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ABSTRACT

The curriculum guide is designed to aid teachers in developing new curricular options as well as modifying existing components to meet the needs of individual secondary level handicapped learners. Section I, on foundations for secondary programing, addresses the prevailing philosophy regarding education of the handicapped; individualized education programs (IEPs); assessment; objective based curriculum; support services; participation in regular programs; program length and evaluation; development of cooperative programs; professional barriers to cooperative secondary programing (including attitudinal, scheduling, and curriculum constraints and lack of appropriate placement options); staff roles and responsibilities; and curriculum implementation strategies. Section II briefly reports on a needs assessment in Morgan County, Georgia. A third section reviews the tenets of curriculum design and modification including a systems approach, analysis of program and cluster goals, and formative evaluation. Section IV offers specific guidelines for modification of vocational curricula to meet the needs of handicapped students. Section V focuses on assessment of handicapped learners in general and special program options. Section VI contains guidelines for vocational assessment of handicapped learners. A final section contains secondary program competencies and suggested course options from a series of course outlines reflecting the competencies identified in the State of Georgia Competency Based Education regulations. (SB)

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A SECONDARY CURRICULUM GUIDE FOR HANDICAPPED LEARNERS

MORGAN COUNTY SCHOOL SYSTEM

MADISON, GEORGIA

JULY, 1981

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7. Systematic Approach to Vocational Education

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TEACHER PREPARED WORK SAMPLES

Many school systems do not have sufficient funds to purchase commercial work sample systems. However, informal work samples can be developed by vocational teachers, in cooperation with special education personnel, so that students can be observed as they perform work related tasks. The tools and equipment used in the vocational classroom or laboratory can be utilized in developing these activities.

Informal work samples should relate to jobs which are available in the community. An informal community survey can be conducted to determine the nature and content of the proposed work sample.

Another source of helpful information in identifying entry level tasks is The Dictionary of Occupational Titles (DOT). Published by the Department of Labor, this resource provides information concerning the physical demands, working conditions, aptitudes and specific job tasks for over 35,000 jobs. The information found in this guide was collected by occupational analysts through observation of workers and job sites. An example from the DOT is provided below:

521.685-306 SLICING-MACHINE OPERATOR (dairy prod., slaught. & meat pack.)

Tends one or more machines that automatically slice food products, such as cheese or meat for packaging: Threads roll or interleaf paper into machine. Turns screw to adjust guides on machine for size of food slab, using wrench. Places slab of food on feeder bed. Presses levers to clamp chunk to bed and start feeder. Turns dials to set number and thickness of slices in each stack. Presses switch to start rotating slicer with synchronized devices that cut, count, interleaf, and stack slices of food. Weighs stack and turns dial to regulate thickness of slices to achieve prescribed weight. Removes and replaces imperfect slice with one from spare pile. Places sliced stack on packaging conveyor.

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A project of this nature cannot become a useful educational tool if it is conceived and written by one individual. Rather, curriculum projects that have a positive impact on the learner generally are a result of a combined effort of a number of concerned professionals. The present curriculum guide is a product of a cooperative effort coordinated by the Programs for Mental Retardation, Exceptional Child Division, University of Georgia. In this light, the philosophy of the Mental Retardation Program is that each person writing a section of this guide is given credit for their work as an independent author. Therefore, the reader will note that each section of the guide is broken into subsections listing the appropriate author(s). Further the following list of contributors is presented to provide a easy reference to the authors and their affiliations.

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PREFACE

The following introductory statement is directed at the teachers who will hopefully be using this guide as a tool to assist them in programming for secondary handicapped learners.

Initially, practitioners should be aware that curriculum guides are often viewed as an end in and of themselves. That is, teachers may feel that a curriculum, once developed, should provide them with content, activities, and suggested materials resulting in a "blue-print" for teaching. Therefore, all that is left for the teacher is enter the classroom and implement the daily objectives. Although some curriculum guides do make the claim of being everything to everybody, the reality of the situation is that no educational tool can provide content, activities and materials that are generic to all handicapped learners. The result often times finds the guide completed, only to set on a shelf in a curriculum library. In any case, the goal of the present curriculum guide reflects an alternative philosophy to providing a cookbook approach to curriculum design.

The focus of this curriculum guide will be to present practitioners with a process for developing new curricular options as well as modifying existing components to meet the identified needs of individual handicapped learners. That is, the purpose of a guide such as this is to make available to teachers educational techniques necessary to develop appropriate programs. Therefore, the first part of this guide emphasizes a process for assessing specific strengths and weaknesses as well as techniques for curriculum modification. As readers progress through these sections, they will note that the tenets presented are generic and can be applied to any teaching situation. The result being that given such information teachers should be able to apply it to their particular needs.

In addition, the nature of secondary programming for handicapped students dictates that the curriculum address program options stressing occupational readiness, preparation, and enhancement as well as interfacing those skills with general daily living competencies.

Therefore, included in the first part of the guide are discussions relating to vocational assessment and the modification of vocational curriculum. The combination of both sections, that in addressing programming in both general and vocational education, should present the teachers of Morgan County with a foundation for appropriate curricular design.

Finally, due to the current trend towards competency based instruction in Georgia a guide of this nature must address specific learner competencies as dictated by state policy. The second part of the present curriculum guide will provide teachers with the initial objectives in each of the four competency areas outlined in the Administrative Manual for Georgia High Schools (Preliminary Manuscript) which includes learner roles of: (1) the individual; (2) the citizen (3) the consumer; (4) the producer. The role of the learner regarding basic academic skills has been delineated by the State Department of Education and will be included in the appendix section of this guide.

In sum, the present curriculum guide is designed to be the foundation for a comprehensive secondary program for handicapped learners that will ultimately be developed by the staff of the Morgan County School System. The purpose of this guide is to present a process for the development of individual educational programs and should assist the teacher as an educational tool to meet that goal. In order to facilitate the development and implementation of the program, further plans should include the current project staff assisting the teachers

with necessary technical assistance designed to translate the tenets outlined in this guide into daily practice. As of this date and pending financial considerations, a second implementation phase is projected.

John Langone
Athens, Georgia
June, 1981

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SECTION I

FOUNDATIONS FOR SECONDARY PROGRAMMING

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INTRODUCTION

PHILOSOPHY

Traditionally, professionals have viewed handicapped persons as being different; that is, different in the sense that those individuals learned in some obscure way and were to be taught by varied methods not applicable to the general population. These methods, however, were based on theoretical constructs that professionals believed were inherent in handicapped persons, yet had difficulty proving. These differences or deviance theories which still exist today among professionals, stimulated an educational philosophy that can be described as a "square peg in a round hole" system for educating the handicapped. In this system public education is designed for large groups allowing individuals to fit somewhere within the system only when their needs coincide with the group goals. This philosophical approach to teaching the handicapped has been a prevailing problem in secondary public education; however, emerging trends that appear to be surfacing in innovative educational programs present hopeful signs for these learners. There appears to be a change of attitude that will allow our public schools to modify their facilities and programs to accommodate handicapped learners. Shifting the philosophy from education to meet the needs of large groups to programming designed for the needs of the individual is important. The emphasis now is one of accommodation; in other words, finding the most suitable teaching methods, materials, teacher personality, physical plant, etc., to meet the specific characteristics of handicapped learners.

Another point that has surfaced as a result of this philosophical shift in secondary programming for the handicapped places

the responsibility for program effectiveness of the professional. There has always been a good deal of lip service given the accountability educators face in developing educational programs for handicapped learners. This accountability, however, has often been avoided by placing the blame of little or no success on the learners' specific handicap(s). For example, an often heard statement among teachers relates that a particular child is unable to read because he/she is mentally retarded or brain-damaged. Fortunately, this philosophy is no longer acceptable in relation to emerging trends. Practitioners are realizing that if a child is not succeeding, a revision of measurement systems, curricular objectives or interventions must be implemented in order to complement the student's learning style with these variables.

One final point should be made here to further clarify the theme of this lesson and identify trends in secondary programming for the handicapped. Readers should note that the handicapped population are extremely heterogeneous in their affective and learning characteristics. One cannot discuss a specific learning problem of one retarded individual, for example, and expect that all retarded individuals have the same problem. Likewise, with other handicapped individuals the problems encountered by these persons and compounded by specific handicaps are generally unique, in a programming sense, to that individual. Therefore, an important trend continuing to surface involves the need to identify characteristics of good teaching and relate these characteristics to the needs of individuals. Professionals now feel that good teaching and special education are synonymous; good teaching, therefore, involves a systematic design of instruction combined with a systematic

method of intervention all based on the identified needs of the target learner. This attempt at individualizing instruction allows professionals to develop efficient and effective programs to assist the handicapped in reaching their potential.

One final point should be made regarding appropriate placement options for handicapped learners. P.L. 94-142 specifically states that handicapped students must be placed in the "least restrictive environment" depending upon their abilities and disabilities at a particular point in time. Therefore, some handicapped students may benefit from a self-contained program and minimal contact with their general peers. Conversely, other handicapped students may function in a completely mainstreamed environment with only minimal support services such as resource tutoring, speech therapy, counseling, etc. Furthermore, professionals must realize that the rigidity in boundaries within special education is not appropriate under current mandate. Traditionally, we have found that there has been little movement between placements according to severity level; for example, students placed in classes for the trainable mentally retarded (TMR) seldom were afforded the opportunity to participate with students in classes for educable mentally retarded (EMR). The reverse of the example has also been true in cases where EMR students might benefit from a specific programmatic sequence available in a given TMR class. Professionals involved in planning must come to realize that this rigidity between placement options should not exist. Further, there are cases where students with identified needs, cannot be placed across programmatic options because of bureaucratic constraints such as I.Q. cutoffs, inflexibility of scheduling or inavailability of program.

In general, it is safe to say that a person who is cognitively on the same level as other students should participate with those peers to the fullest extent possible. This participation, of course, depends somewhat on the existing handicapping condition; however, with the appropriate support services and modifications most handicapped persons with a normal rate of cognitive development can function successfully in the mainstream of education.

Modifications in architectural barriers, for example, and inclusion of resource tutoring can assist children with cerebral palsy in participating in regular programs. Further, advances in medicine allow children with epilepsy as a primary disability, to be included in most classroom activities with guidance from the teacher to help classmates understand and react to this problem. In sum, there should be a diminishing of controversy that exists over appropriate educational placement options for all handicapped individuals. These issues should somewhat diminish as the tenets of P.L. 94-142 become more ingrained into our educational system. Consequently, inclusion of handicapped persons into regular programs and activities, becomes more prevalent, however, practitioners must beware that professional zeal does not blind them the fact that without the highest quality of support services and interventions, handicapped students will not succeed in reaching their potential.

SECONDARY PROGRAM DEVELOPMENT

INDIVIDUAL EDUCATION PROGRAMS (I.E.P.)

Designing secondary educational curriculum has been based on the needs and aspirations of the group. As indicated, under this system the needs of the individual are often lost. The heart of

P.L. 94-142 is the development of the individual education programs (I.E.P.) which attempts to furnish appropriate educational options by providing for the unique needs of the handicapped student. Briefly, there are five areas covered in an I.E.P.: (1) statement of the learner's present level of performance (e.g., academic, social, vocational, etc.); (2) list of annual goals and relating short term objectives; (3) identification of specific services that will be provided (e.g., counseling, transportation, vocational rehabilitation, etc.); (4) extent to which the student will be able to participate in some type of regular education program; and (5) estimate of the approximate length of time the services will be provided and a time line to evaluate progress and revise program.

The I.E.P. now provides professionals the vehicle to bring together the tenets of effective and efficient teaching into one concise plan. The plan itself is jointly developed by a qualified school official, the parents, guardians, or advocates, the student's teacher or any additional professionals (e.g., vocational educator) that may be directly involved in programming and whenever possible, the student for which the I.E.P. is being devised. This system or team approach, when implemented in the spirit of helping the student, allows for input from as many significant sources as possible while providing for an accountability system to revise the program when necessary. For example, parents can now furnish information they deem appropriate to their child's education such as skills the student needs for family related activities. This interaction allows for increased communication between the home and school that can provide vital information concerning the success or failure of the program.

ASSESSMENT

In addition to the team approach for designing programs, the areas of the I.E.P. are each based on components that are vital to a successful educational program. In order to establish the student's present level of performance, for example, parents and professionals have the opportunity to use a variety of assessment data to establish the current strengths and weaknesses of the target student. This is an important step in the process that should not only be dependent on normed-referenced standardized scores. In many instances, the most useful information for developing the I.E.P. will come from teacher-made tests and professional observations in simulated or actual community settings, or in vocational and/or other general education classes. The point here is that the handicapped student should be compared on criteria established based on their present behavior not on norms established on groups of students in the general population.

OBJECTIVE BASED CURRICULUM

The second area of the I.E.P. incorporates a tenet of good teaching known as objective-based curriculum design. All too often teachers rely on developing programs based on nebulous goals that are worded in such a fashion that measurement of success becomes impossible. An equally disastrous result occurs when teachers devise no objectives at all affording themselves little structure. Conversely, teachers should now develop operationally defined behavioral objectives that specify in measurable terms: the behavior that is to occur; under what circumstances that behavior will occur; and when or how often the behavior will be demonstrated. Objectives stated in this format are identified directly from the child's present level of performance and are agreed upon as being important to

that individual by the committee designing the plan. Related to objective-based curriculum design is the concept of developing ecologically valid curricular options. Simply, this concept requires that all program objectives and activities be relevant to the learner's needs in relation to community placement. Take, for example, a secondary handicapped learner who is being trained in a vocational cluster where given present community options, no jobs exist. In this case, the curriculum for this learner could not be justified as being ecologically valid.

SUPPORT SERVICES

A component that is essential to programs for handicapped students involves the quality of services that can be used to support that person in the educational setting. For example, a mildly handicapped student may function adequately in a regular consumer education classroom with the service of a reading specialist to assist the regular education teacher in materials adaptation and systematic tutoring. In addition, this same learner may require psychological counseling to assist them in dealing with the daily problems encountered while attending general education classes. The point to be made here concerns the unlimited range of services that should be available to assist the handicapped. Whether it be services similar to those described above or more intensive interventions, for example, physical therapy for a multihandicapped student, the support services necessary are to be included in the overall individual plan.

PARTICIPATION IN REGULAR PROGRAMS

When P.L. 94-142 was first mandated, the law was erroneously labeled the "Mainstreaming Act". This misnomer was partially a result of misinformation by individuals who felt that the Federal Government was intruding into State's rights to educate their

populations. However, the area of the I.E.P. that addresses participation in regular education programs, merely allows professionals to identify any and all options that a particular handicapped individual can appropriately participate in, based on needs and severity of handicapped. Simply, this means that a majority of the mildly handicapped might be able to participate in programs with their regular peers. Conversely, severely retarded persons may not participate in actual classroom activities but instead may attend self-contained classes located in public schools. This placement option affords professionals the opportunity to develop "mainstreaming in reverse" programs that utilize general education students in special education classes to tutor their severely handicapped peers. However, P.L. 94-142 does include the option for some persons when the nature or severity of the disability requires intense programming, that special schools or classes can be made an alternative. The option of removing the student from the regular educational environment, of course, should only be implemented as a final step and only for the time needed to return the student to the general environment.

PROGRAM LENGTH AND EVALUATION

Deciding on the approximate time period in which the student will participate in a total program or a component of that program is an important section of the I.E.P. Students learn and progress at different rates, therefore, when developing the instructional plan this fact must be taken into account. For example, the handicapped student who requires intensive remediation in basic reading may attend such a program daily for one school year. On the other hand, another learner may demonstrate a deficit in summarizing important points in a reading and therefore, require a remedial

program for a shorter period. Establishing time lines assists professionals in not only managing available resources but also in matching the intensity of program to specific student needs.

In addition to managing resources and matching the appropriate intervention to the child, setting a time frame relates closely to the formative or ongoing program evaluation. One of the basic tenets for teaching the handicapped is that there must be a system of continual checks to monitor whether or not the student is learning the target skills. If progress is not being made, or being made at a rate slower than expected, teachers must make the necessary adjustments in methods, materials, curriculum or personnel to facilitate learning. To assist in accomplishing this, a schedule of ongoing assessment is devised and included in the I.E.P. For example, teachers generally compile data on a daily basis when a severely retarded student is acquiring a new skill. However, included within that student's I.E.P. may be a schedule that requires monthly reviews of assessment data so that the teacher and designated others can meet to discuss any modifications needed in the program. Good teachers will probably have made necessary changes as a result of the data taken daily, but the I.E.P. forces practitioners to review the program at least as the schedule dictates.

DEVELOPING COOPERATIVE PROGRAMS

The most important factor that will effect a secondary program for handicapped learners involves the extent to which special, vocational, and general educators work to cooperatively develop programs for the population. There has been considerable lip service given to these cooperative agreements recently in the field of secondary programming; however, the impact on the handicapped or real change

effecting the practices of classroom teachers has been minimal.

Therefore, if the Morgan County Curriculum Project is to be successful, teachers should be aware of the potential pitfalls involved in working with other disciplines. In addition, administrative awareness and support is necessary to assist these educator teams by creating an atmosphere that will facilitate cooperative efforts.

The present subsection will outline some of the more crucial problems hindering cooperative planning as well as suggest potential solutions to those problems. As teachers read this section, the examples included here should suggest additional problems that may be specific to Morgan County. With such problems identified, teams of educators and administrators can also use the included solutions as a starting point to brainstorm techniques that can be applied to given areas. One final point needs to be made relating to the examples used in this subsection. Initial meetings with the Morgan County staff and coordinators addressed a specific need to increase communication between special and vocational education. With this in mind the present subsection includes barriers and solutions to cooperative planning efforts involving special/vocational educator teams. The content presented, however, is generic to all disciplines in a secondary school. This means, for example, that all teachers involved in any competency-based content areas will find that their relationships with special educators will involve a similar process. Therefore, a goal of the Morgan County teachers will be to apply the issues discussed here to their own specific needs.

PROFESSIONAL BARRIERS TO COOPERATIVE SECONDARY PROGRAMMING

One of the challenges confronting practitioners is the development of effective and efficient educational teams among various

disciplines. A basic problem existing at the secondary level is that professionals usually have only a surface knowledge of the other discipline. Essentially, few special educators have background or training, for example, in vocational education; similarly, vocational educators have little or no background or training in special education.

To illustrate this problem, many special educators may believe that agriculture education programs merely teach students skills relating to farm management. They may have little or no knowledge of related areas that are an intrinsic part of these programs. These areas include farm and agricultural mechanics, dairy product production, landscaping, forestry, logging, and nursery/greenhouse management. Similarly, vocational educators may believe that special education programs prepare personnel who concentrate only on instruction in basic academics or social/emotional skills. The fact many special educators have skills in curriculum design and modification, assessment, precision teaching, and behavior modification may not be realized by vocational teachers.

In addition to a possible misunderstanding in foundations, educators from different disciplines also have to contend with territorial boundaries. For example, special educators are currently being trained in basic vocational skills in order to act in a support role for vocational educators. These instructors are to assist in teaching content related skills to handicapped students enrolled in vocational education programs. Conceptually this approach has merit; however, two problems relating to territorial boundaries appear to be surfacing.

The first involves frequent attempts to bring these programs solely under the auspices of either special education or vocational education. This territorial drive could eventually isolate handicapped students in separate classrooms and allow special education teachers with a limited awareness of vocational education to teach "related vocational content" independent of vocational personnel.

A similar problem exists in vocational education. In some instances special education instructors with vocational training are relegated to a separate section of the vocational classroom or laboratory and are expected to teach handicapped students in select groups apart from the main class body. Both of the above examples result in the same selective exclusion that separates handicapped students from their school-age peers. These problems can often be traced to the assumed "territorial rights and boundaries" that disciplines often cling to tenaciously.

These boundaries, however, often take a secondary role to a number of constraints that exist as a result of the bureaucratic constraints frequently found in the public schools. There appear to be three general areas that restrain cooperative planning and programming efforts: (a) attitudinal constraints, (b) scheduling constraints, (c) curriculum constraints, and (d) lack of appropriate placement options.

ATTITUDINAL CONSTRAINTS

When visiting public secondary school programs one can observe negative attitudes not only toward handicapped students, but also between professionals of different disciplines. The problem of attitudes and the effects on cooperative planning are the most difficult to address.

One traditional problem that has hampered effective cooperative planning relationships has been the established priorities of each discipline. General educators have not regarded the integration of handicapped students in existing programs as a priority issue. Correspondingly, many of the programmatic efforts in the area of special education have been devoted to elementary and middle school levels; planning for adolescents has not been a priority. In order for cooperative ventures to be developed, interdisciplinary and intradisciplinary priorities must include the development of appropriate secondary program opportunities for this population. Similarly, attitudinal change towards certain individuals and groups may occur when professionals come to understand the strengths and weaknesses of specific students. Also, positive attitudes between professionals can be fostered when persons from different disciplines become more aware of each others skills. An initial goal, then, would be for special and general education faculty to meet and design a position statement outlining current attitudes in Morgan County and their philosophy for educating this population.

SCHEDULING CONSTRAINTS

One of the more time consuming tasks faced by educators attempting to design and implement appropriate vocational education options for the handicapped is the need to conform to existing school schedules. Special education students who may only need to be placed, for example, in vocational programs for specific components tend to upset the patterns of general scheduling. A mentally retarded student might benefit from the skills gained through participating in laboratory activities in an auto mechanics program. This placement option may be difficult to arrange, however, if full-time enrollment in the program is required. In this case, the academic requirements

and class lectures may be too rigorous. Under the current scheduling constraints, it may not be possible for this student to spend part of the class session in a more appropriate academic environment (e.g., special education resource room) and the other part of the session in the auto mechanics laboratory. Hence, the student would be denied the opportunity to develop appropriate occupational skills according to his/her abilities and interests. Examples similar to the above can be found in all general education programs at the secondary level.

Developing alternatives to the problems associated with class scheduling is an example of how the aforementioned tenets can function effectively. As suggested by the term "special education", handicapped students who demonstrate a need for these services require programs that are matched to their particular abilities and needs. Therefore, we should not assume that these students can always be slotted into the general time schedules existing in most public schools. For example, certain medical problems of a physically handicapped student may initially hinder participation in a full morning of a data processing program. Similarly, a mild or moderately retarded student with severe academic learning problems (e.g., low reading and math levels) may not fully benefit from the classroom lectures and readings in a distributive education program, but may profit greatly by participating in other aspects of the program.

Secondary educators should initially use a brainstorming process to identify potential problems that scheduling modifications may have on programs, as well as the effect the adaptations will have on the students involved. In the case of the retarded individual, the team may decide that it would upset the management of instruction if the student arrived to class at a later time during the

lab sessions. The teachers could cooperatively decide, for example, that a regular education student be solicited as a volunteer to be trained as a peer tutor. This tutor would then assist in setting up the daily tasks for the handicapped student and periodically monitor progress with the assistance of both teachers.

