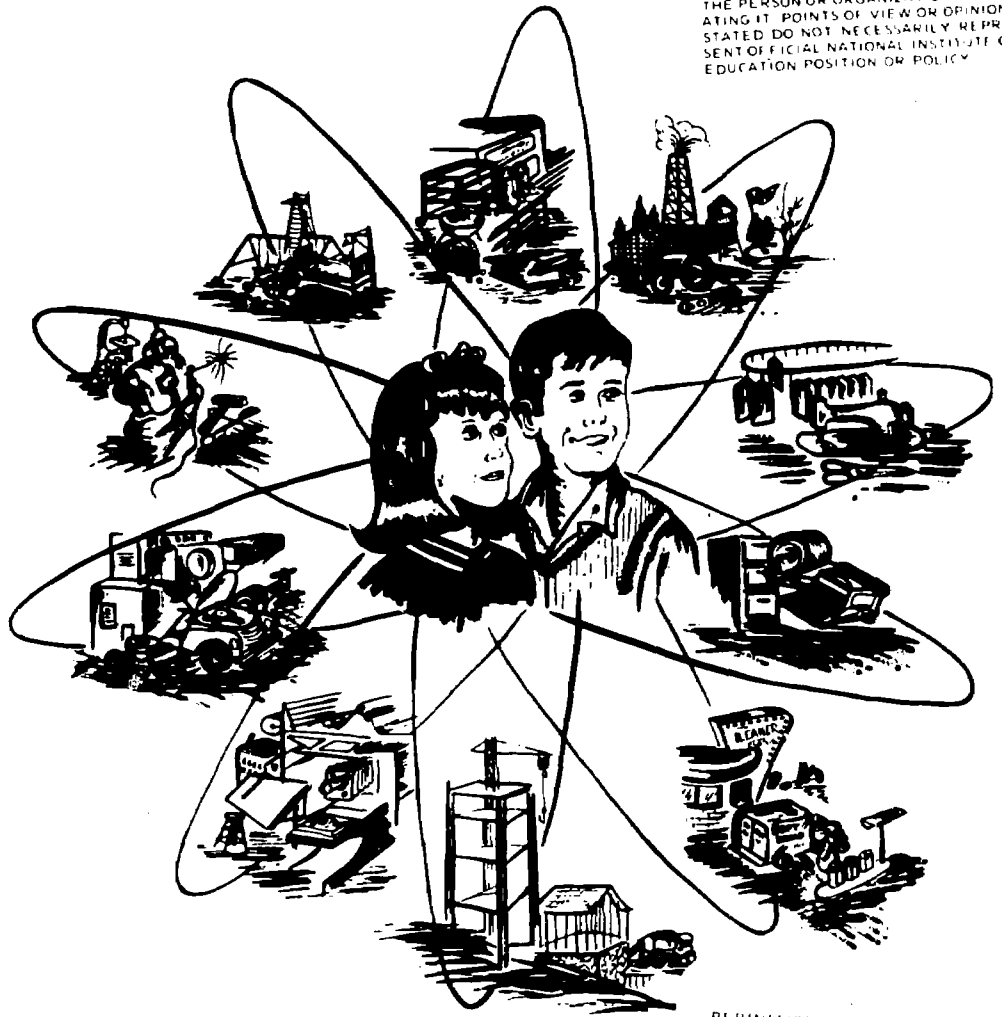
ABSTRACT

This teacher's guide is one of a series of publications focusing on the occupational preparation of persons with special education needs. The material was developed and tested by cooperating teachers over a period of three years. Task analysis information is presented using occupational descriptions from the Dictionary of Occupational Titles, covering entry level occupations generally available in Michigan. Instructional task modules are presented in detail under the headings: behavioral task knowledges/task skills, instructional methods, task-related competencies, instructional materials, basic information for cooperative teaching (language of the task and quantitative concepts), and suggestions. An instructional materials bibliography is included, followed by two appendixes, an instructional materials code indicating probable learning sensations, and a task-related competencies code. This guide describes eight tasks common to the graphics and communications media cluster. Tasks are described for selected entry occupations for the following subclusters: bookbinding (21 tasks for two occupations), screen printing (6 tasks for four occupations), offset lithography (12 tasks for seven occupations), letterpress printing (20 tasks for five occupations), commercial photography (10 tasks for four occupations), and drafting (16 tasks for four occupations). (SA)

Cluster Guide

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.



PERMISSION TO REPRODUCE THIS
COPYRIGHTED MATERIAL BY MICRO-
FICHE ONLY HAS BEEN GRANTED BY
Ernest L. Minelli
Central Mich. Univ.
TO ERIC AND ORGANIZATIONS OPERAT-
ING UNDER AGREEMENTS WITH THE NA-
TIONAL INSTITUTE OF EDUCATION
FURTHER REPRODUCTION OUTSIDE
THE ERIC SYSTEM REQUIRES PERMIS-
SION OF THE COPYRIGHT OWNER

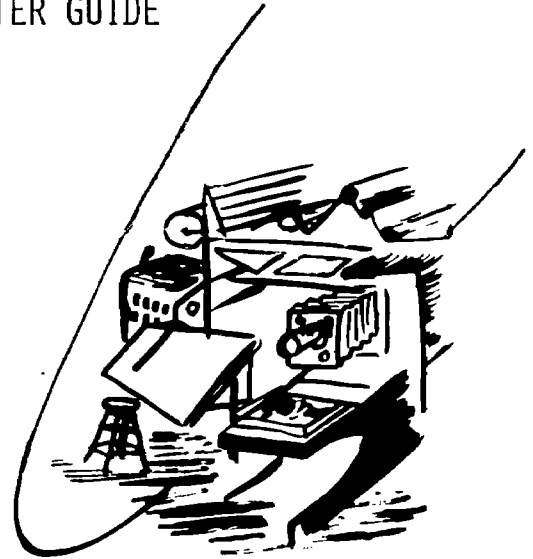
An Instructional Resource Guide to Enhance Cooperative
Vocational Education / Special Education Teaching

Copyright © 1973 by Central Michigan University
All rights reserved. No part of this book may be reproduced in any form, electronic or mechanical including photo-copy, recording or any other information storage and retrieval system, without permission in writing from Central Michigan University.

Permission was obtained from The U. S. Department of Labor Manpower Administration to reprint selected portions of the "Dictionary of Occupational Titles" Volume 1 Third Edition.

GRAPHICS AND COMMUNICATION MEDIA CLUSTER GUIDE

VOCATIONAL EDUCATION/ SPECIAL EDUCATION PROJECT



Director: M. LeRoy Reynolds
Coordinator: Ronald J. Lutz
Special Education
Consultant: Cleo B. Johnson
Vocational Education
Consultant: L. Allen Phelps
Secretary: Jackie Champion

Funding Source

VOCATIONAL EDUCATION AMENDMENTS of 1968
Part B - Handicapped

Funding Agency

MICHIGAN DEPARTMENT OF EDUCATION
Vocational Education and Career Development Service
Special Needs Programs

Educational Agency

CENTRAL MICHIGAN UNIVERSITY
Mt. Pleasant, Michigan 48859

PREFACE

This teacher's guide is one of a series of publications focusing upon the occupational preparation of persons with special education needs. It is intended to be used jointly by concerned teachers as they work collectively to serve students with unique educational problems. Developed and tested by cooperating teachers, these materials represent the culmination of three years of intensive listening, communication, cooperation, and positive action between vocational and special education teachers. If the exciting ideas in these pages are actively and cooperatively implemented, the impact upon our young people could well be tremendous.

ACKNOWLEDGEMENTS

Field Evaluation Teachers

Dave Kiefer Vocational Graphics	Kitty Medler Special Education	Career Opportunities Center 2102 Weiss Street Saginaw, Michigan 48602
Harvey Pearl Vocational Graphics	Jack Mason Venisure Jordan Special Education	Genesee Area Skill Center G-5081 Torrey Road Flint, Michigan 48507
Kenneth J. Weigle Drafting		
Wayne Sheathelm Vocational Graphics	Francine Lauer Occupational Adjustment Teacher	Michigan School for the Deaf West Court at Miller Road Flint, Michigan 48502
Joe Beland Drafting	Beverly Kihn Special Education	Alpena High School 3303 S. Third Avenue Alpena, Michigan 49707
Lanny Johnston Vocational Graphics	Chuck Dunham Special Education	Calhoun Area Vocational Center 475 East Roosevelt Battle Creek, Michigan 49017

Advisory Personnel

Robert Ringel, A.I.A., CENTRAL MICHIGAN UNIVERSITY, Mt. Pleasant, Michigan

George D. Robert, MAGLINE CORPORATION, Pinconning, Michigan

Burton Swartzloff, GREENVILLE PRODUCTION CORPORATION, Greenville, Michigan

Robert Pillotte, A.I.A., Mt. Pleasant, Michigan

Larry Augustyniak, QUESTOR AUTOMOTIVE COMPANY, Pinconning, Michigan

Portions of the occupational task analysis data/information for the Graphics and Communication Media Cluster were obtained from the Ingham Intermediate School District. In early 1973, this Intermediate School District completed a comprehensive task analysis project covering 50 different occupations in a three county area. Selected key analysis occupations in this cluster were identical to those graphics occupations identified and analyzed by the project.

Acknowledgement is due the Ingham Intermediate School District and the Michigan Department of Education for arranging for the release of this data.

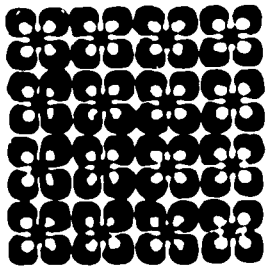
C.M.U. Students

Art Briggs, Department of Industrial Education and Technology

Douglas Dodd, Department of Industrial Education and Technology

CONTENTS

PREFACE	ii
ACKNOWLEDGEMENTS	iii
TASK ANALYSIS INFORMATION	
Cluster Organization	1
Clustered Occupations	2
Dictionary of Occupational Titles	3
Cluster Commonality Analysis	5
Subcluster Commonality Analysis:	
Bookbinding	6
Subcluster Commonality Analysis:	
Screen Printing	7
Subcluster Commonality Analysis:	
Offset Lithography	8
Subcluster Commonality Analysis:	
Letterpress Printing	9
Subcluster Commonality Analysis:	
Commercial Photography	10
Subcluster Commonality Analysis:	
Drafting	11
INSTRUCTIONAL TASK MODULES	
Common Cluster Tasks (CT)	12
Subcluster: Bookbinding (BB)	33
Subcluster: Screen Printing (SP)	77
Subcluster: Offset Lithography (OL)	91
Subcluster: Letterpress Printing (LP)	123
Subcluster: Commercial Photography (CP)	167
Subcluster: Drafting (DT)	189
INSTRUCTIONAL MATERIALS BIBLIOGRAPHY	223
APPENDIX	
Instructional Materials Code	229
Task-Related Competencies Code	231



TASK ANALYSIS INFORMATION

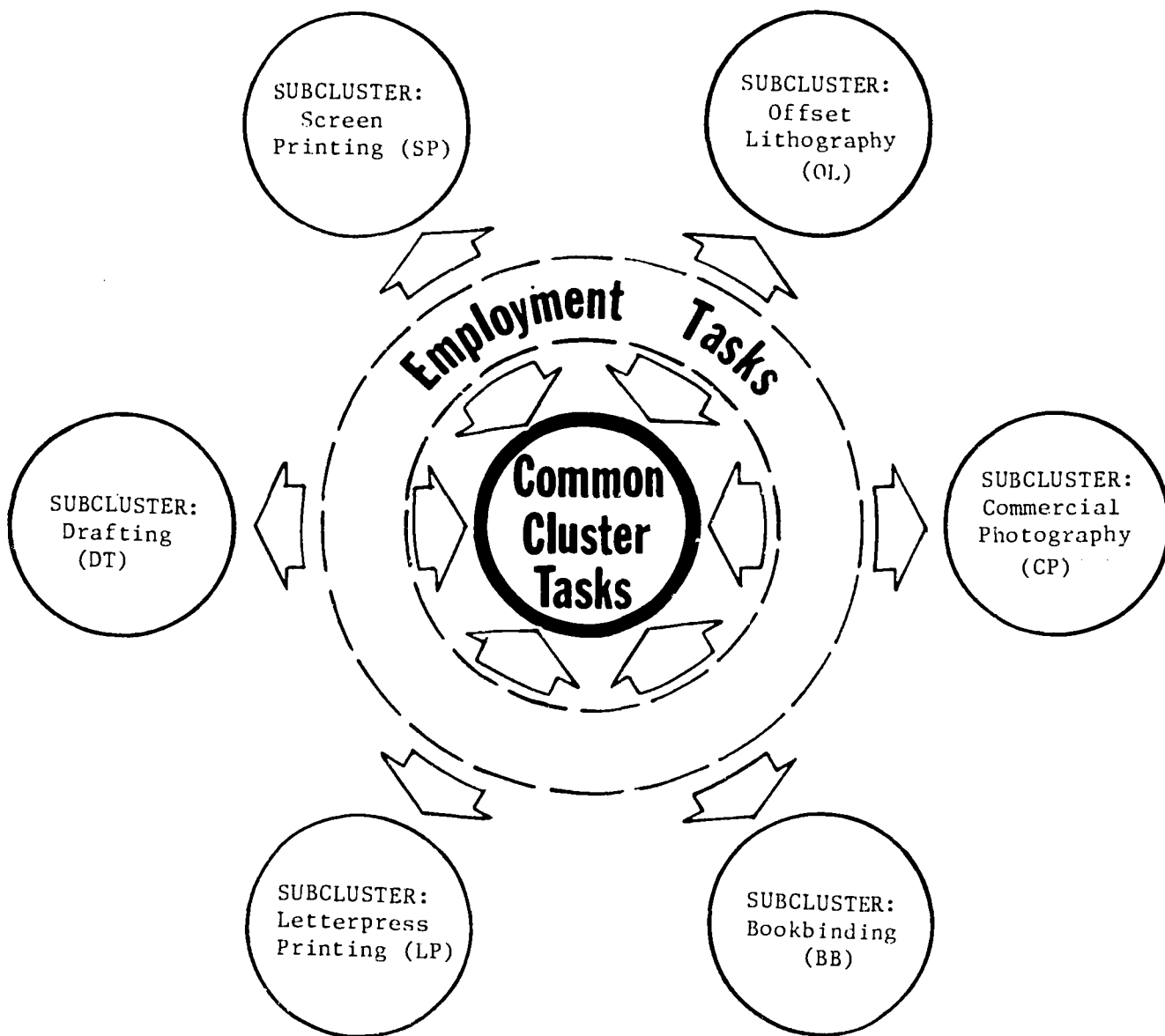
- CLUSTER ORGANIZATION
- CLUSTERED OCCUPATIONS
- DICTIONARY OF OCCUPATIONAL TITLES
- CLUSTER COMMONALITY ANALYSIS
- SUBCLUSTER COMMONALITY ANALYSIS:
BOOKBINDING
- SUBCLUSTER COMMONALITY ANALYSIS:
SCREEN PRINTING
- SUBCLUSTER COMMONALITY ANALYSIS:
OFFSET LITHOGRAPHY
- SUBCLUSTER COMMONALITY ANALYSIS:
LETTERPRESS PRINTING
- SUBCLUSTER COMMONALITY ANALYSIS:
COMMERCIAL PHOTOGRAPHY
- SUBCLUSTER COMMONALITY ANALYSIS:
DRAFTING

CLUSTER

ORGANIZATION

GRAPHICS AND COMMUNICATION MEDIA CLUSTER

(GCM)



CLUSTERED OCCUPATIONS

C L U S T E R : G R A P H I C S A N D C O M M U N I C A T I O N M E D I A

OE PRO-GRAM CODE	SUBCLUSTER TITLE	D.O.T.	OCCUPATIONAL TITLES
17.13	Drafting	*017.281 007.187 017.281 017.281	Detailer Tool Drawing Checker Draftsman Draftsman Apprentice
17.1902	Offset Lithography	659.380 *972.383 651.782 979.782 *651.885 651.886 651.782	Plate Finisher Photographer, Lithographic Striper Man Blocker Offset-Press Operator Press-Man Helper Offset-Duplicating-Machine Operator
17.1905	Screen Printing	979.381 979.884 979.884 *979.884	Silk-Screen Maker Screen Printer Screen Printing Machine Operator Silk-Screen Printer
17.1906	Bookbinding	*977.884 *977.781	Bookbinder Bindery Machine Operator
17.1902	Letterpress	*651.782 651.782 651.782 651.885 973.381	Platen-Press Man Platen-Press Man Apprentice Printing Press Operator Platen-Press Feeder Compositor
17.0901	Commercial Photography	*976.782 976.381 976.381 976.687	Color-Printer Operator Developer Projection Printer Photo Checker and Assembler
			*Key Analysis Occupation

DICTIONARY OF OCCUPATIONAL TITLES

The following is a list of occupational descriptions taken from the third edition (1965) of the Dictionary of Occupational Titles. These represent the key analysis occupations for the Graphics and Communication Media Cluster.

Each occupational title represents an entry-level occupation which is generally available (in demand) across the state of Michigan at the present time. However, teachers and curriculum planners must carefully study the generalizability of this information/data to the specific community. Local or regional manpower information and data must be carefully reviewed and analyzed in making decisions related to local vocational programs offerings and specific curriculum or course content.

- 977.884 BOOKBINDER Binds covers to books or pamphlets, and performs book finishing operations, determining production procedures from job order: Compresses sewed-together signatures of book bodies to uniform thickness, using smashing machine. Applies glue to back of sewed signatures to stiffen back of book body. Trims books to size, using powered cutting machine. Inserts each book into machine that rounds, backs, and forms grooves at back edge in which covers are hinged. Stacks and aligns books, after rounding and backing operation, and glues super-lining and back-lining on each book. Attaches headband if required. Applies solid or mixed colors to edges of signatures, using brush or pad. Fabricates cover for book, cutting and trimming material to size, and gluing on backbinding and chipboard. Glues cover to end sheets and places books in press to dry. Finishes book by embossing lettering or designs on cover, using heated handtools.
- 976.782 COLOR-PRINTER OPERATOR Controls semiautomatic equipment to produce color prints from negatives: Loads roll of printing paper into machine, under darkroom conditions. Examines color negative to determine equipment control settings for production of prints meeting acceptable color-fidelity standards. Sets controls in accordance with examination, loads negative into machine, and starts machine to produce specified number of prints. Removes printed photographic paper from machine and places paper in developer. Inserts processed negatives and prints into envelope for return to customer.
- 017.281 DETAILER Makes detailed drawings of parts of machines or structures from rough or general design drawings: Shows dimensions, material to be used, and other information necessary to make detailed drawing clear and complete. Makes tracing of finished drawing on semitransparent paper from which blue-prints can be made (Draftsman). May specialize in preparing detail drawings for specific type of machine, structure, or product.

- 651.885 OFFSET-PRESS OPERATOR Tends manually controlled offset press that prints lettering on plastic containers: Rolls machine carriage, equipped with pair of clean and inked cylinders, back and forth over press bed to ink engraved plates and transfer impression to clean cylinder. Positions containers in holders in front of engraved plates. Pulls carriage forward so that letters are impressed on clean cylinder and transferred to surface of container. Inspects containers for smears or stains, places satisfactory ones on conveyor leading to drying oven, and sets aside rejects. Prints flexible containers on press equipped with air hose; forces air into container with hose to produce solid surface for printing. Periodically washes cylinders with solvent. Spreads ink on cleaned cylinder with spatula.
- 972.382 PHOTOGRAPHER, LITHOGRAPHIC Sets up and operates camera to photograph illustrations and printed material to produce film or glass negatives, or reversed negatives used in the preparation of lithographic printing plates: Mounts material to be photographed on copy board and focuses camera to enlarge or reduce size of object in photograph. Selects and places screen over negative to break up shadings in object for halftone printing. Places color filters over film to produce four-color separation, halftone separation, and process prints for multicolor printing. Focuses lens, adjusts lights, and exposes film to copy for specified period of time. Develops and dries film or glass plate. Prepares film or glass plate positives by contact method from negatives.
- 651.782 PLATEN-PRESS MAN Makes ready and operates platen-type printing press to produce printed material: Determines set-up and operating procedures from work order. Inserts type setup or plate in press bed and tightens locking attachment, using wrench. Adjusts inking rollers to obtain even distribution of ink. Regulates ink flow by adjusting thumb-screws on fountain. Starts press and directs Platen-Press Feeder to feed sheets by hand onto press platen or to place stack of sheets in feed tray if press is equipped with automatic feeding mechanism. Readjusts press during run to obtain specified color registration.
- 979.884 SILK-SCREEN PRINTER Prints lettering and designs on objects, such as posters, targets, instrument dials, furniture, and toys, using silk-screen printing machine: Positions object against guides on set-up board in machine and lowers silk screen. Draws squeegee dipped in paint across screen to transfer design to object. Cleans screen with solvent at end of run and when using different colors.

CLUSTER COMMONALITY ANALYSIS

GRAPHICS AND COMMUNICATION MEDIA

COMMON CLUSTER TASKS (CT)

SUBCLUSTERS (GCM)

INSTRUCTIONAL TASKS

CT01	Prepare rough sketches
CT02	Utilize proportioning elements
CT03	Select type faces and styles
CT04	Fit copy
CT05	Prepare copy by machine
CT06	Prepare copy by non-machine methods
CT07	Design and produce layouts
CT08	Proofread copy

	BOOKBINDING	SCREEN PRINTING	OFFSET LITHOGRAPHY	LETTERPRESS PRINTING	COMMERCIAL PHOTOGRAPHY	DRAFTING
		x	x	x		o
	x	x	o	x	x	o
		x	o	x		
		x	x	x		o
		x	o	o	o	x
		x	o	x	o	x
		x	o	x		
	x	x	x	x		x

x - Essential

o - Desirable

SUBCLUSTER COMMONALITY ANALYSIS:

*There are a variety of different bindery machines and each machine is operated by someone with the appropriate skills. The analysis in this column indicates the different specializations among bindery machine operators, and should not be considered as representing one occupation.

BOOKBINDING

SELECTED
ENTRY
OCCUPATIONS

INSTRUCTIONAL TASKS

BB01	Identify the parts of a book	x	
BB02	Identify common and special bookbinding handtools	x	
BB03	Assemble various kinds of folds	x	
BB04	Determine grain direction in paper	x	
BB05	Operate a mechanical folder	o	x
BB06	Perform assembling procedures	x	
BB07	Bind a case bound book	x	
BB08	Perform perfect binding	x	x
BB09	Complete various book repairs	x	o
BB10	Operate stitching machine	x	x
BB11	Perform perforating by letterpress	o	x
BB12	Perform perforating by offset press	o	x
BB13	Perform perforating by special machine	o	x
BB14	Side stitch bindings	x	x
BB15	Saddle stitch bindings	x	x
BB16	Drill paper	x	
BB17	Laminate bindings	x	
BB18	Package products and materials	o	x
BB19	Bind pads of paper		x
BB20	Recognize specific characteristics of paper stocks	o	o
BB21	Cut paper	x	x

BOOKBINDER	BINDERY MACHINE OPERATORS*
x	
x	
x	
x	
o	x
x	
x	
x	x
x	o
x	x
o	x
o	x
o	x
x	x
x	x
x	
x	
o	x
	x
o	o
x	x

SUBCLUSTER COMMONALITY ANALYSIS:

SCREEN PRINTING

SELECTED ENTRY OCCUPATIONS

INSTRUCTIONAL TASKS

SP01	Prepare copy for screen printing
SP02	Prepare stencils
SP03	Prepare stencils by indirect methods
SP04	Block out screens
SP05	Apply flock and surface substances
SP06	Set-up for multi-copy printing

	SCREEN PRINTER	SILK-SCREEN PRINTER	SCREEN-PRINTING-MACHINE OPERATOR	SILK-SCREEN MAKER
		x		x
o	x	x	x	x
o	x	x	x	x
x	x	x	x	x
x	x	x		
x	x	x		

x - Essential

o - Desirable

SUBCLUSTER COMMONALITY ANALYSIS:

OFFSET LITHOGRAPHY

SELECTED ENTRY OCCUPATIONS

INSTRUCTIONAL TASKS

OL01	Perform paste-up	x		x	x			
OL02	Perform darkroom procedures	o	x					
OL03	Operate darkroom equipment	o	x					
OL04	Operate copy camera	o	x					
OL05	Prepare a line negative	x	x	x	x	o		
OL06	Prepare a halftone	x	x	o	x	o		
OL07	Prepare a halftone using a contact screen	x	x	o	x	o		
OL08	Prepare and strip-up a flat	x	o	x		o		
OL09	Strip-up flats by selected techniques		o	x		o		
OL10	Complete imposition work	x				x	x	x
OL11	Prepare an offset plate	x	x			o	o	o
OL12	Load, operate, and unload offset presses					x	x	x

	PLATE FINISHER	PHOTOGRAPHER, LITHOGRAPHIC	STRIPPER MAN	BLOCKER	OFFSET-PRESS OPERATOR	PRESS-MAN HELPER	OFFSET-DUPLICATING-MACHINE OPERATOR
OL01	x		x	x			
OL02	o	x					
OL03	o	x					
OL04	o	x					
OL05	x	x	x	x	o		
OL06	x	x	o	x	o		
OL07	x	x	o	x	o		
OL08	x	o	x		o		
OL09		o	x		o		
OL10	x				x	x	x
OL11	x	x			o	o	o
OL12					x	x	x

x- Essential

o- Desirable

SUBCLUSTER COMMONALITY ANALYSIS:

LETTERPRESS PRINTING

SELECTED ENTRY OCCUPATIONS

INSTRUCTIONAL TASKS

LP01	Understands type nomenclature	X	X	X	X	X
LP02	Use the printer's measuring system	O	O	O		X
LP03	Identify and classify type	X	X	O		X
LP04	Handle type			X		X
LP05	Use a composing stick			O		X
LP06	Pull proofs					X
LP07	Corrects forms					X
LP08	Make-up and tie-up forms					X
LP09	Cut and use leads, slugs, and rules			O		X
LP10	Lock-up forms			X		X
LP11	Prepares press platen	X	X		X	
LP12	Implements make-ready techniques and processes	X	X		O	
LP13	Completes bank work	X	X			
LP14	Uses grippers, fenders, and fingers	X	X		O	
LP15	Troubleshoot general problems at letterpress	X	X		O	
LP16	Recognize various plates used for letterpress	X	X		O	
LP17	Select papers for letterpress	X	X			
LP18	Clean and maintain type	O	O			X
LP19	Break forms and distribute type	O	O			X
LP20	Clean and maintain presses	X	X		X	

	PLATEN-PRESS MAN	PLATEN-PRESS MAN APPRENTICE	PRINTING PRESS OPERATOR	PLATEN-PRESS FEEDER	COMPOSITOR
LP01	X	X	X	X	X
LP02	O	O	O		X
LP03	X	X	O		X
LP04			X		X
LP05			O		X
LP06					X
LP07					X
LP08					X
LP09			O		X
LP10			X		X
LP11	X	X		X	
LP12	X	X		O	
LP13	X	X			
LP14	X	X		O	
LP15	X	X		O	
LP16	X	X		O	
LP17	X	X			
LP18	O	O			X
LP19	O	O			X
LP20	X	X		X	

SUBCLUSTER COMMONALITY ANALYSIS

COMMERCIAL PHOTOGRAPHY

SELECTED ENTRY OCCUPATIONS

INSTRUCTIONAL TASKS

- CP01 Identifying cameras and their operation
- CP02 Selecting film
- CP03 Taking pictures
- CP04 Developing negatives and prints
- CP05 Using light meters
- CP06 Using lenses
- CP07 Adjusting flash and lighting
- CP08 Using filters
- CP09 Operate darkroom equipment
- CP10 Making enlargements

	COLOR-PRINTER OPERATOR	DEVELOPER	PROJECTION PRINTER	PHOTO CHECKER AND ASSEMBLER
CP01	o		x	
CP02	o		x	
CP03	o		x	
CP04	x	x	x	
CP05	o	o	x	
CP06	x	x	x	
CP07	o		x	
CP08	x	o	o	o
CP09	x	x	x	x
CP10	x	x	x	x

x - Essential

o - Desirable

SUBCLUSTER COMMONALITY ANALYSIS:

DRAFTING

SELECTED ENTRY OCCUPATIONS

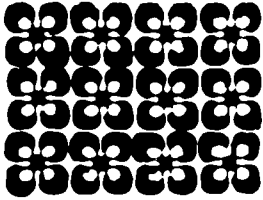
INSTRUCTIONAL TASKS

DT01	Prepare isometric sketches
DT02	Prepare multiview sketches
DT03	Letter drawings and graphic materials
DT04	Use drafting equipment in drawing simple shapes
DT05	Prepare geometric constructions with drafting equipment
DT06	Operate drawing reproduction machines
DT07	Construct and prepare isometric views
DT08	Construct and prepare multiview drawings
DT09	Dimension drawings
DT10	Prepare graphs and charts
DT11	Develop and construct sectional views
DT12	Prepare auxiliary views and revolutions
DT13	Construct developments and intersections
DT14	Construct and prepare perspective drawings
DT15	Detail screw threads and fasteners
DT16	Prepare design and working drawings

DETAILER	TOOL DRAWING CHECKER	DRAFTSMAN	DRAFTSMAN APPRENTICE
o	x	x	x
o	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	o	o
x	o	x	x
x	o	x	x
x	x	x	x
o		x	x
x	o	x	x
x	o	x	x
o		o	o
x	o	x	x
x	o	x	x

x - Essential

o - Desirable



INSTRUCTIONAL TASK MODULES

GRAPHICS AND COMMUNICATION MEDIA CLUSTER

- COMMON CLUSTER TASKS

- SUBCLUSTER: BOOKBINDING

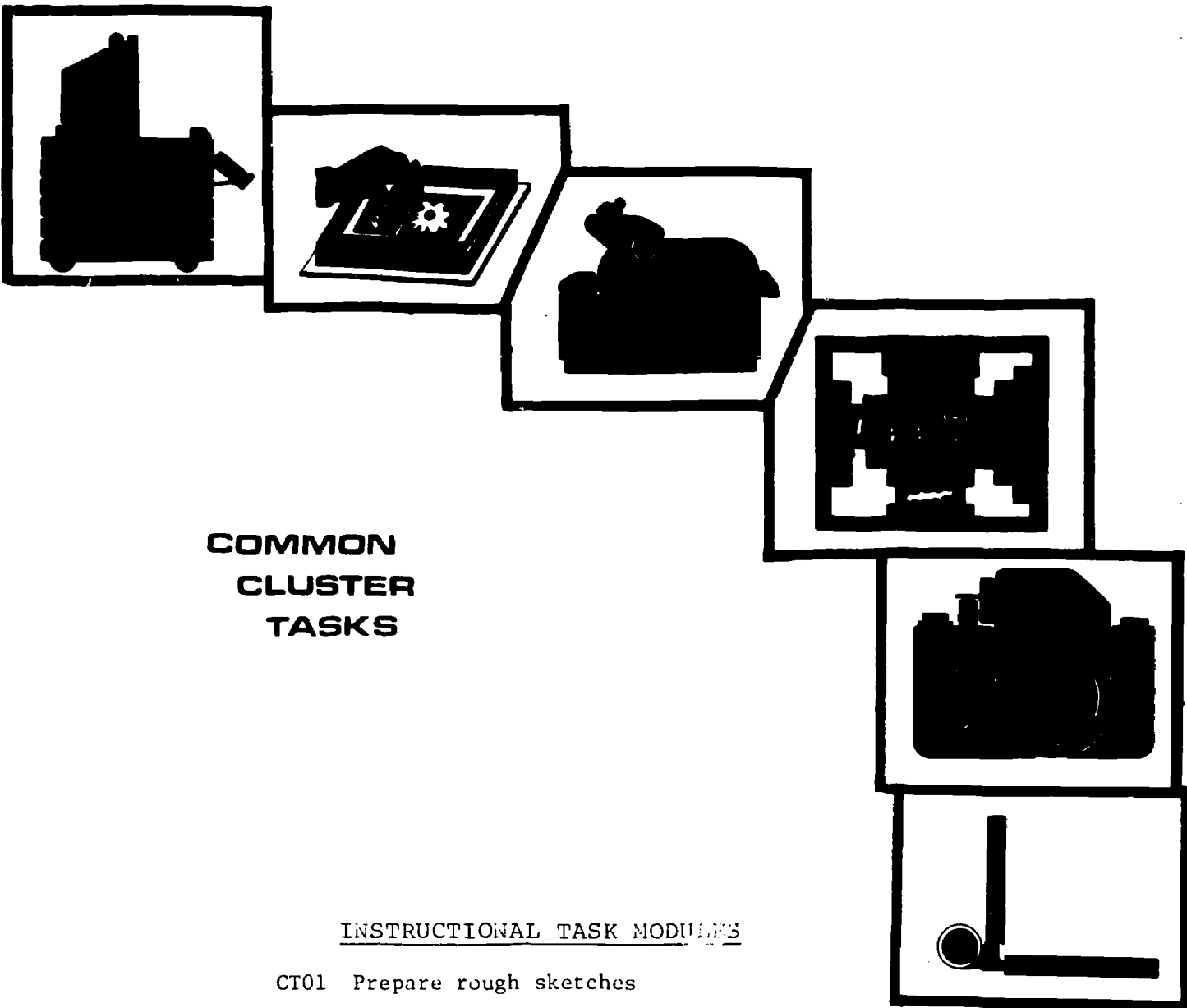
- SUBCLUSTER: SCREEN PRINTING

- SUBCLUSTER: OFFSET LITHOGRAPHY

- SUBCLUSTER: LETTERPRESS PRINTING

- SUBCLUSTER: COMMERCIAL PHOTOGRAPHY

- SUBCLUSTER: DRAFTING



**COMMON
CLUSTER
TASKS**

INSTRUCTIONAL TASK MODULES

- CT01 Prepare rough sketches
- CT02 Utilize proportioning elements
- CT03 Select type faces and styles
- CT04 Fit copy
- CT05 Prepare copy by machine
- CT06 Prepare copy by non-machine methods
- CT07 Design and produce layouts
- CT08 Proofread copy

TASK: Prepare rough sketches

Student Name: _____



Code: GCH - CT01

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. select the appropriate tools and materials for preparing rough sketches of a layout. 2. interpret customer's requests in preparing a rough sketch of the layout. 3. prepare a rough sketch of a layout which includes: <ol style="list-style-type: none"> a. headings b. body or text c. lines d. illustrations (rough) e. correct spelling and punctuation f. approximate proportions g. designations of colors h. notes and directions i. type face styles and sizes. 	<ul style="list-style-type: none"> • Teacher presents the rough sketch, first in series of examples, illustrating the steps in producing copy. • Students look at a collection of finished products and try to imagine and suggest a design of a rough sketch, being careful to include all necessary items.
Involved		
Productive		
Employable		
Task-Related Competencies		Instructional Materials Title
KNOWLEDGE A 2,6,8,9		Photo Offset Fundamentals 13
NUMBERS B 2,4a,i		General Printing 13
APPLICATION C 2,5,7		Graphic Arts Training in Schools 13
PHYSICAL D 1a,c,d 2a, 3c,g		

COMMON CLUSTER TASKS

File: GCM - CT01 TASK: Prepare rough sketches

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
<p>Thumbnail sketch</p> <p>Full size "rough"</p> <p>Type</p> <p>Trimmed sheet</p> <p>Layout</p> <p>Proportion</p>	<p>Measure most commonly used trimmed sheets</p> <p>Measure stock sizes of paper</p> <p>Discuss type size relationships in general terms, 24 pt. larger than 12 pt.</p> <p>Identify common sheet sizes for preparing rough sketches</p>	<ul style="list-style-type: none"> • See graphic's teacher for a sketching practice sheet which illustrates different sketching techniques.