With a well developed program outlining potential problems and realistic solutions the cooperative team can petition the administration and the I.E.P. committee for approval of alternative options.

CURRICULUM CONSTRAINTS

Restrictions placed on cooperative planning and programming by traditional curriculum content constitute another problem. At the secondary level special education students may be denied the opportunity to participate in vocational programs due to the related academic prerequisites and/or program requirements. On the other hand, when these students do participate in programs that are appropriate to their needs, the curriculum may frequently be "modified" to reflect a slower, watered-down pace that will not result in the development of entry level proficiencies. Also, many secondary programs expose handicapped students to only one vocational cluster in an attempt to train them in a single skill area. Therefore, professionals may find it difficult due to school policies, to design programs that will allow handicapped students to learn appropriate skills that will generalize to a number of different content areas of community settings.

Problems identified above have no easy solutions and often are based in the philosophy of different educators. One of the initial priorities of cooperative planning therefore, must be to discuss what student needs will be addressed by the curriculum or program in question. If, for example, the student lives in a highly mobile

community, then the curriculum needs to address generic vocational related affective skills. In this case, students can learn to generalize skills to a number of vocational options depending upon availability in areas where they may relocate. Conversely, some severely handicapped students may show interest and skills in one vocational area and the program would reflect training in entry level skills.

LACK OF APPROPRIATE PLACEMENT OPTIONS

The final point in this section on bureaucratic constraints will deal with the inflexibility of developing and implementing a variety of service delivery options. Educators have realized for some time that many handicapped individuals, particularly students with cognitive deficits, have serious problems in two general areas that adversely effect their success in vocational programs: (1) an inability to readily generalize learned skills to other environments and materials; and (2) a lack of experiential background that hinders them in identifying appropriate career objectives. Therefore, when secondary schools provide opportunities for handicapped students to be exposed to only one vocational alternative, we may be doing them a disservice in limiting their chances to identify their true potential.

Special and vocational educators should pool their knowledge to develop a system that combines the tenets of programming for generalization with the system of career awareness. A program of this nature should transcend traditional delivery systems by allowing handicapped students to participate in a number of vocational programs. They should be allowed to practice learned generic vocational and social/emotional skills in a variety of settings under the auspices of a number of different instructors/supervisors. In addition,

these students should be exposed to an array of possible career choices from which a realistic selection can be made for future training. Further, objectives from a competency based curriculum in the general education cluster, should be incorporated for practice in vocational programs and vice versa.

CLARIFYING ROLES AND RESPONSIBILITIES

One of the most important cooperative objectives that educators face is the ability to eliminate perceived territorial boundaries that impede appropriate programming for the handicapped. Accomplishing this goal will not occur easily. To speed the progress, general and special education personnel must meet to discuss role clarification and subsequent responsibilities for each discipline as well as to develop suggestions for implementing appropriate cooperative planning goals.

Initially, a basic understanding of the roles each professional should assume in cooperative planning and programming endeavors must be established. One suggested approach would be to view this team arrangement as a systems analysis format where vocational teachers provide the necessary content (expertise in a specific vocational or technical area) and special education teachers provide the appropriate process (techniques to teach the skills). The extent to which these roles are emphasized should be a sharing process. Placement procedures which traditionally enroll these learners into either a special education class or a general education class primarily on the basis of program availability should not always be followed. What should be considered, however, are the identified strengths, weaknesses, abilities and interests of each student which will have a direct bearing on the program option selected and the responsibilities assumed by each discipline.

For example, in the case of a moderately handicapped student learning horticulture skills the major program responsibility should lie with the special education teacher to design appropriate instruction for teaching the necessary prevocational skills. The vocational educator in this situation would act in a supplementary or support role by providing content information necessary for appropriate proficiencies to be taught, task analysis information and instructional materials. As the program continues and the student becomes more competent in the basic prerequisite skills, the emphasis of roles should begin to shift. Gradually, the student can be placed in the horticulture class for increasing periods of time, thereby placing more emphasis on the role of the vocational educator for program development.

Conversely, when planning vocational opportunities for a mildly handicapped student the major responsibility at the outset should be assumed by the vocational educator. Using the example of the horticulture program, the special educator would be placed in the support role by providing assistance in curriculum adaptation, materials modification, behavior modification, and remedial academic activities. In addition, the special educator can augment the main program by teaching ancillary skills that have been designated by the vocational instructor. These skills should be reinforced during the period of time that the student attends the special education class.

UNDERSTANDING OTHER EDUCATIONAL DISCIPLINES

As previously stated, a basic barrier that adversely affects cooperative programming efforts lies in the lack of information and/or misconception between special and vocational education personnel regarding the foundations and components of the other discipline.

The attempt to solve this problem at the inservice level usually results in meetings where faculty members explain their job descriptions and accompanying responsibilities. Unfortunately, this technique has not proven to be effective for long-term change in teacher awareness and behavior. Teachers in the field can better grasp the nature of program content, the prerequisite needs of handicapped students, and the concerns of fellow instructors if they experience the classes first-hand. The present author suggests that the special education teachers of Morgan County spend more time in general education classes or laboratories with handicapped students enrolled in the program. These teachers could work with the instructor while learning first hand about the program. Conversely, general education teachers could assist in the special education class for short periods of time when the primary focus of the learner's program occurs there.

This idea is sure to cause concern among some professionals when teaching assignments and time are taken into account. However, the time spent in this sharing process need not be great, whereas the benefits may prove to be. In the experience of the author who has participated in programs of this nature, an hour, half-day, or full day spent in this type of coordinated endeavor can provide insight into student behavior, teacher constraints, and instructional effectiveness in other settings. By using teaching assistants or substitutes, teachers from both disciplines should be able to arrange small periods of time to develop this type of cooperative venture. At the risk of using a time worn dictum, "one picture is worth a thousand words."

WORKING WITH THE SYSTEM

One of the most frustrating experiences faced by educators who attempt to develop innovative program options for the handicapped

involves being blocked or hindered by the bureaucratic constraints stated earlier in this section. Morgan County teachers should keep in mind three basic tenets for dealing with other professionals:

(1) establish networks with teachers from other disciplines by first establishing positive interpersonal relationships (e.g., if you are liked, your program may receive more favorable attention); (2) present a skeletal plan to the colleague you hope to work with and develop the comprehensive components cooperatively; and (3) approach the administration together only after you have developed a number of suggested solutions and contingencies for potential flaws which may occur.

CURRICULUM IMPLEMENTATION STRATEGIES

As previously stated, the present curriculum guide is designed to be a foundation from which the teachers of the Morgan County School System can develop a comprehensive secondary curriculum for handicapped learners. Included within this guide are techniques and strategies to identify learner strengths and weaknesses and subsequently develop or modify curriculum options to meet those needs. In this light, sections are included to assist special/vocational educator teams as well as special/general educator teams to accomplish the goal of providing appropriate educational programming to handicapped students. The present section will briefly describe the relationship of this curriculum guide to the State of Georgia mandates for competency-based education (CBE).

The initial meetings with the Morgan County representatives identified two basic issues that a secondary curriculum for the handicapped should address: (1) vocational program options; and (2) relationship

to C.B.E. cluster goals. Due to time and staff availability, an in-depth look at vocational program options was not found to be currently feasible. Instead, the need to establish a basic process for vocational evaluation and program modification was identified. However, the relationship of the curriculum guide to C.B.E. was deemed a priority.

Teachers will note that the areas and cluster goals identified by the C.B.E. regulations can be labeled as occupational readiness skills as well as skills that students need to explore various career options. Therefore, the competency cluster areas outlined in the State of Georgia High School Graduation Requirements (Policy IHF) cover fine broad areas: (1) the learner; (2) the citizen; (3) the individual; (4) the consumer; and (5) the producer. Further, State documents provide descriptors for each of the fine areas as well as suggested steps for meeting the LEA's responsibility of developing or revising course guides. Keeping within State guidelines, the present guide provides teachers with potential performance (unit) objectives and samples of daily lesson objectives that are on the first level of an instructional analysis. In addition, these performance objectives are placed within the context of specific course titles which includes course descriptions as well as evaluation procedures and performance indicators that are built into the objectives.

With this information in hand, the teachers of Morgan County should be able to complete the next steps of curriculum design. That is, following an assessment of a given learner, teachers can: (1) match appropriate course content to specific learner needs; (2) complete the instructional analysis given learner strengths and weaknesses; (3) develop intervention strategies geared to specific learners; and (4) monitor learner progress as an indicator of program

effectiveness. For example, one cluster area that is a subset of the competency based program involves consumer awareness skills. Teachers can locate the behavioral and sample objectives for these skills supplied within this guide, and develop a series of criterion referenced measures relating to those objectives, for an assessment of learner entering behaviors. Subsequently, as the data from these assessments are analyzed, teacher decisions can be made regarding a student's learning style, appropriate reinforcers, effective program options (self-contained vs. mainstreamed) appropriate materials, etc. Information such as the above stated areas, will assist the teacher in identifying the most effective activities needed to teach and assist the learner to generalize newly acquired skills. In addition, teachers will utilize ongoing assessment techniques relating to their instructional objectives in order to measure learner progress (or the lack of progress) as one method to judge the effectiveness of the instructional interventions.

Teachers reading this should note that the process delineated above does not occur in the preplanning week prior to the school year. Conversely, this process begins when the learner enters the program and continues throughout the year or until the learner leaves that social system. Therefore, teachers should not panic, feeling they will be required at the outset of school to complete the instructional objectives for all the cluster areas included within this guide. On the contrary, the responsibility of the teachers of Morgan County will be to choose the appropriate units based on learner needs, completing and implementing those units at the times during the school year that are targeted by the teachers' schedule.

SECTION II

NEEDS ASSESSMENT OF MORGAN COUNTY, GEORGIA

BY

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The principle of ecological validity requires that both the needs of the learner as well as the community be met. In order for these needs to be met a clear understanding of what they are must exist. The students' needs are directly related to the community needs in that the majority of the Morgan County students will ultimately be employed within the community. Likewise, the community needs are directly related to the students.

A needs assessment, therefore, can be accomplished in several ways and for the purposes of this project the survey method was chosen. Samples of each occupational area were gathered to provide an overview of Morgan County. The data includes representative samples of manufacturing companies, retail businesses, service organizations (hospitals, nursing homes), and farms. The information available gives general perspective of employment opportunities available for the handicapped learners.

The survey showed many similarities between the various types of businesses (See Appendix A). Generally, the employers are very willing to talk about their businesses and work with the school system in preparing young people of the community for future employment. In most instances, it was the larger companies who were more open about their operations. Many of the small businesses are family-run and are perfectly content to continue their operation as is, thus, eliminating the need for high school students as employees. The companies who presently employ high school students are very satisfied with their work and are willing to hire more as long as the students show a desire to work and have good school attendance records.

Attendance is one of the major problems in that the employees either don't go to work consistently or are late a majority of the time.

Volunteer opportunities are limited for several reasons.

One, is that to work in the large companies, the employee must be insured, and in order to be insured they must be on the payroll. Where insurance was not a problem, the employer seemed more than willing to have volunteers work for them. In fact in several of the service organizations they already have volunteers.

One disappointing aspect the survey revealed, was that presently none of the businesses have handicapped workers employed. When asked why this was so, the standard answer seemed to relate to "unskilled and unqualified". However, many places did say they would be willing to hire handicapped workers provided they can be trained on the job.

Training for all the companies interviewed consists of an on the job training by co-workers and immediate supervisors. No job analyses are available so the supervisors use industrial standards as a guide. Usually the new employee has a training period, of 2 to 3 months, as a trial time before they are reviewed for an increase in hourly rate.

There are several important implications identified from the needs assessment utilized in this curriculum guide. First, there is an apparent need for closer contact between the teachers of handicapped learners and various community members. In all instances there had been no attempt to validate curriculum for this population based on actual community placements. In addition, the fact that at the present time, no employer that was contacted has handicapped workers suggests that a more intensive community

awareness program (advisory committees, media campaign, service organizations, etc.) be initiated by the school district.

A second implication of the needs assessment involves the mechanism of on-the-job training. Because of insurance problems O.J.T. does not appear to be a viable option for training at the school level. However, the school personnel can be instrumental in assisting industries in establishing the workstations in industry concept for post-school training. This program can be a joint effort gathering assistance from special education, vocational education, and vocational rehabilitation to lay the groundwork for program development.

Lastly, a needs assessment can provide teachers with valuable insight into the types of skills that potential employers consider important. For example, the present data indicates that good attendance habits is vital for job success. Although this information appears to be common sense, it apparently is still of grave concern to employers, indicating a major problem. Therefore, a curriculum that is sensitive to these type of needs will be flexible enough to address these issues.

In sum, the present needs assessment was designed mainly for demonstration purposes. That is, in keeping with the charge of this guide, this information can now be taken by the Morgan County staff and expanded to provide the necessary information for appropriate curriculum development. Therefore, the Morgan County teachers should plan a number of activities to be implemented on a regular schedule, with the goal of collecting community needs data.

SECTION III

CURRICULUM MODIFICATION TECHNIQUES
FOR USE IN GENERAL PROGRAM OPTIONS

BY

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Regardless of the course content or objectives that teachers encounter when designing programs for handicapped learners, applying the principles of curriculum modification allows them to adapt their program to the needs of the learner. Following the tenets of a systems approach to instructional design, teachers can modify most curricular options if they deem the content appropriate for specific learners. Therefore, one should be able to justify the availability of appropriate skills for handicapped learners within the context of all C.B.E. cluster areas. The following discussion will provide teachers with the tenets of curriculum design and modification. Given the following information teachers should attempt to apply these principles to the portions of the guide involving the C.B.E. objectives.

CURRICULUM DESIGN: A SYSTEMATIC APPROACH

The systems approach to designing secondary instruction grew out of behavioral principles resulting in the development of methods and materials based on operationally defined objectives written to meet identified student needs. In addition, the progress of students in relation to these behavioral objectives is constantly monitored to ensure modification of the program when and where necessary. This systematic process of instructional design relates to the overall design of curriculum in one important way; that is, the teacher applies the steps of a systems approach model to develop instruction identified in the global goals of the curriculum in question. The curriculum as a whole, therefore becomes a plan where information is arranged in sequence and designated as important to students for successful integration into community life.

Issues concerning secondary programming invariably revolve around the principle of individualization. Identifying the strengths and weaknesses of each learner and subsequently matching methods and materials to these needs are the cornerstone of special education. The systems approach to instructional design allow teachers to individualize their curriculum to meet the specified needs of learners. As goals such as improving social skills or increasing use of computation skills are outlined in a curriculum, the teacher should be able to analyze the skill, develop objectives, and assess students in relationship to those objectives. In this way program design matched to learner needs can be assured.

THE I.E.P. AND CURRICULUM DESIGN

Individual Educational Plans (I.E.P.) are an integral component of Public Law 94-142. There needs, however, to be a further explanation of the relationship between I.E.P.'s and the tenets of instructional design. This relationship can best be viewed by inspection of the five general components that are to be included in all I.E.P.'s: (1) assessment; (2) curricular components; (3) support services; (4) program management; and (5) program evaluation.

Assessment being the first component of this plan is the basis for the entire system and is discussed later in this guide. Here a profile of the student is developed that gives a clear picture of the learner's current level of performance. Standardized tests, criterion referenced measures, and behavioral observations are methods that can be used to assess student behavior in a number of curricular areas (e.g., academic and social skills). Assessment that identifies a student's strengths and weaknesses is both the base of instructional design and the I.E.P.

For example, a mildly retarded secondary level student may be assessed on current computation skills by using the Key Math Diagnostic Test to establish a survey level of math skills. Both the I.E.P. and in the systematic development of instruction sampling the entry behavior of the learner is vital. At this point the difference to note between the systems is merely the degree to which assessment is implemented. That is, on the I.E.P. the assessment level is broad, painting a general level of the student; whereas, the process of instructional design continues and the assessment becomes more specific.

The second component of the I.E.P. deals with curricular options that are stated in the form of long and short term objectives. Objectives of this nature are written in performance terms and designate the broad curricular goals and subsequent cluster (unit) objectives that are important to the student based on the results of initial assessment.

There is an important relationship between this component of the I.E.P. and instructional design. To best understand this relationship the reader should visualize the I.E.P. as the document that identifies the components of the general curriculum best fitting the needs of the learner at that point in time. Principles of instructional design, therefore, are applied to those areas outlined in the I.E.P. to operationalize the plan for daily teaching.

The third component of the I.E.P. involves identifying the necessary support services that will be needed to assist the learner in successful participation in the various program options selected. For example, a severely retarded student that is also physically disabled may require the services of a physical therapist in order

to insure maximum participation in a public school program. On the other hand, a mildly or moderately retarded learner may benefit from a psychological counselor to assist that student in adjusting to the emotional rigors of participation with non-handicapped peers in vocational education classes.

The fourth major area of the I.E.P. deals with program management. Here indications are made concerning what, if any, regular education programs are available in which the student can participate. Also, anticipated length of the services are stated to assist in overall management and indicate times for re-evaluation of program goals. The systems approach of instructional design relies on organization to insure a smooth flow in program. This section of the I.E.P. helps professionals gauge their time and incorporate this organization into the curriculum design. Also, identifying available regular education programs will be important for Morgan County teachers.

Finally, the component of the I.E.P. that deals with program evaluation (accountability) outlines procedures for ongoing assessment of student behavior. Frequent samples of learner performance, usually in the form of criterion referenced tests and behavioral observations, are used to measure whether or not the program is affecting the desired change in the student. If the program is not meeting the original change, an analysis should occur that results in modifications necessary to insure change. The relationship here is clear, in that both systems require accountability of programs to identify any modifications needed to benefit the student.

PRINCIPLES OF CURRICULUM DESIGN

ESTABLISHING PROGRAM GOALS

Teachers generally have some idea of which educational direction they would like to see their students take. Decisions as to program

goals that will head students in a direction often are made before the learner enters the classroom. For example, when dealing with mentally handicapped learners goals should be based on the premise that eventually these individuals will be living in a least restrictive environment. Therefore, in the case of certain severely retarded students, program goals such as self-feeding, dressing, communication skills and participation in leisure activities may be appropriate. Similarly, mildly and moderately retarded persons may profit from the application of complex academic skills. In either case, teachers can often initially establish general guidelines for learning that they want their students to be exposed to and gain some desired level of competency during a period of instructional time.

Arithmetic can serve as an example for this process of program goal identification. Teachers should agree that the program goal of arithmetic figures into most curriculum for retarded learners; whether it be for functional use of the hand calculator for shopping, measurement in a vocational setting, or counting change to buy a soda. Within the broad program goal of arithmetic there are a number of subunits or cluster goals such as the basic operations (addition, subtraction, etc.) time, money management, fractions, etc.. This example can be further supported by the program goal of self-care skills. The reader will note that a number of cluster goals can immediately be identified including dressing, eating, toileting, and grooming. The present curriculum guide provides the teacher with the basic cluster goals and subsequent objectives outlined by the C.B.E. regulations. These curricular components comprise the bulk of the secondary curriculum for this population.

The point of the above examples should demonstrate that the basic skeleton of program options can usually be identified before the student arrives to assist the teacher in organizing a beginning frame of reference for assessment. This in fact is the case in that this guide presents the C.B.E. framework. Of course, when teaching secondary students we often need to break from what is considered traditional public school curriculum to implement programs such as community mobility, career education and prevocational/vocational components. Therefore, the instructional design process begins with establishing this framework of identifying program and cluster goals. From this point the system begins to become more specific with an analysis of those goals into subtasks. This next step sets the stage for individualization of instruction by having a benchmark compare the learner's present performance to the subtasks, and is the point in the curriculum process where the teachers of Morgan County will begin their work.

ANALYSIS OF PROGRAM AND CLUSTER GOALS

The process of instructional or task analysis may not be as simple as some professionals believe. Teachers are finding that to develop a meaningful analysis they need knowledge of the content area, ample time, and brainstorming sessions with their peers. Also, although there are many task analyses available for more traditional curricular areas (academic and self-help skills), teachers of the retarded are finding the need to develop new procedures to analyze task-specific skills that may arise in prevocational cluster areas. Nevertheless, the process of instructional analysis is vital to the systems approach so that objectives can be identified and matched to learner needs.

OBJECTIVE BASED TEACHING

To begin the process of analysis teachers must first ask themselves one important question: Do I have the expertise to design a program in the subject area in question? No teacher is an expert covering all content, therefore, it is imperative that in instances when confronting unknown subject matter, that specialists be consulted. A special education teacher, for example, may not be familiar with the intricacies of teaching in the cluster area decoding under the program goal of reading. In this case the teacher could consult with a reading specialist concerning an appropriate task analysis for this area. By the same token, other teachers may not be familiar with latest toilet training techniques or the proper physical positioning in the classroom for retarded learners with severe physical impairments. In either case, before an effective task analysis can be realized, consultation with appropriate professionals must occur and Morgan County staff should plan frequent sessions to iron out all problems.

The second consideration the teacher must identify before the actual analysis can begin involves developing behavioral objectives from the existing cluster goals. Teachers often moan when the word "objective" is mentioned simply because they are hounded in classes and workshops to develop an endless list with no particular purpose in mind. This problem of overkill must be deemphasized, however, so that the practitioner realizes the utility of objectives as instructional tools.

Behavioral objectives are similar to yardsticks; that is, they are a device by which to measure student progress. These instructional devices assist teachers in organizing their programs into manageable

components for teaching; therefore, objectives should not just be looked upon as an exercise in futility but rather a method to make teachers' jobs more systematic and easier to manage. With that in mind it appears appropriate to identify the three components to a measurable objective: (1) outcome; (2) context; and (3) criteria.

The outcome component of the objective is simply a statement describing what learners will be able to do after instruction that they could not do prior to implementation. This statement is written in behavioral terms so that the teacher can observe the student's performance. For example, the following outcome statements represent possible objectives for secondary learners:

- ... correctly write the answer
- ... orally reproduces vowel sounds
- ... manually assembles the complete set
- ... independently rides the bus from point A to B
- ... orders a complete meal at a designated restaurant

Secondly, the context component specifically outlines the situation the teacher will structure under which the student will be allowed to perform the behavior identified in the content area. This sets the stage if you will for the conditions of the learning environment.

Using the above content examples we can begin to see how the objective is taking shape:

1. CONTEXT: Twenty written double digit addition problems with and without regrouping.

OUTCOME: Student will correctly write the answer.

2. CONTEXT: Taped demonstration of vowel sounds.

OUTCOME: Student will orally reproduce the sounds.

3. CONTEXT: Given a disassembled lawn mower carburetor and screwdriver.

OUTCOME: Student will manually assemble the complete set.

4. CONTEXT: Upon request from supervisor, including oral information concerning departure time.

OUTCOME: Student will independently ride the bus from point A to point B.

5. CONTEXT: Given a limited amount of money.

OUTCOME: Student will order a complete meal at a designated restaurant.

The final component of a well written objective involves establishing the criteria for success. Here the teacher considers what criteria must be met before the learner will have adequate skills to continue to the next step in the learning hierarchy. Further, the teacher can decide based on a specific student need whether the criteria can be adjusted up or down to match the learner's strengths or weaknesses. For example, some teachers are erroneously taught that 90% correct is a standard for mastery. This magical number may not be appropriate based on individual students or on different type tasks. Conceivably, five different students in the same classroom may be working in the same cluster area and on the same unit objective, yet have varying criteria for success based on their individual needs. Therefore, again utilizing the above examples the criteria for each may be:

1. CONTEXT: See above.

OUTCOME: See above.

CRITERIA: 18 out of 20 correct

2. CONTEXT: See above.
OUTCOME: See above.
CRITERIA: 100%
3. CONTEXT: See above.
OUTCOME: See above.
CRITERIA: 100%
4. CONTEXT: See above.
OUTCOME: See above.
CRITERIA: Each time
5. CONTEXT: See above.
OUTCOME: See above.
CRITERIA: 4 out of 5 trials

TASK ANALYSIS

The technique of instructional or task analysis can be used both in translating cluster goals into behavioral (unit) objectives and later in translating the unit objectives into daily segments. One type of task analysis can be used when individual behaviors are to be taught in consecutive order to reach criteria on a specific objective. Further, the series of behaviors included in a procedural analysis are independent of each other and often can be interchanged. An example to illustrate this type of analysis can be found in the teaching of home dishwashing skills. Some teachers may require their learners to wash each dish and then rinse it before moving onto the next step. The important point to remember is that each step is independent and in some cases can be interchanged depending on teacher decision and/or student needs.

A second approach for developing a task analysis involves identifying prerequisite skills that when placed in a hierarchy lead to

the specified objective. Academic skills generally lend themselves to this approach, where each skill in the sequence is dependent upon the previous skill cluster.

There are a number of resources teachers can explore to gain assistance in developing a workable analysis for secondary level students. For example, when translating cluster goals into behavioral objectives, appropriate instructional analysis can be found in the form of scope and sequence charts in teacher's manuals, and college textbooks when referring to academic skills. Also, if other areas such as self-help skills are needed, commercially available task analysis forms are plentiful (e.g., the MORE System by Lent and Keilitz, 1974, Edmark, Associates).

Up to this point, individualization of program for the secondary handicapped learners has been limited to matching certain goals and behavioral objectives to student needs. This process, however, now becomes more specific in the development of task analysis that further breaks down a given behavioral objective into its components that can be classified as instructional or enabling objectives. For this step the teacher first decides whether a specific behavioral objective requires use of a procedural, hierarchical, or combination approach to analyze the component behaviors. What is left is to apply one of the approaches and identify the list of instructional objectives that when presented in sequence will lead to the learner being able to perform the overall behavioral objective. The instructional objectives identified in this process become those smaller pieces of the unit that are taught and evaluated on a day-by-day basis. In addition, the specificity of individualizing programs becomes more intense because different learners are engaged at various levels on

the analysis. This allows for progression through the instructional objectives depending upon the learners strengths and weaknesses. Further if a student is having particular difficulty on a specific instructional objective the teacher can analyze that component and break it down into additional sub-tasks or previously unidentified prerequisite skills. Morgan County teachers should be aware that this in fact, is the process of curriculum modification and can be applied to all curricular areas deemed appropriate for handicapped learners. In this case the teacher may include additional subtasks.

SAMPLING STUDENT ENTRY BEHAVIORS (ASSESSMENT)

Sampling student behaviors is an ongoing process involving a number of types of evaluative tools. For that reason the following section of the present guide will present a discussion of the assessment process.

FORMATIVE EVALUATION

THE PROCESS

The process used to continuously monitor student progress in an effort to measure the success or failure of an instructional intervention is called formative evaluation. In a strict sense formative evaluation is a method of field testing units of instruction during the design process in order to "iron out" any difficulties before implementation. The principles of formative evaluation, however, can also be applied to daily instruction and are an integral component to monitoring the effect of a secondary curriculum.

Teachers often design instructional components, implement their lessons and then make certain assumptions that the intervention was successful and transmitted the target knowledge and/or skills to the

student. Subsequently, the instruction will thereby be implemented in the same or similar fashion as was previously noted. The resulting transmission of knowledge and/or skills is merely speculation. By incorporating some type of formative evaluation into their educational programs, teachers can make judgements based on data relative to the efficiency and effectiveness of the instruction that they designed. Therefore, with this information on student performance in hand, teachers can revise their intervention whenever and wherever needed to increase the probability of student success.

In the system described here, formative evaluation is implemented under the guise of daily probes. These daily probes are based on the instructional objective and attempt to measure whether or not the learner has met the criteria for the target instruction. If the criteria has been met the teacher can assume that the initial instruction was successful and subsequent guided practice activities can be implemented as well as advancement to the next objective. Conversely, in the case of the student that has not met criteria, the teacher can assume that there needs to be a revision in materials and/or instruction techniques in order to meet learner needs. Subsequent alterations in interventions can therefore be monitored until the desired result is obtained. Morgan County teachers should realize that this component is vital for judging the effectiveness of their curricular components.

REVISING INTERVENTIONS

Historically when handicapped learners failed, the blame for the failure was placed on some inherent quality of the student based on their handicap. Professionals now believe that when a learning problem occurs, we must exert our energies in attempting to match the appropriate method and material to learner needs. Therefore,

the principle of revising and re-revising interventions becomes critical. Formative evaluation as a tool, provides teachers with structured data that is needed to make decisions concerning the extent to which revision is necessary.

SUMMATIVE EVALUATION

Using the terminology adhered to throughout this section the behavioral objective includes a large chunk of instruction that the student should accomplish at the completion of a unit of study. Summative evaluation then, involves gathering information concerning student performance at the completion of the unit that will assist in assessing the overall effectiveness of the instruction.

Compiling data for analysis in this final phase of evaluation consist of three types: (1) direct product; (2) observational data; and (3) learner input. Measurement of direct products can take a number of different forms; such as, standardized or criterion references tests for academic skills and completed projects for vocational or leisure skills. For example, a behavioral objective for a unit concerning addition may state:

The learner will correctly compute the answers to twenty written addition problems that include multiple digit problems with samples of no regrouping, regrouping, and regrouping across columns.

CRITERIA: 80% correct within a 25 minute period.

For many mildly and moderately retarded learners the above objective comprises a large unit of instruction that may span several weeks. Subsequent analysis of this objective by the teacher could identify a number of instructional objectives that will be taught daily leading up to the completion of the unit. The summative

evaluation of the above unit, therefore, is simply the testing situation outlined in the behavioral objective. Information gathered relating to the behavioral objective can then be analyzed to note whether the student has mastered that unit.

Another example of a direct product measure can be highlighted when considering teaching a leisure time activity to a moderately or severely retarded student. A given behavioral objective may address a project involving needle point describing the criteria needed for completion, design, etc. Instructional objectives leading to the ultimate goal are identified and taught which will result in a finished needle point project as the direct product. Teachers can then evaluate the project according to present criteria and judge the effectiveness of that target unit of study.

Observational data as a tool for evaluation is a vital component for assessing all handicapped learners. As with all techniques of evaluation, observation should be used throughout the system. For example, when teaching self-care skills to retarded learners, the teacher observes the student perform the outcome stated in the behavioral objective (e.g., toileting) by carefully noting performance on each of the instructional objectives that were identified in the task analysis process. Similarly, for evaluating programs that deal with appropriate social behaviors, teachers can intervene (or teach) and subsequently observe the result of their manipulation of variables on the operationally defined behavior. A student who continuously interrupts the conversation of others, for example, may require the teacher to measure the number of occurrences defined as interruptions (by observation) and then design a program to reduce the frequency of that

behavior. Subsequent observations of the target behavior will provide the teacher with data concerning the effectiveness of the behavioral program.

The final method of gathering summative evaluation data involves obtaining learner input concerning the worth of that unit of study. Professionals do not give enough credence to the opinion of the consumer which in this case is the handicapped learner. Therefore, teachers must attempt to sample their students through interview or questionnaire techniques. Secondary students frequently respond to comments sections on materials that allow them to make statements concerning the interest level, etc., of the instruction. Moderately and severely retarded learners can often communicate in a brief interview session their impression of units of study.

Summative evaluation, as discussed here, comprises the final step in the instructional design process. The techniques of summative evaluation are techniques that can also be used during the formative evaluation process and during initial assessments. The important point of this final evaluation, however, stems from the fact that as teachers we do not want to get bogged down studying component parts. Often, we find it useful to analyze the system as a whole. In this way, additional information that may have been inadvertently lost during ongoing assessment, can be included in the system to provide teachers with a more complete analysis of student progress and program effectiveness.

SECTION IV

MODIFICATION OF VOCATIONAL CURRICULA TO MEET
THE NEEDS OF HANDICAPPED STUDENTS

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The challenge of integrating handicapped students into the mainstream of education directly affects vocational education personnel. In complying with the legislative provisions, the primary objective of the vocational instructor should be to assist handicapped students in developing a level of vocational competence that fulfills their needs, interests and abilities.

In order to prepare for handicapped students to enter a regular vocational program, an identification of their general and specific vocational interests and aptitudes should be made. Specific background information necessary to develop realistic curricular guidelines should also be collected and organized. This information will help to identify the specific areas in which the student may have learning difficulties.

CURRICULUM DEVELOPMENT

Curricula comprises a spectrum of experiences and activities which are a direct result of an individual being under the educational auspices of a school. As a vehicle for preparing for individuals for the world of work, vocational education programs comprise an integral component of secondary and post-secondary curricula. Curriculum development is not a stable process. A variety of factors usually affect decisions regarding the content of a vocational curriculum. These variables influence the direction that the course or program will take.

Due to recent legislation enacted to guarantee equal educational rights to handicapped individuals, vocational educators must become adept at developing and/or modifying vocational curricula to meet the needs of this population. This by no means implies that vocational instructors must change the program content or modify the

performance objectives which are expected for successful program completion. However, the special needs and characteristics of each handicapped student must be identified and taken into consideration in order that appropriate instructional methods and techniques may be integrated into the curriculum.

PROGRAM PHILOSOPHY

The philosophy of the vocational program should be the basis for the direction of the instructional content. Hopefully, a concept of the value of individual differences and abilities will be integrated into this philosophy and will be reflected in the overall program objectives. This would allow for the integration of handicapped students into regular vocational programs.

The philosophy of the program emphasize the role of vocational education in our society and a concern for the working potential of all students. Hopefully, a philosophy of providing vocational education and employment opportunities for handicapped individuals can also be established and encouraged among business and industrial leaders represented on vocational program advisory committees.

Entrance into a vocational program can motivate many handicapped students to develop a new interest in attending school. Students learn best when they are actively involved and when work is suited to their individual needs. The basic vocational program objective should be to make each student employable. This includes handicapped students who have displayed interests, aptitudes and abilities necessary for success in the vocational program.

Specific program objectives should include: a) developing a level of vocational competence within each student; b) developing a greater sense of independence and self-sufficiency within each student;

and c) developing an individualized vocational program that is based on skills development and continuous assessment and which allows for a variety of experiences that relate to the needs and abilities of each student.

IDENTIFICATION OF STUDENT ABILITIES AND NEEDS

The needs of the handicapped student must be identified so that the curriculum can be realistically developed and/or revised. Such factors as the nature of the handicapping condition(s), the reading level of the student, and appropriate instructional techniques should be analyzed and taken into consideration. Necessary adaptive equipment, materials, supplies and services should also be noted. This information must be recorded in the student's individualized education program (IEP).

Specific background information which can be useful in planning for handicapped learners in vocational programs includes:

1. prevocational skills
2. occupational interest(s)
3. academic skills (e.g., reading level, math level, comprehension)
4. social skills (e.g., ability to get along with others, ability to work in group situations)
5. previous vocational courses taken and competencies mastered
6. learning style or mode
7. level of psychomotor performance.

The student profile described in the vocational assessment chapter would be helpful in providing this information.

Once information has been gathered regarding student abilities, interests and needs a decision can be made about specific adaptations

which should be made to the vocational curriculum. Modifications can be made in the physical environment, content of the vocational program, instructional materials and/or instructional techniques. Each of these areas will be discussed in this chapter.

MODIFYING THE PHYSICAL ENVIRONMENT

Before the vocational curriculum can be modified to meet the needs of handicapped students physical accessibility must be assured. This assurance is stipulated in Section 504 of the Rehabilitation Act of 1975 (Public Law 93-112) which states that handicapped individuals cannot be excluded from participating in any program or activity receiving federal support because the facilities are inaccessible. Therefore, vocational educators must find ways to adequately modify facilities and/or equipment so that this population will have equal access to programs, services and activities.

There are three major areas of concern in most vocational facilities in identifying possible barriers for handicapped persons. These barriers include (a) access to the building, (b) ability to move around inside the building and (c) ability to use the facilities in the vocational classroom and laboratory.

ACCESS TO THE BUILDING

If handicapped individuals cannot gain access to the building where vocational classes are conducted, adaptations to the existing curriculum will be of little help. Therefore, accessibility should be assured in the following areas:

1. access to public transportation
2. adequate parking space (clearly marked, appropriate numbers, wide enough to allow for wheelchairs, smooth pavement)
3. curb cuts

4. appropriate walkways (correct slope, guardrails)
5. ramps
6. manageable exterior doors (wide enough, no raised thresholds, not too heavy)

MOBILITY AROUND THE BUILDING

Once a handicapped person has gained admittance to the building where vocational classes are held access must be provided around the building. Accessibility factors which should be considered include:

1. easy movement through corridors
2. elevators or ramps from one floor to another
3. classroom doors which are wide enough (i.e., at least 32" wide)
4. accessible restroom facilities
5. accessible water fountains
6. access between classes

MOBILITY AROUND THE VOCATIONAL CLASSROOM AND LABORATORY

It is essential that handicapped individuals are able to move around the vocational classroom and laboratory and use the fixtures, appliances, work station equipment and tools. Factors which should be considered include:

1. ability to use audiovisual equipment
2. ability to use vending machines
3. ability to use telephones
4. ability to use machine controls and emergency fixtures
5. ability to use necessary tools
6. ability to run machinery
7. ability to use study carrels

Specifications for accessibility to buildings, classrooms and laboratory should be readily available in each local school district. Many manuals have been developed to present required standards for accessibility. One commonly used source is the American National Standards Specifications for Making Building and Facilities Accessible to and Useable by the Physically Handicapped (New York: American National Standards Institute, 1961).

MODIFYING THE VOCATIONAL PROGRAM CONTENT

Vocational program curricula are selected and organized based on an assessment of employment opportunities, resources and limitations, and student needs, interests and abilities. Job requirements are analyzed, usually through employers, and are used to formulate performance objectives as well as measures of attaining these objectives. Using this information, instructional units are designed and sequenced. Then instructional strategies, materials, equipment and media are added as appropriate.

Thus, students must achieve success in mastering the performance objectives identified in each assigned instructional unit in order to demonstrate entry level job skills and knowledges. Accountability for vocational programs is evidenced in successful job placement and job performance of program graduates.

Modification of the vocational program content does not mean that program instruction or content is to be "watered down". Handicapped students must demonstrate the same entry level proficiencies as any other person seeking a job. However, there are some modifications which can be utilized to allow handicapped students to successfully develop their vocational potential to the fullest extent possible.

IDENTIFICATION OF MULTIPLE EXIT POINTS

It is important that vocational education personnel identify a variety of exit points associated with their programs. Each exit point represents an entry level job which a student could qualify for upon completion of a specific portion of the vocational program. Every student enrolled in a program will not aspire to or have the ability to prepare for the same job.

Each exit point must also be accompanied by a listing of the specific competencies which the student must achieve, criterion statements used to determine when the competency has been mastered, instructional activities, and appropriate evaluation techniques.

An example of multiple exit points in a masonry program is shown below:

Examples of Multiple Exit Points/Career Options in a Masonry Program

Area: Building Construction (Trade and Industrial Education)

Secondary Career Options -

- a. cement mason helper
- b. bricklayer helper
- c. stone mason helper

Post Secondary Career Options -

- a. cement mason helper
- b. bricklayer helper
- c. stone mason helper
- d. cement mason
- e. stone mason
- f. bricklayer, construction

TASK ANALYSIS

Task listing is an important component of vocational education programming. These task listings are closely associated with the

specific vocational program or course and/or the occupational cluster.

Task analysis is the process of breaking a task into sub-components and allows the student to follow a step-by-step process in mastering the task. The instructor should sequence the specific steps essential for task completion. Once the framework has been established the sequences can be further broken down into even smaller steps if necessary. This "pacing" approach allows students to complete the required competencies while developing a sense of security and success.

UTILIZE RESOURCES

It would seem unrealistic to assume that vocational instructors can modify the vocational curriculum and deliver appropriate instruction to handicapped students without any outside assistance. Therefore, educational personnel and other available sources should cooperatively plan with vocational instructors and offer assistance in the instructional delivery of process.

Examples of resources which can provide invaluable assistance include:

1. special education personnel
2. resource room personnel
3. vocational counselors
4. paraprofessionals (e.g. teacher aides)
5. communication specialist
6. psychologist
7. itinerant personnel (e.g., specialists in areas such as visual impairment and hearing impairment)
8. community resources (e.g., advocacy groups, professional organizations, agencies)

SELECTING AND MODIFYING INSTRUCTIONAL MATERIALS

It is very important that the materials used with handicapped students in vocational programs are appropriate to their needs and ability levels. For instance, textbooks written on a ninth to twelfth grade reading level will not be appropriate for handicapped students who have achieved a maximum reading level of fifth to sixth grade.

Although the content of the course should remain the same for all students enrolled in a vocational program, the instructional materials should be selected according to the individual needs of the student. The materials should be assessed in terms of the following criteria: a) utility of the material, b) level of difficulty, c) assuring that materials are relevant to the abilities of the student, d) assuring that materials are appropriate to the abilities and interests of the student. One consideration that should be kept in mind while selecting or developing instructional materials is the readability level of these materials. Several simple readability formulas have been developed which can be used to quickly and accurately determine readability levels. Among these are the Fry Method, the SMOG readability formula, and the Dale-Chall readability formula. The results should then be compared with the student's reading level in order to avoid frustration and confusion.

Cooperative planning efforts with special education personnel can prove to be successful in effecting individualized instructional materials which satisfy the above criteria.

Securing appropriate instructional materials for use with handicapped students enrolled in vocational programs can be accomplished

by (a) acquiring materials which have specifically been designed for this population and/or (b) adapting existing materials.

Considerations in adapting existing materials include the following:

1. Scope and sequence of content - The material should be well organized and contain adequate vocational information necessary for student success in the program.
2. Process of introducing content material - Are new concepts introduced in step-by-step format?
3. Opportunities for student application - Does the material allow the student to apply what he/she has learned frequently?
4. Relevancy - Is the content relevant to the vocational program?
5. Usability - Is the material to be used on an individualized basis, with small groups and/or for large group instruction?
6. Reinforcement - Does the material provide adequate feedback for students to encourage motivation and a sense of achievement?
7. Degree of teacher time required - Will the teacher have to remain with the student continuously or can progress be checked periodically?

In reviewing the material the following concerns should be addressed:

1. length of time it would take for students to cover the material
2. level of difficulty

3. readability level of the material as compared to the reading level of students who will be using it
4. vocabulary level
5. clarity of directions

MODIFYING INSTRUCTIONAL TECHNIQUES

One of the most important aspects of developing vocational competencies within handicapped students is to utilize appropriate instructional methods and techniques. Strategies must be developed in order to enhance the procedures used in the normal teaching process. Certain teaching techniques are more appropriate for use with handicapped students relative to the nature and/or extent of the handicapping condition(s).

Some of the most effective methods of instructions that can be adopted by vocational teachers are listed as follows:

1. individualized instruction - each student works at his/her own pace. Instruction can start where the student presently is. It also provides for continuous positive reinforcement.
2. individualized learning packets - this method will provide continuous success for the student. The technique is individualized with appropriate reinforcements integrated at periodic intervals. The content can then be mastered at the student's own level of learning.
3. peer tutoring - this method can be beneficial for both the learner and the tutor. The tasks or assignments are individualized. The tutor can provide instant and continuous feedback in either an one-on-one situation or in small group sessions.

4. teacher-pupil contract - this method outlines a specific task or assignment, the desired level of accuracy for the completed project and, when applicable, time limitations. The contract is signed by both the teacher and the student. Rewards and penalties should be firmly established and agreed upon relative to completion or noncompletion of the project. Evaluation should occur as the student works toward the completion of the contract as well as at the final completion point.
5. demonstrations - it is often helpful for handicapped students to see concepts demonstrated and to be given opportunities for subsequent hands-on activities relating to the concept the teacher is teaching.
6. displays - examples of projects/products at various stages of completion can be helpful in order that handicapped students visualize the process in an orderly and systematic fashion.
7. multimedia materials - the use of these materials, with accompanying lecture/discussion sessions, can be very effective in use with handicapped students.
8. grouping - this method can be effective in that handicapped students can work with their normal peers in a variety of experiences. This will help them to learn the content material as well as raising their self-concept.
9. student-teacher contacts can be helpful in identifying specific tasks which will be completed within a certain amount of time.

Handicapped students should be evaluated fairly according to their capabilities and degree of progress in the program rather than by comparing them with group norms. They should be evaluated according to the competencies they develop. Such categories as quality of work, quantity of work, initiative, dependability, work attitude and following safety rules should be taken into consideration when evaluating student progress.

An individualized, competency-based evaluation policy can do much to enhance the self-concept of handicapped students. It would definitely help to reduce anxiety and competition over grades and create a relaxed atmosphere for the teaching-learning environment. It would also make it possible to assess and record the accomplishments of each handicapped student more objectively.

Modification of evaluation techniques is often helpful in working with handicapped students. Examples of adapting the evaluation process include reading test items out loud to students, allowing them to demonstrate hands-on competencies as opposed to completing a written test, and allowing them to tape record responses to test items.

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SECTION V

ASSESSMENT OF HANDICAPPED LEARNERS IN
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GOALS OF ASSESSMENT

Practitioners often make the mistake of viewing assessment in a narrow role of identification and placement. That is assessment to many is merely a process for screening and placement of students either into or within classes for secondary handicapped learners. Conversely, assessment should be viewed as a process to assist the teacher in developing an appropriate educational program to meet identified learner strengths and weaknesses. For example a general education teacher realizes that Norman continues to fall behind the class in reading. This teacher then, consults with a special education teacher in order to develop a comprehensive assessment package that addresses specific areas delineated as important by both teachers. The data is then collected by each teacher as designated in their plan. Information gathered from these sources can, therefore, feed directly into developing an effective intervention for teaching the target skills. Under this system eventual staffing into a classroom for the mildly retarded may be possible; however, Norman's strengths and weaknesses will have to be identified by the professionals working with him on a daily basis and any transition time can be minimized. Any resulting staffing into the special education program will be based on data demonstrating that certain learner needs will best be met there.