Supportive Instructional Materials:

COMMON CLUSTER TASKS

TASK: Utilize proportioning elements

Student Name: _____



GCM - CT02

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods					
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> identify and interpret the concept of element and spatial area proportioning. proportion the elements on a printed page by a ranking number system. use the diagonal line method of proportioning. use the mathematical method of proportioning copy. use the percentage scale method of proportioning copy. 	<ul style="list-style-type: none"> Teacher leads discussion and demonstration of procedures for using proportioning elements. Teacher demonstrates use of percentage scale individually. Each student does sample problems. Students follow a teacher demonstration with "hands-on" supervision. Para-professionals provide sustained involvement with students having difficulty with this task. 					
Involved					Productive	Employable	
Task-Related Competencies		Instructional Materials					
<p>KNOWLEDGE A 7, 9</p> <p>NUMBERS B 2a, 4a, i, 5, 6</p> <p>APPLICATION C 5, 8</p> <p>PHYSICAL D 1a, b, c, d 2a</p>		Title		Media Bib.			
		Proportional scale transparency (teacher-made)		12			

COMMON CLUSTER TASKS

e: GCM - CT02 TASK: Utilize proportioning elements

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
<p>Proportional spacing (Since the manual justification procedures for typewriters equipped with proportional spacings vary from model to model, contact the graphic arts teacher for the typewriters used locally and learn terms appropriate to them.)</p> <p>Marginator</p> <p>Copyfitting</p> <p>Carbon ribbon</p> <p>Diagonal line method</p> <p>Formula method</p>	<p>The students should be able to:</p> <ul style="list-style-type: none"> Use a proportional scale Use the diagonal method of determining proportions for enlargements or reductions. 	<ul style="list-style-type: none"> Be careful in using words with multiple meanings so that partially sighted or deaf students form the correct concept. Informally encourage voluntary buddy system for assisting partially sighted or deaf students (individualize without calling attention to individual). It is essential that the supporting teacher contact the Graphic Arts teacher so that appropriate supportive information can be determined.
<p>Supportive Instructional Materials:</p> <p>Blow up of typewriter used in Graphic Arts Department</p> <p>Proportional rule</p> <p>See Graphic Arts teacher to determine the tools of proportioning</p>		

TASK: Select type faces and styles

Student Name:

a: GCM - CT03

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods									
Introduced Involved Productive Employable	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and select the appropriate styled type faces for traditional and modern layouts and photoengraving; <ol style="list-style-type: none"> a. traditional layouts <ol style="list-style-type: none"> 1) Roman 2) calligraphic. b. modern layouts <ol style="list-style-type: none"> 1) sans serif 2) modern Roman. c. photoengraving d. phototypesetting <ol style="list-style-type: none"> 1) lens 2) discs. 2. identify six (6) common type styles used in industry: <ol style="list-style-type: none"> a. Roman b. Gothic c. Italic d. Contemporary e. Text f. Script. 	<ul style="list-style-type: none"> • Students select and identify type styles/faces from a magazine. • Teacher leads class discussion of types/styles of typefaces and their appropriate use. • Students review samples of type styles and faces from phototypesetter samples. 									
Task-Related Competencies		Instructional Materials									
KNOWLEDGE A 7,9 NUMBERS APPLICATION C 2 PHYSICAL D 1a,c,b,d 2a		<table border="1"> <thead> <tr> <th data-bbox="942 62 1061 901">Title</th> <th data-bbox="1061 62 1150 901">Media</th> <th data-bbox="1150 62 1446 901">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="942 62 1061 248">Overhead transparency of 6 type styles</td> <td data-bbox="1061 62 1150 248">12</td> <td data-bbox="1150 62 1446 248"></td> </tr> <tr> <td data-bbox="942 248 1061 901"><u>Graphic Arts</u></td> <td data-bbox="1061 248 1150 901">13</td> <td data-bbox="1150 248 1446 901">16</td> </tr> </tbody> </table>	Title	Media	Bib.	Overhead transparency of 6 type styles	12		<u>Graphic Arts</u>	13	16
Title	Media	Bib.									
Overhead transparency of 6 type styles	12										
<u>Graphic Arts</u>	13	16									

COMMON CLUSTER TASKS

File: GCM- CT03 TASK: Select type faces and styles

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
<p>Old style</p> <p>Modern style</p> <p>Sans serif</p> <p>Cursive style</p> <p>Occasional style</p> <p>Text style</p> <p>Upper and lower case letters</p> <p>Punctuation marks</p>	<p>Type face sizes are measured in points. Review and understand the printer's measurement system of points, picas, etc.</p>
<p>Suggestions:</p> <ul style="list-style-type: none"> ● Review pp. 24-26 with the student. ● The student will be reviewing type face style books for the purpose of realizing the vast numbers of different type faces available. ● Be careful in using words with multiple meanings so that partially sighted or deaf students form the correct concept. ● Drill deaf student extensively on language of the task. 	

Supportive Instructional Materials:

Graphic Arts

TASK: Fit copy

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. determine whether or not a given amount of copy will fit a certain area by: <ol style="list-style-type: none"> a. computing the vertical space required b. computing the horizontal space required c. computing the element space required. ^{4R} 2. demonstrate the procedure for copy-fitting a line of display type. 3. demonstrate the procedure for copy-fitting body or text type. 4. demonstrate the procedure for leading between lines. 	<ul style="list-style-type: none"> • Teacher leads small group demonstration of copyfitting procedures. • Students use and study line gauge. • Students review copyfitting procedures as outlined in text and teacher prepared handout. • Para-professionals provide sustained involvement with students having difficulty with this task.
Involved		
Productive		
Employable		
	Task-Related Competencies	Instructional Materials
	KNOWLEDGE	Title
	A 7,9	Photo-Offset Fundamentals
	NUMBERS	pp. 29-30
	B 2b,4a,5,6	Handout sheet
	APPLICATION	(teacher-prepared)
	C 5,8	13
	PHYSICAL	18
	D 1a,b,c,d 2a	

COMMON CLUSTER TASKS

de: GCM - CT04 TASK: Fit copy

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
<p>Characters</p> <p>Pica</p> <p>Line</p> <p>Copy</p> <p>Text</p> <p>Body</p> <p>Notations</p> <p>Ascender</p> <p>Descender</p> <p>Leading</p> <p>Copy fit</p>	<p>Contact the graphic arts teacher to determine the length of copy lines and the number of characters per inch that the students will be working with. Then together design problems that will help the student figure appropriate copy. (For example, find the average number of characters per inch, per line, and how many lines per copy space.)</p>	<ul style="list-style-type: none"> • Informally encourage voluntary buddy system for assisting deaf or partially sighted students (individualize without calling attention to the individual). • Demonstration of correct and incorrect procedures to highlight the importance of correctness.

Supportive Instructional Materials:

TASK: Prepare copy by machine

Student Name: _____



GCM - CT05

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify an accurate basic definition of the machine copy preparation process. 2. recognize the two basic types of machines for copy preparation: <ol style="list-style-type: none"> a. hot type b. cold type. 3. recognize the different commercially-made hot type and cold type machines: <ol style="list-style-type: none"> a. monotype caster b. intertype c. ludlow d. linotype. 4. list the operational procedure for at least one cold type and one hot type machine. 5. demonstrate a degree of skill with two machines in preparing copy by operating specific machines: <ol style="list-style-type: none"> a. typical cold type machines <ol style="list-style-type: none"> 1) strike-on machines 2) IBM selectric 3) varityper 4) friden justowriter 5) etc. b. photographic machines <ol style="list-style-type: none"> 1) fotomatic 2) fotosetter 3) linotron 4) etc. 	<ul style="list-style-type: none"> • Teacher leads demonstration and discussion of procedures for preparing copy by machine • Students review machine operation manuals, illustrated texts, and charts • Para-professionals provide sustained involvement with students having difficulty with this task • Teacher encourages small peer group cooperation and interaction
Involved		
Productive		
Employable		
Task-Related Competencies	<p>KNOWLEDGE A 3,7,9 NUMBERS B 1,2 APPLICATION C 2,3,5,6 PHYSICAL D 1a,b,c,d 2a, 3c,8</p>	<p>Instructional Materials</p> <p>Title</p> <p>Charts Booklets <u>Photo-Offset Fundamentals</u></p>
Media		<p>16 14 13</p>
Bib.		<p>18</p>

Suggestions:

- Use pages 56-71 of Photo Offset as a resource for information.
- Contact graphic's instructor to determine the "essential" terms for area.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).

Basic Information for Cooperative Teaching

Language of the Task

Hot type - three dimensional
 Cold type - two dimensional
 Photo-setting
 Monotype caster
 Linotype and intertype
 Ludlow
 IBM selectric
 Vartyper, Friden, IBM, Composer, etc.
 Photo-Comp typesetter

Quantitative Concepts

Review picas/points - total measuring system

Supportive Instructional Materials:

Pictures, charts, transparencies, etc.

TASK: Prepare copy by machine

Student Name: _____



e: GCM - CT05

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will</p> <p>c. headlining machines</p> <ol style="list-style-type: none"> 1) varityper 2) strip printer 3) prototype 4) etc. 	
Involved		
Productive		
Employable		

COMMON CLUSTER TASKS

GCM - CT05 TASK: Prepare copy by machine

Suggestions:

Basic Information for Cooperative Teaching

Quantitative Concepts

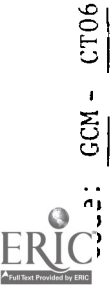
Language of the Task

Supportive Instructional Materials:

COMMON CLUSTER TASKS

TASK: Prepare copy by non-machine methods

Student Name: _____



Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods		
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the different applications for non-machine copy processes. 2. list seven different tools or methods of preparing non-machine copy: <ol style="list-style-type: none"> a. rapidograph b. speedball c. paper stencils d. lettering guides e. varigraph f. transfers g. etc. 3. demonstrate the procedures for using the identified tools and materials for preparing non-machine copy. 	<ul style="list-style-type: none"> • Para-professionals provide sustained involvement with students having difficulty with this task. • Teacher leads demonstration and discussion of the use of tools and equipment. • Students identify and label handout sheets illustrating tools and equipment. • Students view sound/slide program. • Teacher matches successful students who are interested in helping those having difficulty. 		
Involved				
Productive				
Employable				
Task-Related Competencies		Instructional Materials		
KNOWLEDGE		Teacher made handout		
A 2,3,9 NUMBERS		Teacher made transparencies		
B 2,4a,i APPLICATION		Photo Offset Fundamentals pp. 48-55		
C 2,3,5 PHYSICAL		"Tools of the Graphic Arts" Part 1		
D 1a,b,c,d 2a 3c,g		16 12 13 4 22		
Media		Bib.		

COMMON CLUSTER TASKS

e: GCM - CT06 TASK: Prepare copy by non-machine methods

Language of the Task	Basic Information for Cooperative Teaching	Suggestions:
<p>Rapidograph</p> <p>Speedball</p> <p>Paper stencils</p> <p>Lettering guide</p> <p>Varigraph</p> <p>Transfer letters</p> <p>Hand drawn</p> <p>Free hand</p> <p>Guide lines</p> <p>Stencils</p>	<p>Quantitative Concepts</p> <p>Design a problem to fit the method being used. Contact graphic arts instructor for this information.</p>	<ul style="list-style-type: none"> • This equipment is illustrated on pages 48-55 of <u>Photo-Offset Fundamentals</u>. • Teacher and deaf student should cooperatively develop some simple signs related to language of the task. • Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).

Supportive Instructional Materials:

Photo-Offset Fundamentals by McKnight and McKnight

COMMON CLUSTER TASKS

TASK: Design and produce layouts

3: GCM - CT07

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods														
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the different types of layouts used in the graphic arts industry. 2. recognize and employ the various principles inherent in quality design. 3. design and employ different type styles and sizes. 4. demonstrate the proper use of common layout tools. 5. exhibit a basic level of competency for copy balance. 6. exhibit a basic level of competency for lettering. 	<ul style="list-style-type: none"> • Teacher demonstration of comprehensive layout processes and techniques. • Students design and prepare individual layouts using old layout and dummy sheets. 														
Involved																
Productive																
Employable																
		<table border="1"> <thead> <tr> <th data-bbox="845 901 927 1129">Task-Related Competencies</th> <th data-bbox="845 259 927 901">Instructional Materials Title</th> <th data-bbox="845 72 927 259">Media Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="934 901 986 1129">KNOWLEDGE A 7,9</td> <td data-bbox="934 259 986 901" rowspan="2">"Layout and Design" <u>Photo Offset Fundamentals</u> Chapter 4</td> <td data-bbox="934 72 986 259">13 27</td> </tr> <tr> <td data-bbox="986 901 1038 1129">NUMBERS B 2a,b,4a,5,6</td> <td data-bbox="986 72 1038 259">13 18</td> </tr> <tr> <td data-bbox="1038 901 1090 1129">APPLICATION C 5,6</td> <td data-bbox="1038 259 1090 901"></td> <td data-bbox="1038 72 1090 259"></td> </tr> <tr> <td data-bbox="1090 901 1142 1129">PHYSICAL D 1a,b,c,d 2a</td> <td data-bbox="1090 259 1142 901"></td> <td data-bbox="1090 72 1142 259"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials Title	Media Bib.	KNOWLEDGE A 7,9	"Layout and Design" <u>Photo Offset Fundamentals</u> Chapter 4	13 27	NUMBERS B 2a,b,4a,5,6	13 18	APPLICATION C 5,6			PHYSICAL D 1a,b,c,d 2a		
Task-Related Competencies	Instructional Materials Title	Media Bib.														
KNOWLEDGE A 7,9	"Layout and Design" <u>Photo Offset Fundamentals</u> Chapter 4	13 27														
NUMBERS B 2a,b,4a,5,6		13 18														
APPLICATION C 5,6																
PHYSICAL D 1a,b,c,d 2a																

COMMON CLUSTER TASKS

GCM - CT07 TASK: Design and produce layouts

Suggestions:

- Organize a field trip to a newspaper print shop and/or an advertising firm to view the different procedure for layout (see graphic arts teacher).

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
Job Dummy Roughs Designs Finished layout Paste-ups Photostatic copy Proofs Type face Tracing Soft lead pencil Line gauge Drawing board T-square	Recognize type sizes Determine appropriate margin sizes Measure and adjust spacing on a simple layout

Supportive Instructional Materials:

Tools from graphic's department to learn and identify
 Roughs - comprehensive layout - finished layout examples from graphics art department
 Magazines, newspapers

TASK: Proofread copy

Issue: GCM - CT08

Student Name: _____

<p>Introduced Involved Productive Employable</p>	<p>Behavioral Task Knowledges/Task Skills</p> <p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the roles of the "reader" and the "marker" in proofreading 2. recognize and use the correct proofreader's marks for proofreading of: <ol style="list-style-type: none"> a. size and style of type b. position c. spacing d. insertion and deletion e. paragraphing f. punctuation g. miscellaneous. 	<p>Instructional Methods</p> <ul style="list-style-type: none"> • Students proofread materials to one another with one person functioning as a reader and the other as the proofreader. • Para-professionals provide sustained involvement with students having difficulty with this task. • Teacher matches successful students who are interested in helping those having difficulty.
<p>Task-Related Competencies</p> <p>KNOWLEDGE A 3,8,9</p> <p>NUMBERS B 1,2,4a,i</p> <p>APPLICATION C 3,8</p> <p>PHYSICAL D 1a,c 2a,3c</p>		<p>Instructional Materials</p> <p>Title</p> <p>materials to be proofread</p> <p>Media Bib. 1</p>



COMMON CLUSTER TASKS

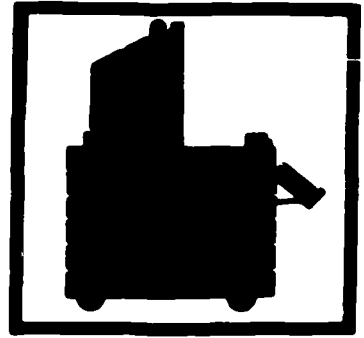
Code: GCM - CT08 TASK: Proofread copy

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
<p>See graphic arts teacher to determine the most essential marks for proofreading</p>	<p>Suggestions:</p> <ul style="list-style-type: none"> ● The student can use proofs of type he has set for this lesson. When reading proof, the student should be taught to look at each letter and word comparing them with the original copy. It is helpful if the student has a good background in English, but not essential. If the student has good copy he can compare his proof successfully with the copy. Remember look at each word. Some people make the mistake of just reading the sentence and overlook misspelled words.

Supportive Instructional Materials:

Graphic Arts by Carlsen

BOOKBINDING



INSTRUCTIONAL TASK MODULES

- BB01 Identify the parts of a book
- BB02 Identify common and special bookbinding handtools
- BB03 Assemble various kinds of folds
- BB04 Determine grain direction in paper
- BB05 Operate a mechanical folder
- BB06 Perform assembling procedures
- BB07 Bind a case bound book
- BB08 Perform perfect binding
- BB09 Complete various book repairs
- BB10 Operate stitching machine
- BB11 Perform perforating by letterpress
- BB12 Perform perforating by offset press
- BB13 Perform perforating by special machine
- BB14 Side stitch bindings
- BB15 Saddle stitch bindings
- BB16 Drill paper
- BB17 Laminate bindings
- BB18 Package products and materials
- BB19 Bind pads of paper
- BB20 Recognize specific characteristics of paper stocks
- BB21 Cut paper

TASK: Identify the parts of a book

GCM - BB01

Student Name:

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods												
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. list and describe the contents of the major sections of a book: <ol style="list-style-type: none"> a. title page b. copy c. table of contents d. text (body) e. appendix f. bibliography g. glossary h. index. 2. describe the general purpose or need for the binding of pages for the reader. 3. suggest several treatment factors which influence the durability and life of a book. 4. identify eight structural parts of a book: <ol style="list-style-type: none"> a. back b. fore edge c. head d. tail e. headband f. case g. hinges h. signatures i. end papers. 	<ul style="list-style-type: none"> • Students review illustrated text materials and transparency. • Students assemble, label, and prepare a display illustrating the different parts of a book. • Students view film loop. • Teacher matches successful students who are interested in helping those having difficulty. 												
Productive														
Employable		<table border="1"> <thead> <tr> <th colspan="2" data-bbox="854 235 946 1120">Instructional Materials</th> </tr> <tr> <th data-bbox="946 235 1010 1120">Task-Related Competencies</th> <th data-bbox="946 235 1010 1120">Title</th> </tr> </thead> <tbody> <tr> <td data-bbox="1010 235 1059 1120">KNOWLEDGE A 9</td> <td data-bbox="1010 235 1059 1120">"The Parts of Books"</td> </tr> <tr> <td data-bbox="1059 235 1108 1120">NUMBERS B 1</td> <td data-bbox="1059 235 1108 1120">"Parts of a Book" GA12</td> </tr> <tr> <td data-bbox="1108 235 1157 1120">APPLICATION C 2</td> <td data-bbox="1108 235 1157 1120"><u>Graphic Arts</u> Chapter 7 Page 83-93</td> </tr> <tr> <td data-bbox="1157 235 1206 1120">PHYSICAL D 1a,d 2a</td> <td data-bbox="1157 235 1206 1120"></td> </tr> </tbody> </table>	Instructional Materials		Task-Related Competencies	Title	KNOWLEDGE A 9	"The Parts of Books"	NUMBERS B 1	"Parts of a Book" GA12	APPLICATION C 2	<u>Graphic Arts</u> Chapter 7 Page 83-93	PHYSICAL D 1a,d 2a	
Instructional Materials														
Task-Related Competencies	Title													
KNOWLEDGE A 9	"The Parts of Books"													
NUMBERS B 1	"Parts of a Book" GA12													
APPLICATION C 2	<u>Graphic Arts</u> Chapter 7 Page 83-93													
PHYSICAL D 1a,d 2a														

SUBCLUSTER: BOOKBINDING

Code: GCM - BB01 TASK: Identify the parts of a book

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
Signature binding Headband Signature Case Title page Hinges Copyright End papers Table of contents Text Appendix Bibliography Glossary Index Back Fore edge Head Tail	Use of ruler in measuring page sizes and paper Division for efficient use of paper
<p>Suggestions:</p> <ul style="list-style-type: none"> • Look at, feel, open, close, discuss books, then pick out signature bound books from others • Work with samples standard stock paper to observe size, grades, colors. • Fold and measure stock paper to determine most efficient cut to meet a variety of page sizes. • Learning to "identify" book parts, tools, etc. will get very monotonous unless combined with some activity that will prepare the student for actual work! 	

Supportive Instructional Materials:

Book samples including variety of sizes of signature bound books
 Standard stock paper
 Guide and samples of most popular page measurements
Graphic Arts (pg. 83-93)



TASK: Identify common and special bookbinding handtools

Student Name: _____



3: GCM - B02

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods				
		Task-Related Competencies	Instructional Materials			
Introduced						
Involved						
Productive						
Employable						
	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and demonstrate the use of the basic handtools used in bookbinding: <ol style="list-style-type: none"> a. straightedge b. awl c. backsaw d. chisel e. needles f. hole punch g. scissors h. glue brush i. carpenter's square. 2. identify and demonstrate the use of special tools used in bookbinding: <ol style="list-style-type: none"> a. bone folders b. backing boards c. backing hammer d. jaspering tools e. band nipper f. bevel knife. 3. identify the component parts of an demonstrate the procedures for operating specific pieces of equipment for bookbinding: <ol style="list-style-type: none"> a. stitching frame b. plough c. lying press d. standing press e. finishing press. 4. identify and describe the application of selected materials for bookbinding: <ol style="list-style-type: none"> a. book cloth (multicolored/multisized) b. mull c. headband material d. backing paper e. paste and glue f. twine g. book tapes (cotton or linen) h. binder's board i. linen thread. 	<ul style="list-style-type: none"> • Teacher organizes and distributes hand out sheets showing pictures of various handtools. • Students name and write identification labels for tools illustrated on hand out sheets. • Para-professionals provide sustained involvement with students having difficulty with this task. 	<p>KNOWLEDGE</p> <p>A 9</p> <p>NUMBERS</p> <p>B 2</p> <p>APPLICATION</p> <p>C 2</p> <p>PHYSICAL</p> <p>D 1a,d 2a</p>	<p>Handout sheets</p> <p>The <u>Binding of Books</u> Chapter 3</p>	<p>17</p> <p>13</p> <p>18</p>	

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
Straightedge	Plough	<ul style="list-style-type: none"> • Field trip to see actual tools being used in real situation • Use stock paper and straightedge to draw efficient cutting lines for a variety of page sizes. • Observe the "waste" paper on drawing — consider the possible use of waste. • Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students. • Teacher and deaf student should cooperatively develop some simple related to language of the task. • Drill deaf student extensively on language of the task.
Awl	Lying press	
Chisel	Standing press	
Needles	Finishing press	
Hole punch	Book cloth	
Scissors	Mull	
Glue brush	Head band material	
Carpenter's square	Backing paper	
Bone folders	Paste & glue	
Backing board	Twine	
Backing hammer	Book tape	
Jaspering tools	Binder's board	
Band nipper	Linen thread	
Bevel knife		
Stitching frame		

Supportive Instructional Materials:

Kits of labeled tools (from the Vocational Graphic Arts Department)
The Binding of Books, chapter 3, for reference

TASK: Assemble various kinds of folds

Code: GCM - BB03

Student Name:

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																		
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the different types of standard folds: <ol style="list-style-type: none"> a. parallel folds b. right angle folds c. accordion folds. 2. prepare the standard folds with each of the following applications: <ol style="list-style-type: none"> a. four page folder - one fold b. six page folder - two parallel folds c. eight page folder - one parallel and one right angle fold d. sixteen page folder - one parallel and two right angle folds. 	<ul style="list-style-type: none"> • Teacher provides small group demonstration of folding procedures of each type of fold. • Students prepare and label samples of each type of fold. • Students follow a teacher demonstration with "hands-on" supervision. • Teacher encourages small peer group cooperation and inter-action. 																		
Involved																				
Productive																				
Employable																				
		<table border="1"> <thead> <tr> <th data-bbox="847 886 940 1123">Task-Related Competencies</th> <th colspan="2" data-bbox="847 64 940 886">Instructional Materials</th> </tr> <tr> <td data-bbox="847 886 940 1123"></td> <th data-bbox="896 64 940 244">Title</th> <th data-bbox="896 244 940 886">Media Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="940 886 1010 1123">KNOWLEDGE A 9</td> <td data-bbox="940 64 1010 886"></td> <td data-bbox="940 244 1010 886"></td> </tr> <tr> <td data-bbox="1010 886 1080 1123">NUMBERS B 1,2,4a,5,6</td> <td data-bbox="1010 64 1080 886"></td> <td data-bbox="1010 244 1080 886"></td> </tr> <tr> <td data-bbox="1080 886 1150 1123">APPLICATION C 2,5,7</td> <td data-bbox="1080 64 1150 886"></td> <td data-bbox="1080 244 1150 886"></td> </tr> <tr> <td data-bbox="1150 886 1219 1123">PHYSICAL D 1a,d,2a/b, 3 c,f,8</td> <td data-bbox="1150 64 1219 886"></td> <td data-bbox="1150 244 1219 886"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials			Title	Media Bib.	KNOWLEDGE A 9			NUMBERS B 1,2,4a,5,6			APPLICATION C 2,5,7			PHYSICAL D 1a,d,2a/b, 3 c,f,8		
Task-Related Competencies	Instructional Materials																			
	Title	Media Bib.																		
KNOWLEDGE A 9																				
NUMBERS B 1,2,4a,5,6																				
APPLICATION C 2,5,7																				
PHYSICAL D 1a,d,2a/b, 3 c,f,8																				

Basic Information for Cooperative Teaching

Language of the Task

Parallel

Right angle

Accordion

Quantitative Concepts

Practice accuracy of counting

Learn how to construct a right angle fold, measure with protractor the degrees of a right angle

Determine parallel folds by measuring

Use stock paper

divide paper into 1/2's, 1/4's, 1/3's, measure size of pages after folds are made

Suggestions:

- Use waste pieces of paper to practice the folds:
parallel
right angle
accordion
- Use stock paper fold into 1/2's, 1/4's, 1/3's to see if math work is correct

Supportive Instructional Materials:

Scrap pieces of paper
Stock sizes of paper

TASK: Determine grain direction in paper

GCM - BB04

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods								
Introduced Involved Productive Employable	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. determine the grain direction of various types of paper by employing: <ol style="list-style-type: none"> a. tear test b. fold test c. moisture test. 	<ul style="list-style-type: none"> • Teacher provides small group demonstration of tear, fold, and moisture tests. • Students view films on paper making processes. • Teacher matches successful students who are interested in helping those having difficulty. • Para-professionals provide sustained involvement with students having difficulty with this task. 								
Task-Related Competencies		Instructional Materials								
KNOWLEDGE A 7 NUMBERS APPLICATION C 5 PHYSICAL D 1a,d 2a/b	<table border="1"> <thead> <tr> <th data-bbox="928 65 987 883">Title</th> <th data-bbox="987 65 1045 883">Media</th> <th data-bbox="1045 65 1423 883">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="928 65 987 883">"The Paper Forest"</td> <td data-bbox="987 65 1045 883">8</td> <td data-bbox="1045 65 1423 883">23</td> </tr> <tr> <td data-bbox="928 65 987 883">"Paper and Pulp Making"</td> <td data-bbox="987 65 1045 883">8</td> <td data-bbox="1045 65 1423 883">25</td> </tr> </tbody> </table>	Title	Media	Bib.	"The Paper Forest"	8	23	"Paper and Pulp Making"	8	25
Title	Media	Bib.								
"The Paper Forest"	8	23								
"Paper and Pulp Making"	8	25								

SUBCLUSTER: BOOKBINDING

TASK: Determine grain direction in paper

Suggestions:

- Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.