Therefore, teachers should differentiate between data obtained from the general level assessments designed for placement as well as identification of broad learning deficits, and specific teacher assessments. The latter provides the most useful information for developing educational plans. Therefore, Morgan County teachers must realize that one of the vital goals of assessment is to obtain data for program

development. In addition, assessment data collected during implementation has the important role of assisting in program accountability.

Formative evaluation is a process of continuously monitoring student progress in an effort to measure the success or failure of an instructional intervention. Simply, if during the course of instruction the monitoring of ongoing assessment data indicates that the student is not progressing (learning), or is progressing at an unsatisfactory rate, the teacher can modify the intervention as necessary in an attempt to improve learning. All too often teachers find themselves developing interventions, applying them with students, and then moving on to the next unit of study. Subsequently, over a period of time the same interventions will be re-applied with little or no modifications for improvement. A systems analysis approach allows for assessment data to become the feedback into the program; that is, information involving student progress is the yardstick against which program effectiveness can be measured. Therefore, maintaining a chart of learner progress data, and honestly analyzing that data, will provide the teacher information concerning patterns of student errors and areas of student strengths in order to make decisions concerning program revision.

VALIDITY AND ASSESSMENT

If teachers take an introspective look at their classroom, curriculum, and school system they will often find that the programs developed for secondary handicapped learners are isolated from everyday community activities. For illustrative purposes we can note the teachers presenting lessons on grocery shopping without ever allowing the class to visit a market or teachers that instruct community mobility skills in the confines of the classroom. The assessment process

suffers from these same problems. Take for example, the psychometrist who administers a diagnostic evaluation of a learner's computation skills in a room away from the student's daily learning milieu. The point here is clear; we tend to assess and subsequently teach learners skills that have little or no bearing on their daily lives.

Educational interventions should be in the best interest of learners regarding their needs and of the needs of the community in which the learner resides. Methods and materials for teaching are developed to instruct the learner in those skills most appropriate for inclusion into community life. Therefore, assessment, if it is to relate to the teaching of community applicable skills, must occur in the learner's natural environments.

Examples of valid assessment techniques can be found in all areas of teaching independent living skills to handicapped learners. Behavioral observations and recording of learner movements in curricular areas are being carried out in a number of settings: (1) self care; (2) community mobility; (3) home and life management skills; and (4) leisure activities. In addition, these principles of validity support developing programs allowing learners to apply learned academic skills to everyday living experiences as opposed to practicing academic skills only in workbooks or on dittoed exercises. Therefore, in order to evaluate student needs accurately, we must take assessment out of the traditional confines and apply those measurement techniques to the learner-community interaction.

TEACHER'S ROLE IN ASSESSMENT

Misconceptions in the field foster the need to rely merely on school psychologists and psychometrists as the authoritative word in the assessment of learning problems. Therefore, parents, administrators

and even teachers find themselves wanting to refer a learner to the testing specialist for a diagnostic workup. Conversely, we must realize that teachers are in fact the best, most reliable source of assessment data.

There are definite advantages of allowing teachers the central role in learner evaluation. First, teachers know their students better than anyone else. This fact is important especially in light of the credence that psychometricians place on establishing a rapport with the learner prior to testing. Teachers generally have a solid rapport established and can assess the learner at times as well as places that are comfortable to both. Conversely, a professional from outside the classroom structure is at best a stranger with little hope of observing the learner's true performance and must test the student in regards to a strict time schedule and availability of testing facilities.

A second advantage to teacher assessment involves the contact teachers have with students. Teachers are in the position to observe students under a number of varied conditions while in contact with a variety of peers and others associated with the school milieu. For example, when assessing prevocational skills of a retarded learner, teachers have the option to place the student in different situations where the target behaviors can be observed. This freedom to alter environments allows teachers to obtain a more global picture of learner behaviors. Similarly, when assessing learning problems of students in regards to academic skills, teachers can structure activities that test the learner's ability to apply the target skills to a variety of daily living tasks. In any case, teachers are, by nature of their daily involvement with students, in the most advantageous position of viewing the scope of learner responses.

Another advantage inherent to teacher involvement in the assessment process relates to program development and accountability. Teachers are the most familiar with their own program goals and objectives since they are the ones who develop them. This being the case, teachers then are in the best position to assess students in relation to those goals. Typically, psychometrists use standardized tests to measure achievement or deficit areas regarding academic skills. When testing specialists administer the Key Math Diagnostic Arithmetic Test, for example, teachers should realize that studies indicate considerable content omitted on a test of this nature. Therefore, performance on a standardized test may not relate to what items are being taught in the classroom. On the other hand, teachers having knowledge of exact program objectives can then assess the learner on specific skills that are being required in their classroom.

In addition, teachers have the responsibility to develop educational interventions and to continually revise those interventions so that they become more effective and efficient. In order to accomplish this, there must be a daily system of checking learner progress so that decisions concerning appropriate revisions can be made. In this case, the teachers' role in assessment becomes paramount.

OBJECTIVE BASED ASSESSMENT

There are two basic assumptions that underlie all assessment of students. First, the learner is failing at some school related task or is in some way demonstrating inappropriate behavior. The second assumption involves the desire to identify skills currently in a student's repertoire and relate those skills to identified objectives that we wish the learner to obtain. Unfortunately, a majority of the assessment process evaluates handicapped learners in relation to the first

assumption. Teachers on the other hand must first decide what exactly the learner should be able to accomplish and then measure the student's current performance against those benchmarks.

The process of evaluating student behavior in relationship to present criterion-related goals can be termed objective-based assessment. In essence, the process of assessment is dynamic in that it is ongoing and totally interwoven within curriculum design. When program goals and subsequent behavioral objectives are designed by teachers, what has been developed essentially are yardsticks by which they can assess student achievement. Therefore, the highlight of this system is simply the organization and the systematic procedures that it entails. If teachers look at student failures and then begin assessing they lose focus on where they are heading; operating in a vacuum resulting in testing for the sake of testing alone. The alternative of designing cluster goals and behavioral objectives first and then assessing in regards to those benchmarks allows for an effective and efficient system. Further, using a system of this nature automatically answers the two most important questions that continually plague teachers, namely what do I assess and then what do I teach? This process then is one of narrowing down; moving from identifying general learning characteristics to more intensive specific assessment aimed at pinpointing the exact needs of the learner. The system of assessment is of course based upon program objectives. What remains then is to present the reader with an indepth discussion of how to move from the broad to the specific in assessing individual learners. To preface that discussion we will briefly present an overview of the methods that will be used to conduct the various levels of assessment.

OVERVIEW OF ASSESSMENT METHODS

STANDARDIZED ACADEMIC MEASURES

Standardized tests are in wide use in the field of education and are recognized by other labels such as formal or norm-referenced measures. In reality, these commercially produced measures require that they be administered by trained individuals in relation to specific objectives and the results are such that comparisons can be made between the learner and national or regional scores of other students. Within the realm of standardized measures there are various levels of intensity (achievement and diagnostic tests) and methods of administration (group and individually applied). Therefore, teachers have a choice of the type of test they wish to administer based on the information it will yield. What is important for teachers to become familiar with is the system by which these types of tests are used and what information they yield.

A frequent and yet inappropriate occurrence is to use group achievement tests to place and subsequently program for learners. When group achievement test results are available, teachers must realize that this information is valuable only for screening purposes of gross learning problems. In the same light, individually administered achievement tests, although somewhat more appropriate, again only provide broad information concerning learning problems. Teachers should not feel that results from these tests are futile; rather this level of testing only needs to be placed in proper perspective. That is, achievement testing is a method to quickly ascertain general learner problems in order to suggest more specific diagnostic testing. Under no circumstances should teachers believe that, at least for handicapped learners, achievement tests are sensitive enough to measure student daily progress, hence program effectiveness.

Diagnostic tests generally are characterized by their administration to individuals, and the testing of more specific skills in designated subject areas. Therefore, one can expect subtests on a diagnostic arithmetic test to cover cluster goal areas such as basic operations, numeration, time, money, etc. Similarly, a diagnostic reading test would include subtests covering work attack, sight vocabulary, comprehension, etc. These diagnostic tests can benefit the teacher by providing a global picture (yet more detailed than achievement tests) of a learner's abilities in a particular subject area and do so in a relatively short period of time. A test of this nature also allows the teacher to use a systematic set of procedures when students first enter their programs. This characteristic of diagnostic tests is valuable especially when new students are placed in temporary situations unknown to the teacher and a quick, relatively reliable technique is needed to profile the learning needs of the student.

Master teachers who have had indepth experience with academic evaluation realize that information from these measures has minimal value when the test has been administered by another professional. In cases where persons other than the teacher administer a test, various skills of standardized testing such as overgeneralization of findings, lack of teaching information, and child/administrator variability become accentuated. Therefore, teachers should note that the relative usefulness of these types of evaluations rely on whether they can participate with the student in the testing process in order to view behaviors and in order to be familiar with test contents in relation to their program goals.

The present section has presented the reader with some of the more cogent and pragmatic points of standardized academic testing. Readers will notice the lack of discussion concerning measures of intelligence. This omission was not an oversight but deliberate in order to make a point. Placing all arguments either supporting or reflecting the value of intelligence testing aside, the point needs to be made that scores yielded by these measures have almost no benefit to teachers as far as designing educational programs for handicapped learners. In reality, the I.Q. score generated by intelligence is an indicator of the relative success or failure of a student in the academic based public school system; therefore, these scores are used as one of several indicators for initial identification and placement. Teachers' concern for handicapped students is initiated where the identification (screening) process leaves off. Keeping the role of teachers in program development and also of realistically identifying the curricular areas of benefit to handicapped learners in mind, the next section is concerned with a general level of assessment of those skills that benefit learners by assisting them in becoming as independent as possible in community living.

STANDARDIZED SOCIAL COMPETENCY MEASURES

The prevailing thought of many special educators continues to turn towards the traditional teaching of academic skills when viewing program development for the handicapped. Although skills are important, especially for the mildly and moderately retarded, they do not encompass the main focus of program goals for retarded learners. Teachers are realizing that when instructing in academic skills there needs to be an approach involving nontraditional methods

(e.g., application to community living skills). Therefore, the logical connection with social competency or more appropriately, independent living skills, is evident.

Adaptive behavior scales are the measures that are most often used at the general level of assessment to assess the independent living skills of retarded learners. Generally, adaptive behavior scales incorporate various categories such as interpersonal relations, self-help, etc., that allow a professional to rate the learner on a graduated scale. In order to rate the learner, the professional must either interview someone who intimately knows the learner (teacher, parent, etc.) or have contact with the learner in an observable situation.

Again, what is important for the reader to realize is that the use of adaptive behavior measures constitutes a general level of assessment designed only to designate the global strengths and weaknesses of the target learner. Inherent problems, such as the high degree of subjectivity in rating, preclude these devices as being useful to specifically monitor student behaviors, progress or assist in program accountability. On the other hand, adaptive behavior scales are useful in obtaining a relatively fast assessment of student's severe deficits hindering independent living. In addition, once teachers have established learner's global deficit areas and relative strengths, they can proceed in identifying appropriate assessment tools that will begin to be more specific in pinpointing areas needing matching interventions.

CRITERION REFERENCED TESTING

Technically, criterion referenced testing (CRT) and informal assessment are different. The first is based on a behavioral objective including a specific criteria that a student must meet to

master the task, while the second involves measuring the learner in relation to specific content with no set criteria in mind. In practice, since the field of special education has moved to objective based curriculum design the two forms of assessment have essentially become synonymous. Actually, what occurs at this level of assessment is a combination of the two procedures; we base our objectives for a student on preset criteria, and yet, we informally test the learner without the specific directions and normative data of formal tests.

The reader is cautioned not to look upon C.R.T. as something less sophisticated or unsystematic because it is referred to as informal testing. On the contrary, this particular type of assessment yields the most important and often most intensive information in regards to program development. At the specific or intensive level of assessment, teachers identify from general information gathered (e.g., formal procedures at the global level), exactly what areas of learning need further scrutiny. Using C.R.T.'s the teacher can design very specific measures based on objectives to assess learner performance in relation to an area of the curriculum. For example, a teacher may have information on a given severely retarded student based on administration of a Cain-Levine Social Competency Scale. The data from this measure may demonstrate that the learner is performing below a designated norm in communication skills, specifically in the area of communicating wants or needs. Information such as this is important to a teacher by alerting them to initial problems, however, there is not enough information provided to make appropriate programming decisions. Therefore, the teacher would then develop assessment objectives specifying the

conditions under which the behavior will occur (e.g., upon questioning the class, the student will communicate correct answer) and with a preset criteria (e.g., 2 out of 3 times).

A similar illustration of assessing academic performance of a mildly retarded student might begin with information from a diagnostic reading test identifying severe deficits in decoding skills (word analysis). The next step is to further assess each of the decoding areas that are suspect by first developing behavioral objectives that relate to each identified skill. So, an example of an objective that can be used as a basis for intensive assessment might be:

CONTEXT: Given a printed list of twenty prefixes.

OUTCOME: SWBT point to each prefix and say it correctly.

CRITERIA: 18 out of 20 correct.

In this case, the teacher now can develop the test based exactly on the objective and obtain a measure of student performance. Similar objectives can be written for each of the skills within the cluster goal of decoding using various commercially produced scope and sequence charts for guides.

The above section dealing with C.R.T. was designed to give the reader a working knowledge of how assessment moves from the formal or general level to the informal and more intensive level of measuring learner performance. Within this intensive level of assessment there is an additional method of gathering data, that when dealing with retarded learners, is often the most valuable technique for measuring specified behaviors. Systematically observing a target learner, allows teachers to assess the application of skills or identify the lack of such skills, in daily naturalistic settings

(classrooms, community environments). If observation measures are designed and implemented appropriately, information gathered can be both reliable and meet the rigorous standards of social validity.

ASSESSMENT AND THE I.E.P.

Initially assessing learners in order to establish their present level of performance will provide the foundation for future program development. This level of assessment is crucial for identifying the needs of the student and areas where more intensive investigation will be necessary. The error that many professionals make at this stage of program development involves timing; that is, deciding when teachers should begin to play an active role in the process. To adequately develop an effective I.E.P. the process must begin in earnest prior to the staffing meeting. The teacher's responsibility for appropriate assessment of the learner is paramount and begins before the I.E.P. meeting convenes.

PRESENT LEVELS OF STUDENT PERFORMANCE

Information that will assist in establishing a student's present level of performance will be collected using three sources: (1) cumulative records and interview; (2) standardized tests; and (3) criterion-referenced measures. The information from these sources must be collated and analyzed prior to I.E.P. development if the data is to be of any practical use. First a careful inspection of cumulative records followed by interviews if needed can produce a wealth of general information that will point to the next step in the assessment process.

The administration of any number of academic diagnostic tests can provide a general profile of student strengths and weaknesses in the designated area. These measures then can designate skill

areas where more intensive assessment will be necessary; however, at this point in the process the information generated from these measures can also be of sufficient detail to develop objectives for the I.E.P. Before the I.E.P. can be translated into an implementation plan, the teacher will have to gather more intensive information.

Teachers will find themselves in the position where it may be impossible to collect data using standardized tests. In this case a number of less formal measures are available including behavioral checklists, informal reading inventories, teacher made tests, etc. The goal of administering measures of this nature is the same as if formal tests are used; the need to establish a global learning profile of the student. To reinforce this principle, we need to refer back to the curriculum section (three).

Before an I.E.P. could be adequately developed a profile of student performance relating to predetermined cluster goals and behavioral (unit) objectives is required. Therefore, in practical terms the standardized and CRT measures administered at this pre-I.E.P. level would relate specifically to those outcomes (e.g., CBE units found in this guide). Once data is collected and analyzed relative to the goals, the teacher, parents, and supporting professionals are ready to meet for detailed program development.

There are two crucial points that should be stressed here.

First, Morgan County teachers, upon reading this section, may feel that the stated coordination of activities is not their job and in fact, results in more work on their part. An attitude of this nature will be difficult to overcome; however, a process of this nature actually saves time in the long run and results in less work for

the teacher. When a learner has been staffed into a teachers' program, these teachers have to rely on information that has been provided by people they have never met. In addition, information on specific areas that may be important to a given teacher, if often not available. Therefore, the result is that additional work by the teacher must be initiated in order to adequately assess the learner; however, these tasks now have to be completed while the responsibility for the rest of the class is pending. Situations such as these result in that feeling of never being able to catch up in order to develop that appropriate program.

The second point we wish to highlight involves the pivotal role of the teacher in this process. In each of several assessment activities the teacher involvement is vital for two reasons: (1) to insure that skills important to the student and related to the classroom are assessed; and (2) the teacher is benefiting from the knowledge of the specialists and assimilating the data collected concerning the learner. This last point allows the teacher to assist in developing the more intensive assessment activities needed for program implementation.

ONGOING MONITORING OF LEARNER PROGRESS

This level of assessment involves intensively measuring learner performance against preset instructional objectives chosen specifically for the target learner. Highlighting the process of curriculum design we can see that program areas were broken into cluster goals which were further delineated into behavioral objectives. A given learner is then assessed in relation to those objectives, information collected and analyzed resulting in an instructional (task) analysis that identify instructional objectives. The next step

involves intensive assessment which essentially identify those instructional objectives appropriate for the student. The assessment tools available to the teacher for this level of intensive inspection of skills include both criterion-referenced tests and behavioral observations.

Probing is a technique of assessment that results by obtaining an ongoing assessment profile of learner progress. Specifically, the techniques used to probe learner behavior are tools that have been discussed throughout the chapter; C.R.T.'s and systematic observation. A unique feature of probes that relate directly to a component of the I.E.P. is that they are frequent; and if possible, they should occur in some form on a daily basis. This principle of frequent monitoring is important. Frequent probing is important because any gains that are made should be an indication of program effectiveness. Conversely, if no student gains are noted then the teacher is alerted to program inadequacy necessitating revisions. The above reasons support the need for frequent probing so that an ineffective program (teacher techniques, materials, reinforcers, etc.) will not continue for any length, thereby, reducing the amount of time available for instruction. Given all the extra activities and unseen events that occur during the school day, every minute of instructional intervention time is valuable.

A typical sequence of teaching events usually involves scheduling a short period of time each day for individual instruction in all categorical areas. That is, for a mildly retarded student the teacher would insure at least 10 minutes of one-to-one instruction in the academic areas designated by assessment data for that learner. Also, the teacher will arrange for individual guided-practice time for the student on the instructional objective(s) covered during the session.

Then, at some point the teacher will present the learner with a C.R.T. covering what the student was targeted to learn, attempting to measure whether or not the daily instruction had an impact on the learner. By applying probes of this nature, teachers will have gathered information from assessment measures that are sensitive to student progress. Subsequently, based on data from the probes, teachers can make decisions as to whether more practice is needed before continuing to the next objective or whether a revision of the instructional intervention is required.

THE I.E.P. REVIEW

Summative evaluation involves gathering information at the completion of the unit that establishes whether or not student performance matches the preset criteria of the behavioral objective. Therefore, the types of assessment methods that can be used at this level involve; direct product measurement, observational data; and learner input. This form of evaluation is essentially a posttest; that is, the assessment measure used will be based on the behavioral objective so that the results can be compared with those of a similar measure that was administered at the outset of the program. Simply, when the learner entered the system he/she was assessed in accordance to preset program cluster goals and behavioral objectives. The results of this level of assessment designated what specific objectives were to be focus of the learner's instructional program. Therefore, when instruction has been completed the student is once again presented with the same or similar assessment measure to note overall progress in the unit of study and to make judgements concerning overall effectiveness of the program. However, there is one more consideration that the teacher must address during summative evaluation.

Knowledge and skills are useless to handicapped learners if they cannot be applied to environments and situations that are as least restrictive as possible. When a handicapped learner has successfully completed a unit of study, the next step in the summative evaluation process is to allow the student to demonstrate those skills under different and/or varying circumstances. In this instance, the teacher would require the learner to perform the skill in different settings, under the supervision of different individuals, using alternative materials and under varying reinforcers or schedules. If the student can transfer the knowledge and/or skills to other situations then the program has been successful. If the learner fails in the transfer, the teacher should be alerted to developing additional program components that will instruct or allow the student to practice the learned skills under the specified conditions.

PROGRAM EVALUATION

Throughout this section and the section in the present curriculum guide dealing with curriculum, a discussion of formative evaluation has been prevalent. Formative evaluation is a technique whereby teachers use data measuring learner performance to judge whether or not the instructional program was successful. This technique, in fact, will constitute the bulk of the program evaluation efforts in Morgan County. However, the technique of using learner performance data is by no means the only method to assess program worth. There are two additional program evaluation techniques that should be utilized by the Morgan County staff that provide information relating to special education students assimilation into community life; the student followup, and the employer survey. Each of these followup evaluations allows teachers to gather information relating to program areas that may need revision in order

to increase the probability that future secondary learners will be successfully integrated into the community.

A student followup can take two forms, both requiring input from classroom teachers in the design and implementation. First, a survey needs to be developed that includes questions that can be asked the former student involving their day to day activities, interpersonal relationships, jobs, etc. There are no set number or kind of questions to ask; rather, questions should be based on the local curriculum components that reflect the generalization of course content into daily living.

Secondly, direct observations of the former learner on-the-job, at home, and participating in community activities will provide valuable information as to the success of a school's curriculum. As with the previous example, the types of behaviors to be observed will be identified by the teacher relating to specific areas of the curriculum.

An additional followup technique that will yield useful information can be obtained from a survey of employers, parents, and significant others. The following are areas that Morgan County staff should explore with community members:

1. on the job performance of former students
2. comparison of handicapped workers with other employees
3. employer suggestions for improvement or additional competencies
4. problems with law enforcement personnel
5. reactions of parents and friends
6. credit record

Please note that some areas described above are confidential and require permission of both the former student and/or guardians. This

information must be kept in strict confidence by the school district, however, because these data are sensitive by no means excludes them from the program development process.

The flow chart located in Appendix B that identifies the implementation steps for this guide, also provides a time line for conducting followup studies. These are merely guidelines and can be adjusted as per the needs of Morgan County.

SECTION VI

VOCATIONAL ASSESSMENT OF HANDICAPPED LEARNERS.

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VOCATIONAL ASSESSMENT

Vocational assessment is a process designed to assess and predict work behavior and vocational potential, primarily through the application of a variety of practical techniques and procedures.

This implies that information gained through vocational evaluation is useful both for short-term and long-term planning.

Specifically, vocational potential may relate to such factors and characteristics as:

specific and general skills and abilities, aptitudes and interests, personality and temperament, values and attitudes, motivation and needs, physical capacity and work tolerance, educability and trainability, social skills and work habits, work adjustment and employability, placeability and rehabilitation/habilitation potential. (Pruitt, 1977, p.4).