Basic Information for Cooperative Teaching

Quantitative Concepts

Language of the Task

Grain

Supportive Instructional Materials:

TASK: Operate a mechanical folder

Student Name: _____



Code: GCM - BB05

<p>Student Progress</p> <p>Introduced</p> <p>Involved</p> <p>Productive</p> <p>Employable</p>	<p>Behavioral Task Knowledges/Task Skills</p> <p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the component parts of a tape and knife folder and a buckle folder 2. demonstrate the procedures for safely operating: <ol style="list-style-type: none"> a. tape and knife folder b. buckle folder 3. recognize and observe specific safety precautions related to the operation of mechanical folding machines 	<p>Instructional Methods</p> <ul style="list-style-type: none"> • Teacher directs small group demonstration of safe folder operation. • Students label parts of the folder illustrated on handout sheets. • Students review illustrated operator's manual for the available equipment. • Para-professionals provide sustained involvement with students having difficulty with this task. • Teacher comm. nstrates his efforts with students having difficulty. 	
<p>Task-Related Competencies</p> <p>KNOWLEDGE A 7,9</p> <p>NUMBERS B 2b</p> <p>APPLICATION C 2,7</p> <p>PHYSICAL D 1a,c,d,e 2a/b 3a,c,f,8</p>		<p>Instructional Materials</p> <p>Title</p> <p>Teacher prepared handout sheet</p> <p>Baum Folder manual</p>	<p>Media</p> <p>14</p> <p>14</p>

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
<p>Tape and knife folder</p> <p>Buckel folder</p>	<p>Suggestions:</p> <ul style="list-style-type: none"> • Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students • Teacher and deaf student should cooperatively develop some simple signs related to language of the task • This task may be particularly appropriate for deaf student • Field trip to observe folders in operation, discuss the need for safety and possible consequence of carelessness
<p>Supportive Instructional Materials:</p>	

SUBCLUSTER: BOOKBINDING

TASK: Perform assembling procedures

Student Name: _____



Code: CCM - BB06

<p>Student Progress</p> <p>Introduced</p> <p>Involved</p> <p>Productive</p> <p>Employable</p>	<p>Behavioral Task Knowledges/Task Skills</p> <p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the component parts and describe the operation of collating racks and bundling presses. 2. bundle (compact) the signatures of a book for binding by hand and power processes. 3. tip the signatures of a book for binding by hand and machine processes. 4. gather the book signatures in sequence for binding through the use of manual, circular, and automated processes. 5. insert the sections or signatures by placing them within sections for binding. 6. collate the individual book leaves for binding by manual, semi-automatic, and fully automatic processes. 	<p>Instructional Methods</p> <ul style="list-style-type: none"> • Teacher matches successful students who are interested in helping those having difficulty. • Teacher provides small group demonstration of assembling methods and procedures. • Para-professionals provide sustained involvement with students having difficulty with this task. 		
<p>Task-Related Competencies</p> <p>KNOWLEDGE</p> <p>A 2,3,9 NUMBERS</p> <p>B 1,2 APPLICATION</p> <p>C 5,7 PHYSICAL</p> <p>D 1a,b,d,e 2b 3a,c,f,8</p>	<p>Instructional Materials</p> <table border="1"> <tr> <td data-bbox="890 51 942 880"> <p>Title</p> </td> <td data-bbox="942 51 1439 880"> <p>Media Bib.</p> </td> </tr> </table>		<p>Title</p>	<p>Media Bib.</p>
<p>Title</p>	<p>Media Bib.</p>			

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
Collating or gathering Collator Ream	Count paper by 5's, 10's, 15's, 20's	<ul style="list-style-type: none">● Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.● Teacher and deaf student should cooperatively develop some simple signs.● This task may be particularly appropriate for deaf student.● Note: Student may be unable to multiply and still be able to count out a definite number of piles of 5, 10, 15, 20, etc. He will arrive at the amount someone else has determined through multiplication.
Supportive Instructional Materials: Ream of paper to practice counting		

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. select and identify the equipment and tools needed for case binding. 2. follow a prescribed procedure for case binding a book: <ol style="list-style-type: none"> a. prepare the signatures b. press the signatures c. sew the signatures d. add end papers e. glue the book f. round the back g. prepare the spine h. make the case i. case the book j. decorate the case. 	<ul style="list-style-type: none"> • Teacher provides small group demonstration of case binding procedures. • Students review transparencies and other illustrated materials. • Teacher matches successful students who are interested in helping those having difficulty.
Involved		
Productive		
Employable		
	Task-Related Competencies	Instructional Materials
	KNOWLEDGE A 2,3,7,9	Graphic Arts pp. 83-93
	NUMBERS B 1,2b,4a	"Parts of a Case Bound Book" GA34
	APPLICATION C 2,5,8	"Sewn Binding Methods" GA34
	PHYSICAL B 1a,c,d,e,f 2b 3a,c,f,g	
		Media
		13
		12
		12
		16

SUBCLUSTER: BOOKBINDING

Code: GCM - BBOZ TASK: Bind a case bound book

Basic Information for Cooperative Teaching

Language of the Task

Case bound

Signature

Kerfs

Sewing frame

Padding compound

Super

Spine

Quantitative Concepts

Use of ruler in measuring

Suggestions:

- Hands-on experience with unfinished book showing steps. Observation of completed book to see effects of total process.

Supportive Instructional Materials:

Graphic Arts pg. 84 Fig. 7-19
pg. 85 Fig. 7-23
pg. 88 Fig. 7-34

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. follow a prescribed procedure for producing a perfect binding: <ol style="list-style-type: none"> a. fold required number of signatures and clamp in lying press b. remove paper from back with jaspering tool c. apply coat of glue to the edge and add a strip of super d. apply more glue e. apply paper cover for hinge f. trim the book on the fore edge, head, and tail. 	<ul style="list-style-type: none"> • Teacher provides small group demonstration of perfect binding procedures. • Students follow a teacher demonstration with "hands-on" supervision. • Para-professionals provide sustained involvement with students having difficulty with this task.
Involved		
Productive		
Employable		
Task-Related Competencies	<p>KNOWLEDGE A 2, 3, 9</p> <p>NUMBERS B 1, 4a</p> <p>APPLICATION C 2, 5, 8</p> <p>PHYSICAL D 1a, c, d, f 2a/b 3c, f, 8</p>	Instructional Materials
		Title
		Media
		Bib.

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
Perfect binding	Work on area of greatest need: measuring fractional division	<ul style="list-style-type: none"> • Keep instruction relative to work in the "shop" • Compare a hap-hazard collection of books with those in the kit that are labeled from the graphics department.
Supportive Instructional Materials:		
Collection of books with variety of bindings		

SUBCLUSTER: BOOKBINDING

TASK: Complete various book repairs

Code: GCM - BB09

Student Name: _____

Student Progress	<p>Behavioral Task Knowledges/Task Skills</p> <p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. follow specific procedures in performing the following book repairs: <ol style="list-style-type: none"> a. cleaning b. mending c. adding end papers d. reglueing backs e. adding super strips f. replacing the case g. replacing covers h. preparing a hollow back i. retitling j. decorating. 	<p>Instructional Methods</p> <ul style="list-style-type: none"> • Teacher matches successful students who are interested in helping those having difficulty. • Teacher provides small group demonstration of specific book repairs. • Students view movie on bookbinding and illustrated materials. • Students follow a teacher demonstration with "hands-on" supervision.
Introduced		
Involved		
Productive		
Employable		
	<p>Task-Related Competencies</p> <p>KNOWLEDGE A 2,9</p> <p>NUMBERS B 2b,4a,5,6</p> <p>APPLICATION C 2,5,8</p> <p>PHYSICAL</p>	<p>Instructional Materials</p> <p>Title</p> <p>"The Art of Binding" <u>The Binding of Books</u> Chapter 15</p>
		<p>Media Bib.</p> <p>8 9</p> <p>13 18</p>

SUBCLUSTER: BOOKBINDING

e: GCM - BB09 TASK: Complete various book repairs

Basic Information for Cooperative Teaching

Language of the Task

- Endsheets
- Reglue
- Mend
- Replace
- Add
- Retitle

Quantitative Concepts

Reinforce the math concepts relative to the need.

Suggestions:

- Observe old books, speculate and discuss the need and nature of repair.
- The areas of reinforcement will be relative to the nature of the repair work. Check with the vocational instructor frequently and reinforce the areas of greatest need.

Supportive Instructional Materials:

Collection of books in need of repair

SUBCLUSTER: BOOKBINDING
TASK: Operate stitching machine
Code: GCM - BB10

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods												
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the component parts of manual and powered stitching machines. 2. follow a prescribed procedure in operating manual and powered stitching machine. 3. adjust the thickness and length of staples needed. 4. recognize and observe specific safety precautions related to the operation and use of stitching machines. 	<ul style="list-style-type: none"> ● Students review illustrated text materials and the stitcher manual. ● Teacher provides small group demonstration of <u>safe</u> stitching machine operation. ● Students follow a teacher demonstration with "hands-on" supervision. ● Teacher matches successful students who are interested in helping those having difficulty. 												
Involved														
Productive														
Employable														
Task-Related Competencies	<p>KNOWLEDGE A 4, 9</p> <p>NUMBERS B 1, 2</p> <p>APPLICATION C 5</p> <p>PHYSICAL D 1a, c, d, e 2b 3a, c, f, g</p>	<p>Instructional Materials</p> <table border="1"> <thead> <tr> <th>Title</th> <th>Media</th> <th>Bib.</th> </tr> </thead> <tbody> <tr> <td>Graphic Arts Chapter 7</td> <td>13</td> <td>16</td> </tr> <tr> <td>"Wire Staple Binding" GA32</td> <td>12</td> <td>12</td> </tr> <tr> <td>stitcher manual</td> <td>14</td> <td></td> </tr> </tbody> </table>	Title	Media	Bib.	Graphic Arts Chapter 7	13	16	"Wire Staple Binding" GA32	12	12	stitcher manual	14	
Title	Media	Bib.												
Graphic Arts Chapter 7	13	16												
"Wire Staple Binding" GA32	12	12												
stitcher manual	14													

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
Stitcher Wire Saddle stitch Side stitch	Reinforce math concepts with which students are having trouble in vocational class.	<ul style="list-style-type: none"> ● Help the student with his math. ● Keep discussion relative to work on bookbinding. ● Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students. ● Teacher and deaf student should cooperatively develop some simple signs related to language of the task.

Supportive Instructional Materials:

- Graphic Arts
- Unfinished book that illustrates this process

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods							
		Task-Related Competencies	Instructional Materials						
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> identify and select the appropriate tools and equipment for perforating by letterpress. recognize and visually identify the two different types of perforation: <ol style="list-style-type: none"> regular struck-in. follow a prescribed procedure in setting up and operating a platen press to perform a perforating operation, using a Reaf-A-Base and a below type-high perforation rule. 	<ul style="list-style-type: none"> Teacher provides small group demonstration of procedures/ techniques for perforating by letterpress. Student follows a teacher demonstration with "hands-on" supervision. Teacher matches successful students who are interested in helping those having difficulty. 	<table border="1"> <thead> <tr> <th>Title</th> <th>Media</th> <th>Bib.</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Title	Media	Bib.			
Title				Media	Bib.				
Involved									
Productive									
Employable									

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
Perforating Perforating rule Regular Stuck-in Reef-a-base Type-high	Suggestions: <ul style="list-style-type: none"> ● Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students. ● Be careful in using words with multiple meanings when talking to lip reading deaf students. ● This task may be particularly appropriate for deaf student. ● Visit Graphics lab - observe perforating operations ● Look at books perforated by different processes <ul style="list-style-type: none"> - are there differences - are there advantages in time and/or quality - are there disadvantages - can you observe the differences

Supportive Instructional Materials:

Books perforated by letterpress, offset press and special machines

TASK: Perform perforating by offset press

GCM - BB12

Student Name:

<p>Student Progress</p> <p>Introduced</p> <p>Involved</p> <p>Productive</p> <p>Employable</p>	<p>Behavioral Task Knowledges/Task Skills</p> <p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and select the appropriate tools and equipment for perforating by offset press. 2. follow a prescribed procedure in setting-up and operating an offset press to perform a perforating operation: <ol style="list-style-type: none"> a. locate position for perforation on impression cylinder b. attach perfa tape to impression cylinder:: c. adjust pressure between cylinders to facilitate acceptable perforation d. prepare press feeder e. prepare press register table f. prepare press delivery system. 	<p>Instructional Methods</p> <ul style="list-style-type: none"> • Teacher provides explanation/discussion of tools and necessary equipment. • Teacher provides small group demonstration of procedures/ techniques for perforating by offset press. • Teacher matches successful students who are interested in helping those having difficulty. • Students review perforating set-up procedures in offset press manual.
<p>Task-Related Competencies</p> <p>KNOWLEDGE A 3,9</p> <p>NUMBERS B 2b,4a</p> <p>APPLICATION C 2a,5,8</p> <p>PHYSICAL D 1a,d 2a/b 3c,f,8</p>	<p>Instructional Materials</p> <p>Title</p> <p>offset press manual</p> <p>14</p>	<p>Media</p> <p>Bib.</p>

Suggestions:

- Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Discuss reasons for and uses of perforated materials

Basic Information for Cooperative Teaching

Language of the Task

Perforating
Perfatape

Quantitative Concepts

Supportive Instructional Materials:

Examples of perforating performed with offset press

TASK: Perform perforating by special machine

Student Name: _____



e: GCM - BB13

<p>Student Progress</p>	<p>Behavioral Task Knowledges/Task Skills</p> <p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify specific tools and equipment used in perforating by special machine. 2. follow a prescribed procedure in operating special machines to perform struck-in perforating. 	<p>Instructional Methods</p> <ul style="list-style-type: none"> • Students review illustrated special machines manuals. • Teacher provides small group demonstration of special methods of perforating. • Students follow a teacher demonstration with "hands-on" supervision. 								
<p>Introduced</p>	<p>Instructional Materials</p> <table border="1"> <thead> <tr> <th data-bbox="244 868 890 1103">Task-Related Competencies</th> <th data-bbox="244 132 890 868">Title</th> <th data-bbox="244 51 890 132">Media</th> <th data-bbox="244 51 890 132">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="890 868 1439 1103"> <p>KNOWLEDGE A 3,9</p> <p>NUMBERS B 2b,4a</p> <p>APPLICATION C 2a,5,8</p> <p>PHYSICAL D 1a,d 2a/b 3c,f,8</p> </td> <td data-bbox="890 132 1439 868"> <p><u>Graphic Arts</u> pg. 50 machine operation manuals</p> </td> <td data-bbox="890 51 1439 132"> <p>13 14</p> </td> <td data-bbox="890 51 1439 132"> <p>16</p> </td> </tr> </tbody> </table>		Task-Related Competencies	Title	Media	Bib.	<p>KNOWLEDGE A 3,9</p> <p>NUMBERS B 2b,4a</p> <p>APPLICATION C 2a,5,8</p> <p>PHYSICAL D 1a,d 2a/b 3c,f,8</p>	<p><u>Graphic Arts</u> pg. 50 machine operation manuals</p>	<p>13 14</p>	<p>16</p>
Task-Related Competencies	Title	Media	Bib.							
<p>KNOWLEDGE A 3,9</p> <p>NUMBERS B 2b,4a</p> <p>APPLICATION C 2a,5,8</p> <p>PHYSICAL D 1a,d 2a/b 3c,f,8</p>	<p><u>Graphic Arts</u> pg. 50 machine operation manuals</p>	<p>13 14</p>	<p>16</p>							
<p>Involved</p>										
<p>Productive</p>										
<p>Employable</p>										

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
Perforating machine Rotary perforator Perforate	Suggestions: <ul style="list-style-type: none"> • Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students. • Teacher and deaf student should cooperatively develop some simple signs related to language of the task. • Keep close contact with needs of vocational education teacher • Discuss reasons for perforations

Supportive Instructional Materials:

Examples of work perforating machine docs

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and select the specific pieces of equipment and materials needed to prepare a side stitch: <ol style="list-style-type: none"> a. stitching head b. needles c. stitching thread. 2. side stitch books and related publications following a prescribed procedure for: <ol style="list-style-type: none"> a. assemble sections b. place under stitching head c. insert stitches. 	<ul style="list-style-type: none"> ● Students review illustrated text materials and transparency. ● Teacher provides small group demonstration of side stitching procedures. ● Students follow a teacher demonstration with "hands-on" supervision. ● Teacher matches successful students who are interested in helping those having difficulty.
Involved		
Productive		
Employable		
Task-Related Competencies		Instructional Materials
KNOWLEDGE A 3,9		Title
NUMBERS B 2b,4a		Graphic Arts pp. 81-83
APPLICATION C 2a,5,8		"Wire Staple and Binding" GA32
PHYSICAL D 1a,b,d,e 2a/b 3a,c,f,8		Media
		Bib.
		13
		12
		16
		12

Basic Information for Cooperative Teaching

Quantitative Concepts

Language of the Task

Side stitch

Wire

Assemble

Insert

Suggestions:

- Support vocational teacher by discussing work he is doing relative to text pp. 81-83.

Supportive Instructional Materials:

Graphic Arts - pp. 81-83

Examples of side stitching

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and select the appropriate tools and equipment for saddle stitching. 2. Saddle stitch book bindings following a prescribed procedure: <ol style="list-style-type: none"> a. assemble sections b. locate on saddle c. activate stapling head d. remove from saddle. 	<ul style="list-style-type: none"> • Teacher matches successful students who are interested in helping those having difficulty. • Teacher provides small group demonstration of saddle stitching procedures. • Students review illustrated text materials and transparency. • Teacher encourages small peer group cooperation and inter-action.
Involved		
Productive		
Employable		
Task-Related Competencies	KNOWLEDGE A 3,7,9 NUMBERS B 2b,4a APPLICATION C 2,5,8 PHYSICAL D 1a,b,d,e 2b 3a,c,f,8	Instructional Materials Title Graphic Arts pp. 81-83 "Binding Methods" GA 31
		Media
		Bib.
		13
		12
		16
		12

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
Saddle stitch Wire	Provide examples of saddle stitched booklets (stapled) for measuring from top, from bottom, and centering the staples.

Suggestions:

- Review pages 81-83 with the student.

Supportive Instructional Materials:

Graphic Arts

TASK: Drill paper

GCM - BB16

Student Name:

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and describe the operation of the appropriate tools and equipment for drilling holes in paper. 2. list several applications or uses for drilled paper: <ol style="list-style-type: none"> a. shipping tags b. spiral notebooks c. notebook fillers. 3. follow a prescribed procedure in setting up and operating a hole drill. 4. recognize and observe specific safety precautions in operating a hole drill. 	<ul style="list-style-type: none"> • Students review illustrated text materials and operator's manual procedures. • Teacher provides small group demonstration of paper drilling procedures and operations. • Teacher matches successful students who are interested in helping those having difficulty. • Para-professionals provide sustained involvement with students having difficulty with this task.
Productive		
Involved		
Employable		

Basic Information for Cooperative Teaching

Language of the Task

Paper drill
Hollow point drill

Quantitative Concepts

Measure the location of holes in a standard 8 1/2 x 11 paper from left edge and from top edge.
Discuss accuracy to 1/16th of an inch

Suggestions:

- Visiting a local printing establishment during production drilling may be appropriate.

Supportive Instructional Materials:

Graphic Arts pg. 50 (for reference only)

SUBCLUSTER: BOOKBINDING

TASK: Laminate bindings

GCM - BB17

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods		
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and select the appropriate tools and equipment for laminating. 2. follow a prescribed procedure for laminating paper stock: <ol style="list-style-type: none"> a. bond thin film of plastic over page by adhesive or pressure methods. 	<ul style="list-style-type: none"> • Teacher matches successful students who are interested in helping those having difficulty. • Teacher provides small group demonstration of laminating techniques. • Students follow a teacher demonstration with "hands-on" supervision. 		
Involved		<p style="text-align: center;">Instructional Materials</p>		
Productive		<p style="text-align: center;">Title</p>		
Employable		<p style="text-align: center;">Media Bib.</p>		
		Task-Related Competencies		
		KNOWLEDGE		
		A 2,7,9		
		NUMBERS		
		B 2b,4a		
		APPLICATION		
		C 2,5		
		PHYSICAL		
		D 1a,c 2a 3c,f,8		

Basic Information for Cooperative Teaching

Language of the Task

- Laminate
- Laminating
- Bond
- Film

Quantitative Concepts

Multiplication:
to determine quantities of
paper, plastic, etc. needed
for 100 bindings as compared
to one

Suggestions:

- Help students verbalize their activities to enlighten rest of class to that area of involvement.

Supportive Instructional Materials:

TASK: Package products and materials

Student Name:

GCM - BBL8

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
<p>Introduced</p> <p>Involved</p> <p>Productive</p> <p>Employable</p>	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and describe selected types of packaging materials: <ol style="list-style-type: none"> a. covering materials b. filler materials c. cushioning materials. 2. recognize several specific packaging requirements for different types of materials: <ol style="list-style-type: none"> a. fragility b. heat sensitivity c. dangerous materials. 3. follow a prescribed procedure in securing packages by gluing and taping, and mechanical steel banding. 4. identify pre-packaging and post-packaging label information: <ol style="list-style-type: none"> a. pre-packaging labeling <ol style="list-style-type: none"> 1) manufacturer 2) contents 3) destination 4) quantity b. post-packaging labeling <ol style="list-style-type: none"> 1) stamps 2) stencil marking 3) hand lettering 4) preprinted labels. 	<p>Students view films to supplement teacher-led demonstration.</p> <p>Teacher provides small group demonstration of packaging methods.</p> <p>Students prepare displays of various kinds of packages.</p> <p>Teacher encourages small peer group cooperation and interaction</p>
Task-Related Competencies		Instructional Materials
<p>KNOWLEDGE A 3,9</p> <p>NUMBERS B 2,4a,b,5,6</p> <p>APPLICATION C 1a,b 2,8</p> <p>PHYSICAL D 1a,c,d 2b 3a,c,f,8</p>		<p>Title</p> <p>"Packaging Design" 8</p> <p>"Packaging Practice" 8</p> <p>Media</p> <p>Bib.</p> <p>8</p> <p>5</p>

Basic Information for Cooperative Teaching

Suggestions:

Language of the Task

Quantitative Concepts

Covering

Filler

Cushioning

Fragile

Heat sensitive

Pre-package

Post-package

Taping

Steel banding

Stamps

Stencils

Hand lettering

Recognize ream (500) sheets 8 1/2" x 11"

Tickets (1000) package 2" x 3 1/2"

Review and support areas of need:

- quantities of packaged materials
- calculating amount of postage required for a package

Supportive Instructional Materials:

Postage rates, charts, types (stamps, permits, metered tape, scales)

TASK: Bind pads of paper

Code: GCM - BB19

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods												
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and describe the use of selected tools and materials in the padding process: <ol style="list-style-type: none"> a. joggers b. padding compounds c. brush d. knife e. pad counter. 2. follow prescribed set of procedures in preparing and gluing up pads of paper: <ol style="list-style-type: none"> a. divide sheets into required size stocks b. add weight to pile to compress sheets c. apply padding compound with brush d. add second coat after first dries e. separate pads with knife f. add strip of super after first coat if more strength desired g. use of padding press. 	<ul style="list-style-type: none"> • Students view movies on the paper industry. • Teacher provides small group demonstration of padding procedures. • Student's review booklets on the paper industry and illustrated text materials on padding. • Para-professionals provide sustained involvement with students having difficulty with this task. • Teacher encourages small peer group cooperation and inter-action. 												
Involved														
Productive														
Employable														
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Instructional Materials</th> </tr> <tr> <th style="width: 80%;">Task-Related Competencies</th> <th style="width: 20%;">Media Bib.</th> </tr> </thead> <tbody> <tr> <td>KNOWLEDGE A 6,9</td> <td>"The Forests About Us" 8</td> </tr> <tr> <td>NUMBERS B 2,4a</td> <td>"Let's Go to a Paper Mill" 13</td> </tr> <tr> <td>APPLICATION</td> <td>Graphic Arts pg.80 13</td> </tr> <tr> <td>PHYSICAL</td> <td>16</td> </tr> </tbody> </table>	Instructional Materials		Task-Related Competencies	Media Bib.	KNOWLEDGE A 6,9	"The Forests About Us" 8	NUMBERS B 2,4a	"Let's Go to a Paper Mill" 13	APPLICATION	Graphic Arts pg.80 13	PHYSICAL	16
Instructional Materials														
Task-Related Competencies	Media Bib.													
KNOWLEDGE A 6,9	"The Forests About Us" 8													
NUMBERS B 2,4a	"Let's Go to a Paper Mill" 13													
APPLICATION	Graphic Arts pg.80 13													
PHYSICAL	16													

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Padding</p> <p>Padding compound</p> <p>Padding rack</p> <p>Jog</p> <p>Chipboard</p> <p>Trim</p>	<p>Reinforce measuring thickness, length, and width of pads with ruler (i.e. pads, 1/4" x 4 1/4" x 5 1/2"; 1/2" x 8 1/2" x 11"; 3/4" x 5 1/2" x 8 1/2")</p>

Suggestions:

- Students bring in variety of pads and discuss using the waste of one job for the "pads". Discuss margin of profit.

Supportive Instructional Materials:

Graphic Arts pg. 80

TASK: Recognize specific characteristics of paper stocks

Student Name: _____



GCM - BB20

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify specific weights, sizes, types, and colors of selected papers: <ol style="list-style-type: none"> a. weight b. size c. types <ol style="list-style-type: none"> 1) bond 2) cover 3) index 4) card stock 5) wrapping 6) newsprint 7) etc. 2. identify the number of sheets in a ream and a mill. 3. identify specific stock specifications for envelopes. 4. identify specific stocks commonly used for letterheads. 5. identify specific stocks commonly used for tickets and cards. 6. measure stock thicknesses with a paper micrometer. 	<ul style="list-style-type: none"> • Teacher provides demonstration of using the paper micrometer. • Teacher provides discussion and demonstration of paper stock characteristics. • Students assemble and prepare a display of different paper stocks. • Students practice using paper micrometer making sample measurements.
Involved		
Productive		
Employable		

de: GCM - BK20 TASK: Recognize specific characteristics of paper stock

Basic information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
<p>Bond</p> <p>Cover</p> <p>Index</p> <p>Newsprint</p> <p>Ream</p> <p>Weight</p>	<p>Measure and discuss standard paper sizes</p> <p>Observe, feel, discuss common weights of paper (pg. 58 of text)</p> <p>Examples: 70#, 60#, 50# - offset 20#, 16#, 24# - bond 90#, 110#, 140# - index</p> <p>Check with vocational teacher when working with weights and size</p>	<p>• Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.</p> <p>• Teacher and deaf student should cooperatively develop some simple signs related to language of the task.</p> <p>• This task may be particularly appropriate for deaf student.</p>
<p>Supportive Instructional Materials:</p> <p>Collect from the vocational instructor a ream of each weight of paper labeled with uses of paper</p> <p>Text: <u>Graphic Arts</u>, Chapter 13</p>		

TASK: Cut paper

GCM - BB21

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																																			
Introduced Involved Productive Employable	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. accurately figure paper cuts prior to cutting. 2. demonstrate proper and safe operation of paper cutters: <ol style="list-style-type: none"> a. hand paper trimmer b. power paper trimmer c. bench trimmer operation. 3. recognize and observe specific safety precautions for operating paper cutters. 4. suggest procedures for proper care and maintenance of paper cutters. 	<ul style="list-style-type: none"> • Teacher provides small group demonstration of the <u>safe</u> operation of each type of paper cutter. • Students review illustrated text materials and cutter manuals. • Teacher leads chalkboard discussion in figuring several examples of common and difficult paper cutting procedures. • Para-professionals provide sustained involvement with students having difficulty with this task. <table border="1" data-bbox="837 72 1419 1139"> <thead> <tr> <th data-bbox="837 901 880 1139">Task-Related Competencies</th> <th colspan="2" data-bbox="837 72 880 901">Instructional Materials</th> </tr> <tr> <td data-bbox="880 901 924 1139"></td> <th data-bbox="880 259 924 901">Title</th> <th data-bbox="880 72 924 259">Media Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="924 901 968 1139">KNOWLEDGE</td> <td data-bbox="924 259 968 901" rowspan="2">Graphic Arts pg. 58-59 cutter manual</td> <td data-bbox="924 72 968 259">16</td> </tr> <tr> <td data-bbox="968 901 1011 1139">A 6,9</td> <td data-bbox="968 72 1011 259">13</td> </tr> <tr> <td data-bbox="1011 901 1055 1139">NUMBERS</td> <td data-bbox="1011 259 1055 901"></td> <td data-bbox="1011 72 1055 259">14</td> </tr> <tr> <td data-bbox="1055 901 1099 1139">B 2</td> <td data-bbox="1055 259 1099 901"></td> <td data-bbox="1055 72 1099 259"></td> </tr> <tr> <td data-bbox="1099 901 1142 1139">APPLICATION</td> <td data-bbox="1099 259 1142 901"></td> <td data-bbox="1099 72 1142 259"></td> </tr> <tr> <td data-bbox="1142 901 1186 1139">C 2,7</td> <td data-bbox="1142 259 1186 901"></td> <td data-bbox="1142 72 1186 259"></td> </tr> <tr> <td data-bbox="1186 901 1230 1139">PHYSICAL</td> <td data-bbox="1186 259 1230 901"></td> <td data-bbox="1186 72 1230 259"></td> </tr> <tr> <td data-bbox="1230 901 1274 1139">D 1a,c</td> <td data-bbox="1230 259 1274 901"></td> <td data-bbox="1230 72 1274 259"></td> </tr> <tr> <td data-bbox="1274 901 1317 1139">2b</td> <td data-bbox="1274 259 1317 901"></td> <td data-bbox="1274 72 1317 259"></td> </tr> <tr> <td data-bbox="1317 901 1361 1139">3c,8</td> <td data-bbox="1317 259 1361 901"></td> <td data-bbox="1317 72 1361 259"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials			Title	Media Bib.	KNOWLEDGE	Graphic Arts pg. 58-59 cutter manual	16	A 6,9	13	NUMBERS		14	B 2			APPLICATION			C 2,7			PHYSICAL			D 1a,c			2b			3c,8		
Task-Related Competencies	Instructional Materials																																				
	Title	Media Bib.																																			
KNOWLEDGE	Graphic Arts pg. 58-59 cutter manual	16																																			
A 6,9		13																																			
NUMBERS		14																																			
B 2																																					
APPLICATION																																					
C 2,7																																					
PHYSICAL																																					
D 1a,c																																					
2b																																					
3c,8																																					

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Paper cutter Trim Ream Jogged Knife blade Clamp</p>	<p>Measure pieces of paper cut to standard sizes, i.e. 5 1/2" x 8 1/2", 8 1/2" x 11", 17" x 22" etc. Divide paper stock into pre-determined standard sizes, giving special attention to economy. Example: One 17" x 22" sheet cut in half provides two 8 1/2" x 11" sheets. One 8 1/2" x 11" sheet cut in half provides two 5 1/2" x 8 1/2" sheets, etc.</p>

Suggestions:

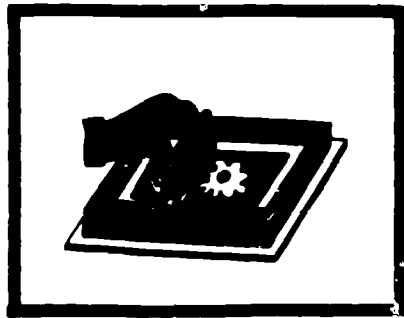
- Discuss need for observing proper procedures and concern for others when using cutter.
- Ask graphics instructor for sheets of paper stock of standard size.

Supportive Instructional Materials:

Graphic Arts

Collect from vocational instructor samples of standard sizes of paper

SCREEN PRINTING



INSTRUCTIONAL TASK MODULES

- SP01 Prepare copy for screen printing
- SP02 Prepare stencils
- SP03 Prepare stencils by indirect methods
- SP04 Block out screens
- SP05 Apply flock and surface substances
- SP06 Set-up for multi-copy printing

SUBCLUSTER: SCREEN PRINTING

TASK: Prepare copy for screen printing

Code: GCM - SP01

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. demonstrate specific methods of copy preparation for: <ol style="list-style-type: none"> a. photographs b. clippings c. artwork d. drawings e. lettering f. ink reproductions. 2. select the appropriate paper for the specific type of copy. 	<ul style="list-style-type: none"> • Teacher leads small group demonstration of procedures and techniques of copy preparation. • Students view film following introduction by instructor. • Students review illustrated text materials. • Teacher supplies students with a miscellaneous assortment of silk screen prints to look over and discuss — both good and bad points. <p>Note: See task sheets CT01-CT08 for more background on copy preparation.</p>
Involved		
Productive		
Employable		

Task-Related Competencies	Instructional Materials	Media Bib.
<p>KNOWLEDGE</p> <p>A 2, 6, 9 NUMBERS</p> <p>B 4a APPLICATION</p> <p>C 2a, 5 PHYSICAL</p> <p>D 1a, b, d 2a 3c, 8</p>	<p>Title</p> <p>"Seriography - Methods and Techniques of Guy MacCoy"</p> <p><u>Graphic Arts</u> Chapter 6</p> <p><u>Silk Screen Printing</u></p>	<p>8 10</p> <p>13 16</p> <p>13 24</p>

Basic Information for Cooperative Teaching

Language of the Task

Screen
silk
organdy
nylon
mesh
copper
bronze
stainless steel

Rubber squeegee

Ink
plastic
decal

Hand cut

Photographic screen
indirect photo
direct photo

Quantitative Concepts

Recognize appropriate size relationships for layout.

Recognize lines that are parallel and lines that are vertical and horizontal to the edge of the design.

Suggestions:

- Take a walking tour of a business district and pick out silk screened advertisements and posters. Discuss screen cutting problems and techniques.

Supportive Instructional Materials:

Graphic Arts by Carlsen
Chas. Bennett Co., Inc.

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. prepare a stencil for a screen process by the direct photographic method <ol style="list-style-type: none"> a. stencil design b. purpose c. chemical d. procedure. 2. prepare a stencil for a screen process by the direct non-photographic method: <ol style="list-style-type: none"> a. stencil design b. purpose c. chemical d. procedure. 	<ul style="list-style-type: none"> • Students view film and review illustrated text materials. • Students watch demonstration of techniques by teacher or someone "on-the-job". • Teacher checks individual student's work on a practice stencil before proceeding to actual stencil work.
Involved		
Task-Related Competencies		Instructional Materials
KNOWLEDGE A 2,3,6		"Stencil Cutting"
NUMBERS B 4a		Graphic Arts Chapter 6
APPLICATION		"Silkscreen"
C 2a,5		Fundamentals of Silk Screen Process
PHYSICAL		
D 1a,b,c,d,f 2a 3c,8		
		Media
		Bib.
		9
		13
		8
		13
		1
		16
		19
		17



Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
Film Stencil knife Masking tape Stencil Backing sheet Register guide Register mark Masking tape Mask out	Estimate 2" and 1/2". Measure accurately to 1/4".
Suggestions: <ul style="list-style-type: none"> Bring in resource person who can correctly demonstrate the procedures. If possible, let it be on an exploratory or experimental stencil so the students can attempt this delicate operation. Have students accurately trace images as a preparation for cutting stencils. 	

Supportive Instructional Materials:
 Graphic Arts by Carlsen
 Chas. Bennett Co., Inc.

TASK: Prepare stencils by indirect methods

Student Name:

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> prepare on a stencil for a screen process printing by the indirect photographic method, following a prescribed procedure: <ol style="list-style-type: none"> sensitizing exposing adhering to screen. observe safety precautions for handling chemicals. describe the various applications of stencils produced by indirect methods. 	<ul style="list-style-type: none"> Para-professionals provide sustained involvement with students having difficulty with this task. Teacher leads demonstration of techniques for preparing stencils by indirect methods. Students view filmstrip and illustrated text. Teacher encourages small peer group cooperation and inter-action.
Involved		
Productive		
Employable		
Task-Related Competencies		Instructional Materials
KNOWLEDGE A 3.7,9		Title
NUMBERS		Graphic Arts Chapter 6
APPLICATION		"Silkscreen Printing"
C 2a,5,8 PHYSICAL		13 16
D 1a,d 2a/b 3c,8		10 20

SUBCLUSTER: SCREEN PRINTING

TASK: Prepare stencils by indirect methods

Code: GCM - SP03

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts	Suggestions:
<p>Indirect</p> <p>Line border</p> <p>Positive (photographic)</p> <p>Film (transfer)</p> <p>Sensitizer</p> <p>Camel's hair brush</p> <p>Darkroom</p> <p>Amber color bottle</p> <p>Electric fan</p> <p>Printing frame</p> <p>Clamp</p> <p>Expose</p> <p>Photo flood lamp</p> <p>Check with vocational graphics teacher to learn commercial brands being used and obtain manufacturer's vocabulary.</p>	<p>Measure and visually estimate 2"-3" — width of brush or margin measurement</p> <p>12"-18" — distance of photo light from image</p> <p>Recognize time variance relative to light intensity — 1 1/2-3 minutes.</p> <p>Become sensitive to warm water — 100°-115°F, check with thermometer.</p>	<ul style="list-style-type: none"> Check with vocational graphics teacher to work out distance, time, light intensity formula or film manufacturer's exposure table.

Supportive Instructional Materials:

Graphic Arts by Carlsson
Chas. Bennett Co., Inc.

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> select different types of blockout materials. cut a paper frisket for a specific shaped block out area, following a prescribed procedure. spread and apply liquid blockouts, following a prescribed procedure for brushing, squeeze spreading, spraying, and cutting. 	<ul style="list-style-type: none"> Teacher encourages small peer group cooperation and inter-action. Teacher leads demonstration of techniques/procedures for blocking out screens. Students practice blocking out different shapes and areas on a dummy screen. Para-professionals provide sustained involvement with students having difficulty with this task.
Involved		
Productive		
Employable		
Task-Related Competencies KNOWLEDGE A 2,9 NUMBERS APPLICATION C 2a,5,8 PHYSICAL D 1a,c,d,f 2a/b 3c,8	Instructional Materials Title Graphic Arts Chapter 6	Media 13 Bib. 16

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
Blockout material	
Paper	
Glue	
Shellac	
Lacquer	
Photographic	
Emulsion	
Frisket	

Suggestions:

- Check with vocational graphic arts teacher to determine the particular trade names of the materials being used. Add these names to the language of the task, because these materials will usually be referred to by that name.

Supportive Instructional Materials:



Student Progress	Behavioral Task Knowledge/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> identify and describe the use of specific pieces of equipment used in flocking: <ol style="list-style-type: none"> flocking gun flock mounted screen frame flock adhesive flocking/spraying booth. follow a prescribed procedure in applying flock to textiles: <ol style="list-style-type: none"> use of a booth operating gun angle of spray excess flock. follow a prescribed procedure in applying selected surface treatments to textiles: <ol style="list-style-type: none"> hair spangles beads glitter. 	<ul style="list-style-type: none"> Para-professionals provide sustained involvement with students having difficulty with this task. Teacher leads demonstration of procedures/techniques for using flocking in screen printing. Students collect and display samples of surface substances used in screen printing. Teacher makes contact with <u>each</u> student during the class period.
Involved		
Productive		
Employable		

Task-Related Competencies

- KNOWLEDGE**
- A 2,3,9 NUMBERS
 - B 2 APPLICATION
 - C 2,5,8 PHYSICAL
 - D 1a,b,c 2a/b 3c,8

Instructional Materials

Title	Media	Bib.
		A

SUBCLUSTER: SCREEN PRINTING

TASK: Apply flock and surface substances

Code: GCM - SP05

Suggestions:

Basic Information for Cooperative Teaching

Language of the Task

- Flocking
- Flocking adhesive
- Hair
- Spangles
- Beads
- Glitter

Quantitative Concepts

See vocational graphics instructor to see if there are any needs other than to match numbers for correct color, etc.

Supportive Instructional Materials:

Student Name:

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. set-up basic jigs, guides, and equipment to produce multicopy prints by the silk screen process performing: <ol style="list-style-type: none"> a. fitting b. registering c. setting guides and jigs d. setting semiautomatic devises. 	<ul style="list-style-type: none"> • Students review Job 2 in workbook. • Teacher makes contact with <u>each</u> student during the class period. • Teacher leads small group demonstration of short cuts and procedures to multiple printing. • Students work in teams of two setting up and running multi-copy screen printing jobs.
Involved		
Productive		
Employable		

Task-Related Competencies

- KNOWLEDGE
- A 3,9
- NUMBERS
- APPLICATION
- C 2a,5,8
- PHYSICAL
- D 1a,b,d
2a/b
3c,8

Instructional Materials

Title

"Fundamentals of Silk Screen Process" Job 2

Media

13

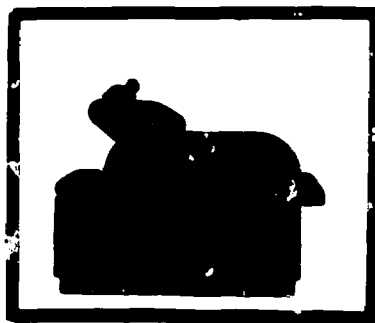
Bib.

17

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
<p>Multicolor Fitting Registering Transparent paper Blank stock Register guides Center Mask Register marks Proof print Solvent adhering film</p>	<p>Demonstrate the need for using three register guides—properly placed. Recognize the proportion 1 to 1 (1/2 glue to 1/2 water)</p>	

Supportive Instructional Materials:

OFFSET LITHOGRAPHY



INSTRUCTIONAL TASK MODULES

- OL01 Perform paste-up
- OL02 Perform darkroom procedures
- OL03 Operate darkroom equipment
- OL04 Operate copy camera
- OL05 Prepare a line negative
- OL06 Prepare a halftone
- OL07 Prepare a halftone using a contact screen
- OL08 Prepare and strip-up a flat
- OL09 Strip-up flats by selected techniques
- OL10 Complete imposition work
- OL11 Prepare an offset plate
- OL12 Load, operate, and unload offset presses

91/43

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods			
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and describe the function or nature of the paste-up process. 2. select and use the appropriate tools and materials for paste-up: <ol style="list-style-type: none"> a. drawing board b. T-square c. triangles d. scissors e. print trimmer f. rubber cement g. wax h. wax coating machine i. exacto knife j. ruling k. India ink l. snopake m. acetate overlays n. light table o. blakeout. 3. demonstrate a degree of skill in following a basic procedure in pasting-up copy: <ol style="list-style-type: none"> a. draw trim size marks on illustration board b. draw printed page size marks on paste-up c. draw in image lines for locating paste-up. 4. clean, maintain, and repair paste-up tools. 	<ul style="list-style-type: none"> • Para-professionals provide sustained involvement with students having difficulty with this task. • Teacher leads small group demonstration of procedures for using paste-up tools and equipment and performing paste-up. • Students view sound/filmstrip and illustrated materials. • Students use tools and equipment in performing actual paste-up of simple jobs using dummy paste-up sheet. 	<p>Task-Related Competencies</p> <p>KNOWLEDGE A 3,6,9</p> <p>NUMBERS B 2,4a,e</p> <p>APPLICATION C 2,5,8</p> <p>PHYSICAL D 1a,b,c,d 2a,b 3c,8</p>	<p>Instructional Materials</p> <p>Title</p> <p>Teacher-made mock-up</p> <p>"Fundamentals of Layout and Design" (2 parts)</p> <p>"Introduction to Graphic Design"</p> <p>"Laying Out a Flat" GA-21</p>	<p>Media Bib.</p> <p>2</p> <p>5</p> <p>4</p> <p>12</p>

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
<p>Trim size marks</p> <p>Gripper margin</p> <p>Image area</p> <p>Image lines</p> <p>Bleed</p> <p>Drawing board</p> <p>T-square</p> <p>Triangles</p> <p>Ruling pen</p> <p>India ink</p> <p>Rubber cement</p> <p>Wax coating machine</p> <p>Print trimmer</p> <p>Exacto knife</p>	<p>Relate inch rule to pica measurement, i.e. 6 picas per inch</p> <p>Measure the angles of the T-square with a protractor</p>	<ul style="list-style-type: none"> • The student should be familiar with the line gauge (printer's rule), both the inch and pica measurement. Check the student's ability to read fractions on the rule. • Teacher and deaf student should cooperatively develop some simple signs related to language of the task. • Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual). • Illustrations and information can be found on pages 46-53 of text, <u>Photo Offset Fundamentals</u>. • Students handle and observe the tools and equipment, while verbally discussing the names and uses of each.

Supportive Instructional Materials:

Photo Offset Fundamentals
Collection of labeled tools and information

TASK: Perform darkroom procedures

3: GCM - 0102

Student Name:

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods												
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. recognize the different types of standard darkroom procedures: <ol style="list-style-type: none"> a. preparation b. organization c. cleanliness d. protection. 2. demonstrate the following basic darkroom procedures: <ol style="list-style-type: none"> a. prepare chemicals and place in proper containers b. place developing trays in sequence c. maintain continual agitation in developing trays d. keep dust and dirt from accumulating e. keep skin away f. seal light-sensitive materials from light. 	<ul style="list-style-type: none"> • Students tour darkroom and instructor discusses general function and operation of equipment. • Teacher leads class discussion of photography processes and procedures occurring in the darkroom. • Students review illustrated text and handout materials. • Students view sound/slide program. 												
Involved														
Productive														
Employable														
	<p>Task-Related Competencies</p> <p>KNOWLEDGE A 3,7,9</p> <p>NUMBERS B 2,4a,b,c,d</p> <p>APPLICATION C 2,3,5,7</p> <p>PHYSICAL D 1a,c,d,f 2b,3a,c,8</p>	<p>Instructional Materials</p> <table border="1"> <thead> <tr> <th data-bbox="896 484 943 899">Title</th> <th data-bbox="896 153 943 484">Media</th> <th data-bbox="896 68 943 153">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="943 484 991 899">Handout sheets</td> <td data-bbox="943 153 991 484">16</td> <td data-bbox="943 68 991 153"></td> </tr> <tr> <td data-bbox="991 484 1038 899">"Line Photography"</td> <td data-bbox="991 153 1038 484">4</td> <td data-bbox="991 68 1038 153"></td> </tr> <tr> <td data-bbox="1038 484 1086 899">Photo Offset Fundamentals Chapter 11</td> <td data-bbox="1038 153 1086 484">13</td> <td data-bbox="1038 68 1086 153">18</td> </tr> </tbody> </table>	Title	Media	Bib.	Handout sheets	16		"Line Photography"	4		Photo Offset Fundamentals Chapter 11	13	18
Title	Media	Bib.												
Handout sheets	16													
"Line Photography"	4													
Photo Offset Fundamentals Chapter 11	13	18												

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
Developer	Measure precise quantities of liquid using graduated flasks: oz., pt., qt., gallon
Stop bath	Determine the number of: pints in a quart, quarts in a gallon, ounces in a quart, by actually using graduates and liquids
Fix	Learn meaning of the following ratios and proportions: 3 to 1--3 parts water, 12 oz. of water to 1 part developer (12:1 ratio), 4 oz. of chemical equal to 16 oz. of water (4:1 ratio)
Safe light	Check with vocational education teacher for other often used proportions
Process camera	
Negative	
Gray scale	
Graduate	
Rinse	
Negative	
Dryer	

Suggestions:

- Give student opportunity to study Chapter 11 and help that student interpret the lesson.
- Stress importance of cleanliness, keeping materials organized, and keeping jars and bottles tightly sealed.
- Teacher and deaf student should cooperatively develop some simple signs.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).

Supportive Instructional Materials:

Photo Offset Fundamentals by McKnight and McKnight
Graduates, variety of sizes

TASK: Operate darkroom equipment

Student Name: _____

File: GCM - OLO3

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the different pieces of equipment found in a darkroom: <ol style="list-style-type: none"> a. basic camera b. electrical outlets (receptacles) c. exhaust fan d. temperature control sink e. thermometer and timer f. safelights g. contact vacuum frame h. enlarger i. dryer. 2. demonstrate a degree of skill in operating darkroom equipment (camera discussed in OLO4). 3. provide care and basic maintenance for darkroom equipment. 	<ul style="list-style-type: none"> • Teacher leads small group discussions of procedures for operating darkroom equipment. • Student label parts of camera illustrated on handout sheets. • Teacher matches successful students who are interested in helping those having difficulty. • Para-professionals provide sustained involvement with students having difficulty with this task.
Involved		
Productive		
Employable		
Task-Related Competencies	Instructional Materials	Media Bib.
KNOWLEDGE A 3,7,9	Handout sheets	16
NUMBERS B 2,4a,b,c,d	"Horizontal Process Camera"	12 12
APPLICATION C 2,3,5,7		
PHYSICAL D 1a,c,d,f 2b,3a.c.g		

SUBCLUSTER: OFFSET LITHOGRAPHY

de: GCM - 0L03 TASK: Operate darkroom equipment

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
<p>Exposure</p> <p>F Stop</p> <p>Reduction</p> <p>Enlargement</p> <p>Flash</p> <p>Timer</p> <p>Percentage wheel</p>	<p>Accurate measurement of time - minutes and half minutes in seconds, etc.</p> <p>Interpret meaning of lens (f Stop) adjustment in relation to light</p> <p>See graphics teacher to identify necessary timer settings</p> <p>Measuring and cutting of film</p> <p>Interpret percentages chart for enlargement and reduction of pictures - see graphics instructor</p>	<ul style="list-style-type: none"> It is necessary to work closely with the graphics teacher so that the cooperative instruction be relative to the need. Timing of supportive help is very important. Cleanliness is important in the darkroom.

Supportive Instructional Materials:

- Photo-Offset Fundamentals by McKnight and McKnight
- Percentage chart
- Stop watch

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods															
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> identify the two main types of copy camera: <ol style="list-style-type: none"> vertical horizontal. list the component parts of the copy camera: <ol style="list-style-type: none"> lighting system copy board lens bellows camera back viewer stops. describe the function and basic operation of the camera parts. follow a prescribed procedure in setting up and operating a copy camera: <ol style="list-style-type: none"> centering set diaphragm adjust tapes position ground glass open shutter center copy board center film on camera back activate vacuum close camera back set exposure time. follow the camera manufacturer's specifications for cleaning and maintenance of camera. 	<ul style="list-style-type: none"> Teacher demonstration of camera operation procedures. Students role play or return demonstration of camera operation procedures. Students review illustrated text materials. Teacher matches successful students who are interested in helping those having difficulty. Teacher encourages small peer group cooperation and interaction. 															
Involved																	
Productive																	
Employable																	
Task-Related Competencies	<p>KNOWLEDGE A 2,3,7,9</p> <p>NUMBERS B 2,4a,d,5,6</p> <p>APPLICATION C 2,5,8</p> <p>PHYSICAL D 1a,c,d 2b 3a,c,g</p>	<p>Instructional Materials</p> <table border="1"> <thead> <tr> <th>Title</th> <th>Media</th> <th>Bib.</th> </tr> </thead> <tbody> <tr> <td>"Enlarging and Reduction" GA9</td> <td>12</td> <td>12</td> </tr> <tr> <td>"Enlarging and Reduction Scale" GA10</td> <td>12</td> <td>12</td> </tr> <tr> <td>"Aperture" GA18</td> <td>12</td> <td>12</td> </tr> <tr> <td><u>Photo Offset Fundamentals</u> Chapter 8</td> <td>13</td> <td>18</td> </tr> </tbody> </table>	Title	Media	Bib.	"Enlarging and Reduction" GA9	12	12	"Enlarging and Reduction Scale" GA10	12	12	"Aperture" GA18	12	12	<u>Photo Offset Fundamentals</u> Chapter 8	13	18
Title	Media	Bib.															
"Enlarging and Reduction" GA9	12	12															
"Enlarging and Reduction Scale" GA10	12	12															
"Aperture" GA18	12	12															
<u>Photo Offset Fundamentals</u> Chapter 8	13	18															

Basic Information for Cooperative Teaching

Language of the Task

Vertical camera
 Horizontal camera
 Copy board
 Lens
 Bellows
 Camera back or vacuum back
 F Stop

Quantitative Concepts

Construct vertical and horizontal lines
 Read F Stops (amount of lens opening)
 Large openings-small numbers
 Small openings-large numbers
 Determining and setting shutter speeds of litho camera: 20 secs., 1 min., 2 1/2 min.
 Accurately match numbers to a gauge guide for focus

Suggestions:

- It is essential that there be close communication with graphics teacher so that supportive instruction can be relative to the students' needs in completing this task.

Supportive Instructional Materials:

Photo Offset Fundamentals by McKnight and McKnight
 Camera and/or mock-ups that are labeled

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods								
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and describe the uses of line negatives. 2. name several check list items to look for in inspecting copy. 3. demonstrate the procedures for placing copy on copy board. 4. demonstrate the procedures for adjusting all copy camera settings for a line negative: <ol style="list-style-type: none"> a. lens settings b. filters c. lighting devices d. tape settings e. focusing. 5. demonstrate the procedures for loading the copy camera. 6. list and suggest criteria for selecting specific exposure times. 7. remove and develop exposed film from copy camera. 8. list criteria to be observed or checked in inspecting line negatives: <ol style="list-style-type: none"> a. overexposure b. cleanliness c. pinholes d. care in handling negatives. 	<ul style="list-style-type: none"> • Students review illustrated text materials. • Teacher leads small group demonstration of procedures for preparing a line negative. • Students follow a teacher demonstration with "hands-on" supervision. • Students individually set up their own jobs. • Teacher matches successful students who are interested in helping those having difficulty. 								
Involved										
Productive										
Employable										
		<table border="1"> <thead> <tr> <th data-bbox="975 1113 1026 1297">Task-Related Competencies</th> <th data-bbox="975 1297 1026 2003">Instructional Materials Title</th> <th data-bbox="1026 1297 1070 2003">Media</th> <th data-bbox="1070 1297 1419 2003">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="975 1113 1026 1297"> KNOWLEDGE A 3,7,9 NUMBERS B 2,4a,d APPLICATION C 2,5,8 PHYSICAL D 1a,c,d 2a/b 3c,8 </td> <td data-bbox="975 1297 1026 2003"> Photo Offset Fundamentals Chapter 8 </td> <td data-bbox="1026 1297 1070 2003">13</td> <td data-bbox="1070 1297 1419 2003">18</td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials Title	Media	Bib.	KNOWLEDGE A 3,7,9 NUMBERS B 2,4a,d APPLICATION C 2,5,8 PHYSICAL D 1a,c,d 2a/b 3c,8	Photo Offset Fundamentals Chapter 8	13	18
Task-Related Competencies	Instructional Materials Title	Media	Bib.							
KNOWLEDGE A 3,7,9 NUMBERS B 2,4a,d APPLICATION C 2,5,8 PHYSICAL D 1a,c,d 2a/b 3c,8	Photo Offset Fundamentals Chapter 8	13	18							

Basic Information for Cooperative Teaching

Language of the Task

Develop
Emulsion
Exposure
Line negatives or line shot
Cameraman's guide

Quantitative Concepts

Recognize the meaning of horizontal and vertical relative to a sheet of paper

Suggestions:

- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).
- Demonstration of correct and incorrect procedures to highlight the importance of correctness.
- Allow students to read chapter assignment - give supportive help.
- Keep close contact with the graphics teacher so supportive information can be relative to student's needs.

Supportive Instructional Materials:

Photo Offset Fundamentals
Examples of line negatives and uses

Student Name: _____

Student Progress Introduced Involved Productive Employable	Behavioral Task Knowledges/Task Skills Given the necessary tools, materials, equipment, and requisite knowledge, the learner will: <ol style="list-style-type: none"> 1. define and describe the purpose and use of halftones. 2. describe the unique characteristics of the halftone photography process: <ol style="list-style-type: none"> a. inking b. duplication c. shading. 3. demonstrate the procedures for preparing and using a levi or glass screen: <ol style="list-style-type: none"> a. definition b. positioning procedure c. care and maintenance. 4. select and specify different glass screen ratings: <ol style="list-style-type: none"> a. lines per inch b. range. 5. follow a prescribed procedure to expose film using a glass screen. 6. follow a prescribed procedure for developing a halftone: <ol style="list-style-type: none"> a. prepare developer b. agitate c. maintain proper temperature d. handle negatives with caution. 	Instructional Methods <ul style="list-style-type: none"> ● Para-professionals lead small group demonstration and discussion of halftone preparation processes and their uses - have student lead the group. ● Teacher prepares a slide series on halftone photography for student use. ● Students review illustrated text materials.
Task-Related Competencies KNOWLEDGE A 3,7,9 NUMBERS B 2,4a,d,e APPLICATION C 2,5,8 PHYSICAL D 1a,c,d 2a/b 3c,8	Instructional Materials Title "Halftone Photography" <u>Photo Offset Fundamentals</u>	Media Bib. 11 18 13

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
Contact screen Flash Halftone Agitate Glass screen	Learn to read the table on Equivalency Density Factors Identify contact screen ratings: 80 line 120 line 140 line
Suggestions: <ul style="list-style-type: none"> Teacher and deaf student should cooperatively develop some simple signs related to language of the task. Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual). Look at a variety of halftones and discuss, relate to class work and text book information. Provide opportunity for student to review reading assignment. Give encouragement and help. 	

Supportive Instructional Materials:

- Photo Offset Fundamentals
- Examples of halftones with explanations of difference in preparation
- Table of Equivalency Density Factors

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> identify and describe the different types of contact screens: <ol style="list-style-type: none"> magenta gray gravure. identify and list the different types of ratings of contact screens: <ol style="list-style-type: none"> lines per inch size. follow a prescribed procedure in exposing film employing a contact screen: <ol style="list-style-type: none"> types of exposure desired contrasts positioning expose highlight dots developing procedures critical developing temperatures. list and discuss the advantages and disadvantages of using the contact screen to produce a halftone: <ol style="list-style-type: none"> resolution distance vacuum cost efficiency in use. 	<ul style="list-style-type: none"> Teacher leads small group demonstration of procedures/ techniques for using a contact screen. Students individually prepare a halftone using a contact screen. Teacher matches successful students who are interested in helping those having difficulty. Para-professionals provide sustained involvement with students having difficulty with this task.
Involved		
Productive		
Employable		

SUBCLUSTER: OFFSET LITHOGRAPHY

File: GCM - 0107 TASK: Prepare a halftone using a contact screen

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
Gray or magenta screen Lines per inch Developing temperature	Determine the number of lines per inch ratings of screens, i.e. 80, 110, 135 Read a thermometer range between 65° - 100° F within 1° accuracy
Suggestions: <ul style="list-style-type: none">• Teacher and deaf student should cooperatively develop some simple signs related to language of the task.• Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).• Important to keep supportive help in line with needs of the student.	

Supportive Instructional Materials:
Thermometer
Screens

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> identify and describe the distinguishing elements of an offset flat. select the appropriate tools and material for stripping-up a flat: <ol style="list-style-type: none"> goldenrod negatives opaque brushes exacto knife red litho tape light table brown-line print paper. follow a prescribed procedure to strip-up a line negative: <ol style="list-style-type: none"> obtain dummy copy position goldenrod on light table draw in reference lines trim negatives to size required for flat opaque-out; or blackout all pin holes or light holes transfer measurements from dummy to flat position negatives on flat tape negatives to goldenrod cut windows in flat with exacto knife remove all goldenrod in front of register, trim and fold marks expose flat to brown print paper as a check. 	<ul style="list-style-type: none"> Teacher assists students to strip-up a flat; then students individually prepare and strip-up their own flat. Students review illustrated text materials and transparencies. Teacher concentrates his effort with students having difficulty Teacher matches successful students who are interested in helping those having difficulty.
Involved		
Productive		
Employable		

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts	Suggestions:
<p>Goldenrod or masking sheet Opaque Red litho tape Light or stripping table Scribing Taped Reverse Relative positions Windows Cut out Stripping Developed</p>	<p>The student will have to use measurements extensively in this task, measuring inches to 1/4", 1", 2" Determine proportion of windows relative to portion of negative to be exposed.</p>	<ul style="list-style-type: none"> Review Chapter 12 of the text with the student. Give supportive help and assist in interpretation. Supportive teacher must keep close contact with vocational teacher. Teacher and deaf student should cooperatively develop some simple signs related to language of the task. Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).

Supportive Instructional Materials:

Photo Offset Fundamentals

SUBCLUSTER: OFFSET LITHOGRAPHY

TASK: Prepare and strip-up a flat

Code: GCM - OL08

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods															
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 4. follow a prescribed procedure for stripping-up a halftone negative: <ol style="list-style-type: none"> a. exposure b. opaque c. positioning d. trimming e. prepare a brown-line print to insure alignment of flats. 																
Involved																	
Productive																	
Employable																	
		<table border="1"> <thead> <tr> <th data-bbox="1009 880 1053 1118">Task-Related Competencies</th> <th colspan="2" data-bbox="1009 51 1053 880">Instructional Materials</th> </tr> <tr> <td data-bbox="1053 880 1098 1118">KNOWLEDGE</td> <td data-bbox="1053 51 1098 880">Title</td> <td data-bbox="1053 51 1098 880">Media</td> </tr> <tr> <td data-bbox="1098 880 1142 1118">NUMBERS</td> <td data-bbox="1098 51 1142 880"></td> <td data-bbox="1098 51 1142 880"></td> </tr> <tr> <td data-bbox="1142 880 1187 1118">APPLICATION</td> <td data-bbox="1142 51 1187 880"></td> <td data-bbox="1142 51 1187 880"></td> </tr> <tr> <td data-bbox="1187 880 1231 1118">PHYSICAL</td> <td data-bbox="1187 51 1231 880"></td> <td data-bbox="1187 51 1231 880"></td> </tr> </thead></table>	Task-Related Competencies	Instructional Materials		KNOWLEDGE	Title	Media	NUMBERS			APPLICATION			PHYSICAL		
Task-Related Competencies	Instructional Materials																
KNOWLEDGE	Title	Media															
NUMBERS																	
APPLICATION																	
PHYSICAL																	

SUBCLUSTER:

TASK:

Basic Information for Cooperative Teaching

Language of the Task

Quantitative Concepts

Suggestions:

Supportive Instructional Materials:

SUBCLUSTER: OFFSET LITHOGRAPHY

TASK: Strip-up flats by selected techniques

Student Name: _____



Code: GCM - OL09

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> follow a prescribed procedure for inserting negative sections: <ol style="list-style-type: none"> strip film overlay inserts window inserts. follow a prescribed procedure for adding rules and boarders to negatives: <ol style="list-style-type: none"> trimming scribing lines care/retouching. follow a prescribed procedure for adding tint screens to negatives. 	<ul style="list-style-type: none"> Para-professionals provide sustained involvement with students having difficulty with this task. Teacher leads small group demonstration of procedures for stripping-up flats with selected techniques. Students individually prepare a flat by a specified method. Students review illustrated text materials. Teacher encourages small peer group cooperation and interaction.
Involved		
Productive		
Employable		
Task-Related Competencies	<p>KNOWLEDGE A 2,3,5,6,7</p> <p>NUMBERS B 2,4a,i</p> <p>APPLICATION C 2,5,8</p> <p>PHYSICAL D 1a,b,d 2a 3c,g</p>	<p>Instructional Materials</p> <p>Title</p> <p><u>Photo Offset Fundamentals</u> Chapter 12</p> <p>Media 13</p> <p>Bib. 18</p>

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Reverse</p> <p>Emulsion</p> <p>Base</p> <p>Unreadable</p> <p>Duller</p> <p>Transparent</p> <p>Opaquing</p> <p>Halation</p> <p>Taping</p> <p>Flat</p> <p>Scribing</p> <p>Straightedge</p>	<p>Trim 1/4" accurately from edge of an image</p> <p>Draw a series of lines 1/4" in length</p> <p>Note: this activity is reinforcing the scribing of negatives</p>

Suggestions:

- Teacher and deaf student should cooperatively develop some simple signs.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).
- Visit the graphics lab and observe a flat ready for processing.

Supportive Instructional Materials:

Photo Offset Fundamentals
 Examples of flats in various stages

SUBCLUSTER: OFFSET LITHOGRAPHY

TASK: Complete imposition work

Code: GCM - 0110

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods			
		Task-Related Competencies	Instructional Materials		
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the basic information needed for imposition: <ol style="list-style-type: none"> a. stock size b. folding information <ol style="list-style-type: none"> 1) binding type 2) margin size 3) typed page size 4) trimmed size 5) untrimmed size. 2. describe and demonstrate the arrangement and positioning of pages during imposition: <ol style="list-style-type: none"> a. working dummy developed b. arrangement of signatures. 3. follow a prescribed procedure for completing imposition work by four identified processes: <ol style="list-style-type: none"> a. sheetwise b. step and repeat burn c. work and tumble d. work and turn. 	Title	Media	Bib.	
Productive			<p>KNOWLEDGE A 3,6,7,9</p> <p>NUMBERS B 2,4a,d,1 5</p> <p>APPLICATION C 2,5,8</p> <p>PHYSICAL D 1a,b,d 2a/b 3c,8</p>	<p>Photo Offset Fundamentals Chapter 12</p> <p>"Imposition Techniques" (Developed by: Lanny R. Johnston)</p>	13
Involved				14	30

SUBCLUSTER: OFFSET LITHOGRAPHY

File: GCM-0110 TASK: Complete imposition work

Language of the Task	Quantitative Concepts	Suggestions:
<p>Press sheet</p> <p>Press run</p> <p>Images</p> <p>Lay out</p> <p>"Four up"</p> <p>Four page folder</p> <p>Job</p>	<p>Read and use ruler to within 1/16" accuracy</p>	<ul style="list-style-type: none"> • Teacher and deaf student should cooperatively develop some simple signs related to language of the task. • Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual). • Chapter 12 - <u>Photo Offset Fundamentals</u> can serve as back up information when necessary.

Supportive Instructional Materials:

Photo Offset Fundamentals

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																				
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and describe the purpose or use of offset plates. 2. identify by name the different types of offset plates: <ol style="list-style-type: none"> a. surface plates b. deep-etch c. relief. 3. name the different materials commonly found in offset plates: <ol style="list-style-type: none"> a. paper b. aluminum c. plastic d. bimetal e. trimetal. 4. recognize the required precautions for protecting the sensitivity of plate coatings. 5. prepare an offset plate to press run: <ol style="list-style-type: none"> a. exposure of plate to light b. desensitize plate c. develop plate using lacquer material d. coat plate to eliminate oxidation. 	<ul style="list-style-type: none"> • Teacher concentrates his effort with students having difficulty. • Teacher leads small group demonstration of plate burning. • Students individually burn and prepare their own plate(s). • Students review illustrated text materials and handouts on additive and subtractive plates. • Teacher encourages small group cooperation and interaction. 																				
Involved																						
Productive																						
Employable		<table border="1"> <thead> <tr> <th data-bbox="860 878 942 1113">Task-Related Competencies</th> <th data-bbox="860 235 942 878">Instructional Materials</th> <th data-bbox="860 61 942 235">Media</th> <th data-bbox="860 61 942 235">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="942 878 1046 1113"> KNOWLEDGE A 3,5,6 </td> <td data-bbox="942 235 1046 878"> Photo Offset Fundamentals Chapter 13 </td> <td data-bbox="942 61 1046 235">13</td> <td data-bbox="942 61 1046 235">18</td> </tr> <tr> <td data-bbox="1046 878 1150 1113"> NUMBERS N 2,4a,b,c,d,i 5,6 </td> <td data-bbox="1046 235 1150 878"> "Additive Plates" "Subtractive Plates" (Developed by Lanny R. Johnston) </td> <td data-bbox="1046 61 1150 235">14</td> <td data-bbox="1046 61 1150 235">30</td> </tr> <tr> <td data-bbox="1150 878 1253 1113"> APPLICATION C 2,3,5,8 </td> <td data-bbox="1150 235 1253 878"></td> <td data-bbox="1150 61 1253 235"></td> <td data-bbox="1150 61 1253 235"></td> </tr> <tr> <td data-bbox="1253 878 1357 1113"> PHYSICAL D 1a,b,c,d 2a/b 3c,f,8 </td> <td data-bbox="1253 235 1357 878"></td> <td data-bbox="1253 61 1357 235"></td> <td data-bbox="1253 61 1357 235"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials	Media	Bib.	KNOWLEDGE A 3,5,6	Photo Offset Fundamentals Chapter 13	13	18	NUMBERS N 2,4a,b,c,d,i 5,6	"Additive Plates" "Subtractive Plates" (Developed by Lanny R. Johnston)	14	30	APPLICATION C 2,3,5,8				PHYSICAL D 1a,b,c,d 2a/b 3c,f,8			
Task-Related Competencies	Instructional Materials	Media	Bib.																			
KNOWLEDGE A 3,5,6	Photo Offset Fundamentals Chapter 13	13	18																			
NUMBERS N 2,4a,b,c,d,i 5,6	"Additive Plates" "Subtractive Plates" (Developed by Lanny R. Johnston)	14	30																			
APPLICATION C 2,3,5,8																						
PHYSICAL D 1a,b,c,d 2a/b 3c,f,8																						

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Offset plate</p> <p>Styles of plate ends</p> <p>Burn a plate</p> <p>Gumming</p> <p>Lacquer</p> <p>Subtractive plate</p> <p>R,K,E,S, plates</p> <p>Image</p> <p>Ink</p> <p>Print</p> <p>Transfer</p> <p>Plate ends</p> <p>straight</p> <p>round hole-pin bar</p> <p>oval hole-slotted</p> <p>looped hole-serrated</p> <p>surface grain</p> <p>chemical graining</p>	<p>Set time on a clock or timer in minutes, i.e. 1 1/2, 2 min., 2 1/2</p>

Suggestions:

- It will probably be hard for the student to gain an understanding of this task from the text, but he should be familiar with process and terms in this chapter.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).