Evaluating the vocational needs of handicapped individuals is a critical part of vocational preparation. Accurate evaluation information provides an opportunity to develop individualized planning and instruction in the vocational program. This information further serves to assist teachers in expanding their vocational curriculum to meet the unique needs of these students and assist them in developing their vocational potential to the greatest extent possible. Effective vocational preparation of handicapped individuals is dependent on teachers having functional knowledge of vocational evaluation techniques and tools. Appropriate use of vocational evaluation procedures enables teachers of the developmentally disabled to assess current performance levels, to set long-range expectations, and to develop the needed activities and short-term goals that will allow students to achieve their career goal.

An important consideration in the evaluation process is to select assessment tools and activities which will provide the maximum amount of information concerning the student's aptitudes, strengths, limitations and interests in relationship to the world of work. A number of vehicles can be used, including (a) appropriate student background data, (b) tests, (c) rating scales, (d) interest inventories, (e) personal interviews, (f) work samples, (g) simulations, (h) situational observations, and (i) work evaluations.

A variety of evaluation instruments should be utilized in order to provide information about the individual from several different vantage points, as each of the techniques suggested above have specific strengths and weaknesses.

The process of vocational assessment should be a cooperative endeavor involving a number of people, including but not limited to special education personnel, vocational education personnel, vocational evaluators, administrators, parents and agency representatives.

A comprehensive program of vocational assessment components usually includes the following categories of activities: (a) clinical assessment, (b) work samples--formal and informal, (c) situational assessment, and (d) job try-outs. Information collected from these components can be organized into a student profile and can be helpful in identifying appropriate training methods, curriculum needs, support services (such as speech or physical therapy) needed as part of the vocational preparation process, attitudes and behaviors, and predicted vocational potential and limits. However, vocational evaluation tools can also be used selectively and individually at critical points in a handicapped individual's vocational preparation program even at the time of job placement. It must be emphasized that assessment tools should be used individually and collectively as appropriate

CLINICAL ASSESSMENT

The information gained from clinical assessment will assist personnel in better understanding the student's disability and performance capabilities. This component is usually the first to be developed, as the information provided will help to narrow the range and scope of the testing that follows it. Since testing must be limited to appropriate instruments which provide essential information, clinical assessment usually concentrates on the following areas:

1. Academic achievement information can indicate the student's current levels of academic and behavioral functioning and whether he/she is capable of handling other tests designed for Achievement Test.
2. Intelligence tests provide information which can assist personnel in anticipating the non-motor ability level at which the student is performing.
3. Aptitude tests (paper and pencil or performance based) can provide information which describes the student's vocational potential in specific educational levels. It can also provide a basis for necessary remediation. For instance, approximate levels of reading, vocabulary, comprehension, spelling, arithmetic computation, word attack skills, and problem solving skills can be determined by administering such standardized instruments as the Adult Basic Learning Examination (ABLE), the Wide Range Achievement Test (WRAT) or the Peabody Individual areas such as those which require specific clerical, mechanical, and manual dexterity skills.

4. Dexterity and motor tests can provide specific information relating to the student's eye hand coordination, fine and gross motor skills, psychomotor rate of performance, and manual dexterity level.
5. Interest inventories are usually paper and pencil batteries and require at least a sixth grade reading ability. Some instruments, however, are based on a selection of pictures and can be administered to students with reading difficulties and nonreaders. Information from these tests can help to narrow the range of vocational program options in the least restrictive environment and to establish an appropriate career objective.
6. Cumulative records can provide information concerning a student's grades, attendance, and discipline records.

This information should all be collected and recorded on a Background Information Profile. A sample profile is provided for you.

BACKGROUND INFORMATION PROFILE*

Date _____

Name _____

Age _____ Grade _____

A. Performance Levels:

1. Reading level _____

2. Math level _____

3. Spelling level _____

4. Psychological test results:

Test _____

Score _____

Date administered _____

5. Communication skills:

Verbal _____

Written _____

6. Strong, style of learning:

(e.g., visual, auditory, kinesthetic)

7. Attendance:

8. Language skills:

Listening _____

Conveying information _____

9. Perceptual-motor skills development:

10. Interest inventory:

Test _____

Date administered _____

Results _____

11. Aptitude Battery:

Test _____

Date administered _____

Results _____

12. Interview Information:

* Adapted from Sarkees and Scott, 1981.

WORK SAMPLES

Work samples represent an important component of the vocational evaluation process. As a close simulation of the tasks required in business, industry or a specific vocational area, work samples can be useful in assessing vocational strengths, aptitudes, interests and limitations in order to lend realism as a vocational guidance tool.

Work samples can produce useful evaluation data for predicting vocational potential in that they emphasize psychomotor skills rather than verbal abilities, they can produce feedback relative to the practically based hands-on activities in a short period of time and they provide direct information relating to the individual's performance level and enthusiasm.

COMMERCIAL WORK SAMPLES

A variety of commercially prepared work samples are available. They are based on cluster-trait samples and single-trait samples. Cluster-trait samples use one activity to measure a variety of vocational factors essential to many occupations. Single-trait samples are based on one vocational activity and measures all the qualities necessary for successful performance in that vocation.

Selection of the proper commercial system should take into consideration:

1. the range of jobs available in the community and the scope of jobs represented in the work sample;
2. validity and reliability for the student population to be served;
3. purpose of the evaluation;
 - (a) occupational information through a hands-on experience,
 - (b) assessment of present skills and aptitudes without relating information to career functions,

- (c) a thorough evaluation of student aptitudes and work behaviors,
- (d) occupational information and dissemination,
- (e) occupational exploration.

(Revell, Kriloff and Sarkees, 1980)

Work samples can be motivating to handicapped students because they provide them with practical hands-on experiences as opposed to paper and pencil activities. Therefore, performance skills are emphasized rather than verbal or written skills. While the student is completing the work sample the evaluator observes important information relative to manipulative skills, motor skills, and work capacity. This can help in selecting an appropriate placement in an appropriate vocational program or in selecting job placement sites.

The advantages of commercial work sample systems include (a) motivating the students through psychomotor experiences, (b) providing necessary information through observation, (c) helping to predict potential success in an occupational area and (d) providing exploratory and career counseling experiences.

Disadvantages of commercial work sample systems include (a) cost, (b) training time for evaluator(s), (c) time consuming to administer and (d) inappropriate norms. Commercial work samples which are currently being used are listed below:

1. Jewish Employment and Vocational Service (JEVS)
2. Singer Vocational Evaluation System
3. Testing, Orientation and Work Evaluation in Rehabilitation (TOWER)
4. Talent Assessment Program (TAP)
5. McCarron-Dial
6. Wide Range Employment Sample Test (WREST)

7. Systematic Approach to Vocational Education

8. Valpar

TEACHER PREPARED WORK SAMPLES

Many school systems do not have sufficient funds to purchase commercial work sample systems. However, informal work samples can be developed by vocational teachers, in cooperation with special education personnel, so that students can be observed as they perform work related tasks. The tools and equipment used in the vocational classroom or laboratory can be utilized in developing these activities.

Informal work samples should relate to jobs which are available in the community. An informal community survey can be conducted to determine the nature and content of the proposed work sample.

Another source of helpful information in identifying entry level tasks is The Dictionary of Occupational Titles (DOT). Published by the Department of Labor, this resource provides information concerning the physical demands, working conditions, aptitudes and specific job tasks for over 35,000 jobs. The information found in this guide was collected by occupational analysts through observation of workers and job sites. An example from the DOT is provided below:

521.685-306 SLICING-MACHINE OPERATOR (dairy prod., slaught. & meat pack.)

Tends one or more machines that automatically slice food products, such as cheese or meat for packaging: Threads roll or interleaf paper into machine. Turns screw to adjust guides on machine for size of food slab, using wrench. Places slab of food on feeder bed. Presses levers to clamp chunk to bed and start feeder. Turns dials to set number and thickness of slices in each stack. Presses switch to start rotating slicer with synchronized devices that cut, count, interleaf, and stack slices of food. Weighs stack and turns dial to regulate thickness of slices to achieve prescribed weight. Removes and replaces imperfect slice with one from spare pile. Places sliced stack on packaging conveyor.

Once information has been collected to determine what informal work sample is to be developed the following steps should be followed:

1. analyze the job represented by the work sample to make certain that the skills required for the job are the same as those represented in the work sample (the DOT may be helpful)
2. develop activities for the work sample which simulate the tasks expected for the job
3. decide how you will explain and/or demonstrate the work sample to handicapped students.
4. decide how student performance will be evaluated or scored (establish criteria)
5. pretest the work samples with handicapped students before using it as an assessment tool to help identify any problem areas.

Using these five steps in developing informal work samples the following examples from each vocational service area are provided to illustrate the process.

A. AGRICULTURE - Potting a Plant (Horticulture Class)

Skills necessary for successful completion of this activity:

The student will be able to --

1. fill pot with soil mixture
2. properly handle the plant material
3. plant the plant in the pot
4. water the plant
5. place the pot on bench for further care
6. understand basic concepts of requirements for plant growth

Procedure: The student is provided with a 6" clay pot, soil, one tropical houseplant, a bucket of water, a demonstration and instructions on how the procedure should be carried out. The student is also provided with ample time to complete the activity.

Key Considerations in Evaluation: The instructors (preferably agriculture and special education cooperatively) will observe manual manipulation, attitude toward the project, and the student's understanding of basic concepts behind the steps involved in carrying out the activity.

B. BUSINESS AND OFFICE EDUCATION - Filing (Office Procedures Class)

Skills necessary for successful completion of this activity:

The student will be able to --

1. listen to directions
2. know the order of alphabetical letters
3. read the name of a department and match the name with the proper tab in the filing box
4. put index-cards in order

Procedure: The instructor will provide the student with a filing box containing ten cards with raised tabs on which will be written ten departments of a company (i.e., Personnel Department, Accounting Department, Shipping Department, Engineering Department). Also provided will be 100 index cards on which will be written (a) the name of the person who works for the company and (b) the department where the person works. The instructor will explain to the student that each card is to be filed in alphabetical order behind the correct department tab. Appropriate time will be allowed for the student to complete the activity.

100

Key Considerations in Evaluation: The instructors (preferably

business education and special education cooperatively) will observe the student's concentration on the task, rate of error, decision making ability, work pace, ability to work unsupervised, and ability to work under pressure.

C. HEALTH OCCUPATIONS EDUCATION - Preparing Articles for Sterilization (Nursing Class)

Skills necessary for successful completion of this activity:

The student will be able to --

1. read instructions
2. observe and interpret diagrams
3. assemble materials
4. wash instruments, needles and syringes
5. rinse instruments, needles and syringes
6. wrap instruments, needles and syringes

Procedure: The student will be introduced to the work area which will include a sink with running water, basins and detergent, brushes, stylets, applicators, sponges, paper towels, sterilization syringe envelopes, paper needle forms, paper wrappers, and sterilization tape. The items will be placed in a systematic arrangement so that the student can work in an orderly manner. The instructor will provide the student with a demonstration, an explanation of the activity, and a typed checklist of tasks to be completed.

Key Considerations in Evaluation: The instructors (preferably health occupations and special education cooperatively) will observe the student's ability to follow instructions, ability to properly utilize the task checklist and diagram, safety in handling objects, coordination during disassembly of needles and syringes, and proper cleaning, rinsing and wrapping of instruments.

D. HOME ECONOMICS - Placing and Cutting Out a Garment (Basic Clothing Construction Class)

Skills necessary for successful completion of this activity:

The student will be able to --

1. read the guide sheet (either by words or pictures)
2. identify and know how to use the appropriate equipment (e.g., pins, yardstick, shears, pattern)
3. locate the grain line in the fabric and on the pattern piece
4. recognize the cutting line on the pattern.
5. know which pieces are to be placed on the fold of the fabric
6. recognize the pattern pieces that go with the view being made

Procedure: The student would be introduced to the work area which would contain a work table, fabric, a pattern, a pattern guide and all of the appropriate supplies and equipment. The instructor would explain to the student that he/she should follow the pattern guide sheet to place the pattern pieces on the fabric and cut them out.

The student would be given sufficient time to complete the activity.

Key Considerations in Evaluation: The instructors (preferably home economics and special education cooperatively) will observe ability to read the pattern guide sheet, ability to follow directions, ability to use the equipment, ability to measure, frustration level, attention span, and manipulation and dexterity skills.

E. MARKETING AND DISTRIBUTIVE EDUCATION - Setting Up a Display Area With Merchandise (Merchandising Class)

Skills necessary for successful completion of this activity:

The student will be able to --

1. determine what merchandise needs to go on each shelf
2. get the proper merchandise from the storeroom/stockroom
3. price the merchandise
4. put the merchandise on the shelf in the correct place
5. label the shelf
6. work with others
7. give and follow directions

Procedure: The student would be introduced to the stockroom as well as the display area. The instructor would give specific directions about the activity. The student is to check the typed list which will indicate how many items of merchandise should be on each shelf. After checking this list and counting the material on the shelves the extra merchandise should be obtained from the stockroom, priced and put in the appropriate place on the display shelf.

Key Considerations in Evaluation: The instructors (preferably marketing and distributive education and special education cooperatively) will observe the ability of the student to follow directions, computational ability (counting and pricing merchandise) and perseverance level.

F. TRADE AND INDUSTRIAL EDUCATION - Build a Napkin Holder (Carpentry Class)

Skills necessary for successful completion of this activity:

The student will be able to --

1. measure
2. layout materials
3. cut wood
4. hammer
5. chisel

6. drill

Procedure: The student is provided with tools (i.e., 12" scale ruler, 10 - point - 20" hand saw, drill brace with 3/8" drill compass, 6 1/2" coping saw, 12" combination square, 1/2" wood chisel mallet, shoe or wood rasp, and safety glasses) and supplies (12 wire nails - 1/2", 1 piece plywood 1/4" x 8" x 18", 1 - 6" x 3/8" wood dowel, 1 - 1" x 4" x 4" pine board, 1 shop cloth, 1/2 sheet medium sandpaper, 1/2 sheet fine sandpaper, 1 oz. wood glue, and plastic wood filler). The instructor will demonstrate the proper use of the tools, the safety procedures, and the procedure for making a napkin holder. The directions will also be listed in task analysis form for the student to follow step-by-step.

Key Considerations in Evaluation: The instructors (preferably carpentry and special education cooperatively) will observe the student's ability to measure, strength, endurance, dexterity, assembling errors, finishing errors, and proper use of tools.

SITUATIONAL ASSESSMENT

Perhaps the most widely used method of vocational assessment is the situational assessment approach. This technique utilizes observation to record vocational behaviors and work habits demonstrated by students performing work tasks. The work tasks occur in a real or simulated job environment. Students work on tasks in small groups, rather than in individual situations, so that interpersonal skills can also be observed. Behavior checklists and rating scales are usually used during the observation to record student performance.

Situational assessment provides the student with activities whose relationship to vocational concerns can be readily experienced.

The relationship to the world of work motivates the students to

complete the tasks. A student can be placed in varied settings for situational assessments with limited costs for equipment and materials. As information is gained about the student's work behaviors and skills, situations which meet individual needs can be established. The situational assessment provides both learning experiences for the student as well as indications of further evaluation and training needs.

The positive aspect of this approach is that situational assessment can take place in a variety of situations. Sites for assessment can be selected according to the work environment relative to a specific job. Opportunities to establish situational assessment activities can be found in institutional facilities or schools. They may also be based in the community.

During the process of situational assessment, several factors relative to a student's work performance are observed. These factors include specific work skills, work personality, perseverance, and work tolerance. Inferences are also made regarding worker attitudes and values (Pruitt, 1977).

More time can be allowed for situational assessment activities than is normally allowed for commercial work sample batteries. Therefore, a more precise profile of student abilities can be developed in order that a realistic vocational plan can be formulated.

Brolin (1976) presented some advantages of using the situational assessment technique:

1. it simulates a real work situation
2. it allows for observation of hands-on as well as personal-social skills
3. it takes less time than some formal assessment batteries
4. it is less costly than most formal or commercial batteries

5. it provides a natural work environment in which students can be more relaxed
6. it provides an excellent opportunity for cooperative observation, evaluation and decision-making among educational personnel.

A sample Situational Assessment Checksheet is provided to illustrate a recordkeeping system that can be used by observers during the assessment activity.

SITUATIONAL ASSESSMENT CHECKSHEET*

Student _____

Date _____

Observer(s): _____

Task/Activity: _____

Skill/Behavior	Needs Improvement	Satisfactory	Excellent
----------------	-------------------	--------------	-----------

Punctuality			
Work endurance			
Concentration			
Follows safety rules			
Motivation			
Works well with others			
Fine motor skills			
Gross motor skills			
Follows directions			
Eye-hand coordination			
Quality of work performed			
Speed			
Accuracy/precision			
Dexterity			
Accepts criticism			
Hygiene/grooming			
Consistency in performing tasks			
Reaction to task changes			

*Adapted from Sarkees and Scott, 1981.

JOB TRYOUTS

Job tryouts are placements in the community under the conditions normally associated with a specific job. Job tryouts include formal follow-up activities once a job placement is made to assure that the student is given an accurate evaluation and a fair opportunity to perform. The motivating features of job tryouts for students can be seen both in terms of the reality of the assessment experience and the opportunity to demonstrate skills in an actual work setting.

Another positive feature of job tryouts is the effect of high levels of performance on the attitudes of employers toward handicapped workers. For example, individuals with epilepsy are frequently excluded from the job market because of societal attitudes toward seizures. This exclusion is particularly relevant to individuals whose seizures cannot be brought under perfect control. A student with epilepsy can be placed in a work tryout with a potential employer. The student would have the opportunity to demonstrate that the job can be completed at a competitive level and that seizure activity can be compensated for without injury or liability.

Job tryouts also provide information concerning a student's current level of interest in a particular job area, production level, work attitude, and need for further preparation.

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SECTION VII

SECONDARY PROGRAM COMPETENCIES AND
SUGGESTED COURSE OPTIONS

BY

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A. Introduction

Included within the present section is a series of course outlines that reflect the competencies identified in the State of Georgia Competency Based Education regulations. As previously stated, the Learner competencies were obtained directly from the state regulations. Competencies from the Individual, Citizen, Consumer and Producer clusters were identified as a component of the present project. In addition, the goals and subsequent objectives for these competencies are included within the framework of course options that they appear to relate to. The reader will note that additional steps of instructional analysis are needed in order to translate the competency goals and objectives into implementation activities for each course. This system will allow individual teachers to modify goals to the needs of specific learners and to the characteristics of their instructional setting.

Since modification of goals within courses will be necessary for many handicapped learners, a way of earning modified credit must also be developed. Clarke County School District has already developed an outline of course credit options. The model is very comprehensive in that it ranges from full-time regular class and full credit to special class and no credit. This modification of program and course credit enables all students flexible, program options allowing the availability of more than one instructional setting. The following subsection includes four possible credit options that can be modified if necessary to fit the needs of the Morgan County School System.

System for Awarding Course Credit*

A. Regular courses requiring no modification:

These courses will be designated by the systemwide course number

on the student record. The student will receive full credit upon completion.

B. Regular courses requiring minor modifications:

These courses exist when the special education teacher consults with the regular teacher. They will maintain the systemwide course number on the student record and the student will receive full credit upon each course completion.

C. Regular courses requiring major modification:

These courses will carry a coded number to designate that the course was taught by a special education teacher or in conjunction with a regular education teacher. The essential goals and objectives of the regular course will be followed as much as possible for each student. All concepts, goals, and objectives for each modified course will be listed in the IEP of each exceptional child. These courses may be graded by a satisfactory or unsatisfactory grade upon completion of IEP goals. The satisfactory/unsatisfactory stipulation should be covered in the IEP. If the parents do not want the satisfactory/unsatisfactory option, the child will be graded according to the established class grading standards.

D. Specific needs courses:

These courses will be provided or supervised by special education personnel to guarantee that the basic CBE learner competencies are completed by each special education student who receives a diploma. These courses will be considered a part of the 150 high school elective hours. These courses will carry a coded number in the student's record to designate that the course was provided in the special education curriculum and taught by the special education

teacher. The goals and objectives for each specific needs course will be listed in the IEP of each exceptional child.

* Developed by Clarke County Exceptional Children Division Staff.

PART A

COMPETENCIES FOR THE LEARNER

DEVELOPED BY:

DEPARTMENT OF EDUCATION
STATE OF GEORGIA

I. SUGGESTED COURSE OPTIONS

- A. ENGLISH-LANGUAGE ARTS
- B. MATH
- C. SCIENCE-MATH
- D. PERSONAL FINANCE
- E. ECONOMICS & BUSINESS
- F. SCIENCE

1. Learner

Each graduate should demonstrate competence in the areas of reading; writing, mathematics, speaking and listening and problem solving. Performance will be demonstrated by students using those materials which are used in typical academic, employment and everyday tasks. These may include newspapers, magazines, personal budgets, tax and employment forms, textbooks, business and personal letters and other materials requiring the application of basic learning skills.

Reading - A student will demonstrate competence by his or her ability to read, understand, interpret and use written materials in the context of academic problems, everyday tasks and employment activities. Illustrative indicators of reading competence include such skills as identifying main ideas and details, interpreting literal and figurative language and using reference resources.

Writing - A student will demonstrate competence by his or her ability to select, organize and compose written material in the context of academic problems, everyday tasks and employment activities. Indicators of writing include such skills as composing sentences, organizing information and writing paragraphs.

Mathematics - A student will demonstrate competence by his or her ability to understand and employ basic mathematical concepts and operations in the context of academic problems, everyday tasks and employment

activities. Indicators illustrative of skills in mathematics include translating numbers, computing percentages and applying arithmetic operations.

Speaking and Listening - A student will demonstrate competence by his or her ability to receive and transmit oral and aural communication in the context of academic problems, everyday tasks and employment activities. Indicators of speaking and listening may include interpreting aural communications, composing oral directions and questions and using formal and informal speaking styles.

Problem-Solving - A student will demonstrate competence by his or her ability to evaluate, analyze and draw conclusions from situations presented in the context of academic problems, everyday tasks and employment activities. Illustrative indicators of problem-solving may include interpreting a variety of data, inferring cause and effect and applying logical reasoning to the identification and solution of problems.

On the following pages, indicator clusters or descriptive statements are listed for three of the learner competencies--reading, mathematics and problem-solving. Indicator clusters for speaking/listening and writing are now being clarified and will be published later by the Standards and Assessment Division of the Department of Education.

Basic Skills Assessment: Overview and Content, Description, Standards and Assessment Division Office of Planning and Development, Georgia Department of Education.

INDICATOR CLUSTER

SAMPLE TEST ITEMS

Literary Comprehension

INDICATOR CLUSTER 1: THE STUDENT DISTINGUISHES BETWEEN FACT AND OPINION.
(Weight: 10%)

Assessment Characteristics: This cluster is assessed with such materials as editorials, books, movies and news reports. If a passage is used for assessment, the facts and opinions are based on the passage exclusively. Statements of value are not considered facts.

INDICATOR CLUSTER 2: THE STUDENT INTERPRETS SEMANTIC RELATIONSHIPS.
(Weight: 10%)

Assessment Characteristics: This cluster is assessed by requiring students to substitute words with appropriate connotations or by paraphrasing individual sentences. Passages used give context clues to help determine the meaning of the word(s) in the question.