Supportive Instructional Materials:

Photo Offset Fundamentals

SUBCLUSTER: OFFSET LITHOGRAPHY

TASK: Load, operate and unload offset presses

Student Name: _____

Code: GCM - 0L12

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods			
		Task-Related Competencies	Instructional Materials Title	Media Bib.	
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> Identify the component parts of an offset press: <ol style="list-style-type: none"> master cylinder blanket cylinder impression cylinder grippers ink form rollers molleton form rollers feed table delivery table ink duct roller water duct roller water fountain ink fountain. Identify and describe the operation of machine controls on the A.B. Dick offset press: <ol style="list-style-type: none"> aquamatic inking unit switch vacuum buckle speed. Identify and describe the operation of press feeder unit on the A.B. Dick offset press: <ol style="list-style-type: none"> suction cups pile side guide rear paper guide paper height guide forward rollers 	<ul style="list-style-type: none"> Students work in teams setting up and operating the press Teacher leads small group demonstration of offset press operation procedures Students label parts of press illustrated on handout sheets Students review illustrated text materials and press operation manuals Para-professionals provide sustained involvement with students having difficulty with this task 	<p>"Offset Systems" GA25-29</p> <p>Press manuals</p> <p><u>Photo Offset Fundamentals</u> Chapters 16-19</p>	<p>12 12</p> <p>14</p> <p>12 18</p>	
Involved					<p>KNOWLEDGE A 1,2,3,7,9</p> <p>NUMBERS B 4(all) 5</p> <p>APPLICATION C 5,6,8</p> <p>PHYSICAL D 1a,b,c,d,f 2b 3c,f,g</p>
Productive					
Employable					

SUBCLUSTER: OFFSET LITHOGRAPHY

Code: GCM - 0112 **TASK:** Load, operate and unload offset presses

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Basic parts of an offset press (Check with graphics teacher to determine the types of presses in the lab, and identify that model press with the student(s) will be working on)</p>	<p>Recognize ratios for mixing chemicals in the press water system (5:1 water-chemical) (7:1)</p>

Suggestions:

- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).

Note: This task represents the culmination of all preceding tasks. Specific concepts may need to be reinforced for individual students.

Supportive Instructional Materials:

TASK: Load, operate and unload offset presses

Student Name: _____

GCM - 0112

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods		
		Task-Related Competencies	Instructional Materials Title	Media Bib.
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ul style="list-style-type: none"> f. bail bar g. paper feed. <p>4. identify and describe the operation of the delivery and printing units of the A.B. Dick offset press:</p> <ul style="list-style-type: none"> a. printing unit <ul style="list-style-type: none"> 1) automatic unit 2) inking system b. delivery system <ul style="list-style-type: none"> 1) chain delivery 2) front stop 3) jogging guides 4) ejector 5) retainer straps. <p>5. demonstrate the procedures for setting up and operating the A.B. Dick offset press:</p> <ul style="list-style-type: none"> a. position paper in center of feeding unit b. set pile height of supply c. add ink to fountain d. turn on duplicator e. add fountain solution to fountain f. place plate on cylinder g. ink the plate h. turn duplicator on and close plate and blanket cylinder i. adjust buckle control j. register and adjust image on page k. adjust delivery chute l. balance ink and water volumes 	KNOWLEDGE		
Involved		NUMBERS		
Productive		APPLICATION		
Employable		PHYSICAL		

SUBCLUSTER: _____

TASK: _____

Basic Information for Cooperative Teaching

Language of the Task

Quantitative Concepts

Suggestions:

Supportive Instructional Materials:

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ul style="list-style-type: none"> m. adjust counter and print n. turn off ink then water o. turn off vacuum pump and press p. remove plate from cylinder q. place clean-up mat on cylinder r. drain fountain solution s. clean ink fountain t. add solvent to ink rollers and drop rollers onto clean-up mat u. clean-up blanket cylinder. 	
Involved		
Productive		
Employable		
Task-Related Competencies		Instructional Materials
KNOWLEDGE		Title
NUMBERS		Media Bib.
APPLICATION		
PHYSICAL		

SUBCLUSTER:

TASK:

Basic Information for Cooperative Teaching

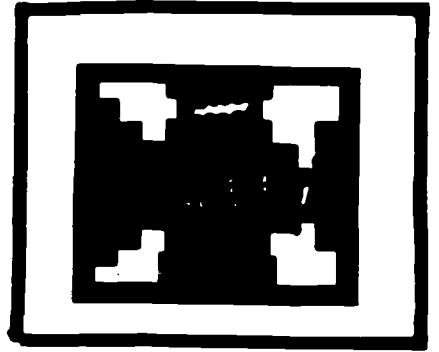
Language of the Task

Quantitative Concepts

Suggestions:

Supportive Instructional Materials:

LETTERPRESS PRINTING



INSTRUCTIONAL TASK MODULES

- LP01 Understands type nomenclature
- LP02 Use the printer's measuring system
- LP03 Identify and classify type
- LP04 Handle type
- LP05 Use a composing stick
- LP06 Pull proofs
- LP07 Corrects forms
- LP08 Make-up and tie-up forms
- LP09 Cut and use leads, slugs, and rules
- LP10 Lock-up forms
- LP11 Prepares press platen
- LP12 Implements make-ready techniques and processes
- LP13 Completes bank work
- LP14 Uses grippers, fenders, and fingers
- LP15 Troubleshoot general problems at letterpress
- LP16 Recognize various plates used for letterpress
- LP17 Select papers for letterpress
- LP18 Clean and maintain type
- LP19 Break forms and distribute type
- LP20 Clean and maintain presses

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																								
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the various parts of a piece of type <ol style="list-style-type: none"> a. feet b. face c. serif d. shoulder e. neck or beard f. counter g. hairline h. groove i. nick j. body k. height (.918 inch). 2. explain the purpose of each of the identified parts of a piece of type. 3. place type in the proper positioning for printing. 4. describe the process of casting type by foundry and machine. 	<ul style="list-style-type: none"> • Students review an overhead transparency and wall chart with parts of a piece of type labeled. • Students fill in a worksheet labelling the parts of a piece of type. • Students review type nomenclature from illustrated text materials. • Teacher concentrates his effort with students having difficulty 																								
Involved																										
Productive																										
Employable																										
		<table border="1"> <thead> <tr> <th data-bbox="845 901 927 1129">Task-Related Competencies</th> <th data-bbox="845 259 927 901">Instructional Materials Title</th> <th data-bbox="845 72 927 259">Media</th> <th data-bbox="845 72 927 259">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="927 901 1016 1129">KNOWLEDGE A 9</td> <td data-bbox="927 259 1016 901">"Foundry-type Parts" GA13</td> <td data-bbox="927 72 1016 259">12</td> <td data-bbox="927 72 1016 259">12</td> </tr> <tr> <td data-bbox="1016 901 1105 1129">NUMBERS B 2</td> <td data-bbox="1016 259 1105 901">"Letterpress Lock Up" GA20 "Type Measurement Parts" GA15</td> <td data-bbox="1016 72 1105 259">12</td> <td data-bbox="1016 72 1105 259">12</td> </tr> <tr> <td data-bbox="1105 901 1194 1129">APPLICATION C 2,5</td> <td data-bbox="1105 259 1194 901"><u>Graphic Arts Chapters 2,3</u></td> <td data-bbox="1105 72 1194 259">13</td> <td data-bbox="1105 72 1194 259">16</td> </tr> <tr> <td data-bbox="1194 901 1283 1129">PHYSICAL D 1a,2a,3c</td> <td data-bbox="1194 259 1283 901"><u>"Printing Through the Ages"</u> <u>Practice of Printing</u></td> <td data-bbox="1194 72 1283 259">8</td> <td data-bbox="1194 72 1283 259">26</td> </tr> <tr> <td data-bbox="1283 901 1439 1129"></td> <td data-bbox="1283 259 1439 901">AFT Wall Chart</td> <td data-bbox="1283 72 1439 259">14</td> <td data-bbox="1283 72 1439 259">16</td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials Title	Media	Bib.	KNOWLEDGE A 9	"Foundry-type Parts" GA13	12	12	NUMBERS B 2	"Letterpress Lock Up" GA20 "Type Measurement Parts" GA15	12	12	APPLICATION C 2,5	<u>Graphic Arts Chapters 2,3</u>	13	16	PHYSICAL D 1a,2a,3c	<u>"Printing Through the Ages"</u> <u>Practice of Printing</u>	8	26		AFT Wall Chart	14	16
Task-Related Competencies	Instructional Materials Title	Media	Bib.																							
KNOWLEDGE A 9	"Foundry-type Parts" GA13	12	12																							
NUMBERS B 2	"Letterpress Lock Up" GA20 "Type Measurement Parts" GA15	12	12																							
APPLICATION C 2,5	<u>Graphic Arts Chapters 2,3</u>	13	16																							
PHYSICAL D 1a,2a,3c	<u>"Printing Through the Ages"</u> <u>Practice of Printing</u>	8	26																							
	AFT Wall Chart	14	16																							

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Face</p> <p>Shoulder</p> <p>Counter</p> <p>Nick</p> <p>Groove</p> <p>Feet</p> <p>Pinmark</p> <p>Body or shank</p> <p>Neck or beard</p> <p>Stem</p> <p>Serif</p> <p>Shoulder</p> <p>Hairline</p> <p>Caps (uppercase)</p> <p>Lower case</p>	<p>All type is "type high", a standard distance from the foot to the type face</p>

Suggestions:

- See Graphic Arts by Carlsen for an illustration of language of the task.
- Drill deaf student extensively on language of the task.
- Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Use the type character sheet to help the student with spelling and pronunciation of words.

Supportive Instructional Materials:

"Graphic Arts Training in Schools" - Addressograph-Multigraph Corporation, Cleveland, Ohio 47117
Practice of Printing - Polk
 AFT Wall Chart

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> Identify and describe the relationship between linear composing measurements: <ol style="list-style-type: none"> the pica the nonpareil the point comparison to inch. Identify the component part and procedure for using a composing stick: <ol style="list-style-type: none"> half pica lever calibrations clamp micrometer-adjusted stick. Identify and describe the relationship between area composing measurements: <ol style="list-style-type: none"> the en the em multiple em quads 3-em space 4-em space 5-em space. 	<ul style="list-style-type: none"> Students review simplified handout sheets on measuring system. Students handle and adjust line gauges as teacher discusses its use. Teacher concentrates his effort with students having difficulty. Teacher matches successful students who are interested in helping those having difficulty.
Involved		
Productive		
Employable		
Task-Related Competencies	<p>KNOWLEDGE A 1,6</p> <p>NUMBERS B 4a,5a</p> <p>APPLICATION C 2,5</p> <p>PHYSICAL D 1a,b,c,d 2a/b 3c,8</p>	Instructional Materials
		Title
		Media
		Bib.
		12
		12
		13
		16

Basic Information for Cooperative Teaching

Language of the Task

Quantitative Concepts

Point

6 picas = 1 inch

Pica

72 points = 1 inch

Em

12 points = 1 pica

Em quad

Em is the square of the type body of any size type

Space

En is half an em

Em space

Em-quad is a multiple of an em

En

Em-space is a fractional part of an em

Multiple

Translate printer's terms for measurement into inch terminology. In view of current trends, the teacher may want to consider metric measurements

Half

Fractional part

Suggestions:

- Most special education teachers do not understand the language of the printer so check with the vocational graphic arts teacher to determine his needs.
- A review of the text may give the student a better understanding of the task.
- Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Drill deaf student extensively on language of the task.

Supportive Instructional Materials:

- Graphic Arts by Carlsen
- Line gauge
- Composing stick

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods		
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify specific type faces from a variety of pieces of printed material: <ol style="list-style-type: none"> a. script b. Roman c. san serif d. italic e. display/novelty f. block letter. 2. identify type by the following: <ol style="list-style-type: none"> a. by size b. by broad classes c. script faces divided d. novelty faces divided e. Roman faces divided. 	<ul style="list-style-type: none"> • Teacher leads class discussion of the historical development of different type styles available in lab. • Students prepare and display samples of all type faces available in lab. • Students review illustrated text materials. 		
Involved			Productive	Employable
Instructional Materials				
Task-Related Competencies		Title	Media	Bib.
<p>KNOWLEDGE</p> <p>A 1,6 NUMBERS B 4a</p> <p>APPLICATION</p> <p>C 2 PHYSICAL D 1a, 2a, 3c,8</p>		<p>Graphic Arts Chapter 2</p>	13	16

Basic Information for Cooperative Teaching

Language of the Task

Point sizes

Face

California job case

Quantitative Concepts

Visualize the different sized type by working with a composing stick, then relate points, etc., to inches.

Suggestions:

- Material under task skills could be pointed out with the use of text.
- Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.

Supportive Instructional Materials:

Graphic Arts by Carlsen

SUBCLUSTER: LETTERPRESS PRINTING

TASK: Handle type

Code: GCM - LP04

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify specific compartments of the California job case with accuracy: <ol style="list-style-type: none"> a. major divisions b. subdivisions c. caps (upper case) d. lower case e. figures f. ligatures g. punctuation marks h. spacing pieces. 2. properly remove, handle, and replace job case from storage bank. 3. recognize and observe specific safety precautions related to handling pieces of type. 	<ul style="list-style-type: none"> • Teacher demonstrates the use and care of California job case. • Students review teacher-prepared handout on California job case and illustrated text materials. • Students practice learning the California job case by distributing a variety of pre-set jobs.
Involved		
Productive		
Employable		
Task-Related Competencies		Instructional Materials
KNOWLEDGE A 1,6		"California job case"
NUMBERS		Graphic Arts Chapter 2
APPLICATION		
C 2		
PHYSICAL		
D 1a,b,c,d 2a/b 3c,8		
		Media
		12
		13
		12
		16



Basic Information for Cooperative Teaching

Language of the Task

Caps or upper case
 Lower case
 California job case
 Composing stick
 Leads and slugs
 Hell box
 Copy
 Pull a proof /galley proof

Quantitative Concepts

Suggestions:

- Ask graphics instructor for a handout sheet on the California job case. It would be helpful if the student would work on memorizing the areas where each letter goes.
- Use of illustrations in text may help the student.
- Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Since many places are doing away with letterpress, perhaps one could acquire a California job case. If a few pieces of type were removed at random from the case, the student could get a working knowledge of the case by trying to replace the type.

Supportive Instructional Materials:

Graphic Arts by Carlsen
 Chas. Bennett Co.

TASK: Use a composing stick

Student Name:

GCM - LP05

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> properly select and place type in a composing stick: <ol style="list-style-type: none"> picking out piece locating nick placing in stick holding in place with thumb. demonstrate the proper grip of the composing stick. follow a prescribed procedure for quadding out line space on a composing stick: <ol style="list-style-type: none"> roughly estimate space large pieces first large pieces placed at end fit out balance. follow a prescribed procedure for setting type flush right in a composing stick. follow a prescribed procedure for centering lines with a composing stick. follow a prescribed procedure for word spacing. follow a prescribed procedure for justifying a line of type in a composing stick follow a prescribed procedure for spacing lines of type in a composing stick. 	<ul style="list-style-type: none"> Teacher demonstrates the proper positioning and use of composing stick. Students review California job case handout and AFT wall charts. Students practice setting a variety of sample and production jobs. Para-professionals provide sustained involvement with students having difficulty with this task. Teacher matches successful students who are interested in helping those having difficulty.
Involved		
Productive		
Employable		
	Task-Related Competencies	Instructional Materials
	KNOWLEDGE A 1,6 NUMBERS B 4a APPLICATION C 2 PHYSICAL D 1a,b,c,d 2a/b 3c,8	Title
		Media
		Bib.
		<p>Graphic Arts Chapter 2</p> <p>AFT charts</p> <p>13</p> <p>16</p>





Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
Composing stick Pica Nick Flush Centered Proof marks Leads and slugs	Translate printers measurement into inch terminology

Suggestions:

- Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- This is an excellent opportunity to emphasize correct spelling and use of the dictionary.

Supportive Instructional Materials:

- Graphic Arts by Carlsen
- Chas. Bennett Co.
- Composing stick
- Type
- Manuscript samples

SUBCLUSTER: LETTERPRESS PRINTING

TASK: Pull proofs

Code: GCM- LP06

Student Name: _____

<p>Student Progress</p>	<p>Behavioral Task Knowledges/Task Skills</p>	<p>Instructional Methods</p>
<p>Introduced</p>	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the component parts of a proof press. 2. describe and demonstrate the procedure for operating a proof press to provide for single line proofing or galley proofs 3. pull and correct proofs of hand set job sheets. 	<ul style="list-style-type: none"> • Teacher directs small group demonstration of procedures for pulling proofs. • Students pull proofs of all set jobs. • Teacher encourages small peer group cooperation and interaction • Para-professionals provide sustained involvement with students having difficulty with this task.
<p>Involved</p>	<p>Task-Related Competencies</p> <p>KNOWLEDGE A 7,9</p> <p>NUMBERS</p> <p>APPLICATION C 5,6,8 PHYSICAL D 1a-d 2c, 3c</p>	
<p>Productive</p>	<p>Instructional Materials</p> <p>Title</p> <p>Graphic Arts Chapter 2</p>	
<p>Employable</p>	<p>Media</p> <p>13</p>	<p>Bib.</p> <p>16</p>

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
<p>Tying up</p> <p>Galley</p> <p>Ink</p> <p>Brayer</p> <p>Centers</p> <p>Contact</p> <p>Release</p> <p>Slur</p> <p>Roll proof</p> <p>Strip proof</p> <p>Grippers</p> <p>Deadline</p> <p>Proof</p>	<p>Recognize and/or check for the following on a proof: parallel, even, perpendicular, level, sequence.</p>
<p>Suggestions:</p> <ul style="list-style-type: none"> • Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students. • Teacher and deaf student should cooperatively develop some simple signs related to language of the task. • Pulling proofs demands close attention to accuracy and coordinated movements. If in pulling proofs a student notices something slipping the or going askew, he must recognize the importance of asking for help because much time can be lost by making an incorrect adjustment. Machines, parts, and product can be damaged and students can be injured by trying to make corrections while a machine is in motion. It behooves the supportive teacher to provide the occasion to impress upon the student of the importance of respecting this need. 	

Supportive Instructional Materials:

Graphic Arts by Carlsen
Chas. Bennett Co., Inc.

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced Involved Productive Employable	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. correct type forms in a composing stick following a prescribed procedure: <ol style="list-style-type: none"> a. performed in stick b. exclusive use of fingers c. tilt bad piece out d. insert corrected piece e. rejustify if required f. pull new proof g. dispose of damaged type h. make final corrections in the galley. 	<ul style="list-style-type: none"> • Para-professionals provide sustained involvement with students having difficulty with this task. • Teacher directs small group demonstration of procedures for correcting mistakes before lock-up. • Students read and review illustrated text materials. • Teacher concentrates his effort with students having difficulty.
Task-Related Competencies		Instructional Materials
KNOWLEDGE A 3,7,9 NUMBERS APPLICATION C 2,8 PHYSICAL D 1a,b,c,d 2a/b, 3c		Title Graphic Arts Chapter 2 13 16

Basic Information for Cooperative Teaching

Language of the Task

Tweezers
Rejustify line

Quantitative Concepts

Suggestions:

- A review of appropriate sections of text will help the student.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).

Supportive Instructional Materials:

Graphic Arts by Carlsen
Chas. Bennett Co., Inc.

Student Name:

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> identify and describe the use of select pieces of equipment for making-up and tying-up forms: <ol style="list-style-type: none"> galley type gauge line gauge leads slugs page cord make-up rule tweezers. follow a prescribed procedure in tying-up type forms in a composing stick in a galley: <ol style="list-style-type: none"> small forms single lines using the beginner's technique. demonstrate the proper use and function of the imposing stone. dump a stick of type onto the stone or galley. follow a prescribed procedure in tying up a type form for transfer to a galley: <ol style="list-style-type: none"> page cord place slugs on sides wrap tightly overlap cord wrappings tuck in cord at end slide wrapping to center perform hold test transfer to galley. 	<ul style="list-style-type: none"> Teacher directs small group demonstration of tie-up procedures. Students review illustrated text materials and wall charts. Teacher concentrates his effort with students having difficulty Teacher matches successful students who are interested in helping those having difficulty.
Involved		
Productive		
Employable		

Basic Information for Cooperative Teaching

Language of the Task

- Form
- Slug
- Type
- Feet
- String
- Quad
- Head
- Galley
- Wrap
- Make-up rule

Quantitative Concepts

Concept of order — 1st, 2nd, 3rd

Determine length of string needed for tie-up by adding length of form times 2 to width of form times 2, then multiple by 5 or measure off five more identical lengths before cutting.

Suggestions:

- This lesson is covered in Chapter 2 of text. If the student has covered previous lessons, he should have an understanding of this task.
- Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.
- Teacher and deaf student should cooperatively develop some signs related to language of the task.
- The teacher will learn this skill by experiencing it, but the supportive teacher can do much by helping the student understand the need for accuracy and caution.

Supportive Instructional Materials:

Graphic Arts by Carlsen
Chas. A. Bennett Co., Inc.

SUBCLUSTER: LETTERPRESS PRINTING

TASK: Cut and use leads, slugs, and rules

Student Name: _____

Code: GCM - LP09

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the component parts of the slug cutter and mitering machine. 2. identify the component parts of an AFT saw trimmer. 3. suggest uses or applications of leads, slugs, and rules in relief printing. 4. list seven different types of rules to be used in relief printing: <ol style="list-style-type: none"> a. line width b. dotted line c. facing d. double line e. brass f. ornamental g. creasing h. perforating. 5. safely operate a slug cutter, following a prescribed procedure. 6. safely operate a mitering machine, following a prescribed procedure. 	<ul style="list-style-type: none"> • Teacher matches successful students who are interested in helping those having difficulty. • Teacher provides small group demonstration of procedures for cutting and using leads, slugs, and rules. • Students practice cutting leads, slugs, and rules to specified lengths. • Para-professionals provide sustained involvement with students having difficulty with this task. 																
Involved																		
Productive																		
Employable																		
		<table border="1"> <thead> <tr> <th data-bbox="853 868 890 1113">Task-Related Competencies</th> <th colspan="2" data-bbox="853 51 890 868">Instructional Materials</th> </tr> <tr> <td data-bbox="853 868 890 1113"></td> <th data-bbox="853 235 890 868">Title</th> <th data-bbox="853 51 890 235">Media Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="890 868 934 1113">KNOWLEDGE A 3,7,9</td> <td data-bbox="890 235 934 868" rowspan="2">AFT wall charts</td> <td data-bbox="890 51 934 235" rowspan="2">16</td> </tr> <tr> <td data-bbox="934 868 979 1113">NUMBERS B 2, 4a</td> </tr> <tr> <td data-bbox="979 868 1023 1113">APPLICATION C 2,5,8</td> <td data-bbox="979 235 1023 868"></td> <td data-bbox="979 51 1023 235"></td> </tr> <tr> <td data-bbox="1023 868 1068 1113">PHYSICAL D 1a,b,d 2b 3c,8</td> <td data-bbox="1023 235 1068 868"></td> <td data-bbox="1023 51 1068 235"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials			Title	Media Bib.	KNOWLEDGE A 3,7,9	AFT wall charts	16	NUMBERS B 2, 4a	APPLICATION C 2,5,8			PHYSICAL D 1a,b,d 2b 3c,8		
Task-Related Competencies	Instructional Materials																	
	Title	Media Bib.																
KNOWLEDGE A 3,7,9	AFT wall charts	16																
NUMBERS B 2, 4a																		
APPLICATION C 2,5,8																		
PHYSICAL D 1a,b,d 2b 3c,8																		

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Leads</p> <p>Rules</p> <p>Slugs</p> <p>Rough cut</p> <p>Miter</p> <p>Gauge</p> <p>Shear</p> <p>Knurled nut</p> <p>Micrometer</p> <p>Bed</p> <p>Work holder</p> <p>Knife holder</p>	<p>Read gradations on gauge to half point accuracy. (Accuracy in reading rules of measurements are essential in letterpress printing).</p>

Suggestions:

- The use of slug cutter will be demonstrated in the classroom .
- Safety is important, stress to the student that care should be used when operating this type of tool. Areas that should be stressed are: wearing safety glasses when using the saw, don't talk to other students, other students should keep away from the student using these tools, keep fingers at a safe distance from cutting edge.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).

Supportive Instructional Materials:

Graphic Arts by Carlsen
Chas. Bennett Co., Inc.

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																																				
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> pull and proofread final galley proof. transfer type from imposing stone to galley, following a prescribed procedure. lock-up type form in chase following a prescribed procedure: <ol style="list-style-type: none"> measure form select furniture use chaser method for lock-up fill solid spaces place quoins fill opposite sides position form use pyramidal building hand tighten quoins plane type tighten quoins by wrench test for hold, bind, spring. identify and select furniture for the lock-up. demonstrate the chaser method for locking up and placing furniture. demonstrate the furniture within furniture method. 	<ul style="list-style-type: none"> Students review wall charts and teacher prepared handouts on lock-up. Teacher provides small group demonstration of procedures for locking-up a form. Students practice locking-up forms by various methods. 																																				
Involved																																						
Productive																																						
Employable																																						
		<table border="1"> <thead> <tr> <th data-bbox="868 901 912 1129">Task-Related Competencies</th> <th colspan="2" data-bbox="868 62 912 901">Instructional Materials</th> </tr> <tr> <td data-bbox="912 901 957 1129"></td> <th colspan="2" data-bbox="912 62 957 901">Title</th> </tr> </thead> <tbody> <tr> <td data-bbox="957 901 1001 1129">KNOWLEDGE</td> <td colspan="2" data-bbox="957 62 1001 901"></td> </tr> <tr> <td data-bbox="1001 901 1046 1129">A 3,9</td> <td colspan="2" data-bbox="1001 62 1046 901">Handouts (Developed by Lanny Johnston)</td> </tr> <tr> <td data-bbox="1046 901 1090 1129">NUMBERS</td> <td colspan="2" data-bbox="1046 62 1090 901"></td> </tr> <tr> <td data-bbox="1090 901 1135 1129">B 1, 4a</td> <td colspan="2" data-bbox="1090 62 1135 901">Graphic Arts Chapter 3</td> </tr> <tr> <td data-bbox="1135 901 1179 1129">APPLICATION</td> <td colspan="2" data-bbox="1135 62 1179 901"></td> </tr> <tr> <td data-bbox="1179 901 1224 1129">C 2a,5,8</td> <td colspan="2" data-bbox="1179 62 1224 901">AFT wall charts</td> </tr> <tr> <td data-bbox="1224 901 1268 1129">PHYSICAL</td> <td colspan="2" data-bbox="1224 62 1268 901"></td> </tr> <tr> <td data-bbox="1268 901 1313 1129">D 1a,b,c,d</td> <td colspan="2" data-bbox="1268 62 1313 901"></td> </tr> <tr> <td data-bbox="1313 901 1357 1129">2a/b</td> <td colspan="2" data-bbox="1313 62 1357 901"></td> </tr> <tr> <td data-bbox="1357 901 1402 1129">3c,8</td> <td colspan="2" data-bbox="1357 62 1402 901"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials			Title		KNOWLEDGE			A 3,9	Handouts (Developed by Lanny Johnston)		NUMBERS			B 1, 4a	Graphic Arts Chapter 3		APPLICATION			C 2a,5,8	AFT wall charts		PHYSICAL			D 1a,b,c,d			2a/b			3c,8		
Task-Related Competencies	Instructional Materials																																					
	Title																																					
KNOWLEDGE																																						
A 3,9	Handouts (Developed by Lanny Johnston)																																					
NUMBERS																																						
B 1, 4a	Graphic Arts Chapter 3																																					
APPLICATION																																						
C 2a,5,8	AFT wall charts																																					
PHYSICAL																																						
D 1a,b,c,d																																						
2a/b																																						
3c,8																																						

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Stone</p> <p>Chase</p> <p>Lock-up</p> <p>Furniture</p> <p>Quoin</p> <p>Quoin key</p> <p>Chaser method of lock-up</p> <p>Imposing table</p> <p>Unlocked form</p> <p>Make-ready rule</p> <p>Cards</p> <p>Rule border</p> <p>Sinkers</p> <p>Sounding</p>	

Suggestions:

- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).
- This task is illustrated quite well in the text.
- To observe this operation would be very meaningful if one could arrange such a demonstration. Perhaps a home movie taken of the operation would have value. A composer will read from left to right, but upside down.

Supportive Instructional Materials:

Graphic Arts by Carlsen
Chas. Bennett Co., Inc.

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																					
<p>Introduced</p> <p>Involved</p> <p>Productive</p> <p>Employable</p>	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will</p> <ol style="list-style-type: none"> 1. identify and describe the use of selected materials and equipment for preparing the press platen: <ol style="list-style-type: none"> a. tympan paper b. packing stock c. gauge pins d. ink e. ink knife f. solvent g. rags h. sealing wax. 2. follow a prescribed procedure for removing and replacing packing material from press. 3. ink the press platen for operation: <ol style="list-style-type: none"> a. obtain ink b. work on ink plate c. use ink knife d. ink the press e. work out ink f. use ink sparingly. 4. clean the press platen of ink: <ol style="list-style-type: none"> a. solvents (kerosene) b. rags c. use machine operation to clean press. 	<ul style="list-style-type: none"> ● Students view movie on preparing press platens . ● Students review sections of <u>General Printing</u> text . ● Teacher provides small group demonstration of procedures for making ready a press platen . ● Students work in teams practicing procedures for preparing the press platen . ● Para-professionals provide sustained involvement with students having difficulty with this task . <table border="1" data-bbox="837 51 1426 1113"> <thead> <tr> <th data-bbox="837 868 924 1113">Task-Related Competencies</th> <th colspan="2" data-bbox="837 51 924 868">Instructional Materials</th> </tr> <tr> <td data-bbox="924 868 1426 1113"></td> <th data-bbox="924 51 1026 868">Title</th> <th data-bbox="924 51 1026 868">Media Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="924 868 1026 1113">KNOWLEDGE A 2,3,7,9</td> <td data-bbox="924 51 1026 868"><u>General Printing</u></td> <td data-bbox="924 51 1026 868">13 18</td> </tr> <tr> <td data-bbox="1026 868 1128 1113">NUMBERS B 4a, 5</td> <td data-bbox="1026 51 1128 868">"Platen Press Makeready"</td> <td data-bbox="1026 51 1128 868">8 6</td> </tr> <tr> <td data-bbox="1128 868 1230 1113">APPLICATION C 2,8</td> <td></td> <td></td> </tr> <tr> <td data-bbox="1230 868 1332 1113">PHYSICAL D 1a,b,d 2b</td> <td></td> <td></td> </tr> <tr> <td data-bbox="1332 868 1426 1113">3a,c,f,g</td> <td></td> <td></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials			Title	Media Bib.	KNOWLEDGE A 2,3,7,9	<u>General Printing</u>	13 18	NUMBERS B 4a, 5	"Platen Press Makeready"	8 6	APPLICATION C 2,8			PHYSICAL D 1a,b,d 2b			3a,c,f,g		
Task-Related Competencies	Instructional Materials																						
	Title	Media Bib.																					
KNOWLEDGE A 2,3,7,9	<u>General Printing</u>	13 18																					
NUMBERS B 4a, 5	"Platen Press Makeready"	8 6																					
APPLICATION C 2,8																							
PHYSICAL D 1a,b,d 2b																							
3a,c,f,g																							

Basic information for Cooperative Teaching

Language of the Task	Quantitative Concepts	Suggestions:
<p>Tympan paper or drawsheet Platen Packing Gauge pins Ink knife Solvent or cleaning fluid Safety can Grippers Makeready Ink Oxidation Ink plate Tampan balls Press bed</p>	<p>Must be able to estimate 1/6 of an inch, 1/3 of a width of a sheet. Check accuracy of estimation with a scale that one must read accurately.</p>	<ul style="list-style-type: none"> ● The book refers to the draw sheet; It is more appropriate for it to be called the tympan sheet. ● Teacher concentrates his effort with students having difficulty. ● Teacher and deaf student should cooperatively develop some simple signs related to language of the task. ● Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual). ● Student must recognize the corner of an object that is "upper and to the right" in placing the chase in the press, lower left corner, etc.

Supportive Instructional Materials:

Graphic Arts by Carlsen
 Chas. Bennett Co., Inc.

TASK: Implement make-ready techniques and processes

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> list and describe the make-ready processes for operation of the platen press. strike an impression by hand operating platen press: <ol style="list-style-type: none"> secure bails watch grippers strike on draw sheet strike on top sheet. diagnose impressions and adjust packing materials accordingly. complete spot and overlay procedures for the platen press, following a prescribed procedure: <ol style="list-style-type: none"> open tympan sheets build up underlay feather-edged pieces paste trial and error process repeat as needed impression correct entire impression if needed. attach gauge pins to tympan of the press, following a prescribed procedure: <ol style="list-style-type: none"> layout lines for pin placement on tympan insert gauge pins 	<ul style="list-style-type: none"> Student practice make-ready and operation on a hand-fed job press with teacher standing at the brake and hand lever. Students review illustrated text and handout materials. Teacher provides small group demonstration of make-ready procedures/techniques on hand-fed job press. Teacher matches successful students who are interested in helping those having difficulty.
Involved		
Productive		
Employable		
Task-Related Competencies		Instructional Materials
KNOWLEDGE A 3,7,9		Title
NUMBERS B 2,4a		<p>Graphic Arts Chapter 3</p>
APPLICATION C 2,8		<p>"Platen Press Makeready Handout" (developed by Lanny Johnston)</p>
PHYSICAL D 1a,c,d,f 2b 3c,8		Media
		Bib. 13 16 14 30

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
Make-ready Platen press Impression Super Pinch-mark "Marking-out" "Spot-up" Hard packing Soft packing "Matrix" packing Margin Grippers Tympan Underlay	Recognize and/or check for: parallel, vertical, horizontal. Adjust margins: 1/4" to 1 1/2" in 1/4" intervals.

Suggestions:

- Being able to work accurately and recognize fine differences, to read the necessary scale to its degree of exactness and have the ability to estimate these distances are all essential to better press printing.
- Go over Safety Precautions on page 37 and 38. The student must know how to operate the equipment safely.
- Inform graphics teacher of left-handed students since they usually have trouble with this task.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).
- Be careful in using words with multiple meanings when talking to lip reading deaf students.

Supportive Instructional Materials:

Graphic Arts by Carlsen
 Chas. Bennett Co., Inc.

SUBCLUSTER: LETTERPRESS PRINTING

TASK: Implement make-ready techniques and processes

Student Name: _____

Code: GCM - LP12

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will</p> <ul style="list-style-type: none"> c. seal pins with wax d. stroke impression e. check for squareness, margins, etc. f. wipe impression from tympan g. tap gauge pins tight. <p>6. feed and deliver paper to press bed:</p> <ul style="list-style-type: none"> a. feed press with right hand b. remove and deliver stock with left hand. <p>7. recognize and observe safety precautions related to the operation of a platen press.</p>	
Involved		
Productive		
Employable		



SUBCLUSTER:

TASK:

Basic Information for Cooperative Teaching

Language of the Task

Quantitative Concepts

Suggestions:

Supportive Instructional Materials:

SUBCLUSTER: LETTERPRESS PRINTING

TASK: Complete bank work

GCM - LP13

Student Name:

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. follow a specific procedure for final imposing at the bank: <ol style="list-style-type: none"> a. galley arrangement b. printer's position c. forms tied d. placement of forms e. spacing out forms f. untying g. tightening h. retying . 2. complete additional bank, such as: <ol style="list-style-type: none"> a. corrections b. line space arrangements c. centering d. flush left e. flush right f. diagonal centering g. breaking for color . 	<ul style="list-style-type: none"> ● Para-professionals provide sustained involvement with students having difficulty with this task. ● Teacher matches successful students who are interested in helping those having difficulty. ● Teacher provides small group demonstration of use of the type bank. ● Teacher encourages small peer group cooperation and interaction.
Involved		
Productive		
Employable		

Basic Information for Cooperative Teaching

Language of the Task

Bank
Alley
Galley

Quantitative Concepts

Note: This task involves some of the previous tasks; therefore selected quantitative concepts may have to be covered again based on individual student needs.

Suggestions:

- Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).
- A compositor reads his type from left to right and upside down.
- Stress the need for careful workmanship because expensive type can be damaged easily.

Supportive Instructional Materials:

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and describe the operation of specific types of grippers and fingers. 2. attach a frisket to grippers of a press. 3. demonstrate the procedures for adjusting gripper: <ol style="list-style-type: none"> a. fingers b. racket teeth c. supplementary tabs. 4. describe the purpose and procedure for using fenders. 	<ul style="list-style-type: none"> • Teacher provides small group demonstration of use of grippers, fenders, and fingers. • Students follow a teacher demonstration with "hands-on" supervision. • Students practice setting up and adjusting grippers. • Para-professionals provide sustained involvement with students having difficulty with this task.
Involved		
Productive		
Employable		

SUBCLUSTER: LETTERPRESS PRINTING

e: GCM-LPL4 **TASK:** Use grippers, fenders, and fingers

Basic Information for Cooperative Teaching

Language of the Task

- Frisket
- Fingers
- Racket
- Supplementary
- Fender
- Good guide
- Tympan
- Clearance

Quantitative Concepts

Recognize and/or check for:
 parallel
 vertical
 horizontal.

Suggestions:

- This will be demonstrated in the graphics lab. See the graphics teacher to determine his needs.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.

Supportive Instructional Materials:

|

SUBCLUSTER: LETTERPRESS PRINTING

TASK: Troubleshoot general problems at letterpress

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																																	
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> visually observe press operation for possible malfunction: <ol style="list-style-type: none"> roller action inking system gripper action picking mechanism vibration roller action. detect malfunction of press operation by listening for auditory cues: <ol style="list-style-type: none"> rhythmic beat recognize speed-up friction sounds identify roller pull. examine a press proof and identify the following undesirable characteristics <ol style="list-style-type: none"> slur ghosting offset mottling embossing picking. cite specific reasons and solutions for adjusting the identified press malfunctions. 	<ul style="list-style-type: none"> Teacher provides small group demonstration of troubleshooting techniques for specific problems. Students review teacher-prepared handout of common trouble-shooting areas. Teacher concentrates his effort with students having difficulty. Teacher encourages small peer group cooperation and interaction. 																																	
Involved																																			
Productive																																			
Employable																																			
		<table border="1"> <thead> <tr> <th data-bbox="845 901 927 1129">Task-Related Competencies</th> <th colspan="2" data-bbox="845 62 927 901">Instructional Materials</th> </tr> <tr> <td data-bbox="845 901 927 1129"></td> <th data-bbox="882 248 927 901">Title</th> <th data-bbox="882 62 927 248">Media Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="927 901 979 1129">KNOWLEDGE</td> <td data-bbox="927 248 979 901" rowspan="3">Handout</td> <td data-bbox="927 62 979 248" rowspan="3">13</td> </tr> <tr> <td data-bbox="979 901 1031 1129">A 3,9</td> </tr> <tr> <td data-bbox="1031 901 1083 1129">NUMBERS</td> </tr> <tr> <td data-bbox="1083 901 1135 1129">B 4a,5</td> <td data-bbox="1083 248 1135 901"></td> <td data-bbox="1083 62 1135 248"></td> </tr> <tr> <td data-bbox="1135 901 1187 1129">APPLICATION</td> <td data-bbox="1135 248 1187 901"></td> <td data-bbox="1135 62 1187 248"></td> </tr> <tr> <td data-bbox="1187 901 1239 1129">C 8</td> <td data-bbox="1187 248 1239 901"></td> <td data-bbox="1187 62 1239 248"></td> </tr> <tr> <td data-bbox="1239 901 1291 1129">PHYSICAL</td> <td data-bbox="1239 248 1291 901"></td> <td data-bbox="1239 62 1291 248"></td> </tr> <tr> <td data-bbox="1291 901 1343 1129">D 1a/b</td> <td data-bbox="1291 248 1343 901"></td> <td data-bbox="1291 62 1343 248"></td> </tr> <tr> <td data-bbox="1343 901 1394 1129">2a/b</td> <td data-bbox="1343 248 1394 901"></td> <td data-bbox="1343 62 1394 248"></td> </tr> <tr> <td data-bbox="1394 901 1446 1129">3c,8</td> <td data-bbox="1394 248 1446 901"></td> <td data-bbox="1394 62 1446 248"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials			Title	Media Bib.	KNOWLEDGE	Handout	13	A 3,9	NUMBERS	B 4a,5			APPLICATION			C 8			PHYSICAL			D 1a/b			2a/b			3c,8			
Task-Related Competencies	Instructional Materials																																		
	Title	Media Bib.																																	
KNOWLEDGE	Handout	13																																	
A 3,9																																			
NUMBERS																																			
B 4a,5																																			
APPLICATION																																			
C 8																																			
PHYSICAL																																			
D 1a/b																																			
2a/b																																			
3c,8																																			

Basic Information for Cooperative Teaching

Language of the Task

Quantitative Concepts

Slur

Ghosting

Offset

Mottling

Embossing

Measure accurately with a rule

Determine parallelness

Recognize vertical and horizontal lines

Recognize evidence of uneven pressure on a frame, etc.

Suggestions:

- This lesson will be demonstrated in the classroom.
- Teacher and deaf students should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).
- It is very important to recognize any evidence of elements of a form being askew.

Supportive Instructional Materials:

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods		
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the types, uses, and applications of plastic and flexographic plates: <ol style="list-style-type: none"> a. flexographic book reprints rubber stamp b. plastic engravings (line, halftone, and combination) c. zinc d. lead. 	<ul style="list-style-type: none"> • Students assemble, label, and display different types of plates used in letterpress printing. • Teacher concentrates his effort with students having difficulty. • Teacher makes contact with <u>each</u> student during the class period. • Teacher encourages small peer group cooperation and interaction. 		
Involved			Employable	
Productive				

SUBCLUSTER: LETTERPRESS PRINTING

e: GCM - LP16 TASK: Recognize various plates used for letterpress

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
<p>Engravings or cuts</p> <p>Line engravings or line cuts</p> <p>Wood cuts</p> <p>Copper plate</p> <p>Intaglio</p> <p>Gravure</p> <p>Photoengraving</p> <p>Stereotype plates</p> <p>Monotype</p> <p>Nickel-type plates</p> <p>Rubber print plates</p> <p>Plastic plates</p>	<p>Recognize common sizes of engraved plates used in letterpress printing.</p>	<ul style="list-style-type: none"> • Teacher and deaf student should cooperatively develop some simple signs related to language of the task. • Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).

Supportive Instructional Materials:

SUBCLUSTER: LETTERPRESS PRINTING

TASK: Select papers for letterpress

Code: GCM - LP17

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																														
Introduced																																
Involved																																
Productive																																
Employable																																
	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> identify specific types of paper appropriate for letterpress printing: <ol style="list-style-type: none"> bonds ledgers books. select specific type of paper finishes appropriate for letterpress printing: <ol style="list-style-type: none"> bond paper ledger papers book papers. select the paper and ink for a specific letterpress job: <ol style="list-style-type: none"> color pigment vehicle filler dryer retarder. analyze the optimum relationship of ink components for a specific letterpress job. 	<ul style="list-style-type: none"> Students assemble, label, and display the various types of paper stocks used on letterpress. Students review appropriate sections of <u>Graphic Arts</u>. Para-professionals provide sustained involvement with students having difficulty with this task. Teacher makes contact with <u>each</u> student during the class period. 																														
		<table border="1"> <thead> <tr> <th data-bbox="853 880 934 1129">Task-Related Competencies</th> <th colspan="2" data-bbox="853 62 934 880">Instructional Materials</th> </tr> <tr> <td data-bbox="853 880 934 1129"></td> <td colspan="2" data-bbox="853 62 934 880">Title</td> </tr> </thead> <tbody> <tr> <td data-bbox="934 880 942 1129">KNOWLEDGE</td> <td colspan="2" data-bbox="934 62 942 880"></td> </tr> <tr> <td data-bbox="942 880 994 1129">A 3,9</td> <td colspan="2" data-bbox="942 62 994 880"></td> </tr> <tr> <td data-bbox="994 880 1046 1129">NUMBERS</td> <td colspan="2" data-bbox="994 62 1046 880"></td> </tr> <tr> <td data-bbox="1046 880 1098 1129">B 4a,b</td> <td colspan="2" data-bbox="1046 62 1098 880"></td> </tr> <tr> <td data-bbox="1098 880 1150 1129">APPLICATION</td> <td colspan="2" data-bbox="1098 62 1150 880"></td> </tr> <tr> <td data-bbox="1150 880 1202 1129">C 2,8</td> <td colspan="2" data-bbox="1150 62 1202 880"></td> </tr> <tr> <td data-bbox="1202 880 1253 1129">PHYSICAL</td> <td colspan="2" data-bbox="1202 62 1253 880"></td> </tr> <tr> <td data-bbox="1253 880 1305 1129">D 1a, 2b</td> <td colspan="2" data-bbox="1253 62 1305 880"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials			Title		KNOWLEDGE			A 3,9			NUMBERS			B 4a,b			APPLICATION			C 2,8			PHYSICAL			D 1a, 2b		
Task-Related Competencies	Instructional Materials																															
	Title																															
KNOWLEDGE																																
A 3,9																																
NUMBERS																																
B 4a,b																																
APPLICATION																																
C 2,8																																
PHYSICAL																																
D 1a, 2b																																

Language of the Task	Quantitative Concepts	Suggestions:
<p>Bond paper</p> <p>Ledgers paper</p> <p>Book paper</p> <p>Vehicle</p> <p>Dryer</p> <p>Newsprint</p> <p>Calendared</p> <p>Super calendared</p> <p>English finish</p> <p>Antique</p> <p>Bond</p> <p>Ledger</p> <p>Lithograph or offset</p>	<p>Measure flat stock and suggest various cuts for standard size working stock.</p> <p>Recognize and measure the following paper sizes:</p> <p>8 1/2" x 11"</p> <p>17" x 22"</p> <p>22" x 28"</p> <p>17 1/2" x 22"</p> <p>19" x 24".</p>	<ul style="list-style-type: none"> • Teacher and deaf student should cooperatively develop some simple signs related to language of the task. • Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual). • Keep a close contact with graphics teacher so meaningful communication can take place between the student and supportive teacher.

Supportive Instructional Materials:

Graphic Arts by Carlsen
Chas. Bennett Co., Inc.

SUBCLUSTER: LETTERPRESS PRINTING

TASK: Clean and maintain type

Code: GCM - LP18

Student Name: _____

Student Progress	Instructional Methods																	
<p>Behavioral Task Knowledges/Task Skills</p> <p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. select the appropriate tools and materials for cleaning type. 2. follow a prescribed procedure in cleaning pieces of type: <ol style="list-style-type: none"> a. wipe after use b. clean after press run c. clean with benzine brush d. solvents <ol style="list-style-type: none"> 1) kerosene 2) type wash 3) quick drying solution. 	<ul style="list-style-type: none"> • Teacher provides small group demonstration of procedures and techniques for cleaning and maintaining type. • Students follow a teacher demonstration with "hands-on" supervision. • Para-professionals provide sustained involvement with students having difficulty with this task. • Teacher encourages small peer group cooperation and interaction. 																	
<p>Introduced</p> <p>Involved</p> <p>Productive</p> <p>Employable</p>	<table border="1"> <thead> <tr> <th colspan="2" data-bbox="853 51 934 1129">Instructional Materials</th> </tr> <tr> <th data-bbox="934 51 979 1129">Task-Related Competencies</th> <th data-bbox="979 51 1424 1129">Media Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="979 51 1038 1129"> KNOWLEDGE A 2,9 </td> <td data-bbox="979 51 1424 1129" rowspan="4"> Graphic Arts Chapter 3 </td> </tr> <tr> <td data-bbox="1038 51 1098 1129"> NUMBERS </td> </tr> <tr> <td data-bbox="1098 51 1157 1129"> APPLICATION </td> </tr> <tr> <td data-bbox="1157 51 1216 1129"> C 5-8 </td> </tr> <tr> <td data-bbox="1216 51 1276 1129"> PHYSICAL </td> <td data-bbox="1216 51 1424 1129"> 13 </td> </tr> <tr> <td data-bbox="1276 51 1335 1129"> D 1a,b,d </td> <td data-bbox="1276 51 1424 1129"> 16 </td> </tr> <tr> <td data-bbox="1335 51 1394 1129"> 2a/b </td> <td></td> </tr> <tr> <td data-bbox="1394 51 1432 1129"> 3c,8 </td> <td></td> </tr> </tbody> </table>	Instructional Materials		Task-Related Competencies	Media Bib.	KNOWLEDGE A 2,9	Graphic Arts Chapter 3	NUMBERS	APPLICATION	C 5-8	PHYSICAL	13	D 1a,b,d	16	2a/b		3c,8	
Instructional Materials																		
Task-Related Competencies	Media Bib.																	
KNOWLEDGE A 2,9	Graphic Arts Chapter 3																	
NUMBERS																		
APPLICATION																		
C 5-8																		
PHYSICAL	13																	
D 1a,b,d	16																	
2a/b																		
3c,8																		

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
<p>Safety can</p> <p>Cleaner</p> <p>Type wash</p> <p>Brush fibre bristle plate brush</p> <p>Solvent</p>	<p>Recognize common sizes of cleaning solvent containers: pints quarts gallons 5 gallons.</p>
<p>Suggestions:</p> <ul style="list-style-type: none"> Teacher and deaf student should cooperatively develop some simple signs related to language of the task. Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual). Teach caution in cleaning type, because surfaces can be scratched and damaged. Check with graphics teacher to determine precautions in handling type. 	

Supportive Instructional Materials:

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods		
		Task-Related Competencies	Instructional Materials Title	Media Bib.
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> follow a prescribed procedure in breaking out a form: <ol style="list-style-type: none"> remove from press clean type clean chase and furniture open lockup place chase in rack distribute furniture tie up form place in galley. follow a prescribed procedure in distributing type from a galley to the job case: <ol style="list-style-type: none"> untying remove one line at a time hold the line on a slug distribute to case sort odd pieces distribute leads and slugs. 	<ul style="list-style-type: none"> Para-professionals provide sustained involvement with students having difficulty with this task. Teacher provides small group demonstration of techniques for distributing type. Student follows a teacher demonstration with "hands-on" supervision. Teacher makes contact with <u>each</u> student during the class period. 		
Involved				
Productive		NUMBERS		
Employable		APPLICATION C 2,8		
		PHYSICAL D 1a,b,c 2a/b 3c, b		

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
Distribute California job case	
Suggestions: <ul style="list-style-type: none">• By this time the student will have covered the terms used in this lesson. Selective review may be necessary based on student need.• Teacher and deaf student should cooperatively develop some simple signs related to language of the task.• Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).	
Supportive Instructional Materials:	

SUBCLUSTER: LETTERPRESS PRINTING
TASK: Clean and maintain presses

File: GCM - LP20

Student Name: _____

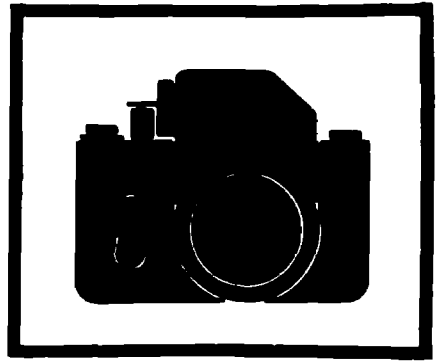
Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. follow a prescribed procedure for lubricating and maintaining letterpress presses: <ol style="list-style-type: none"> a. manufacturer's specifications b. daily lubrication schedule c. oil grades d. grease cups e. oil cups f. cleanliness g. belt dressing h. drip pan. 2. complete the following maintenance tasks as required: <ol style="list-style-type: none"> a. cleaning b. recasting c. removal/replacement d. storage e. cleaning precautions. 	<ul style="list-style-type: none"> • Teacher provides demonstration of cleaning and maintaining the platen press. • Student follows a teacher demonstration with "hands-on" supervision. • Teacher encourages small peer group cooperation and interaction • Para-professionals provide sustained involvement with students having difficulty with this task.
Involved		
Productive		
Employable		

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
<p>Manufacturer's specifications</p> <p>Grease cups</p> <p>Oil cups</p> <p>Belt dressing</p> <p>Recast</p> <p>Remove</p> <p>Replace</p>	<p>Suggestions:</p> <ul style="list-style-type: none"> • Teacher and deaf student should cooperatively develop some simple signs related to language of the task. • Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual). • Stress the importance of total cleanliness when cleaning the press.

Supportive Instructional Materials:

Graphic Arts by Carlsen
 Chas. Bennett Co., Inc.

COMMERCIAL PHOTOGRAPHY



INSTRUCTIONAL TASK MODULES

- CP01 Identifying cameras and their operation
- CP02 Selecting film
- CP03 Taking pictures
- CP04 Developing negatives and prints
- CP05 Using light meters
- CP06 Using lenses
- CP07 Adjusting flash and lighting
- CP08 Using filters
- CP09 Operate darkroom equipment
- CP10 Making enlargements

TASK: Identifying cameras and their operation

3: GCM - CP01

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify different types of cameras and describe their operation: <ol style="list-style-type: none"> a. pin hole camera. b. box camera. c. instamatic camera. d. polaroid camera. e. range finder camera. f. reflex camera. g. twin lens reflex camera. 2. load, set, and shoot pictures with a camera: <ol style="list-style-type: none"> a. ASA. b. F stop. c. split image focusing. d. ground glass focusing. e. shutter speed. 	<ul style="list-style-type: none"> • Para-professionals provide sustained involvement with students having difficulty with this task. • Teacher leads small group discussion regarding cameras and their operation. • Teacher demonstrates the use of cameras and equipment. • Students follow a teacher demonstration with "hands-on" supervision. • Students review text materials regarding cameras and camera operations. • Students role play the use/operation of cameras in simulated situations.
Involved		
Productive		
Employable		

SUBCLUSTER: COMMERCIAL PHOTOGRAPHY

File: GCM - CP01 TASK: Identifying cameras and their operation

Suggestions:

- Use Chapter 2 as a reference.
- It is imperative that the supporting teacher relates the work being taught to the current needs of the vocational graphic arts teacher. This requires frequent communication between the two.

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>F-opening or F-stop Pin hole camera Shutter speed ASA Focal length Range finder Split image Load Focus Shoot</p>	<p>Measure distance. Read a light meter — relate to distance. Read speed chart.</p>

Supportive Instructional Materials:

Practical Photography

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																																					
Introduced																																							
Involved																																							
Productive																																							
Employable																																							
	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. select the appropriate film for a given use: <ol style="list-style-type: none"> a. black and white film. b. color film. c. slide film. d. ASA rating. e. graininess. f. orthochromatic. g. panchromatic. h. structure of film. 2. discuss the general differences between different types of film. 	<ul style="list-style-type: none"> • Teacher leads small group discussion of different types of film characteristics and film ratings. • Students review illustrated text materials and film company materials. • Students select the appropriate film for specific applications on a problem worksheet exercise. • Students role play and discuss the advantages/disadvantages of using certain types of film for a given situation. 																																					
		<table border="1"> <thead> <tr> <th data-bbox="837 880 917 1118">Task-Related Competencies</th> <th colspan="2" data-bbox="837 51 917 880">Instructional Materials</th> </tr> <tr> <td data-bbox="837 880 917 1118"></td> <th colspan="2" data-bbox="837 51 917 880">Title</th> </tr> </thead> <tbody> <tr> <td data-bbox="917 880 924 1118">KNOWLEDGE</td> <td colspan="2" data-bbox="917 51 924 880"></td> </tr> <tr> <td data-bbox="924 880 975 1118">A 2,3,6</td> <td colspan="2" data-bbox="924 51 975 880"></td> </tr> <tr> <td data-bbox="975 880 1026 1118">NUMBERS</td> <td colspan="2" data-bbox="975 51 1026 880"></td> </tr> <tr> <td data-bbox="1026 880 1077 1118">B 2</td> <td colspan="2" data-bbox="1026 51 1077 880"></td> </tr> <tr> <td data-bbox="1077 880 1128 1118">APPLICATION</td> <td colspan="2" data-bbox="1077 51 1128 880"></td> </tr> <tr> <td data-bbox="1128 880 1179 1118">C 2</td> <td colspan="2" data-bbox="1128 51 1179 880"> <p><u>Practical Photography</u> Chapter 6</p> </td> </tr> <tr> <td data-bbox="1179 880 1230 1118">PHYSICAL</td> <td colspan="2" data-bbox="1179 51 1230 880"></td> </tr> <tr> <td data-bbox="1230 880 1281 1118">D 1a,2a</td> <td colspan="2" data-bbox="1230 51 1281 880"></td> </tr> <tr> <td data-bbox="1281 880 1412 1118"></td> <td data-bbox="1281 51 1412 880"></td> <td data-bbox="1281 51 1412 880"> <table border="1"> <thead> <tr> <th data-bbox="1288 134 1412 238">Media</th> <th data-bbox="1288 51 1412 134">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="1288 134 1412 238">13</td> <td data-bbox="1288 51 1412 134">18</td> </tr> </tbody> </table> </td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials			Title		KNOWLEDGE			A 2,3,6			NUMBERS			B 2			APPLICATION			C 2	<p><u>Practical Photography</u> Chapter 6</p>		PHYSICAL			D 1a,2a					<table border="1"> <thead> <tr> <th data-bbox="1288 134 1412 238">Media</th> <th data-bbox="1288 51 1412 134">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="1288 134 1412 238">13</td> <td data-bbox="1288 51 1412 134">18</td> </tr> </tbody> </table>	Media	Bib.	13	18
Task-Related Competencies	Instructional Materials																																						
	Title																																						
KNOWLEDGE																																							
A 2,3,6																																							
NUMBERS																																							
B 2																																							
APPLICATION																																							
C 2	<p><u>Practical Photography</u> Chapter 6</p>																																						
PHYSICAL																																							
D 1a,2a																																							
		<table border="1"> <thead> <tr> <th data-bbox="1288 134 1412 238">Media</th> <th data-bbox="1288 51 1412 134">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="1288 134 1412 238">13</td> <td data-bbox="1288 51 1412 134">18</td> </tr> </tbody> </table>	Media	Bib.	13	18																																	
Media	Bib.																																						
13	18																																						

Basic Information for Cooperative Teaching

Language of the Task

- Pan film
- Grain
- Gelatin
- Cut film
- Color
- Black-white
- Light sensitive

Quantitative Concepts

Make number relationships between camera size and film size. Relate the instructions that come with the film to distance from object, intensity of light, etc.

Suggestions:

- Use Chapter 6 of the text as a reference.
- This requires close communication between the two teachers until a good working understanding is established.

Supportive Instructional Materials:

Practical Photography

TASK: Taking pictures

e: GCM- CP03

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced Involved Productive Employable	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. take pictures, using different types of cameras and attachments, of the following subjects: <ol style="list-style-type: none"> a. landscapes. b. still life. c. portraits. d. silhouettes. e. abstractions. f. action pictures. g. etc. 	<ul style="list-style-type: none"> • Students view sound/filmstrip and sound/slide presentations. • Students become involved in actual picture-taking activities. • Teacher-led discussion of specific considerations in taking pictures of certain subjects. • Para-professionals provide sustained involvement with students having difficulty with this task. • Teacher encourages small peer group cooperation and interaction.
Task-Related Competencies		Instructional Materials
KNOWLEDGE A 3,6,9 NUMBERS B 1,2,4a,d	Title	Media Bib.
APPLICATION C 5,7,9 PHYSICAL D 1a,b,c,d 2a, 3a,b,c,e, f,g	"Adventures in Indoor Color Slides" "Adventures in Outdoor Color Slides" "Photography-Close-Ups, Copy with a 35mm Camera"	13 18 4 4 5 22

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts	Suggestions:
<p>Stop action</p> <p>Light meter</p> <p>Distance</p>	<p>Estimate distance.</p> <p>Read a light meter.</p> <p>Compute or read appropriate chart for F-stop setting.</p>	<p>Log information of conditions under which each picture is taken so discussion can take place and appropriate adjustments be made.</p>

Supportive Instructional Materials:

TASK: Developing negatives and prints

Student Name: _____

#: GCM - CP04

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																								
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. demonstrate his ability to develop a roll of film by preparing and using: <ol style="list-style-type: none"> a. developer. b. stop bath. c. fix. d. wash. e. measuring device. f. developing tank. g. timer. 	<ul style="list-style-type: none"> • Teacher directs small group discussion of procedures for developing negatives and prints. • Students view sound/slide program and filmstrips. • Students review illustrated text materials and film company literature. • Teacher encourages small peer group cooperation and interaction. 																								
Involved																										
Productive																										
Employable																										
		<table border="1"> <thead> <tr> <th data-bbox="853 880 927 1116">Task-Related Competencies</th> <th data-bbox="853 235 927 880">Instructional Materials Title</th> <th data-bbox="853 63 927 235">Media</th> <th data-bbox="853 63 927 235">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="927 880 1046 1116">KNOWLEDGE A 2,3,9,10</td> <td data-bbox="927 235 1046 880"><u>Practical Photography</u> Chapter 9</td> <td data-bbox="927 63 1046 235">13</td> <td data-bbox="927 63 1046 235">18</td> </tr> <tr> <td data-bbox="1046 880 1150 1116">NUMBERS B 2,4c,d,f</td> <td data-bbox="1046 235 1150 880">"How to Develop Black and White Film"</td> <td data-bbox="1046 63 1150 235">4</td> <td data-bbox="1046 63 1150 235">21</td> </tr> <tr> <td data-bbox="1150 880 1209 1116">APPLICATION</td> <td data-bbox="1150 235 1209 880">"Developing a Roll of Film"</td> <td data-bbox="1150 63 1209 235">10</td> <td data-bbox="1150 63 1209 235"></td> </tr> <tr> <td data-bbox="1209 880 1253 1116">C 2,5</td> <td data-bbox="1209 235 1253 880">"Developing Sheet Film"</td> <td data-bbox="1209 63 1253 235">10</td> <td data-bbox="1209 63 1253 235"></td> </tr> <tr> <td data-bbox="1253 880 1446 1116">PHYSICAL D 1,2a/b 3c,f,8</td> <td data-bbox="1253 235 1446 880"></td> <td data-bbox="1253 63 1446 235"></td> <td data-bbox="1253 63 1446 235"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials Title	Media	Bib.	KNOWLEDGE A 2,3,9,10	<u>Practical Photography</u> Chapter 9	13	18	NUMBERS B 2,4c,d,f	"How to Develop Black and White Film"	4	21	APPLICATION	"Developing a Roll of Film"	10		C 2,5	"Developing Sheet Film"	10		PHYSICAL D 1,2a/b 3c,f,8			
Task-Related Competencies	Instructional Materials Title	Media	Bib.																							
KNOWLEDGE A 2,3,9,10	<u>Practical Photography</u> Chapter 9	13	18																							
NUMBERS B 2,4c,d,f	"How to Develop Black and White Film"	4	21																							
APPLICATION	"Developing a Roll of Film"	10																								
C 2,5	"Developing Sheet Film"	10																								
PHYSICAL D 1,2a/b 3c,f,8																										

Basic Information for Cooperative Teaching

Suggestions:

Language of the Task	Quantitative Concepts
<p>Developer</p> <p>Stop bath</p> <p>Fix</p> <p>Fog</p> <p>Tank</p> <p>Light leak</p>	<p>Measure liquids in a measuring cup with accuracy.</p> <p>Be able to count a pre-determined number of seconds and minutes on a clock, i.e. 10 sec., 30 sec., 1 min. 10 sec., 90 sec., etc.</p> <p>Be able to read a thermometer. (Check with photography teacher to see if centigrade or fahrenheit.)</p>

Supportive Instructional Materials:

Practical Photography

TASK: Using light meters

Student Name: _____



GCM- CPO5

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																				
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> demonstrate the ability to select and use: <ol style="list-style-type: none"> hand held light meters. built in light meters. demonstrate the ability to check and/or set: <ol style="list-style-type: none"> F stop and time combinations. false meter readings. time exposures. exposure guides. 	<ul style="list-style-type: none"> Teacher and/or resource person demonstrates the procedures for selecting, setting, and using light meters. Students view film. Students read and review illustrated text materials and film company literature on use of light meters. Para-professionals provide sustained involvement with students having difficulty with this task. 																				
Involved																						
Productive																						
Employable																						
		<table border="1"> <thead> <tr> <th data-bbox="845 868 927 1113">Task-Related Competencies</th> <th data-bbox="845 235 927 868">Instructional Materials Title</th> <th data-bbox="845 51 927 235">Media</th> <th data-bbox="845 51 927 235">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="927 868 1031 1113">KNOWLEDGE A 2,3,6,9</td> <td data-bbox="927 235 1031 868"><u>Practical Photography</u> Chapter 4</td> <td data-bbox="927 51 1031 235">13</td> <td data-bbox="927 51 1031 235">18</td> </tr> <tr> <td data-bbox="1031 868 1135 1113">NUMBERS B 1,2,4a,d</td> <td data-bbox="1031 235 1135 868">"Exposure Meter"</td> <td data-bbox="1031 51 1135 235">8</td> <td data-bbox="1031 51 1135 235">5</td> </tr> <tr> <td data-bbox="1135 868 1209 1113">APPLICATION C 2,5</td> <td data-bbox="1135 235 1209 868"></td> <td data-bbox="1135 51 1209 235"></td> <td data-bbox="1135 51 1209 235"></td> </tr> <tr> <td data-bbox="1209 868 1283 1113">PHYSICAL D 1a,b,2a</td> <td data-bbox="1209 235 1283 868"></td> <td data-bbox="1209 51 1283 235"></td> <td data-bbox="1209 51 1283 235"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials Title	Media	Bib.	KNOWLEDGE A 2,3,6,9	<u>Practical Photography</u> Chapter 4	13	18	NUMBERS B 1,2,4a,d	"Exposure Meter"	8	5	APPLICATION C 2,5				PHYSICAL D 1a,b,2a			
Task-Related Competencies	Instructional Materials Title	Media	Bib.																			
KNOWLEDGE A 2,3,6,9	<u>Practical Photography</u> Chapter 4	13	18																			
NUMBERS B 1,2,4a,d	"Exposure Meter"	8	5																			
APPLICATION C 2,5																						
PHYSICAL D 1a,b,2a																						

Basic Information for Cooperative Teaching

Language of the Task

Light or exposure meter
 Iris - Lens opening
 F-stop
 Time settings
 Camera lens
 Time exposure

Quantitative Concepts

Read a time setting - 1/30 sec., 1/60 sec., 1/250 sec., etc.
 Read a light meter to determine appropriate lens opening and shutter speed.
 Learn to estimate distance by measuring distance after estimating 5 ft., 10 ft., etc.