INDICATOR CLUSTER 3: THE STUDENT RECOGNIZES EXPLICITLY STATED MAIN IDEAS, DETAILS, SEQUENCES OF EVENTS, AND CAUSE AND EFFECT RELATIONSHIPS. (Weight: 10%)

Assessment Characteristics: The main idea is a major point or purpose of the passage. Correct responding should not be determined solely on the basis of passage dependent details or events selected for their content but also on the basis of their relevance to overall passage meaning.

INDICATOR CLUSTER 1: Which of the following statements is an opinion?

- A. Hank is the cutest cat in the neighborhood.
- B. Hank ate three cans of cat food last week.
- C. Hank chipped a tooth chewing a bone yesterday.
- D. Hank is a 20-pound, long-haired tomcat.

INDICATOR CLUSTER 2: After two weeks without food, the dog voraciously ate his food.

Voraciously means

- A. slowly
- B. hungrily
- C. angrily
- D. carefully

INDICATOR CLUSTER 3: Chimpanzees traveled in space before people did. Scientists wanted to know whether the human body and brain would be able to function in a state of weightlessness. So before they sent humans into space, scientists sent in dogs, monkeys, cats, dogs and monkeys. The scientists decided to send chimpanzees into space because the chimpanzee brain is similar to the human brain in size, weight and structure. If the chimpanzees could make the journey successfully, then humans could try.

The purpose of sending chimpanzees into space was to find out whether they could

- A. get food and water by pressing levers.
- B. live in a state of weightlessness.
- C. find the other animals that had been sent into space.
- D. learn to rest after every hour's work.

INDICATOR CLUSTER 4: THE STUDENT FOLLOWS DIRECTIONS
(Weight: 3%)

Assessment Characteristics: Directions are clear and unambiguous. Directions are presented in narrative form, or lists or steps. Directions should include content which is unfamiliar to the student.

INDICATOR CLUSTER 4: 3 sections for making Georgia Smores

Ingredients:

- 1 graham cracker per person
- 4 large marshmallows per person
- 1/4 chocolate candy bar per person

Directions:

Cover graham cracker with marshmallow; cover with sections of chocolate bars. Put in a preheated oven at 350° F. Bake until candy melts.

Variations:

Spread peanut butter before adding marshmallows - spread with jelly or preserves before adding marshmallows. Top with salted nuts.

For a regular Georgia Smore, which is the first ingredient added to the graham cracker according to these directions?

- A. marshmallow
- B. nuts
- C. chocolate
- D. peanut butter

Interferential Comprehension

INDICATOR CLUSTER 5: THE STUDENT INTERPRETS FIGURATIVE LANGUAGE.
(Weight: 3%)

Assessment Characteristics: This cluster includes all similes and hyperboles. Idioms are not used. Interpretation is based on semantic similarity between use of figurative language and correct response.

INDICATOR CLUSTER 5: After Tina tried out for a job with the band, Tom told her that her skill on the drums was beyond his wildest dreams.

Tom meant that

- A. Tina needed to calm down when she played.
- B. he had fallen asleep during her tryout.
- C. he did not really need a drummer.
- D. Tina did an outstanding job of playing.

INDICATOR CLUSTER 6: THE STUDENT RECOGNIZES PROPAGANDA TECHNIQUES.
(Weight: 3%)

Assessment Characteristics: Items do not require the student to identify particular propaganda techniques, but rather to identify propaganda via intent to mislead or misinform.

INDICATOR CLUSTER 6: A woman on TV said that boys liked best the girls who used the product she was advertising. Which of these do you think the TV woman wanted to do?

- A. report a fact
- B. let you in on a good thing
- C. make money for TV
- D. sell the product

INDICATOR CLUSTER 7: IMPLICITLY STATED INFORMATION, IMPLICATIONS, DETAILS, RELATIONSHIPS OF EVENTS AND CAUSE AND EFFECT RELATIONSHIPS (weight, 13%)

Assessment Characteristics: Implicitly stated information can be thought of as that information contained between the lines, and yet passage dependent.

INDICATOR CLUSTER 8: THE STUDENT MAKES PREDICTIONS, GENERALIZATIONS AND COMPARISONS (weight, 13%)

Assessment Characteristics: Prediction implies a future event; a degree of probability exists. Generalizations are the result of inductive reasoning; specifics or details are presented from which the general statement is derived. Deduction may be involved as well. Comparisons are made based on some defined variable which is constant for that comparison.

INDICATOR CLUSTER 9: THE STUDENT DRAWS CONCLUSIONS (weight, 13%)

Assessment Characteristics: Conclusions are considered the result of a deductive or inductive reasoning process. The conclusion may act as a summary statement, account for a synthesis of the information or bring closure to the passage. In most cases, multiple pieces of information on which to base a conclusion are included in the passage.

INDICATOR CLUSTER 7: Mrs. Banks was driving down the street. She was on her way to a meeting at the library. She was a few minutes late and was very anxious to get there because she was chairperson of the committee. Two blocks away from the library, a police officer stopped Mrs. Banks. As he pulled out his ticket book, he asked her why she was in such a rush.

Why did the police officer stop Mrs. Banks?

- A. He wanted to say hello.
- B. She was speeding.
- C. They were good friends.
- D. She was on the wrong street.

INDICATOR CLUSTER 8: The land of Mingo is surrounded by an ocean. Because of the ice and snow, there is little land for farming, so the people must make a living in other ways. The Atlantic Ocean provides good fishing year round. Since the inhabitants of this land are good sailors, they spend a lot of time on the water.

What kind of industry would be attracted to Mingo?

- A. textile mills
- B. farming
- C. auto manufacturing
- D. ship building

INDICATOR CLUSTER 9: Georgia peach farmers recently gathered in Atlanta to discuss the current status of peach farming in the state. Several issues were presented during the meeting. Among the topics was a discussion about the mild winter last year and the fact that there were not enough cold days for the peach crop to develop well. Last year's crop was also plagued by insects that ate holes in the peaches while they were still ripening on the trees.

What could you conclude from the passage?

- A. South Georgia peach farmers had a worse year than North Georgia peach farmers.
- B. The peaches without holes tasted good.
- C. It was a bad year for peach farmers.
- D. Next year will be a good year for peaches.

Study Skills

INDICATOR CLUSTER 10: THE STUDENT INTERPRETS GRAPHIC INFORMATION, INSTRUCTIONS AND LABELING INFORMATION, FORMS AND APPLICATIONS, TRANSPORTATION INFORMATION, AND OCCUPATIONAL AND CAREER INFORMATION. (weight 17%)

Assessment Characteristics: The emphasis of this cluster is application rather than terminology. Graphic rather than narrative stimulus is used during assessment. Items represented are actual forms or other information presented in practical situations.

INDICATOR CLUSTER 10. Which of the following would correctly complete the information requested below?

APPLICATION FOR EMPLOYMENT			
Name:			
Street			
Address:			
City:	State	Zip Code	

A. Ricky Jones
118 Main Street
Valdosta, Georgia 31601

B. Ricky Jones
728-4290
Valdosta

C. Ricky Jones
Valdosta, 31601

D. Ricky Jones
115 Main Street
Valdosta

INDICATOR CLUSTER 11: THE STUDENT RECOGNIZES RELEVANCE OF DATA. (weight, 4%)

Assessment Characteristics: Items pertaining to this cluster provide the student with the opportunity to identify relevant or irrelevant pieces of information. The student will identify what further piece(s) of information may be necessary to respond to a task or question or identify unnecessary information which may cause confusion or be extraneous to the situation.

INDICATOR CLUSTER 11: If you were interested in the eating habits of Indians what section in a reference book under the heading of American Indians would be the most useful?

- A. Hunting habits
- B. Climate
- C. Agriculture
- D. Types of dwellings

INDICATOR CLUSTER 12: THE STUDENT RECOGNIZES APPROPRIATE REFERENCE RESOURCES. (weight, 4%)

Assessment Characteristics: This cluster assesses the student's ability to identify various reference resources such as a card catalog, an encyclopedia, types of directories and general library skills. Also included are Yellow Pages, classified ads, recipes/cook books and instruction manuals.

INDICATOR CLUSTER 12: If you needed to find information about purchasing new tires for your car, where would you most likely look for information?

- A. telephone directory
- B. encyclopedia
- C. atlas
- D. almanac

CLUSTER 12: THE STUDENT LOCATES INFORMATION IN
REFERENCE MATERIALS.

Assessment Characteristics: This cluster assesses the student's ability to use various sources of information including library reference materials.

CLUSTER 13: On which pages would you look to find out about Public Law 92?

- A. 36-38
- B. 48-49
- C. 63-64
- D. 69-73

Oil, 29, 33
Oxygen, 11
importance to plants, 15
importance in breathing, 25
amount in air, 13
Particulates, 74-75
Pesticides, 23, 65
Philadelphia, 40
Plants
crop damage, 51, 52, 53, 54, 55
forests, 10, 48-49, 51
importance of oxygen, 15
Public Law 92, 61-64
Smoke, 36, 37, 39 See also Particulates
Smoking, 48-50, 45, 60
Soot, see Particulates
Sunlight, 23, 24
Tests to measure pollution, 19, 53, 54, 61, 69-73
Trucks, see automobiles and trucks

HIGH SCHOOL BASIC SKILLS EXAMINATION

GLOSSARY FOR READING INDICATORS

SKILLS

- 01 DISTINGUISHES BETWEEN
- 02 INTERPRETS
- 03 RECOGNIZES
- 04 MAKES
- 05 DRAWS
- 06 FOLLOWS
- 07 LOCATES

CONTENT

- 01 EXPLICITLY STATED MAIN IDEA
- 02 EMPLICITLY STATED MAIN IDEA
- 03 EXPLICITLY STATED DETAILS
- 04 IMPLICITLY STATED DETAILS
- 05 EXPLICITLY STATED SEQUENCE OF EVENTS
- 06 IMPLICITLY STATED SEQUENCE OF EVENTS
- 07 APPROPRIATE REFERENCE RESOURCES
- 08 EXPLICITLY STATED CAUSE AND EFFECT
- 09 IMPLICITLY STATED CAUSE AND EFFECT
- 10 CONCLUSIONS
- 11 DIRECTIONS
- 12 GRAPHIC INFORMATION
- 13 FACT AND ORINION
- 14 RELEVANCE OF DATA
- 15 PROPAGANDA TECHNIQUES
- 16 PREDICTIONS
- 17 GENERALIZATIONS
- 18 COMPARISONS
- 19 INFORMATION IN REFERENCE MATERIALS
- 20 FIGURATIVE LANGUAGE
- 21 INSTRUCTIONS AND LABELING INFORMATION
- 22 FORMS AND APPLICATIONS
- 23 TRANSPORTATION INFORMATION
- 24 OCCUPATIONAL AND CAREER INFORMATION
- 25 SEMANTIC RELATIONSHIPS

BASIC SKILLS TEST: MATHEMATICS
INDICATOR CLUSTERS AND SAMPLE TEST ITEMS

INDICATOR CLUSTER

Number Concepts

INDICATOR CLUSTER 1: THE STUDENT TRANSLATES FROM WORDS TO NUMERALS AND THE REVERSE. (weight, 5%)

Assessment Characteristics: In the assessment of this cluster whole numbers and decimals are appropriate; however, fractions or percents should not be included for conversion.

INDICATOR CLUSTER 2: THE STUDENT ORDERS FRACTIONS, DECIMALS OR PERCENTS. (weight, 7%)

Assessment Characteristics: Items used for assessment are mutually exclusive, not involving combinations of these number concepts. If fractions are included they are limited to halves through tenths, plus twelfths and hundredths, not sixths, sevenths or ninths. Mixed numbers can be used; however, improper fractions are not appropriate.

INDICATOR CLUSTER 3: THE STUDENT TRANSLATES FROM DECIMALS TO PERCENTS AND THE REVERSE. (weight, 5%)

Assessment Characteristics: The student's understanding of the conversion process of these number concepts in any given context is the primary consideration. For this cluster, the use of decimals over one, smaller than hundredths; percents with fractions or decimals and percents over 100 are not suitable.

INDICATOR CLUSTER 4: THE STUDENT TRANSLATES FROM FRACTIONS TO PERCENTS AND THE REVERSE. (weight, 5%)

Assessment Characteristics: In this cluster, assessment includes percents with fractions in combination and repeating decimals. Fractions are limited to halves, thirds, fourths, fifths, eighths, tenths and hundredths. The use of mixed numbers and percents over 100 are not suitable.

SAMPLE TEST ITEMS

INDICATOR CLUSTER 1: What is the correct way to write thirteen thousand nine hundred eighty-nine?

- A. 13,989
- B. 13,998
- C. 130,989
- D. 189,590

INDICATOR CLUSTER 2: Marie just got a job and is figuring out her budget. She spends 25% of her income on rent, 20% on food, 15% on gas, 10% on entertainment and 10% goes to savings. What is the order of expenses from LEAST to GREATEST?

- A. rent, food, gas, entertainment, savings
- B. gas, savings, entertainment, rent, food
- C. entertainment, food, gas, savings, rent
- D. food, rent, entertainment, savings, gas

INDICATOR CLUSTER 3: Which is .53 written as a percent?

- A. .53%
- B. 5.3%
- C. 53%
- D. 530%

INDICATOR CLUSTER 4: Which equals fraction $37\frac{1}{2}\%$?

- A. $\frac{3}{8}$
- B. $\frac{3}{7}$
- C. $\frac{1}{2}$
- D. $\frac{7}{3}$

INDICATOR CLUSTER 5: THE STUDENT TRANSLATES FROM FRACTIONS TO DECIMALS AND THE REVERSE. (weight, 5%)

Assessment Characteristics: In measuring the student's ability to achieve this cluster, improper fractions and decimals smaller than thousandths are not appropriate. Suitable means include the use of mixed numbers and repeating decimals.

Number Operations

INDICATOR CLUSTER 6: THE STUDENT SELECTS APPROPRIATE OPERATIONS FOR A GIVEN PROBLEM SITUATION. (weight, 2%)

Assessment Characteristics: Money and common decimals are among the productive subject areas for the measurement of this cluster.

INDICATOR CLUSTER 7: THE STUDENT COMPUTES WITH WHOLE NUMBERS, FRACTIONS, DECIMALS and PERCENTS. (weight, 3%)

Assessment Characteristics: The assessment of this cluster may include horizontal and vertical presentations using mixed numbers, like and unlike denominations, simplifying fractions, etc. Identity and inverse properties, improper fractions, percents over 100 or less than one, percents of increase or decrease are to be excluded. The use of graphics and word problems in items are not suitable for this Indicator.

INDICATOR CLUSTER 8: THE STUDENT APPLIES PROPERTIES OF OPERATIONS (weight, 2%)

Assessment Characteristics: This cluster assesses a student's application of the identity, inverse, commutative, associative and distributive properties of operations. The identification of a particular property is not the objective in this case; therefore, the selection of the correct option should not be predicated on same.

INDICATOR CLUSTER 5: Which is the same as .75?

- A. $\frac{7}{15}$
- B. $\frac{2}{3}$
- C. $\frac{3}{4}$
- D. $\frac{5}{7}$

INDICATOR CLUSTER 6: Mailing cost: Second class mail is \$.10 for the first 2 ounces, .06 for each additional ounce or fraction.

Which shows the total cost of mailing a 15 ounce package?

- A. $2 (.10) + 13 (.06)$
- B. $2 (.10) + 15 (.06)$
- C. $.10 + 13 (.06)$
- D. $.10 + 14 (.06)$

INDICATOR CLUSTER 7: Soap \$.43

Three bars of soap would cost

- A. \$.86
- B. \$.89
- C. \$1.23
- D. \$1.29

INDICATOR CLUSTER 8: Which of the following statements is always true?

- A. $(a + b) + c = ab + c$
- B. $(a + b) + c = a - (b - c)$
- C. $ab + c = (a + b) + c$
- D. $a + b + c = abc$

INDICATOR CLUSTER 9: THE STUDENT SOLVES SIMPLE WORD PROBLEMS.

Assessment Characteristics: Computation, purposely, is to be kept simple. The assessment of this cluster includes asking for the solution equation only (not the answer) and problems demanding computation. No academic word problems or problems involving percent of increase or decrease are to be used. Sales tax and changing recipes are among suggested contexts for this cluster.

Relations and Formulas

INDICATOR CLUSTER 10: THE STUDENT APPLIES PROPORTIONS. (weight, 22)

Assessment Characteristics: The aim of this cluster is to determine the student's ability in the application of proportional relationships. Assessment includes the use of similar drawings or scale drawings as well as unit pricing and "better buys" concept in item presentation.

INDICATOR CLUSTER 11: THE STUDENT APPLIES FORMULAS. (weight, 22)

Assessment Characteristics: Formulas such as simple interest, area-circumference, distance/rate, miles per gallon and perimeter are appropriate in the assessment of a student's ability in formula application. Complex formulas which would include the Pythagorean theorem and compound interest are not to be in the measurement of this indicator. Formulas may be supplied.

Statistics

INDICATOR CLUSTER 12: THE STUDENT COMPUTES THE MEAN AND MEDIAN. (weight, 22)

Assessment Characteristics: For any set of numbers, in the assessment of this cluster, the mean and the median should be different. The median is determined from a set with an odd number of elements which may be arranged in order. The mean should be a whole number.

INDICATOR CLUSTER 9: Hal and Janet decided to earn some money by washing cars. On the first day they made \$3.75 and on the second day they made \$11.25. How much more money did they make the second day than on the first day?

- A. \$2.75
- B. \$3.25
- C. \$4.50
- D. \$3.75

INDICATOR CLUSTER 10: If a motorcycle goes 25 miles on a half-gallon, how many miles will it travel on 3 gallons?

- A. 50
- B. 75
- C. 125
- D. 150

INDICATOR CLUSTER 11: If your average speed is 60 kilometers, it takes 3 1/2 hours to travel from Tampa to Miami. What is the distance between the two cities?

- A. 20 kilometers
- B. 180 kilometers
- C. 210 kilometers
- D. 360 kilometers

INDICATOR CLUSTER 12: There are five children in the Russell family. Ann is 12 years old. Willis is 11. Tom is 9. Calvin is 6 and Martha is 2 years old. What is the mean age of the Russell children?

- A. 7
- B. 8
- C. 9
- D. 10

INDICATOR CLUSTER 13: THE STUDENT DETERMINES PROBABILITIES.
(weight, 2%)

116 Assessment Characteristics: Events with zero or one probability are suitable assessment areas for this cluster. Limitations include the presentation of probabilities as a percent; joint (and/or), independent and dependent events; and the use of combinations or permutations.

INDICATOR CLUSTER 14: THE STUDENT ORGANIZES DATA INTO TABLES, CHARTS, AND GRAPHS. (weight, 6%)

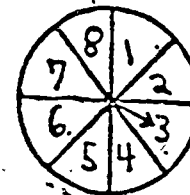
Assessment Characteristics: Assessment problems in this cluster involve the selection of the appropriate representation of the data as well as some interpretation. Graphs used can include bar graphs, line graphs, circle graphs and pictographs, which may be incorrectly labeled or have missing information.

INDICATOR CLUSTER 15: THE STUDENT INTERPRETS DATA IN THE FORM OF TABLES, CHARTS AND GRAPHS. (weight, 7%)

Assessment Characteristics: The ability of a student to discover a relationship or rule from the presented material is assessed in this cluster. Formats wherein data can be interpreted may include circle graphs, bar graphs, line graphs and pictographs.

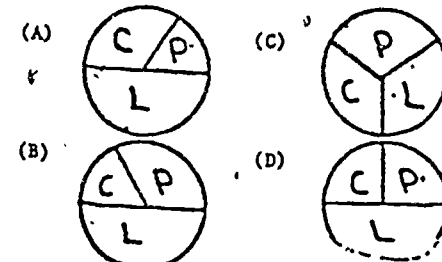
134

INDICATOR CLUSTER 13: If you were to spin the pointer on the spinner, the probability of its landing on either 1 or 2 is

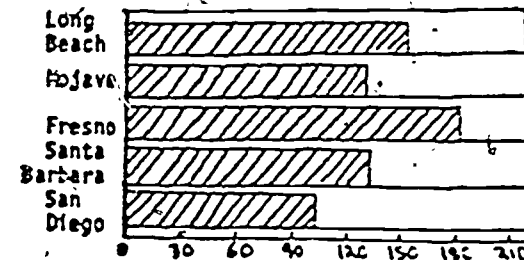


- A. $\frac{1}{2}$
- B. $\frac{1}{4}$
- C. $\frac{1}{8}$
- D. $\frac{1}{3}$

INDICATOR CLUSTER 14: The label inside Martha's shirt states that the fabric content is 20% cotton, 50% linen and 30% polyester. Which of the following graphs shows these proportions?



INDICATOR CLUSTER 15: Distances of cities from Los Angeles



Which two cities are approximately the same distance from Los Angeles?

- A. Mojave and Santa Barbara
- B. Fresno and Santa Barbara
- C. Mojave and San Diego

135

Measurement and Estimation

INDICATOR CLUSTER 16: THE STUDENT IDENTIFIES CUSTOMARY OR METRIC UNITS TO MEASURE LENGTH, AREA, VOLUME, WEIGHT, TIME AND TEMPERATURE. (weight, 142)

Assessment Characteristics: This cluster involves choosing the unit that applies to a specific type of measurement such as picking the appropriate type or size unit. It is not suitable to use conversions from metric to customary or the reverse in this indicator. Units appropriate include grams, meters, liters, Celsius, inches, feet, yards, miles, ounces, pounds, pints, quarts, gallons, Fahrenheit, seconds, minutes, hours, days, weeks or months. Prefixes such as milli-, centi- and kilo- are suitable for inclusion.

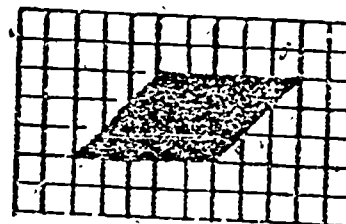
INDICATOR CLUSTER 17: THE STUDENT APPLIES CUSTOMARY OR METRIC UNITS OF MEASUREMENT TO DETERMINE LENGTH, AREA, VOLUME, WEIGHT, TIME AND TEMPERATURE. (weight, 142)

Assessment Characteristics: Non-standard units of measurement can be used in the assessment of this cluster. It specifically involves presenting a measurement scale and having the student identify or apply it. Conversion from metric to customary or the reverse is not appropriate; however, conversion within a system of measurement can be included. Units appropriate include grams, meters, liters, Celsius, inches, feet, yards, miles, ounces, pounds, pints, quarts, gallons, Fahrenheit, seconds, minutes, hours, days, weeks or months. Prefixes such as milli-, centi- and kilo- are suitable for inclusion.

INDICATOR CLUSTER 16: If you wanted to measure the amount of water a bathtub could hold, what unit of measurement would you use?