Suggestions:

- Continue frequent contacts with the photography instructor to determine individual student's need.

Supportive Instructional Materials:

Practical Photography

SUBCLUSTER: COMMERCIAL PHOTOGRAPHY

TASK: Using lenses

Student Name: _____



Code: GCM - CP06

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods		
		Task-Related Competencies	Instructional Materials Title	Media Bib.
Introduced Involved Productive Employable	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> Identify and explain the use and characteristics of different types of lenses: <ol style="list-style-type: none"> wide angle lens. normal lens. telephoto lens. extenders. close up lens. rings. select and utilize the appropriate equipment listed above in taking pictures under specified conditions. 	<ul style="list-style-type: none"> Teacher discusses the proper techniques for selecting and using camera lenses. Students read and review illustrated text materials. Students select the appropriate lens for given situations on a worksheet exercise. Teacher concentrates his effort with students having difficulty. 	<p>Practical Photography</p>	13
		<p>KNOWLEDGE A 2,3,5,6</p> <p>NUMBERS B 2a,4a,d</p> <p>APPLICATION C 2a,5,7,8,9</p> <p>PHYSICAL D 1a,d 2a/b</p>		18

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
Image Wide angle Telephoto Light rays Refraction Distortion Depth of field Supplementary lens	Measurement of distance Reading meters Reading guides or charts	

Supportive Instructional Materials:
Practical Photography

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods		
		Task-Related Competencies	Instructional Materials	
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. demonstrate his ability to adjust, operate, and/or use: <ol style="list-style-type: none"> a. electronic flash. b. flash bulb. c. available light. d. front, side and back lighting. e. guide numbers. f. flash bounce. g. flash fill in. h. special effect lighting. 	Title	Media	Bib.
Involved		<ul style="list-style-type: none"> • Teacher leads small group discussion and demonstration of appropriate techniques for adjusting flash and lighting. • Students view slide presentation entitled: "Pictures with Flash and Flood". • Students review illustrated text materials. • Para-professionals provide sustained involvement with students having difficulty with this task. 	<p><u>Practical Photography</u> Chapter 5</p> <p>"Pictures with Flash and Flood"</p>	13
Productive	<p>KNOWLEDGE</p> <p>A 2, 3, 6</p> <p>NUMBERS</p> <p>B 2a</p> <p>APPLICATION</p> <p>C 2a, b, 5, 8</p> <p>PHYSICAL</p> <p>D 1a, c 2a/b</p>			4
Employable				

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
<p>Flash bulb</p> <p>Electronic</p> <p>Fill in</p> <p>Bounce</p> <p>Over-exposure</p> <p>Under-exposure</p>	<p>Estimate distances in feet.</p> <p>Read light meter.</p> <p>Recognize angle of lighting and the subsequent shadows (adjust angle of lighting with regard to shadows)</p>
<p>Suggestions:</p> <ul style="list-style-type: none"> ● Discuss with the student the specific work experiences and information learned in the vocational class. ● Measure and mark distances down a hallway from 0 to 25 feet in 5 foot intervals. With students working in pairs, allow each student ample time to become accurate in estimating the measured distances. 	

Supportive Instructional Materials:

TASK: Using filters

Student Name: _____



File: GCM - CP08

Student Progress Introduced Involved Productive Employable	<p>Behavioral Task Knowledges/Task Skills</p> <p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. demonstrate his ability to select and use filters: <ol style="list-style-type: none"> a. colored filters. b. diffusion filters. c. pollinizing filter. d. haze filters. e. glass and gelatin filters. 	<p>Instructional Methods</p> <ul style="list-style-type: none"> • Teacher leads small group discussion and demonstration of the use of filters. • Students complete teacher-designed experiments illustrating the effects of different types of filters. • Students read and/or review illustrated text materials. • Para-professionals provide sustained involvement with students having difficulty with this task. 	
<p>Task-Related Competencies</p> <p>KNOWLEDGE A 2, 3, 5, 6</p> <p>NUMBERS B 4a, d 6</p> <p>APPLICATION C 2a, b, 5, 7 PHYSICAL D 1a, b, d 2a/b</p>		<p>Instructional Materials</p> <p>Title</p> <p><u>Practical Photography</u></p>	<p>Media Bib.</p> <p>13 18</p>



Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Filter color light</p> <p>Depth of field</p> <p>Intensity of light</p>	<p>Divide numbers such as $4/\overline{100}$, $3/400$, $5/100$, etc.</p>

Suggestions:

- Have student bring examples of work being done in vocational class and explain the differences — purpose, effect, etc.

Supportive Instructional Materials:

Practical Photography

SUBCLUSTER: COMMERCIAL PHOTOGRAPHY

TASK: Operate darkroom equipment

Code: GCM - CP09

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																																															
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> demonstrate his ability to operate commercial photographic darkroom equipment: <ol style="list-style-type: none"> enlarger. print washer. print dryer. dodging tools. timers. measuring devices. storage equipment. darkroom lights. provide care and maintenance for darkroom equipment. 	<ul style="list-style-type: none"> Teacher encourages small peer group cooperation and interaction. Teacher leads small group discussion and demonstration of procedures for operating darkroom equipment. Students view film. Students read and review illustrated text materials. Students use darkroom equipment for developing of film. 																																															
Productive																																																	
Employable																																																	
		<table border="1"> <thead> <tr> <th data-bbox="853 890 942 1129">Task-Related Competencies</th> <th data-bbox="853 238 942 890">Instructional Materials Title</th> <th data-bbox="853 145 942 238">Media</th> <th data-bbox="853 72 942 145">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="942 890 986 1129">KNOWLEDGE</td> <td data-bbox="942 238 1446 890" rowspan="2"> <p><u>Practical Photography</u> Chapter 8</p> <p>"Darkroom Techniques"</p> </td> <td data-bbox="942 145 986 238">13</td> <td data-bbox="942 72 986 145">18</td> </tr> <tr> <td data-bbox="986 890 1046 1129">A 2,3,5,6,10</td> <td data-bbox="986 145 1046 238">8</td> <td data-bbox="986 72 1046 145">29</td> </tr> <tr> <td data-bbox="1046 890 1090 1129">NUMBERS</td> <td></td> <td></td> <td></td> </tr> <tr> <td data-bbox="1090 890 1135 1129">B 1,2</td> <td></td> <td></td> <td></td> </tr> <tr> <td data-bbox="1135 890 1179 1129">4b,c,d,f</td> <td></td> <td></td> <td></td> </tr> <tr> <td data-bbox="1179 890 1224 1129">APPLICATION</td> <td></td> <td></td> <td></td> </tr> <tr> <td data-bbox="1224 890 1268 1129">C 2,5,8</td> <td></td> <td></td> <td></td> </tr> <tr> <td data-bbox="1268 890 1313 1129">PHYSICAL</td> <td></td> <td></td> <td></td> </tr> <tr> <td data-bbox="1313 890 1357 1129">D 1a,b,d,f</td> <td></td> <td></td> <td></td> </tr> <tr> <td data-bbox="1357 890 1402 1129">2a/b</td> <td></td> <td></td> <td></td> </tr> <tr> <td data-bbox="1402 890 1446 1129">3c,f,8</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials Title	Media	Bib.	KNOWLEDGE	<p><u>Practical Photography</u> Chapter 8</p> <p>"Darkroom Techniques"</p>	13	18	A 2,3,5,6,10	8	29	NUMBERS				B 1,2				4b,c,d,f				APPLICATION				C 2,5,8				PHYSICAL				D 1a,b,d,f				2a/b				3c,f,8			
Task-Related Competencies	Instructional Materials Title	Media	Bib.																																														
KNOWLEDGE	<p><u>Practical Photography</u> Chapter 8</p> <p>"Darkroom Techniques"</p>	13	18																																														
A 2,3,5,6,10		8	29																																														
NUMBERS																																																	
B 1,2																																																	
4b,c,d,f																																																	
APPLICATION																																																	
C 2,5,8																																																	
PHYSICAL																																																	
D 1a,b,d,f																																																	
2a/b																																																	
3c,f,8																																																	

SUBCLUSTER: COMMERCIAL PHOTOGRAPHY

File: GCM - CF09 TASK: Operate darkroom equipment

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Enlarger Lamp house Condensing lens Negative carrier Focus and lens adjustment Lens</p>	<p>Student must be able not only to read and count seconds on a clock, but he must also be able to relate and react on a close time sequence, i.e. 10 sec., 30 sec., 1 min., 90 sec., etc.</p>

Suggestions:

- Encourage the student to tell the rest of the class about photography. Set a pattern of interest so the other students feel comfortable in asking relative questions, thus learning more about the "world out there".

Supportive Instructional Materials:

Practical Photography

TASK: Making enlargements

Student Name: _____

e: GCM - CPIO

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																		
Introduced Involved Productive Employable	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. select and use the following equipment and materials in making enlargements: <ol style="list-style-type: none"> a. enlarger. b. paper safe. c. safe lights. d. filters (variable contrast). e. No. 1,2,3,4 contrast paper. f. burning in tools. g. dodging tools. h. cropping. i. easel. j. developing chemicals. k. print washer. l. print dryer. m. timer. 	<ul style="list-style-type: none"> • Para-professionals provide sustained involvement with students having difficulty with this task. • Teacher leads small group discussion and demonstration of procedures for making enlargements. • Students view sound/slide program. • Students view filmstrips. • Students make enlargements from previously developed prints. 																		
Task-Related Competencies		Instructional Materials																		
KNOWLEDGE A 2,3,6 NUMBERS B 1,2,4a,5,6, APPLICATION C 2,5,8 PHYSICAL D 1a,d 2a/b		<table border="1"> <thead> <tr> <th data-bbox="924 51 1019 235">Title</th> <th data-bbox="924 235 1019 337">Media</th> <th data-bbox="924 337 1019 1103">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="1019 51 1113 235"><u>Practical Photography</u> Chapter 11</td> <td data-bbox="1019 235 1113 337">13</td> <td data-bbox="1019 337 1113 1103">18</td> </tr> <tr> <td data-bbox="1113 51 1164 235">"Let's Make an Enlargement"</td> <td data-bbox="1113 235 1164 337">4</td> <td data-bbox="1113 337 1164 1103">21</td> </tr> <tr> <td data-bbox="1164 51 1215 235">"Projection Printing" 1 and 2</td> <td data-bbox="1164 235 1215 337">10</td> <td data-bbox="1164 337 1215 1103"></td> </tr> <tr> <td data-bbox="1215 51 1266 235">"Spot Printing and Dodging"</td> <td data-bbox="1215 235 1266 337">10</td> <td data-bbox="1215 337 1266 1103"></td> </tr> <tr> <td data-bbox="1266 51 1419 235">"Contact Printing"</td> <td data-bbox="1266 235 1419 337">10</td> <td data-bbox="1266 337 1419 1103"></td> </tr> </tbody> </table>	Title	Media	Bib.	<u>Practical Photography</u> Chapter 11	13	18	"Let's Make an Enlargement"	4	21	"Projection Printing" 1 and 2	10		"Spot Printing and Dodging"	10		"Contact Printing"	10	
Title	Media	Bib.																		
<u>Practical Photography</u> Chapter 11	13	18																		
"Let's Make an Enlargement"	4	21																		
"Projection Printing" 1 and 2	10																			
"Spot Printing and Dodging"	10																			
"Contact Printing"	10																			

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Diffusion</p> <p>Condenser</p> <p>Diffusion-condenser</p> <p>Focal length</p> <p>Emulsion</p> <p>Sensitive paper</p> <p>Photo supply</p> <p>Dodging</p> <p>Spot printing</p> <p>Cropping</p> <p>Vignetting</p> <p>Retouch</p> <p>Spotting</p>	<p>Continue familiarizing student with the fractional breakdown of short periods of time, i.e. four 15 min. segments in an hour; three 20 min. segments in an hour; three 5 min. segments in 15 min., fractional breakdown of seconds.</p> <p>Repeat the refinement of measuring distance. Students should recognize the difference between 1/4, 1/8, 1/16 of an inch.</p> <p>Realize the need to recognize stock sizes: 11x5, 8x10, 3x5, etc.</p>

Suggestions:

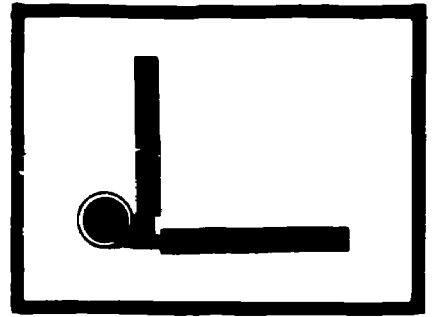
- Show interest in each student's work by asking questions related to the subjects being photographed, the sharpness of prints, and/or the correctness of exposure.

Supportive Instructional Materials:

Practical Photography



DRAFTING



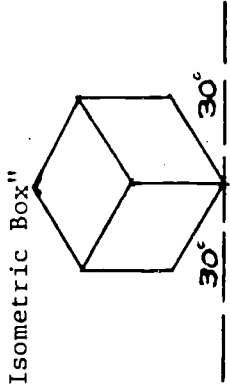
INSTRUCTIONAL TASK MODULES

- DT01 Prepare isometric sketches
- DT02 Prepare multiview sketches
- DT03 Letter drawings and graphic materials
- DT04 Use drafting equipment in drawing simple shapes
- DT05 Prepare geometric constructions with drafting equipment
- DT06 Operate drawing reproduction machines
- DT07 Construct and prepare isometric views
- DT08 Construct and prepare multiview drawings
- DT09 Dimension drawings
- DT10 Prepare graphs and charts
- DT11 Develop and construct sectional views
- DT12 Prepare auxiliary views and revolutions
- DT13 Construct developments and intersections
- DT14 Construct and prepare perspective drawings
- DT15 Detail screw threads and fasteners
- DT16 Prepare design and working drawings

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																					
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the approximate construction axis for given isometric drawings. 2. recognize the proper proportions of a given object. 3. describe and demonstrate the procedures for locating non-isometric lines. 4. describe and demonstrate the procedures for sketching isometric circles and arcs. 5. accurately prepare isometric sketches of simple objects from two given orthographic views. 6. accurately prepare isometric sketches of simple objects from three given orthographic views. 	<ul style="list-style-type: none"> • Teacher leads blackboard discussion of procedures and techniques using teacher-made transparencies. • Students view film loops. • Students complete partially finished views from a teacher-prepared problem sheet. • Students work on sketching problems employing 3-D styrofoam or wood models of the objects. • Students should use isometric grid paper, this leaves no room for error in determining axes. 																					
Involved																							
Productive																							
Employable																							
	<p>Task-Related Competencies</p> <p>KNOWLEDGE A 6,7,9 NUMBERS B 2a,b, 4a,5</p> <p>APPLICATION C 2,7,8</p> <p>PHYSICAL D 1a,b,c,d 2a</p>	<p>Instructional Materials</p> <table border="1"> <thead> <tr> <th data-bbox="880 562 924 1113">Title</th> <th data-bbox="880 1113 924 2003">Media</th> <th data-bbox="880 2003 924 2044">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="924 562 960 1113">Sketching Circles and Arcs</td> <td data-bbox="924 1113 960 2003">9</td> <td data-bbox="924 2003 960 2044">13</td> </tr> <tr> <td data-bbox="960 562 997 1113">Sketching Straight Lines</td> <td data-bbox="960 1113 997 2003">9</td> <td data-bbox="960 2003 997 2044">13</td> </tr> <tr> <td data-bbox="997 562 1033 1113">Square and Circle</td> <td data-bbox="997 1113 1033 2003">9</td> <td data-bbox="997 2003 1033 2044">14</td> </tr> <tr> <td data-bbox="1033 562 1070 1113"><u>Freehand Drafting for Technical Sketching</u></td> <td data-bbox="1033 1113 1070 2003">13</td> <td data-bbox="1033 2003 1070 2044">11</td> </tr> <tr> <td data-bbox="1070 562 1106 1113">Teacher-made transparencies</td> <td data-bbox="1070 1113 1106 2003">12</td> <td></td> </tr> <tr> <td data-bbox="1106 562 1142 1113">Styrofoam/wood problem models</td> <td data-bbox="1106 1113 1142 2003">2</td> <td></td> </tr> </tbody> </table>	Title	Media	Bib.	Sketching Circles and Arcs	9	13	Sketching Straight Lines	9	13	Square and Circle	9	14	<u>Freehand Drafting for Technical Sketching</u>	13	11	Teacher-made transparencies	12		Styrofoam/wood problem models	2	
Title	Media	Bib.																					
Sketching Circles and Arcs	9	13																					
Sketching Straight Lines	9	13																					
Square and Circle	9	14																					
<u>Freehand Drafting for Technical Sketching</u>	13	11																					
Teacher-made transparencies	12																						
Styrofoam/wood problem models	2																						

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Isometric</p> <p>Sketch</p> <p>Freehand</p> <p>Object/model</p> <p>Horizontal/vertical</p> <p>Single stroke lines</p> <p>Parallel</p> <p>Alignment</p> <p>Front edge</p> <p>Lower edge</p> <p>Ellipse</p> <p>Oval</p> <p>Shape</p>	<p>Estimate proportions and sizes of isometric objects drawn on paper</p> <p>"The Isometric Box"</p>  <p>Interpret 30° angle of projection in the isometric box</p>

Suggestions:

- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf and partially sighted students (Individualize without calling attention to the individual).

Supportive Instructional Materials:

Pencils, paper, models

SUBCLUSTER: DRAFTING

TASK: Prepare multiview sketches

Code: GCM - DT02

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods					
		Task-Related Competencies	Instructional Materials Title	Media Bib.			
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. sketch straight lines, arcs, and circles, exhibiting a degree of skill. 2. identify the different types of lines used in drafting. 3. describe basic shapes by sketching, exhibiting a degree of skill. 4. identify the three dimensions of an object and the views in which they appear. 5. identify the three most common views used in multiview projection. 6. determine the three views of an object from a given pictorial view. 7. determine the third view of an object from two given views. 8. describe and demonstrate the use of reference lines and 45° angle for projection. 9. describe simple objects by multiview sketches, exhibiting a degree of skill. 	<ul style="list-style-type: none"> • Teacher-led blackboard discussion of procedures/techniques. • Teacher demonstration of projection principles using object models and projection box. • Students view transparencies and film loops. • Students can review reference books in basic drawing procedures. • Note: cutting views from an isometric box aids in seeing views. 	<p>Methods of Projection</p> <p>Orthographic Projection (series of 16 colored)</p> <p>"Spacing Views in Orthographic Multiview"</p> <p>"Understanding Orthographic Multiview Projection"</p> <p>Teacher-made transparencies</p> <p>Models/blocks made of styro-foam or wood</p> <p>Reference books</p>	<p>12</p> <p>12</p> <p>9</p> <p>9</p> <p>12</p> <p>2</p> <p>13</p>			
Involved					KNOWLEDGE		
Productive					A 1,6,7,9 NUMBERS		
Employable					B 2a,4a,5,6		
					APPLICATION		
					C 2,7,8		
					PHYSICAL		
					D 1a,b,c,d 2a		

SUBCLUSTER: DRAFTING

TASK: GCM - DTO2 Prepare multiview sketches

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
Orthographic projection Cube Circle Square Views front top right side left side back bottom Multiview Horizontal Vertical Alphabet of lines	Size Degrees Estimate: height, depth, length Recognize basic geometric shapes Recognize and estimate the proportions and sizes of objects drawn on paper	<ul style="list-style-type: none"> Informally encourage voluntary buddy system for assisting deaf or partially sighted students (individualize without calling attention to the individual).

Supportive Instructional Materials:
Pencils, paper

TASK: Letter drawings and graphic materials

Student Name: _____

3: GCM - DT03

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																															
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. describe and demonstrate the fundamentals of and procedures to follow when lettering alphabet, numbers, and symbols. 2. letter freehand on a drawing, exhibiting a degree of skill. 3. describe and demonstrate the proper procedures in the use of lettering guides. 4. letter with a lettering guide on a drawing, exhibiting a degree of skill. 5. letter with a LeRoy Lettering Set. 6. letter with rub-on letters. 7. letter with typed notes. 8. letter with guideline aids. 	<ul style="list-style-type: none"> • Students view film loop series. • Teacher-led blackboard demonstration of proper lettering techniques. • Students practice lettering on teacher-made work sheets, LeRoy Lettering Set, and with rub-on letters. 																															
Involved																																	
Productive																																	
Employable																																	
		<table border="1"> <thead> <tr> <th data-bbox="845 901 927 1129">Task-Related Competencies</th> <th data-bbox="845 259 927 901">Instructional Materials Title</th> <th data-bbox="845 72 927 259">Media Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="927 901 979 1129">KNOWLEDGE</td> <td data-bbox="927 259 979 901">McIntyre lettering series</td> <td data-bbox="927 72 979 259">9 14</td> </tr> <tr> <td data-bbox="979 901 1031 1129">A 6,9</td> <td data-bbox="979 259 1031 901">Teacher-made practice sheets</td> <td data-bbox="979 72 1031 259">14</td> </tr> <tr> <td data-bbox="1031 901 1083 1129">NUMBERS</td> <td data-bbox="1031 259 1083 901">LeRoy Lettering Set</td> <td data-bbox="1031 72 1083 259">1</td> </tr> <tr> <td data-bbox="1083 901 1135 1129">B 2a, 4a</td> <td data-bbox="1083 259 1135 901">Rub-on letters</td> <td data-bbox="1083 72 1135 259">1</td> </tr> <tr> <td data-bbox="1135 901 1187 1129">APPLICATION</td> <td data-bbox="1135 259 1187 901"></td> <td data-bbox="1135 72 1187 259"></td> </tr> <tr> <td data-bbox="1187 901 1239 1129">C 2,5,8</td> <td data-bbox="1187 259 1239 901"></td> <td data-bbox="1187 72 1239 259"></td> </tr> <tr> <td data-bbox="1239 901 1291 1129">PHYSICAL</td> <td data-bbox="1239 259 1291 901"></td> <td data-bbox="1239 72 1291 259"></td> </tr> <tr> <td data-bbox="1291 901 1343 1129">D 1a,b,c,d</td> <td data-bbox="1291 259 1343 901"></td> <td data-bbox="1291 72 1343 259"></td> </tr> <tr> <td data-bbox="1343 901 1394 1129">2a,3g</td> <td data-bbox="1343 259 1394 901"></td> <td data-bbox="1343 72 1394 259"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials Title	Media Bib.	KNOWLEDGE	McIntyre lettering series	9 14	A 6,9	Teacher-made practice sheets	14	NUMBERS	LeRoy Lettering Set	1	B 2a, 4a	Rub-on letters	1	APPLICATION			C 2,5,8			PHYSICAL			D 1a,b,c,d			2a,3g			
Task-Related Competencies	Instructional Materials Title	Media Bib.																															
KNOWLEDGE	McIntyre lettering series	9 14																															
A 6,9	Teacher-made practice sheets	14																															
NUMBERS	LeRoy Lettering Set	1																															
B 2a, 4a	Rub-on letters	1																															
APPLICATION																																	
C 2,5,8																																	
PHYSICAL																																	
D 1a,b,c,d																																	
2a,3g																																	



SUBCLUSTER: DRAFTING

TASK: Letter drawings and graphic materials

GCM - DT03

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts	Suggestions:
<p>Gothic lettering</p> <p>Vertical</p> <p>Inclined</p> <p>Single stroke</p> <p>Guidelines</p> <p>Title strip</p> <p>Notes</p> <p>Materials lists</p> <p>Capital (upper case)</p> <p>Lower case</p> <p>Density</p> <p>Punctuation marks</p>	<p>Distinguish between upper case/lower case</p> <p>Recognize number and fraction symbols</p> <p>Recognize two and three place decimals</p> <p>Recognize degrees of angularity</p> <p>30°</p> <p>45°</p> <p>60°</p>	<ul style="list-style-type: none"> • Do not teach lettering at the beginning of a course; it is difficult to hold attention of even the better students. • Informally encourage voluntary buddy system for assisting deaf students and partially sighted persons (individualize without calling attention to the individual). • Demonstration of correct and incorrect procedures to highlight the importance of correctness. •

Supportive Instructional Materials:

Pencil, prepared practice sheets, lettering guide

TASK: Use drafting equipment in drawing simple shapes

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods		
		Task-Related Competencies	Instructional Materials Title	Media Bib.
Introduced Involved Productive Employable	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and describe the use of the following pieces of drafting equipment: <ol style="list-style-type: none"> a. board covering b. straight edge, draft machine c. vellum, mylar, cloth d. triangles <ol style="list-style-type: none"> 1) 45° 2) 30°/60° 3) adjustable e. scales f. pencils, mechanical, plastic film (mylar) g. erasers h. erasing shield i. brush j. masking tape k. pointer l. compass m. protractor n. lead holder o. templates p. french curves, adjustable curves q. sepia, repro. 2. demonstrate proper use of commonly used pieces of drafting equipment. 3. draw basic shapes using commonly used pieces of drafting equipment, exhibiting a degree of skill. 	<ul style="list-style-type: none"> • Teacher provides demonstration of the use of basic drafting tools and equipment. • Students view film loops on use of equipment. • Teacher-led small group demonstration. • Teacher should discuss the use of equipment as it relates to all industries. • Note: This should not be considered as a separate unit. It will be covered and reinforced in upcoming units. 	<p>Complete set of demonstration equipment</p> <p>"T-Square and Triangles I & II"</p> <p>McIntyre loop series on "Drafting Procedures" 5 loops</p>	<p>1</p> <p>9</p> <p>9</p> <p>13</p> <p>14</p>

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
<p>Names of drafting tools and equipment</p> <p>Grades of pencils</p> <p>Types of pencils</p> <p>Points</p> <p>Line weights</p> <p>thin line - sharp pencil</p> <p>medium lines - nearly sharp</p> <p>thick lines - slightly sharp</p>	<p>Recognize and interpret the following scales:</p> <p>1" = 1"</p> <p>1/2" = 1"</p> <p>6" = 1'-0"</p> <p>1 1/2" = 1'-0"</p> <p>12" = 1'</p> <p>Locate the midpoint of a line</p>
<p>Suggestions:</p> <ul style="list-style-type: none"> Teacher and deaf student should cooperatively develop some simple signs related to language of the task. Informally encourage voluntary buddy system for assisting deaf and partially sighted students (individualize without calling attention to the individual). Drafting is the engineer's "language". Develop student awareness and attitudes related to drafting practices and techniques. Clear and concise drawings are essential for duplication (blue-printing). Distribution of these reproductions are utilized as the basis for the total manufacturing process. 	

Supportive Instructional Materials:
 Pencil, paper, eraser, tape, board, T-square, triangles, etc.

TASK: Prepare geometric constructions with drafting equipment

Student Name:

e: GCM - DT05

Student Progress	<p>Behavioral Task Knowledges/Task Skills</p> <p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and describe the proper procedures for completing the following geometric constructions: <ol style="list-style-type: none"> a. bisect an arc b. copy an angle c. divide a line into a given number of parts d. construct a triangle e. construct an equilateral triangle f. construct a square g. construct a pentagon h. construct a hexagon i. construct an octagon j. construct an ellipse. 2. accurately complete the identified geometric constructions for specific problems, following a prescribed procedure. 	<p>Instructional Methods</p> <ul style="list-style-type: none"> • Teacher-led discussion of difficult constructions with individual students. • Teacher-led blackboard demonstration of construction procedures using transparencies. <p>Note: This task is particularly good for teaching manipulation of drafting tools.</p>								
Introduced	<p style="text-align: center;">Instructional Materials</p> <table border="1" style="width: 100%;"> <thead> <tr> <th data-bbox="237 890 838 1129">Task-Related Competencies</th> <th data-bbox="237 248 838 890">Title</th> <th data-bbox="237 145 838 248">Media</th> <th data-bbox="237 62 838 145">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="237 890 838 1129"> KNOWLEDGE A 1,6,7,9 NUMBERS B 4a APPLICATION C 2,5 PHYSICAL D 1a,b,c,d 2a </td> <td data-bbox="237 248 838 890"> "Geometric Construction - (2) Circles Lines" </td> <td data-bbox="237 145 838 248"> 12 </td> <td data-bbox="237 62 838 145"> 12 </td> </tr> </tbody> </table>		Task-Related Competencies	Title	Media	Bib.	KNOWLEDGE A 1,6,7,9 NUMBERS B 4a APPLICATION C 2,5 PHYSICAL D 1a,b,c,d 2a	"Geometric Construction - (2) Circles Lines"	12	12
Task-Related Competencies			Title	Media	Bib.					
KNOWLEDGE A 1,6,7,9 NUMBERS B 4a APPLICATION C 2,5 PHYSICAL D 1a,b,c,d 2a	"Geometric Construction - (2) Circles Lines"	12	12							
Involved	Productive	Employable								

SUBCLUSTER: DRAFTING

Objective: GCM- DT05 TASK: Prepare geometric constructions with drafting equipment

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
Bisect Divide Construct Angle Line Triangle Square Hexagon Octagon Pentagon Ellipse Segment Center Flats-points	Determine the length of a line Locate the center of a circle, line, etc. Interpret circular dimensions in: degrees minutes seconds	<ul style="list-style-type: none"> • This concept good for teaching manipulation of basic drafting tools and equipment. • Drill deaf student extensively on language of the task. • Informally encourage voluntary buddy system for assisting deaf or partially sighted students (individualize without calling attention to the individual). •

Supportive Instructional Materials:

Board, T-square, triangles, compass, dividers, scale

TASK: Operate drawing reproduction machines

Code: GCM - DT06

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. describe the drawing reproduction process. 2. locate, identify, and adjust machine controls accurately. 3. identify and describe the proper steps to follow in making a reproduction of a drawing. 4. prepare quality blueprint reproductions using the drawing reproduction machine. 5. fix the reproduction machine in case of paper jam, following the prescribed procedure. 6. change developer fluid in the reproduction machine, following the manufacturer's prescribed procedure. 	<ul style="list-style-type: none"> • Teacher demonstration of machine operation, adjustment, and use. • Students run prints of their early drawings and recent drawings to compare line weight quality. • Teacher and students discuss use of the reproduction machine as a quality control check of drawings.
Involved		
Productive		
Employable		

Task-Related Competencies

- KNOWLEDGE
- A 7,9
- NUMBERS
- B 2a
- APPLICATION
- C 4,5,8
- PHYSICAL
- D 1a,c,d
- 2a, 3c,f,8

Instructional Materials

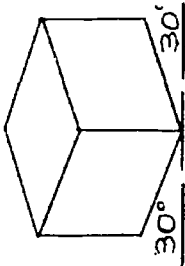
Title	Media	Bib.
Drafting reproduction machine and reproduction materials		1

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
Light Exposure Ammonia development Prints blue-line black-line Rollers Switch	Determine the appropriate dial setting for speed of reproduction machine (see drafting instructor).	<ul style="list-style-type: none"> Informally encourage voluntary buddy system for assisting deaf or partially sighted students (individualize without calling attention to the individual). Demonstration of correct and incorrect procedures to highlight the importance of correctness. Stress the importance of not exposing light-sensitive reproduction (print) paper to light before use. Conduct an experiment in class demonstrating the reproduction process.

Supportive Instructional Materials:

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods			
		Task-Related Competencies	Instructional Materials Title		
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the proper axis for isometric drawings. 2. describe and demonstrate the procedures for locating non-isometric lines. 3. describe and demonstrate the procedures for constructing isometric circles and arcs. 4. describe and demonstrate the procedures for centering isometric drawings. 5. construct and prepare isometric views, exhibiting a degree of skill. 	<ul style="list-style-type: none"> • Teacher leads blackboard demonstration of procedures for constructing isometric views with transparencies. • Teacher provides individual student assistance on specific problems. • Students view film loops to reinforce concepts. • Students complete partially finished views from a teacher-prepared problem sheet. 	Media Bib.		
Involved			KNOWLEDGE A 1,2,6,9	"Constructing Isometric Cylinders"	12 12
Productive			NUMBERS B 4a	"Developing on Isometric Circle"	12 12
			APPLICATION C 2,5	"Principles of Isometric Drawing"	12 12
Employable			PHYSICAL D 1a,b,c,d 2a		

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts
<p>Isometric</p> <p>Oblique</p> <p>Cavilier</p> <p>Cabinet</p> <p>Non-isometric</p> <p>True length</p> <p>Fore shortened</p> <p>Ellipse</p> <p>Axis</p>	<p>Identify the 30° axes of the isometric box</p>  <p>"the isometric box"</p>

Suggestions:

- A unit easy to understand.
- Can build interest and confidence with this material.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf and partially sighted students (individualize without calling attention to the individual).

Supportive Instructional Materials:
Board, T-square, triangles, arch scale

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods			
		Task-Related Competencies	Instructional Materials		
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify the three most common views used in multiview projection. 2. determine the three views of an object from a given pictorial view. 3. determine the third view of an object from two given views. 4. describe and demonstrate the use of reference lines for projecting multi-view drawings. 5. accurately center a multiview drawing in a given space. 6. display fundamental knowledge of line construction and technique. 7. constructs and prepares multiview drawing problems. 	Title	Media Bib.		
Involved		<ul style="list-style-type: none"> • Students cut and construct styrofoam blocks to visualize solutions of multiview problems. • Students prepare and construct solutions for progressively difficult series of multiview problems. • Teacher-led blackboard demonstration of construction procedures with transparencies. • Students complete exercise in missing lines. 	Styrofoam model/blocks	1	
Productive			"Two View Orthographic-- Needle Valve"	12	
Employable			"Three View Orthographic - Drill Block"	12	
			KNOWLEDGE		
			A 6,9		
			NUMBERS		
	B 2a,4a				
	APPLICATION				
	C 2,5,7,8				
	PHYSICAL				
	D 1a,c,d 2a,3g	Missing line problems - teacher prepared	14		

Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
<p>Language of industry</p> <p>Views front top side</p> <p>Projection</p> <p>Orthographic</p> <p>Center</p> <p>Spacing</p> <p>Lines object center dimension construction</p>	<p>Construct these angles using a protractor, compass, and ruler 45° angle 30° angle</p> <p>Measure a drawing of an observable object and determine the scale. One (1) foot (') or one (1) inch (") equals what fractional part of an inch? inch fractions length height depth</p>
<p>Suggestions:</p> <ul style="list-style-type: none"> • Drill deaf student extensively on language of the task. • Teacher and deaf student should cooperatively develop some simple signs related to language of the task. • Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual). 	

Supportive Instructional Materials:

Board, T-square, triangles, scale

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods										
		Task-Related Competencies	Instructional Materials									
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> display a knowledge of the elements of dimensioning. define specific common dimensioning terms. apply specific dimensioning rules, techniques, and conventions to conform with specified engineering standards. read and interpret various dimensioning tables, with a degree of accuracy. dimension given drawing problems with a degree of skill. 	<ul style="list-style-type: none"> Teacher leads blackboard demonstration of each dimensioning technique using transparencies. Student prepare solutions to dimensioning problems, illustrating the appropriate use of each technique on a drawing. Teacher prepares student information sheet containing dimensioning rules, with illustrated examples of each rule. 	<table border="1"> <thead> <tr> <th>Title</th> <th>Media</th> <th>Bib.</th> </tr> </thead> <tbody> <tr> <td>"Dimensions"</td> <td>12</td> <td>12</td> </tr> <tr> <td>Student information sheet on dimensioning</td> <td></td> <td></td> </tr> </tbody> </table>	Title	Media	Bib.	"Dimensions"	12	12	Student information sheet on dimensioning		
Title				Media	Bib.							
"Dimensions"				12	12							
Student information sheet on dimensioning												
Involved												
Productive												
Employable												

Basic Information for Cooperative Teaching

Language of the Task

Size description
 Dimension line
 Extension lines
 Arrowheads
 Leader
 Note
 Center
 Center line
 Object line

Quantitative Concepts

Recognize and interpret decimal dimensions
 (2 place - .01)
 (3 place - .001)
 (4 place - .0001)
 Interpret dimension tables for fastener sizes, etc.

Suggestions:

- This is a difficult concept; move slowly, try to teach as a separate unit.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).
- Demonstration of correct and incorrect procedures to highlight the importance of correctness.

Supportive Instructional Materials:

Basic tools

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and describe principles for preparing line, bar, and circle graphs. 2. identify and describe principles for preparing organization and flow charts. 3. accurately prepare specific types of charts and graphs, exhibiting a degree of skill: <ol style="list-style-type: none"> a. line graph b. bar graph c. circle graph d. flow chart e. organization chart. 4. demonstrate the effective use of colors in preparing graphs and charts. 	<ul style="list-style-type: none"> • Teacher should arrange and organize correlated study problems with math instructor for presenting concepts in this unit. • Students prepare and letter specific types of graphs and charts properly illustrated with colors and/or symbols.
Involved		
Productive		
Employable		

Basic Information for Cooperative Teaching

Language of the Task	Quantitative Concepts	Suggestions:
<p>Types of graphs line bar circle or pie</p> <p>Types of charts organizational flow</p>	<p>Determine percentages as applied to constructing charts and graphs</p> <p>Ratio proportion: use a specified color and/or definite length of line or degrees of a circle to represent a frequency of occurrence, distance, weight, etc.</p>	<ul style="list-style-type: none"> ● Be conscious of using good mouth formation of words. ● Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual). ● Drill deaf student extensively on language of the task. ● Interpret charts that have some interest factor to the student's life.

Supportive Instructional Materials:

SUBCLUSTER: DRAFTING
TASK: Develop and construct sectional views
Code: GCM - DT11

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																																
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> define, explain, and illustrate the following elements of sectional views: <ol style="list-style-type: none"> cutting plane section lines conventional representations. identify, describe, and illustrate the various types of sectional views: <ol style="list-style-type: none"> full half revolved removed offset broken-out aligned. select and accurately construct the appropriate sectional view for a given problem. 	<ul style="list-style-type: none"> Teacher illustrates sectioning concepts using teacher-constructed problem blocks or models. Students prepare solutions to simple problems for each type of section. Teacher discusses sectioning examples from industrial/residential prints. 																																
Involved																																		
Productive																																		
Employable																																		
	<table border="1"> <thead> <tr> <th data-bbox="861 341 945 1129">Task-Related Competencies</th> <th data-bbox="861 341 1443 1129">Instructional Materials Title</th> <th data-bbox="861 341 945 1129">Media</th> <th data-bbox="861 341 945 1129">Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="945 341 1020 1129">KNOWLEDGE</td> <td data-bbox="945 341 1443 1129"></td> <td data-bbox="945 341 1020 1129"></td> <td data-bbox="945 341 1020 1129"></td> </tr> <tr> <td data-bbox="1020 341 1096 1129">A 6,7,8,9 NUMBERS</td> <td data-bbox="1020 341 1443 1129">Industrial/residential prints</td> <td data-bbox="1020 341 1096 1129">1</td> <td data-bbox="1020 341 1096 1129"></td> </tr> <tr> <td data-bbox="1096 341 1171 1129">B 2ab,4ae,5</td> <td data-bbox="1096 341 1443 1129">Problem blocks - teacher made</td> <td data-bbox="1096 341 1171 1129">2</td> <td data-bbox="1096 341 1171 1129"></td> </tr> <tr> <td data-bbox="1171 341 1247 1129">APPLICATION</td> <td data-bbox="1171 341 1443 1129"></td> <td data-bbox="1171 341 1247 1129"></td> <td data-bbox="1171 341 1247 1129"></td> </tr> <tr> <td data-bbox="1247 341 1323 1129">C 2,7,8</td> <td data-bbox="1247 341 1443 1129">"The Cutting Plane"</td> <td data-bbox="1247 341 1323 1129">12</td> <td data-bbox="1247 341 1323 1129">12</td> </tr> <tr> <td data-bbox="1323 341 1398 1129">PHYSICAL</td> <td data-bbox="1323 341 1443 1129"></td> <td data-bbox="1323 341 1398 1129"></td> <td data-bbox="1323 341 1398 1129"></td> </tr> <tr> <td data-bbox="1398 341 1451 1129">D 1a,b,c,d 2a</td> <td data-bbox="1398 341 1443 1129"></td> <td data-bbox="1398 341 1451 1129"></td> <td data-bbox="1398 341 1451 1129"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials Title	Media	Bib.	KNOWLEDGE				A 6,7,8,9 NUMBERS	Industrial/residential prints	1		B 2ab,4ae,5	Problem blocks - teacher made	2		APPLICATION				C 2,7,8	"The Cutting Plane"	12	12	PHYSICAL				D 1a,b,c,d 2a				
Task-Related Competencies	Instructional Materials Title	Media	Bib.																															
KNOWLEDGE																																		
A 6,7,8,9 NUMBERS	Industrial/residential prints	1																																
B 2ab,4ae,5	Problem blocks - teacher made	2																																
APPLICATION																																		
C 2,7,8	"The Cutting Plane"	12	12																															
PHYSICAL																																		
D 1a,b,c,d 2a																																		

Basic Information for Cooperative Teaching

Language of the Task

Cutting plane
 Section lines
 Crosshatching
 Conventional representations
 Types of sections
 full
 half
 revolved
 removed
 offset
 broken

Quantitative Concepts

Accurately measure lengths of lines on paper
 Accurately measure angles of objects on paper
 Determine appropriate equal spacing between views on a sheet of paper

Suggestions:

- Can be used to reinforce shape description and dimensioning.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).
- Drill deaf student extensively on language of the task.

Supportive Instructional Materials:

Basic drafting tools

SUBCLUSTER: DRAFTING

TASK: Prepare auxiliary views and revolutions

Student Name: _____

Code: GCM - DT12

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods																		
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will</p> <ol style="list-style-type: none"> 1. identify, describe, and illustrate procedures used in constructing different auxiliary views: <ol style="list-style-type: none"> a. inclined surfaces b. reference lines c. primary auxiliaries d. secondary auxiliaries. 2. identify, describe, and illustrate procedures used in constructing revolutions: <ol style="list-style-type: none"> a. axis of revolution b. "Rule of Revolution" c. practical application. 	<ul style="list-style-type: none"> • Teacher uses 3-D problem blocks to illustrate concept of auxiliary and revolution. • Students prepare simple solutions to auxiliary and revolution problems. • Students view film loops. 																		
Involved																				
Productive																				
Employable		<table border="1"> <thead> <tr> <th data-bbox="861 890 945 1129">Task-Related Competencies</th> <th colspan="2" data-bbox="861 72 945 890">Instructional Materials</th> </tr> <tr> <td data-bbox="952 890 997 1129"></td> <th data-bbox="952 72 997 890">Title</th> <th data-bbox="952 72 997 890">Media Bib.</th> </tr> </thead> <tbody> <tr> <td data-bbox="997 890 1058 1129">KNOWLEDGE A 7,8,9</td> <td data-bbox="997 72 1058 890">Teacher-prepared problem blocks</td> <td data-bbox="997 72 1058 890">2</td> </tr> <tr> <td data-bbox="1058 890 1103 1129">NUMBERS B 2ab,4ae,5</td> <td data-bbox="1058 72 1103 890">"Plotting Curves in Auxiliary Views"</td> <td data-bbox="1058 72 1103 890">12 15</td> </tr> <tr> <td data-bbox="1103 890 1149 1129">APPLICATION C 2,7,8</td> <td data-bbox="1103 72 1149 890">"Projecting Auxiliary Views"</td> <td data-bbox="1103 72 1149 890">12 15</td> </tr> <tr> <td data-bbox="1149 890 1194 1129">PHYSICAL D 1a,b,c,d 2a/b 3c,8</td> <td data-bbox="1149 72 1194 890"></td> <td data-bbox="1149 72 1194 890"></td> </tr> </tbody> </table>	Task-Related Competencies	Instructional Materials			Title	Media Bib.	KNOWLEDGE A 7,8,9	Teacher-prepared problem blocks	2	NUMBERS B 2ab,4ae,5	"Plotting Curves in Auxiliary Views"	12 15	APPLICATION C 2,7,8	"Projecting Auxiliary Views"	12 15	PHYSICAL D 1a,b,c,d 2a/b 3c,8		
Task-Related Competencies	Instructional Materials																			
	Title	Media Bib.																		
KNOWLEDGE A 7,8,9	Teacher-prepared problem blocks	2																		
NUMBERS B 2ab,4ae,5	"Plotting Curves in Auxiliary Views"	12 15																		
APPLICATION C 2,7,8	"Projecting Auxiliary Views"	12 15																		
PHYSICAL D 1a,b,c,d 2a/b 3c,8																				



Basic Information for Cooperative Teaching	
Language of the Task	Quantitative Concepts
<p>Inclined surfaces</p> <p>Auxiliaries</p> <p>Axis</p> <p>Parallel</p>	<p>Supportive help on this level will have to be determined by the two teachers working together because to be at this level the fundamental concepts will already have been mastered.</p>

Suggestions:

- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).
- Drill deaf student extensively on language of the task.
- One way a teacher could check to see if the student understood the position of a drawing would be to have the student place an object in the same position as a drawing, then explain the need for auxiliary views and revolutions.

Supportive Instructional Materials:

SUBCLUSTER: DRAFTING

TASK: Construct developments and intersections

Student Name: _____



Code: GCM - DT13

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced		
Involved		
Productive		
Employable		

Basic Information for Cooperative Teaching

Language of the Task

Quantitative Concepts

Suggestions:

Surface plane
 single curve
 double curve
 warped
 Developable surface
 Axis
 Line
 Intersection
 Development
 Element
 Parallel
 Oblique
 Cylinder
 Cone
 Sphere
 Torus
 Ellipsoid
 Hyperboloid

Recognize common geometric figures and shapes
 At this level, a supportive teacher could best reinforce the vocational teacher by working with strictly individualized problems and generally recognizing the need for accurate measurements and keen observation of surface changes which represent a drafting problem.

- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Informally encourage voluntary buddy system for assisting deaf students (individualize without calling attention to the individual).
- Be aware of the key word interpretation which lip reading deaf students make from your speech.

Supportive Instructional Materials:

SUBCLUSTER: DRAFTING

TASK: Construct and prepare perspective drawings

Code: GCM - DT14

Student Name: _____

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify terms related to perspective drawings. 2. describe and demonstrate the procedures for constructing one-point and two-point perspective drawings. 3. construct and prepare perspective drawings, with acceptable engineering standard accuracy. 4. describe and demonstrate different techniques or methods of shading perspective drawings. 	<ul style="list-style-type: none"> • Students review magazine pictures or appropriate materials illustrating perspective and related concepts. • Students shade and render lined perspective drawings. • Teacher demonstrates the use of perspective grid paper. • Teacher leads blackboard discussion of procedures for constructing perspective drawings.
Involved		
Productive		
Employable		

Task-Related Competencies

- KNOWLEDGE
- A 6,8,9 NUMBERS
- B 2ab,4a,5 APPLICATION
- C 2,7,8 PHYSICAL
- D 1a,b,c,d 2a

Instructional Materials

Title	Media	Bib.
"Pictorial Drawings"	12	12
"Two Point Perspective Drawing"	9	13
"One Point Perspective Drawing"	9	13
Perspective grid paper	1	



SUBCLUSTER: DRAFTING

Code: GCM - DT14 TASK: Construct and prepare perspective drawings

Basic Information for Cooperative Teaching

Language of the Task

Vanishing point

Horizon line

Station point

Horizon plane

Ground plane

Ground line

Center of vision

Piercing point

End points

Station point

One point perspective

Two point perspective

Angular perspective

Quantitative Concepts

The accuracy of natural talent for perspective drawing can be appreciated by the carefully measured angles of triangulation. The similarity of the two drawings justify training for those who may not have a "natural eye" for this skill.

Suggestions:

- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.
- The development of respect for skills both natural and trained might be one of the most constructive things the supportive teacher could do. This could be done both with perspective drawings and photographs.

Supportive Instructional Materials:

- Photographs
- Perspective drawings
- Sketch pads or drawing paper
- Pencils, T-squares, triangles, compass, etc.

SUBCLUSTER: DRAFTING

TASK: Detail screw threads and fasteners

Student Name: _____



GCM - DT15

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods															
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> read and interpret screw thread charts. discriminate between specific types of screw-thread representations: <ol style="list-style-type: none"> detailed schematic simplified. define and list the various parts of screw thread specifications. identify and describe the types of screws. identify and describe related screw-thread terms. identify, describe, and illustrate different bolt head and nuts. identify, describe, and illustrate specific types of fasteners. detail specific types and sizes of screw threads and fasteners for a given problem with engineering standard accuracy. 	<ul style="list-style-type: none"> Teacher collects different types and sizes of screw threads and fasteners and have students measure sizes of each in class. Students layout, prepare, and detail screw threads and fasteners from real objects. Teacher demonstrates the use of a screw pitch gage. 															
Involved																	
Productive																	
Employable																	
Task-Related Competencies	<p>KNOWLEDGE A 2,3,8,9</p> <p>NUMBERS B 2a,b 4ae,5,6</p> <p>APPLICATION C 2,3,8</p> <p>PHYSICAL D 1a,b,c,d 2a</p>	<p>Instructional Materials</p> <table border="1"> <thead> <tr> <th>Title</th> <th>Media</th> <th>Bib.</th> </tr> </thead> <tbody> <tr> <td>Threaded bolts and fasteners</td> <td>1</td> <td></td> </tr> <tr> <td>Thread measuring instruments</td> <td>1</td> <td>15</td> </tr> <tr> <td>"Thread notes"</td> <td>12</td> <td>15</td> </tr> <tr> <td>"Threads and Conventional Threads"</td> <td>12</td> <td>15</td> </tr> </tbody> </table>	Title	Media	Bib.	Threaded bolts and fasteners	1		Thread measuring instruments	1	15	"Thread notes"	12	15	"Threads and Conventional Threads"	12	15
Title	Media	Bib.															
Threaded bolts and fasteners	1																
Thread measuring instruments	1	15															
"Thread notes"	12	15															
"Threads and Conventional Threads"	12	15															

Basic Information for Cooperative Teaching		Suggestions:
Language of the Task	Quantitative Concepts	
Schematic	Root	<ul style="list-style-type: none"> • Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students. • Teacher and deaf student should cooperatively develop some simple signs related to language of the task. • To appreciate the need for accuracy time should be spent discussing, observing and manipulating screws and fasteners to show that they: <ol style="list-style-type: none"> 1) hold parts together 2) adjust parts with reference to each other 3) transmit power.
Simplified	Depth	
Pitch	Single	
Double	Multiple	
Triple		
Square thread		
Standard thread		
External thread		
Internal thread		
Diameter		
major		
minor		
pitch		
Lead		
Angle of thread		
Crest		

Supportive Instructional Materials:
 Collection of screws and fasteners
 Appropriate measurement tools to match

TASK: Prepare design and working drawings

Student Name:

Student Progress	Behavioral Task Knowledges/Task Skills	Instructional Methods				
Introduced	<p>Given the necessary tools, materials, equipment, and requisite knowledge, the learner will:</p> <ol style="list-style-type: none"> 1. identify and describe the various types of working drawings: <ol style="list-style-type: none"> a. detail drawings b. assembly drawing <ol style="list-style-type: none"> 1) unit 2) group 3) outline 4) check 5) display. 2. demonstrate the various practices basic to the preparation of working drawings: <ol style="list-style-type: none"> a. choice of views b. choice of scale c. location of views d. grouping and placing e. order of working f. titles g. parts' list h. identification of parts. 	<ul style="list-style-type: none"> • Students select an appropriate product, tool, jig, fixture, etc., with multiple parts from the shop area, and prepare a detailed working drawing from the object. • Teacher works individually with students in discussing the preparation of their specific set of working drawings. • Students should consult with machinists, machine operators, and other people who will be reading the set of drawings. 	Task-Related Competencies	Instructional Materials	Media	Bib.
Involved			KNOWLEDGE A 2,3,7,8,9	"Working Drawing-Main Bearing"	12	12
Productive			NUMBERS B 1,2ab,4a,5,0	"Engineering Drawing Problems, Series 1"	14	13
Employable			APPLICATION C 2,3,5,6,7,8			
			PHYSICAL D 1a,b,c,d 2a			

Basic Information for Cooperative Teaching

Language of the Task

Detailed drawing
Working drawing

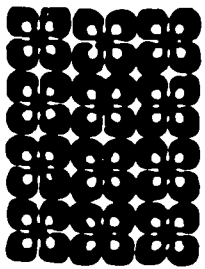
Quantitative Concepts

Review selected quantitative concepts previously identified, based on each individual student's needs.

Suggestions:

- Speak distinctly and slowly, use simple sentences, and look directly at lip reading deaf students.
- Teacher and deaf student should cooperatively develop some simple signs related to language of the task.
- This task represents an accumulation of all the drafting skills outlined previously.

Supportive Instructional Materials:



**INSTRUCTIONAL
MATERIALS
BIBLIOGRAPHY**

INSTRUCTIONAL MATERIALS BIBLIOGRAPHY

GRAPHICS AND COMMUNICATION MEDIA CLUSTER

<u>Bib. Ref. No.</u>	<u>Company Name/Address</u>	<u>Title</u>
1.	Bailey Film Association 11559 Santa Monica Blvd. Los Angeles, California 90025	"Stencil Cutting"
2.	E.M. Hale and Co. 1210 South Hastings Way Eau Claire, Wisconsin 54701	"Let's Go to a Paper Mill"
3.	Eye Gate House, Inc. 146-01 Archer Avenue Jamaica, New York 11435	"The Parts of Books"
4.	GAF Corporation Reprographic Products 140 W. 51st Street New York, N.Y. 10020	"Proofreaders' Marks A through S"
5.	Indiana University Audio-Visual Center Field Service Department Bloomington, Indiana 47401	"Packaging Practice" "Exposure Meter"
6.	International Film Bureau, Inc. 332 South Michigan Avenue Chicago, Illinois 60604	"Platen Press Makeready"
7.	Quebec Department of Tourism (No address available)	"The Forest About Us"
8.	Scope Productions, Inc. 1616 West Shaw Avenue Fresno, California 93705	"Packaging Design"
9.	STAS Instructional Material, Inc. 1225 Eighth St. Berkeley, California 94176	"The Art of Binding"
10.	Tumbo, John (No address available)	"Seriography - Methods and Techniques of Guy MacCoy"

- | | | |
|-----|--|--|
| 11. | Van Nostr Reinhold
450 West 33rd Street
New York, N.Y. 10001 | "Textile Printing"
<u>Freehand Drafting for</u>
<u>Technical Sketching</u> |
| 12. | DCA Educational Products
4865 Stenton Avenue
Philadelphia, Pa 19144 | "Methods of Projection"
"Orthographic Projection"
"Geometric Construction:
Circles"
"Geometric Construction:
Lines"
"Cabinet Drawing"
"Constructing Isometric
Cylinders"
"Oblique Drawing"
"Developing and Isometric
Circle"
"Principles of Isometric
Drawing"
"Pictorial Drawing
(Cavalier)"
"Two-View Orthographic-
Drill Block"
"Dimensions"
"The Cutting Plane"
"Pictorial Drawing"
"Working Drawing-Main
Bearing"
"Foundry-Type Parts" GA13
"Letterpress Lock Up" GA20
"Type Measurement Parts"
GA15
"California Job Case"
"Parts of a Book" GA12
"Parts of a Case Bound
Book" GA34
"Sewn Binding Methods"
GA34
"Wire Staple Binding" GA32
"Binding Methods" GA31
"Laying Out a Flat" GA21
"Horizontal Process Camera"
"Enlarging and Reduction
Scale" GA10
"Aperature" GA18
"Offset Systems" GA25-29 |
| 13. | McGraw-Hill Book Co.
Tom Troseth
2358 Crestview Drive
Wyoming, Michigan 49509 | "Sketching Circles and
Arcs"
"Sketching Straight Lines"
"Spacing Views in Ortho-
graphic Multiview"
"Understanding Orthographi
Multiview Projection" |

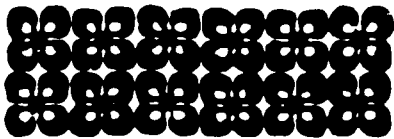
McGraw-Hill Book Co., continued

- | | | |
|-----|--|--|
| | | "T-Square and Triangles
I and II"
"Oblique Drawing"
"Surface Development"
(3 loops)
"Two Point Perspective
Drawing"
"One Point Perspective
Drawing"
"Engineering Drawing
Problems, Series I" |
| 14. | McIntyre, Inc. | Square and Circle
Lettering series (loops)
Drafting procedures
series (loops) |
| 15. | Visual Materials, Inc.
2549 Middlefield Road
Redwood City, Ca 94063 | "Plotting Curves in
Auxiliary Views"
"Projecting Auxiliary
Views"
"Thread Notes"
"Threads and Conventional
Threads" |
| 16. | Charles A. Bennett
809 W. Detweiller Drive
Peoria, Ill 61614 | <u>Graphic Arts</u> by Carlsen |
| 17. | Drake Publishers, Inc.
381 Park Avenue, South
New York, New York 10016 | "Fundamentals of Silk
Screen Process" |
| 18. | McKnight and McKnight Publishers
Bloomington, Illinois | <u>General Printing</u>
<u>Photo Offset Fundamentals</u>
<u>The Book of Binding</u>
<u>Practical Photography</u>
<u>Silk Screen Printing</u> |
| 19. | ACI Productions
16 West 46th Street
New York, N.Y. 10036 | "Silkscreen" |
| 20. | Imperial Film Co., Inc.
4044 S. Florida Avenue
Lakewood, Fla 33803 | "Silkscreen Printing" |

21. Eastman Kodak Co.
343 State Street
Rochester, New York 14650 "How to Develop Black and White Film"
22. B.F.A. Educational Media
2211 Michigan Avenue
Santa Monica, Calif 90404 "Fundamentals of Layout and Design"
"Introduction to Graphic Design"
"Tools of the Graphic Arts"
23. Modern Talking Picture Service
15921 W. Eight Mile Rd.
Detroit, Michigan 48235 "The Paper Forest"
24. Visual Arts Studio
1909 Avenue Q
Huntsville, Texas 77340
25. Coronet Instructional Films
65 East South Water
Chicago, Illinois 60601 "Paper and Pulp Making"
26. Encyclopedia Britannica
425 South Michigan Avenue
Chicago, Illinois 60611 "Printing Through the Age"
27. Delmar Publishers, Inc.
Division of L. tton Educ. Pub.
Inc., Mountainview Avenue
Albany, New York 12205 Printing Layout and Design
28. University of Iowa
Audio-Visual Center
C-5 East Hall
Iowa City, Iowa 52240
29. University of Minnesota
Audio Visual Education Service
Room 55, Westbrook Hall
Minneapolis, Minn 55455
30. Lanny R. Johnston
Calhoun Area Vocational Center
475 East Roosevelt
Battle Creek, Michigan 49017 "Imposition Techniques"
"Additive Plates"
"Subtractive Plates"
"Platen Press Makeready"

31. Addressograph-Multigraph Corp.
Cleveland, Ohio 47117

Graphic Arts Training
in Schools



APPENDIX

- INSTRUCTIONAL MATERIALS CODE
- TASK-RELATED COMPETENCIES CODE

INSTRUCTIONAL MATERIALS CODE

MEDIA CODE/INDEX

Probable Learning Sensations

<u>Code</u>	<u>Media</u>	Vis.	Aud.	Tac.	Kin.	Ole.	Sav.
1	Demonstration with real objects/materials	x	x	x	x	x	x
2	3-D models - Mockups	x	x	x	x	x	x
3	Games - Simulators	x	x	x	x	x	x
4	Sound/Slide Programs	x	x				
5	Filmstrip - Cassette/Record	x	x				
6	TV - Broadcast, Closed Circuit	x	x				
7	Video and/or Audio Recorder	x	x				
8	Film, 16mm - BW/Color, Sound	x	x				
9	Film loop, 8mm	x					
10	Filmstrip	x					
11	Slides	x					
12	Overhead transparencies	x					
13	Books, Magazines, Texts, Booklets	x					
14	Pamphlets, Brochures, Manuals, Workbooks	x					
15	Newspapers, Cartoons	x					
16	2-D Displays, Charts, Graphs, Posters	x					
17	Drawings, Photographs, Schematics, Maps	x					
18	Opaque Projectuals	x					
19	Telephone, Intercom		x				
20	Other, specify						

BIBLIOGRAPHY REFERENCE

. . . complete ordering information for each of the commercially or teacher-produced instructional materials may be obtained by checking this reference number in the Instructional Materials Bibliography located in the back of the Master Guide.

TASK-RELATED COMPETENCIES

The task-related competencies are a summation of the specific skills, understandings, and/or attitudes that are necessary to satisfactorily accomplish the instructional tasks found in the ten cluster guides. The following listing is used for interpreting the Task-Related Competency code numbers found on each task sheet. A more detailed description of each of the identified competencies can be found either in the Program Guide or the Project Handbook.

A. SKILLS BASED ON KNOWLEDGE

1. Name one or more items
2. Request supplies and/or equipment
3. Check for accuracy and, if necessary, require correction of self and/or others
4. Discriminate sound cues, recognize normal sound as opposed to abnormal sound
5. Identify color
6. Identify form, size, shape, texture
7. Sequencing - Respond by pre-determined plan
8. Write identifying information of persons, places, and/or objects, serial no., weight, and/or types of products on slips or tags, etc.
9. Obtain information through sight, shape, size, distance, motion, color, and other unique characteristics
10. Discriminate olfactory cues

B. CONCEPT OF NUMBERS BASED ON KNOWLEDGE

1. Ordinal
2. Cardinal
 - a. read numbers and/or copy
 - b. count and/or record
3. Make change (money)
4. Measure
 - a. distance
 - b. weights - volume - balance
 - c. liquids - solids
 - d. time (measurement of)
 - e. degrees of circle
 - f. temperature, pressure and humidity
 - g. torque
 - h. electricity
 - i. plumb - level
5. Perform simple addition and/or subtraction
6. Perform simple multiplication and/or division

TASK-RELATED COMPETENCIES, continued. . .

C. COMPREHENSION AND PERFORMANCE

1. Forms
 - a. write
 - b. file, post and/or mail
2. Match
 - a. duplicate
 - b. sort
3. Check lists and/or fill out report forms
4. Time awareness
5. Follow verbal symbol and/or written direction
6. Recognize words (not numbers) or ability to read and/or write
7. Depth perception
8. Ability to select most appropriate solution
9. Concept of distance

D. SKILLS BASED ON PHYSICAL ABILITIES

1. Fine Coordination
 - a. coordinate eyes and hands or fingers accurately
 - b. make precise movement
 - c. move fingers to manipulate objects
 - d. move hands skillfully - placing and turning motion
 - e. coordinate hand and foot
 - f. feeling - perceiving objects and materials as to size, shape, temperature, moisture content, or texture by means of touch
2. Strength (lifting, carrying, pushing, and/or pulling)
 - a. sedentary work, 10# occasionally lifting and/or carrying small items such as tools, etc.
 - b. light work, 20#, requires a significant amount of standing or walking
 - c. medium work, lifting 50#, frequent lifting and carrying objects weighing 25#
 - d. heavy work, frequent lifting and/or carrying up to 50#
 - e. very heavy work - lifting objects in excess 100#, lifting and/or carrying objects weighing 50# or more
3. Gross Coordination (climbing and/or balancing)
 - a. maintain body equilibrium to prevent falling when walking, standing, crouching, or running on narrow, slippery or moving surfaces
 - b. ascend and descend ladders, stairs, scaffolding, ramps, poles, ropes, using feet and legs and/or hands and arms
 - c. reaching - extending hands and arms in any directions
 - d. crawling - moving on knees or hands and feet
 - e. kneeling - bend legs at knees to rest on knee or knees
 - f. stooping - bend downward and forward by bending legs and spine
 - g. bending - downward and forward by bending at the waist