- A. gram
- B. liter
- C. meter
- D. kilogram

INDICATOR CLUSTER 17: How many square units is the shaded region?



INDICATOR CLUSTER 18: THE STUDENT ESTIMATES NUMBERS (RESULTS) USING ROUND NUMBERS, WITH OR WITHOUT UNITS OF MEASUREMENT. (weight, 2%)

Assessment Characteristics: The objective of this cluster is specifically to assess the student's ability to estimate a result. A non-standard unit of measurement can be used to ask the student to estimate the number of units contained in a drawing in practical settings.

INDICATOR CLUSTER 18: Which problem would be the closest to the results of

680
x20

- A. 675×15
B. 682×22
C. 685×25
D. 690×20

INDICATOR CLUSTER 19: THE STUDENT DETERMINES AMOUNTS OF MONEY. (weight, 2%)

Assessment Characteristics: The assessment of this cluster can include making change by counting or by subtracting, as well as determining the least number of coins. Computation can be involved, as well as simply showing an amount of money. Exclude the use of half dollars, silver dollars or two-dollar bills.

INDICATOR CLUSTER 19: How much money is shown?



Geometry

INDICATOR CLUSTER 20: THE STUDENT IDENTIFIES SETS OF POINTS USING STANDARD NAMES. (weight, 2%)

Assessment Characteristics: Sets of points in the assessment of this cluster may include identification of the circle, triangle, rectangle, point, line, plane, parallelogram, cone, sphere, cylinder, pyramid and cube.

INDICATOR CLUSTER 20: Which is the name of the shape shown below?



- A. cone
B. prism
C. sphere
D. cylinder

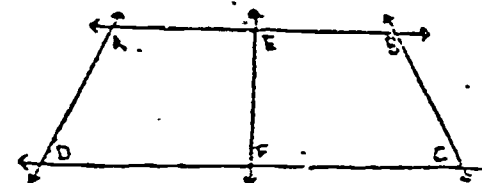
INDICATOR CLUSTER 11: THE STUDENT IDENTIFIES GEOMETRIC RELATIONS AND PROPERTIES. (weight, 5%)

Assessment Characteristics: Geometric relations and properties to be identified in this cluster may include parallel, perpendicular, similar, congruent, vertical and horizontal. The concepts of congruent and similar are to be measured and are not to be presented as vocabulary items. Additionally, degrees in a right angle, triangle, circle and rectangle are included.

INDICATOR CLUSTER 12: THE STUDENT IDENTIFIES POINTS ON CARTESIAN COORDINATES. (weight, 2%)

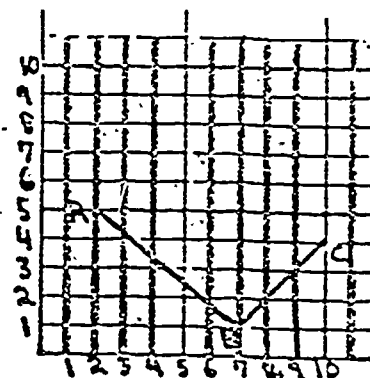
Assessment Characteristics: The assessment of this cluster includes finding the coordinates of a point. An appropriate strategy for cluster measurement may be the use of a street map.

INDICATOR CLUSTER 11: Name a pair of parallel lines.



- A. AD and BC
- B. EF and DC
- C. AB and DC
- D. EF and EC

INDICATOR CLUSTER 12: A, B and C are vertices of a rectangle. Use the graph below to help you find the coordinates of D so that quadrilateral ABCD is a rectangle.



HIGH SCHOOL BASIC SKILLS EXAMINATION GLOSSARY FOR MATHEMATICS INDICATORS

SKILLS

- 01 ORDERS
- 02 IDENTIFIES
- 03 COMPUTES
- 04 ORGANIZES
- 05 ESTIMATES
- 06 INTERPRETS
- 07 APPLIES
- 08 DETERMINES
- 09 TRANSLATES
- 10 COMPUTES WITH
- 11 SELECTS
- 12 MAKES CHANGE
- 13 SOLVES

CONTENT

- 01 NUMBERS (RESULTS) OF USING ROUNDED NUMBERS WITH AND WITHOUT UNITS OF MEASUREMENT
- 02 WHOLE NUMBERS
- 03 FRACTIONS
- 04 DECIMALS
- 05 PERCENTS
- 06 SIMPLE WORD PROBLEMS
- 07 FROM WHOLE NUMBERS TO FRACTIONS AND THE REVERSE
- 08 FROM WHOLE NUMBERS TO PERCENTS AND THE REVERSE
- 09 FROM FRACTIONS TO DECIMALS AND THE REVERSE
- 10 FROM FRACTIONS TO PERCENTS AND THE REVERSE
- 11 FROM DECIMALS TO PERCENTS AND THE REVERSE
- 12 FROM WORDS TO NUMERALS AND THE REVERSE
- 13 ARITHMETIC OPERATIONS
- 14 UNITS TO MEASURE TIME
- 15 GEOMETRIC PROPERTIES
- 16 SETS OF POINTS
- 17 AMOUNTS OF MONEY
- 18 THE ASSOCIATIVE PROPERTY OF OPERATIONS
- 19 THE COMMUTATIVE PROPERTY OF OPERATIONS
- 20 THE DISTRIBUTIVE PROPERTY OF MULTIPLICATION OVER ADDITION
- 21 PROPORTIONS (INCLUDING SIMILAR FIGURES)
- 22 FORMULAS (INCLUDING MEASUREMENT, INTEREST AND TAXES)
- 23 GEOMETRIC RELATIONS (I.E., PARALLEL, PERPENDICULAR, SIMILAR, CONGRUENT, VERTICAL AND HORIZONTAL)
- 24 CUSTOMARY OR METRIC UNITS TO MEASURE LENGTH
- 25 CUSTOMARY OR METRIC UNITS TO MEASURE AREA

- 26 CUSTOMARY OR METRIC UNITS TO MEASURE VOLUME
- 27 CUSTOMARY OR METRIC UNITS TO MEASURE TEMPERATURE
- 28 CUSTOMARY OR METRIC UNITS TO DETERMINE WEIGHT
- 29 CUSTOMARY OR METRIC UNITS TO DETERMINE TEMPERATURE
- 30 CUSTOMARY OR METRIC UNITS TO DETERMINE TIME
- 31 DATA INTO TABLES, CHARTS AND GRAPHS
- 32 DATA IN THE FORM OF TABLES, CHARTS AND GRAPHS
- 33 PROBABILITIES
- 34 RANGE, MEAN AND MEDIAN
- 35 BY COUNTING
- 36 BY SUBTRACTING
- 37 SETS OF POINTS USING STANDARD NAMES (I.E., PLANE, POINT, LINE)
- 38 POINTS ON CARTESIAN COORDINATES

BASIC SKILLS TEST: PROBLEM SOLVING INDICATOR CLUSTERS AND SAMPLE TEST ITEMS

INDICATOR CLUSTER

COMPONENT SKILLS

INDICATOR CLUSTER 1: THE STUDENT DISTINGUISHES BETWEEN FACT AND OPINION. (See Reading 1)

Assessment Characteristics: This cluster is assessed with such materials as editorials, books, movies and news reports. Items must present a problem context. Minimal prior information (i.e., information other than that presented in the stem or associated stimulus material) should be required for correct responding. Statements of values are not considered facts.

INDICATOR CLUSTER 2: THE STUDENT RECOGNIZES MAIN IDEAS, DETAILS, SEQUENCES OF EVENTS AND CAUSE AND EFFECT RELATIONSHIPS. (See Reading 3 & 7)

Assessment Characteristics: Includes explicit or implicit statement of ideas, details, sequences and relationships. Correct responding may require prior knowledge; however, answer must be dependent on item stimulus material. The details of events selected for item content must be necessary or relevant to overall comprehension of the problem situation. Items requiring identification of appropriate statement of a problem are included in this cluster.

INDICATOR CLUSTER 3: THE STUDENT RECOGNIZES APPROPRIATE REFERENCE SOURCES. (See Reading 12)

Assessment Characteristics: This cluster assesses the student's ability to identify various reference sources such as a card catalog, an encyclopedia, types of directories and general library skills. Also included are yellow pages, classified ads, recipes/cook books and instructional manuals. Some items should focus on why one source is more appropriate than another for a specific task. Items preferably should emphasize the use of non-academic reference sources.

SAMPLE TEST ITEMS

INDICATOR CLUSTER 1: Which of the following statements about a fire reported in a newspaper is an opinion?

- A. A fireman was injured fighting the blaze.
- B. The exact cause of the fire is unknown.
- C. The top five stories of the building were destroyed.
- D. The building needs to be renovated immediately.

INDICATOR CLUSTER 2: A survey of the automobile industry indicated a very sharp decline in the sale of some of the cars. Most of these are of the larger types. As much as 34% decline has been noted in some makes.

Since fewer cars are being purchased, auto workers will

- A. drive less.
- B. find fewer jobs available.
- C. make more money.
- D. go on strike.

INDICATOR CLUSTER 3: If you needed to find information about purchasing new tires for your car, where would you most likely look for information?

- A. telephone directory
- B. encyclopedia
- C. atlas
- D. almanac

INDICATOR CLUSTER 4: THE STUDENT LOCATES INFORMATION IN REFERENCE MATERIALS. (See Reading 13)

Assessment Characteristics: This cluster assesses the student's ability to use various sources of information, including library reference materials. Items requiring use of cross-references, multiple-step search strategies, and recognition of various classification schemes are included in this cluster.

INDICATOR CLUSTER 4:

O₂, 29, 30
 Oxygen, 11
 importance to plants, 15
 importance in breathing, 15
 amount in air, 13
 Particulates, 74-76
 Pesticides, 23, 65
 Philadelphia, 46
 Plants
 crop damage, 51, 52, 53, 54, 55,
 forests, 10, 46-49, 51
 importance of oxygen, 15
 Public Law #91, 63-64
 Smoke, 36, 37, 39. See also Particulates
 Smoking, 46-47, 48, 60
 Soot, see Particulates
 Sunlight, 25, 31
 Tests to measure pollution, 19, 55, 59, 61, 69-73
 Trucks, see Automobiles and trucks

On the evening news each day, a "pollution count" is given as part of the regular weather report. If you were not familiar with what "pollution count" meant and wanted to know what it measured, to which pages in this book might you refer?

- A. 11, 15
- B. 46-47
- C. 69-73
- D. 74-76

INDICATOR CLUSTER 3: THE STUDENT ESTIMATES OUTCOMES, WITH OR WITHOUT UNITS OF MEASUREMENT. (See Math 18)

Assessment Characteristics: The objective of this cluster is specifically to assess a student's ability to estimate a result. Appropriate items include use of estimation in planning stages of problem solving as well as items asking which of several problem-solving methods gives the best estimate of quantity or other result. Items requiring identification of alternative solution strategies and items requiring value judgments about the appropriateness of alternative solution strategies are included.

INDICATOR CLUSTER 5: The Math Club at Center High School filled a five-gallon jar with beans. All the students were asked to guess how many beans were in the jar. A prize will be given to the person whose guess is closest to the actual number of beans in the jar. Which method best estimates the number of beans in the jar?

- A. Count the number of beans around the outside of the jar and then multiply by the number of beans from the top to the bottom of the jar.
- B. Count the number of beans in a cup and then multiply by the number of cups in five gallons.
- C. Measure the size of a bean and then multiply by the area of the jar.
- D. Weigh the jar, weigh a bean, and then

INDICATOR CLUSTER 6: THE STUDENT DRAWS CONCLUSIONS. (See Reading 9)

Assessment Characteristics: Conclusions are considered the result of a deductive or inductive reasoning process.

The conclusion may act as a summary statement, account for a synthesis of the information or bring closure to the passage. In most cases, multiple pieces of information on which to base a conclusion are included in the passage. Items requiring identification of valid conclusions are appropriate for this cluster. Where conclusions involve predictions, generalizations, or comparisons, these must be stated in the item stem or associated stimulus material. Also appropriate are items requiring the student to identify or state a problem or question to be resolved. This indicator may be assessed in the context of free-response items.

Data Fluency

INDICATOR CLUSTER 7: THE STUDENT INTERPRETS NON-GRAPHIC INSTRUCTIONS, LABELS, FORMS, AND APPLICATIONS. (See Reading 10)

Assessment Characteristics: The emphasis of this cluster is application rather than terminology. Items represented are actual forms or other information presented in practical situations. Item content may include transportation, occupational, and career information.

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INDICATOR CLUSTER 6: The effects of alcohol last for several hours. It can be dangerous to drive after drinking large amounts of alcohol. Muscular response is reduced and judgment may be impaired.

Which of the following could you conclude from this passage?

- A. Alcohol speeds up reaction time.
- B. Alcohol may cause spontaneous behavior.
- C. Alcohol may increase chance of an accident.
- D. Alcohol has no side-effects.

INDICATOR CLUSTER 7: Jessie's teacher provided this format for bibliographic information:

Lee Snelling, Studying Clouds, Jones and Smith Publishing Company, 1980.

Which of the following sets of bibliographic information is incomplete according to the teacher's model?

- A. Lois Murphy, Clouds and Rain, Science Associates Press, 1972.
- B. Kirk Nelms, The Science of Weather, illustrated by Bonnie Nelms, Boone Publishing Co, 1932.
- C. Betty Coleman, Controlling Weather, U.S. Government Printing Office.
- D. Rex Green, Learning to Read the Clouds, University Press.

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INDICATOR CLUSTER 8: THE STUDENT ORGANIZES RELEVANCE OF DATA.
(See Reading ...)

Assessment Characteristics: Items pertaining to this cluster must require the student to identify relevant or irrelevant pieces of information for a specific problem situation and set of resolution criteria. Particularly, the student will identify what further piece(s) of information may be necessary to respond to a task or question or identify unnecessary information which may cause confusion or be extraneous to the situation.

INDICATOR CLUSTER 9: THE STUDENT ORGANIZES DATA INTO TABLES, CHARTS, AND GRAPHS. (See Math 14)

Assessment Characteristics: Assessment problems in this cluster involve the selection of the appropriate representation of data for a specific purpose or set of resolution criteria. Items may also require construction of decision tables or flow charts. Content of items may include labeling, transportation, career and occupational information. Items should focus on the organization of data in order to facilitate problem solution. This indicator may be assessed in the context of free-response items.

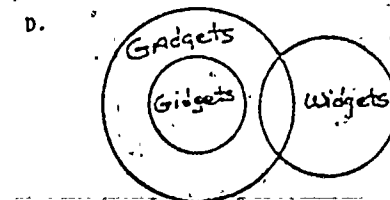
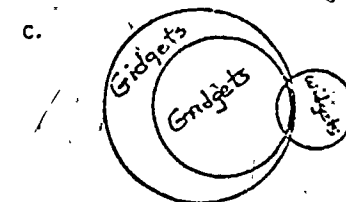
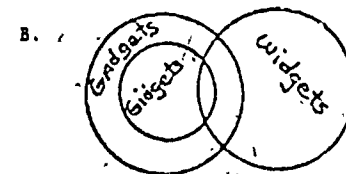
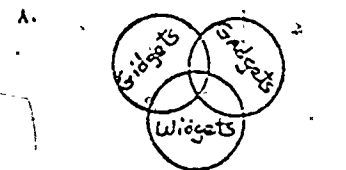
150

INDICATOR CLUSTER 9:

All widgets are gadgets. Some widgets are gadgets. No widgets are gadgets. Which diagram shows these statements?

- Area of kitchen
- Shape and size of kitchen, width of carpet
- Length and width of kitchen, width of carpet
- Length of kitchen and length of carpet

INDICATOR CLUSTER 9: All gadgets are gadgets. Some widgets are gadgets. No widgets are gadgets. Which diagram shows these statements?



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INDICATOR CLUSTER 10: THE STUDENT INTERPRETS DATA IN THE FORM OF TABLES, CHARTS, AND GRAPHS. (See Math 15)

Assessment Characteristics: Items should require a student to identify a relationship or rule from the presented material. Formats wherein data can be interpreted may include circle graphs, bar graphs, line graphs and pictographs. Items requiring the use of decision tables and flow charts are appropriate. Items may include labeling, transportation, career and occupational information.

INDICATOR CLUSTER 10:

HIGHWAY MILEAGE

	ATLANTA	AUGUSTA	DAKINIDGE	COLUMBUS	LAGRANGE	MACON	SAVANNAH	TIFTON	VALDOSTA
MAVERCUS	134	194	25	61	104	12	224	172	118
ATHENS	55	101	257	167	113	12	274	222	247
ATLANTA	0	157	123	104	61	42	227	151	234
BAKERIDGE	123	21	0	112	167	113	274	154	2
BRUNSWICK	274	182	109	104	208	155	12	122	176
CARROLLTON	45	205	205	25	4	115	154	104	120
COLUMBUS	104	274	124	0	44	67	211	12	121
CORDELE	144	170	97	93	136	67	174	41	68
DAMLONEGA	71	161	130	160	136	141	343	254	321

Yolanda who lives in Brunswick, is planning a trip for this weekend, and will be back for work Monday morning. Her car can be driven about 270 miles on a tank of gasoline. Many gas stations will be closed during the weekend, so Yolanda is not planning to purchase gasoline while on her trip.

Which is the farthest city she will be able to visit?

- A. Atlanta
- B. Columbus
- C. LaGrange
- D. Tifton

MODEL APPLICATION.**INDICATOR CLUSTER 11: THE STUDENT MAKES PREDICTIONS, GENERALIZATIONS AND COMPARISONS. (See Reading 8)**

Assessment Characteristics: Prediction implies a future event; a degree of probability exists. Generalizations are the result of inductive reasoning; specifics or details are presented from which the general statement is derived. Deduction may be involved as well. Comparisons are made based on some defined variable which is constant for that comparison and should be required with respect to some specific criteria. Items may entail explicit or implicit problem resolution criteria. This indicator may be assessed in the context of free-response items.

INDICATOR CLUSTER 12: THE STUDENT SOLVES SIMPLE WORD PROBLEMS. (See Math 22)

Assessment Characteristics: Problem solutions may involve several operations performed in a specified or implied sequence. Solutions may require responses for which there are no readily apparent response cues in the item stem or associated stimulus material (e.g., common knowledge responses). Some items may require value judgments about the appropriateness of alternative solution strategies. Solutions are not necessarily numerical results.

INDICATOR CLUSTER 11: Marie wants to buy a new car--either a Stallion or an AM Shark. She must choose the car which is least expensive to maintain. Her brother Luke is an auto mechanic. Which of the following comments from Luke would help Marie decide which car would probably have the lower maintenance expenses?

- "Both of those cars are well constructed. I know you'd like either one. You'll have to decide which one you want to drive."
- "The AM Shark costs a little more than the Stallion, but I have had to do less repair work on it than the Stallion. My customers say it drives well."
- "The AM Shark costs more than the Stallion. Both of them drive well and you would enjoy either one."
- "The AM Shark is really better looking and has cleaner lines. The Stallion isn't bad looking, though. You need to decide if you can spend extra money on looks."

INDICATOR CLUSTER 12: Mary, Bill, Elaine and Jeff are members of the Heathens rock band.

The keyboard player is a boy.
The guitar and bass players sing.
Bill doesn't play the drums.
The guitar player is a girl.
Jeff and Elaine do not sing.

Who plays the drums?

- Bill
- Elaine
- Jeff
- Mary

HIGH SCHOOL BASIC SKILLS EXAMINATION
GLOSSARY FOR PROBLEM SOLVING.
INDICATORS

SKILLS.

- 01 DISTINGUISHES
- 02 RECONGIZES
- 03 LOCATES
- 04 ESTIMATES
- 05 DRAWS
- 06 INTERPRETS
- 07 ORGANIZES

CONTENT

- 01 FACT AND OPINION
- 02 MAIN IDEAS
- 03 DETAILS
- 04 SEQUENCES OF EVENTS
- 05 CAUSE AND EFFECT RELATIONSHIPS
- 06 REFERENCE SOURCES
- 07 INFORMATION IN REFERENCE MATERIALS
- 08 OUTCOMES
- 09 CONCLUSIONS
- 10 NON-GRAPHIC INSTRUCTIONS
- 11 LABELS
- 12 FORMS
- 13 APPLICATIONS
- 14 RELEVANCE OF DATA
- 15 TABLES, CHARTS, GRAPHS

PART B

COMPETENCIES FOR THE INDIVIDUAL

DEVELOPED BY:

ROBERTA COOK
KARLA COOPER
JANICE CUMMINS
PEGGY DEVORE
LEAH KOSTER
TONI HERRIN

II. SUGGESTED COURSE OPTIONS

- A. HEALTH AND SAFETY
- B. PERSONAL FINANCE
- C. PHYSICAL EDUCATION
- D. ECONOMICS BUSINESS

1. Individual

Each graduate should have the skills and understandings necessary to improve both physical and mental health; to use leisure time in a profitable and fulfilling manner; and to establish a personal family role which is mutually beneficial to the individual and to members of the family.

Competency Performance Standards

The student recognizes and practices sound personal health habits necessary to maintain physical and mental health; and, demonstrates preventive and emergency actions for health and safety.

The student recognizes the value of cultural arts and the humanities, and the use of personal leisure activities in contributing to his or her physical, mental and emotional well-being.

The student understands the sound health care principles involved in family living, parenting and parenthood.

2. Cluster Goals

2.1 Health

2.2 Leisure

2.3 Safety

2.4 Family and Parenting

3. Behavioral Objectives

C. G. 2.1

B. O. 2.11

The student will be able to identify and demonstrate appropriate basic personal and dental hygiene skills at any given time according to teacher specifications.

B. O. 2.12

Given the opportunity to maintain a weight control program the student will be able to demonstrate knowledge of general exercise according to teacher specifications.

B. O. 2.13

Given instances of minor illness and first aid the student will be able to demonstrate a knowledge of common illnesses, how to treat minor illnesses, minor first aid, vaccinations and immunizations, a knowledge of medical professions, and the community health center and its services.

C. G. 2.2

B. O. 2.21

The student will be able to select and attend a cultural activity in the community with appropriate behaviors according to social standards.

B. O. 2.22

The student will be able to select and attend a sports event within the school or community and will either be a spectator or participant with appropriate behaviors according to teacher specifications.

B. O. 2.23

Given a list of resources, the student will be able to display a knowledge of what community services are available and where to find them according to teacher specifications.

B. O. 2.24

The student will plan and participate in activities within the home environment, according to teacher specifications.

C. G. 2.3

B. O. 2.31

In an emergency situation the student will be able to perform basic communication skills involving the use of the phone in five successive trials.

B. O. 2.32

Given a specific destination, the student will be able to reach the destination, either by foot or community service, in five successive trials.

B. O. 2.33

In a given household, the student will be able to exhibit his knowledge of caution with cleaning agents by correctly sealing, storing and using them for five successive trials.

B. O. 2.34

In a given crime occurrence, the student will be able to exhibit appropriate behavior concerning crime, to be determined by the teacher in 5/6 successive trials.

C. G. 2.4

B. O. 2.41

Given an actual or simulated living arrangement with responsibilities in handling household duties, daily living problems and home management the student will be able to perform each task with 95%

accuracy.

B. O. 2.42

Given the situation of eating, cooking and buying foods, the student will be able to eat appropriately and to buy and prepare foods according to teacher specifications.

B. O. 2.43

Given the situation of buying and appropriately caring for clothes the student will be able to buy, wash, iron, store and mend clothes with 85% accuracy.

B. O. 2.44

Given the responsibilities of family management, the student will have knowledge of sex education, family planning, physical and psychological adjustment to marriage, child care and interpersonal family relationships and be able to perform each sub-area to teacher specifications.

4. Instructional Objectives

B. O. 2.11

I. O. 2.111

Given proper towels, soap, shampoo, razor, and hair-brush the student will be able to bathe, shampoo and shave self using proper equipment 4 out of 5 times.

I. O. 2.112

Given a tooth brush, tooth paste, and floss the student will be able to properly brush teeth according to teacher specifications.

B. O. 2.12

I. O. 2.121

Given the situation of proper weight control the student will be able to recognize the need and practice weight control methods according to teacher specifications.

I. O. 2.122

Given the situation of general exercise the student will be able to recognize and practice these principles on an individual schedule.

B. O. 2.13

I. O. 2.131

Given different common illnesses the student will be able to recognize and treat each ailment 4 out of 5 times.

I. O. 2.132

Given different common injuries (cuts, burns, bruises) the student will be able to apply proper minor first aid to each injury 9 out of 10 times.

I. O. 2.133

Given vaccinations and immunizations the student will be able to demonstrate a knowledge of the necessity of vaccinations and laws applying to such and must explain the process of each area 4 out of 5 times.

I. O. 2.134

Given doctors, nurses, dentists, paramedics, policemen and ambulance personnel the student will be able to recognize the different medical professions and show a knowledge of their different services upon sight 7 out of 8 times.

I. O. 2.135

Given a local community health service the student will be able to demonstrate knowledge of the different services the health center gives and how to receive them and be able to explain these processes correctly 9 out of 10 times.

B. O. 2.21

I. O. 2.211

The student will be able to select and attend a concert or opera within the community or surrounding area and attend the event with appropriate behaviors and dress according to social standards.

I. O. 2.212

The student will display a knowledge of family lineage through the great grandparents and will have an understanding of his nationality and/or associated customs.

I. Q. 2.213

The student will be able to select and visit a museum within the community with appropriate dress and behaviors according to social standards.

I. O. 2.214

The student will be able to select a theater or play within the community or surrounding areas and attend the event with appropriate dress and behaviors according to social standards.

B. O. 2.22

I. O. 2.221

The student will be able to select a sports activity in the community to attend as a spectator with appropriate dress and behaviors according to social standards.

I. O. 2.222

Given suggestions on team sports, the student will be able to select and participate in a sport with appropriate behaviors based on teacher specifications.

I. O. 2.223

Given suggestions on individual sports, the student will be able to gather appropriate materials and participate in a sport with appropriate behaviors based on teacher specifications.

B. O. 2.23

I. O. 2.231

The student will be able to attend and participate in church related functions in the church of his or her denomination with appropriate dress and functions according to social standards.

I. O. 2.232

The student will be able to attend and participate in school related activities in his or her school with appropriate dress and behaviors according to school regulations.

I. O. 2.233

Given a list of resources, the student will be able to display a knowledge of available park services and will utilize these services according to teacher specifications.

I. O. 2.234

The student will be able to locate the library within the community and utilize its resources according to teacher specifications.

I. O. 2.235

The student will be able to select and go to a nightspot in the community while displaying appropriate dress and behaviors according to social standards.

B. O. 2.24

I. O. 2.241

Given a choice of media within the home, the student will be able to utilize the media for his own entertainment according to teacher specifications.

I. O. 2.242

The student will be able to plan a vacation utilizing various sources within the community such as travel agents, maps, etc., according to teacher specifications.

I. O. 2.243

Given ideas on a vocational activity(ies), the student will be able to select one and gather appropriate materials to carry out the project according to teacher specifications.

I. O. 2.244

The student will be able to select and play table games within the home environment with appropriate behaviors according to social standards.

B. O. 2.31

I. O. 2.311

Given a telephone, the student will be able to perform basic skills for use of phone dialing, hold receiver for 3 successive trials.

I. O. 2.312

Given a telephone, the student will be able to reach the operator and speak appropriately for 3 successive trials.

I. O. 2.313

In an emergency situation, the student will be able to convey a message over the phone for 3 successive trials.

B. O. 2.32

I. O. 2.321

In an emergency situation, the student will be able to reach a policeman, doctor, and fireman for 3 successive trials.

I. O. 2.322

In a given block, the student will be able to cross the street successfully for 5 successive trials.

I. O. 2.323

Given a type of transportation, the student will be able to use community transportation to reach a predetermined destiny for 5 successive trials.

I. O. 2.324

Given a destination, the student will be able to ask a stranger for directions to his given destination.

B. O. 2.33

I. O. 2.331

In a given household, the student will be able to place cleaning agents in labeled containers for 5 successive trials.

I. O. 2.332

In a given household, the student will be able to store all drugs and cleaning agents out of the reach of children every time the situation arises.

I. O. 2.333

In an environment that contains cleaning agents, the student will be able to exhibit knowledge of the danger of ingesting cleaning agents by refraining from doing so and verbally explaining dangers to the teacher.

B. O. 2.34

I. O. 2.341

In a given crime occurrence, the student will be able to say what crime was committed, describe the scene and the perpetrator, upon request.

I. O. 2.342

In a given facility, the student will be able to demonstrate appropriate security measures by locking all windows and doors at night and whenever leaving the facility.

B. O. 2.4

I. O. 2.411

Given common household appliances and tools the student will be able to identify and satisfactorily

use with 100% accuracy.

I. O. 2.412

Given the task of meal preparation the student will be able to demonstrate knowledge and ability with minimal assistance.

B. O. 2.42

I. O. 2.421

Given the situation of planning a balanced menu the student will be able to do so on a daily or otherwise stated schedule according to an approved nutrition chart.

I. O. 2.422

Given the situation of purchasing foods the student will have knowledge and ability to do so appropriately on a budget and/or list of needed items.

I. O. 2.423

Given a situation of properly storing food the student will be able to properly identify according to teacher specifications.

B. O. 2.43

I. O. 2.431

Given the situation of properly caring for clothes the student will be able to do so for long term wear.

I. O. 2.432

Given the situation of choosing appropriate clothing the student will have knowledge and ability to do so effectively and suitably to their environment, personal, and community standards.

B. O. 2.44

I. O. 2.441

Given the situation of family planning the student will demonstrate knowledge according to their level of functioning need.

I. O. 2.442

Given a marital situation the student will demonstrate appropriate psychological and physical behavior according to teacher specifications.

I. O. 2.443

Given the situation of child care the student will have knowledge and ability of appropriate practices according to their needs and social standards.

I. O. 2.444

Given child and spouse, parent, sibling roles the student will understand family structure and responsibilities according to teacher specifications.

I. O. 2.445

Given incidence of sex education, behavior and relationships the student will be able to handle content appropriate to social norms.

Figure 1A. Instructional Analysis For The Individual

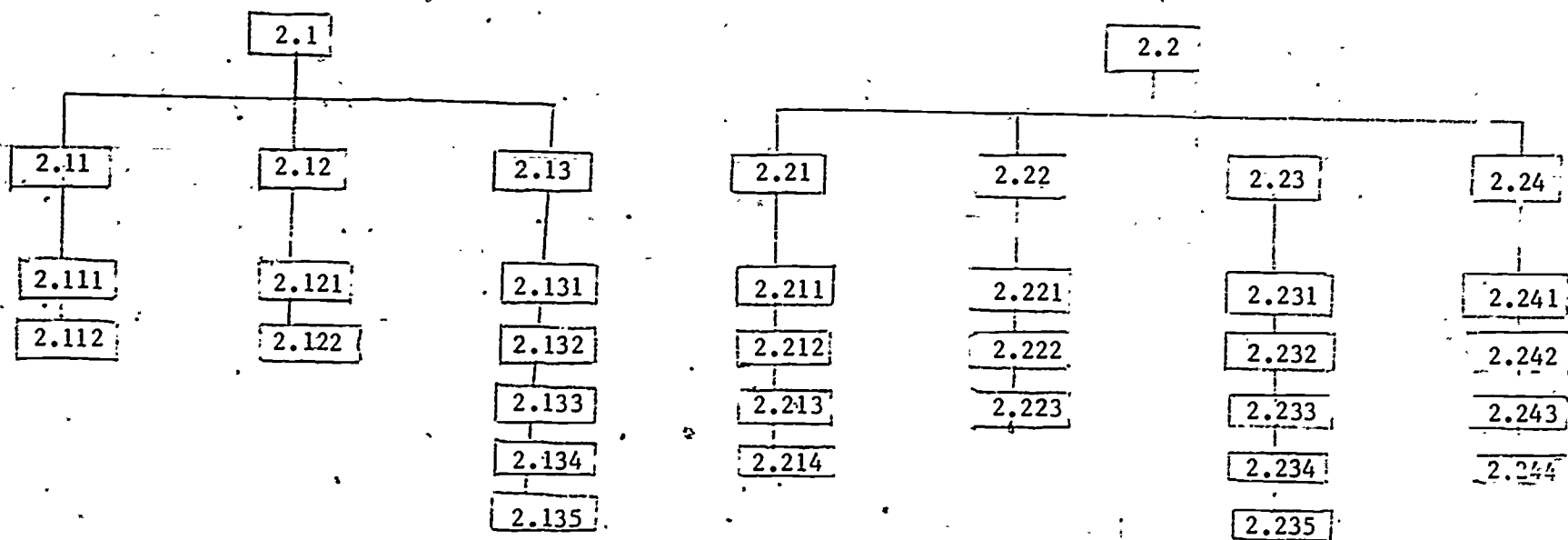
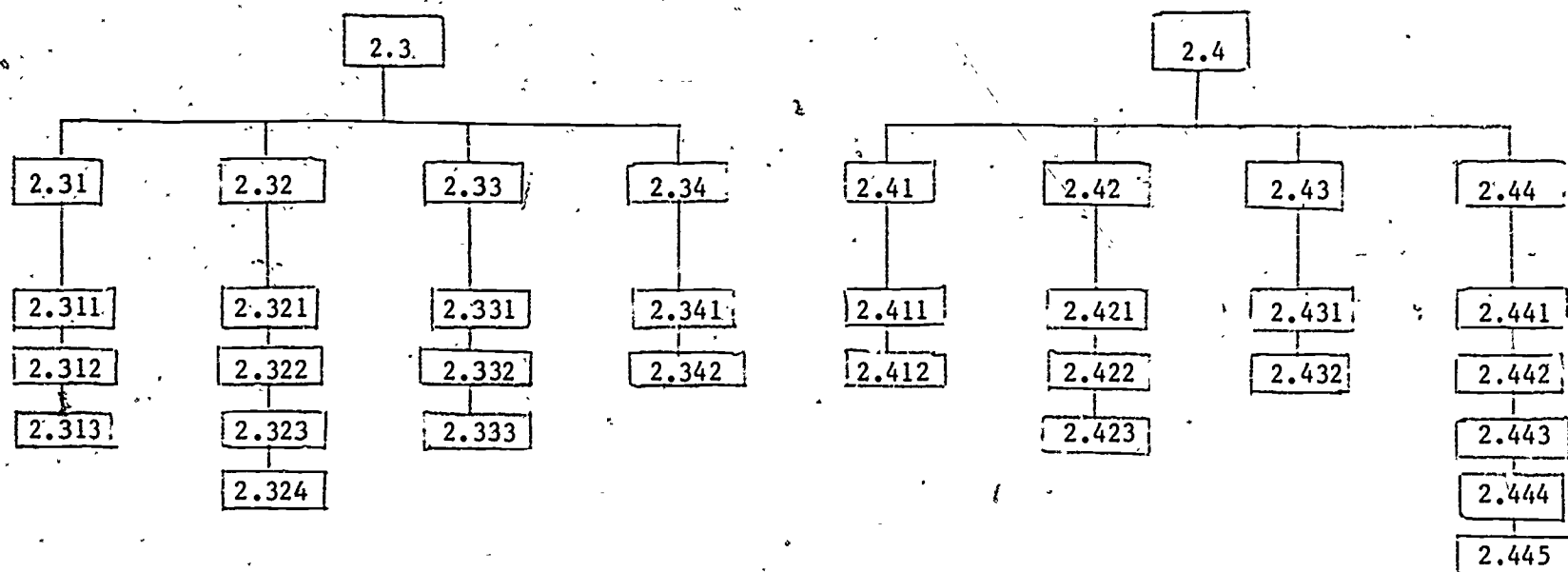


Figure 1B. Instructional Analysis for the Individual



PART C

COMPETENCIES FOR THE CITIZEN

DEVELOPED BY:

LISA TURNER
SHARON VANDERPOOL
TOM VEAL
DONNA WALKER
ANNE WALSH
SHARON WITT
JENNIFER WYLEY

III. SUGGESTED COURSE OPTIONS

- A. CITIZENSHIP
- B. U.S. HISTORY - GOVERNMENT
- C. SOCIAL STUDIES
- D. FREE ENTERPRISE

1. Citizen

Each graduate should have the skills and understanding needed to function as a responsible member of society, using and contributing to society in an appropriate manner, and interacting with the environment in a responsible way.

Competency Performance Standards

The student understands the basic structure and functions of the American system of government and the American economic system.

The student knows basic legal rights and responsibilities of the citizen under the American judicial and penal system. The student recognizes relationships between current societal and environmental problems and the individual's role and responsibilities.

2. Cluster Goals

3.1 Environmental concerns, public services

3.2 General understanding of federal, state and local laws and governments

3.3 Civil Rights and responsibilities

3. Behavioral Objectives

C. G. 3.1

B. O. 3.11

When placed in their community, the student will be able to verbally and physically identify the location and purposes of five public services.

B. O. 3.12

When placed in an everyday setting, the student will be able to identify and demonstrate respect of other

people and their property with 90% accuracy of the above interactions.

B. O. 3.13

When placed in an urban or rural setting, the student will be able to verbally and physically identify ten environmental concerns plus not destroying their own environment with 95% accuracy.

C. G. 3.2

B. O. 3.21

Given the three branches of the federal and state government, the student will be able to (1) list the major responsibilities of each branch, (2) identify key officials of each branch, (3) explain their respective responsibilities in each office. Perform each with 85% accuracy.

B. O. 3.22

Given a list of twenty-five government agencies, federal, state and local, the student will be able to (1) identify services provided by each agency, (2) be able to locate, by phone, mail, geographically, the nearest branch, (3) interact appropriately with above listed agencies in the community. Perform the above with 90% accuracy.

B. O. 3.23

Given a list of fifty civil liberties the student will be able to (1) identify those which are guaranteed by the federal or state constitution or by a local ordinance and those mandated by law, (2) pick five of these liberties and give a verbal explanation and example of

how these rights are exercised in the student's life. Out of fifty rights the student will be able to correctly identify forty and be able to perform item #2 with 100% accuracy.

B. O. 3.24

Given a list of fifteen non-profit organizations which are active in federal, state and local governments as citizen advocacy groups the student will be able to (1) explain the respective roles of these groups in government and the citizen's role within these organizations, (2) name those groups which are supporting services beneficial for the student, (3) demonstrate an ability to contact the above groups which are active within his community and do so appropriately with 90% of the organizations. Perform the first two tasks with 90% accuracy.

B. O. 3.25

Given an outline of the student's local governmental organization the student will be able to name the major components, key elected officials, and their respective responsibilities with 85% accuracy. Given the above the student will be able to locate the offices within his community and contact them by phone, mail and in person in 9 out of 10 attempts.

C. G. 3.3

B. O. 3.31

Placed in a simulated situation where student is questioned or arrested by law enforcers the student will be able to demonstrate respect and cooperation to meet teacher specification.

B. O. 3.32

Placed in a simulated arrest situation the student will be able to identify five basic rights and politely request them if needed with 100% accuracy.

B. O. 3.33

Placed in a classroom test situation the student will be able to identify four common crimes and their consequences as a juvenile and as an adult with 100% accuracy.

B. O. 3.34

The student will be able to register for the vote, be aware of the candidates and issues, work out transportation to the voting site and vote, upon reaching the age of 18, according to state or federal requirements.

B. O. 3.35

Given verbal instruction the student will be able to identify his financial rights and public freedoms according to teacher specifications.

4. Instructional Objectives

B. O. 3.11

B. O. 3.11i

Given the task of filling out a tax form, the student will be able to identify the main procedures and where to seek help from community resources if they need help with 95% accuracy.

I. O. 3.112

When placed in an everyday setting, the student will be able to verbally express where to go to apply for

a drivers license and be able to pass the drivers licence test with 95% accuracy.

I. O. 3.113

When placed in the community, the student will be able to identify verbally equal opportunity employment laws and request them with 95% accuracy.

I. O. 3.114

Upon request, the student will be able to list the location and purposes of the police department and be able to contact them either by phone or directly, with no help.

I. O. 3.115

Upon request, the student will be able to describe the location of the fire department and be able to contact it by phone, with no help.

I. O. 3.116

When placed in the community, the student will be able to verbally and physically locate the public health center plus identify 5 services offered there.

I. O. 3.117

Upon request, the student will be able to identify 5 reasons for calling or contacting the Better Business Bureau.

I. O. 3.118

Given the transportation alternatives in their community, the student will be able to list 5, tell their costs and describe how to use them, with 90% accuracy.

B. O. 3.12

I. O. 3.121

When placed in an everyday setting, the student will be considerate of their neighbors by respecting others rights, property and protecting their children, according to teachers specifications.

I. O. 3.122

When placed in a simulated or real emergency situation, the student will be able to call and report fires or inform someone else about the emergency with 100% accuracy.

I. O. 3.123

Given an emergency setting, the student will be able to call an ambulance, hospital or doctor with 100% accuracy.

I. O. 3.124

Given a setting involving a crime or accident, the student will be able to call the police and describe the situation with 100% accuracy.

B. O. 3.13

I. O. 3.131

When placed in the community, the student will be able to identify five different areas in the community where litter exists and describe what measures could be taken to alleviate the situation, according to teacher's specifications.

I. O. 3.132

Upon request, the student will be able to identify five ways in which the air is being polluted and

five ways the water is being polluted, with 90% accuracy.

I. O. 3.133

Given a park setting, the student will demonstrate environmental awareness and respect, by not polluting, starting fires, shooting animals and destroying the land, according to park rules and regulation.

I. O. 3.134

Given a polluted or destroyed setting and the opportunity to participate, the student will take an active part in advocating pollution control and helping to restore the environment according to teacher's specifications.

B. O. 3.21

I. O. 3.211

Given the three branches of the federal government the student will be able to (1) list the major responsibilities of each branch, (2) identify key elected officials and name their respective responsibilities of each office. Perform the above with 85% accuracy.

I. O. 3.212

Given the three branches of the state government, the student will be able to (1) list the major responsibilities of each branch, (2) name the key elected officials and their respective responsibilities, with 70% accuracy.

B. O. 3.22

I. O. 3.221

Given a list of ten federal government agencies the student will be able to (1) identify services provided by each, (2) locate (by phone, mail) the nearest branch and interact appropriately with each agency 3 times, according to teacher's specifications.

I. O. 3.222

Given a list of ten state government agencies the student will be able to (1) identify the services provided, (2) locate the nearest branch office in his community, (3) interact appropriately with each office 3 times, according to teacher's specifications.

I. O. 3.223

Given a list of five local government agencies the student will be able to (1) name services provided for him by each agency, (2) locate and interact appropriately with each agency, 3 times, to teacher's specifications.

B. O. 3.23

I. O. 3.231

Given a list of thirty civil liberties the student will be able to check those rights guaranteed by the constitution or mandated by federal law and explain how 6/30 effect his everyday life, with 80% accuracy.

I. O. 3.232

Given a list of ten civil liberties the student will be able to pick out those guaranteed him by local ordinance with 85% accuracy, and given an example of how he exercises two of these rights in his daily living with 80% accuracy.

B. O. 3.24

I. O. 3.241

Given a list of 15 non-profit organizations which are active in federal, state and local government, the student will be able to name the major goal of each organization in twelve out of 15 groups.

I. O. 3.242

Given a list of 15 non-profit organizations as above, the student will be able to (1) pick out those groups which are actively supporting legislation that would be beneficial to the student, (2) locate the nearest branch of above organizations within his community and appropriately interact with 90% of these organizations, all with 85% accuracy.

B. O. 3.25

I. O. 3.251

Given a blank outline for the student's community government organization, the student will be able to complete the outline naming the major components of the government system and their respective responsibilities with 90% accuracy.

I. O. 3.252

Given pictures of the key elected officials within his community the student will be able to name the official, his office and his responsibilities, with 85% accuracy.

I. O. 3.253

Given a local phone directory the student will be able to, (1) contact by phone or mail, 3 key

government offices in three successive trials.

B. O. 3.31

I. O. 3.311

Whenever asked, the student will be able to list 5 ways in which a policeman serves the public, according to teacher specification.

I. O. 3.312

When given two simulated situations one in which the student cooperates with the law and the other in which the student does not cooperate, the student will be able to list all possible outcomes of each situation and give reasons why, according to teacher specifications.

B. O. 3.32

I. O. 3.321

Given the miranda rights in a simulated arrest situation, the student will be able to identify the five components of the rights and identify the two parts of the waiver correctly, for 3 successive trials.

I. O. 3.322

In a simulated arrest situation, the student will be able to list three persons he would call in a prioritized order and give reasons why, according to teacher specifications.

B. O. 3.33

I. O. 3.331

Given information on juvenile delinquency the student will be able to list three major crimes of teenagers and three consequences of each with 90% accuracy.

I. O. 3.332

Given information on crime and the penal system, the student will be able to list three major crimes of adults and three consequences, with 90% accuracy.

B. O. 3.34

I. O. 3.341

Given verbal instruction, the student will be able to go to the appropriate office and register, according to voting registration rules and requirements.

I. O. 3.342

Given public notice of an election of candidate the student will be able to verbally give their choice of candidate and 3 reasons for his choice, according to teacher specifications.

I. O. 3.343

Given notice to vote through the mail, media or voting card, the student will be able to obtain transportation on correct day at the correct time to get to the voting place and cast vote properly, according to voting rules.

B. O. 3.35

I. O. 3.351

In a simulated situation where the student is unemployed, the student will be able to list four requirements for receiving unemployment compensation, according to state and federal regulations.

I. O. 3.352

Without being prompted the student will be able to list three situations for receiving SSI benefits,

according to teacher specifications.

I. O. 3.353

Given information of welfare rights, the student will be able to list why and where he should receive welfare benefits according to teacher specifications.

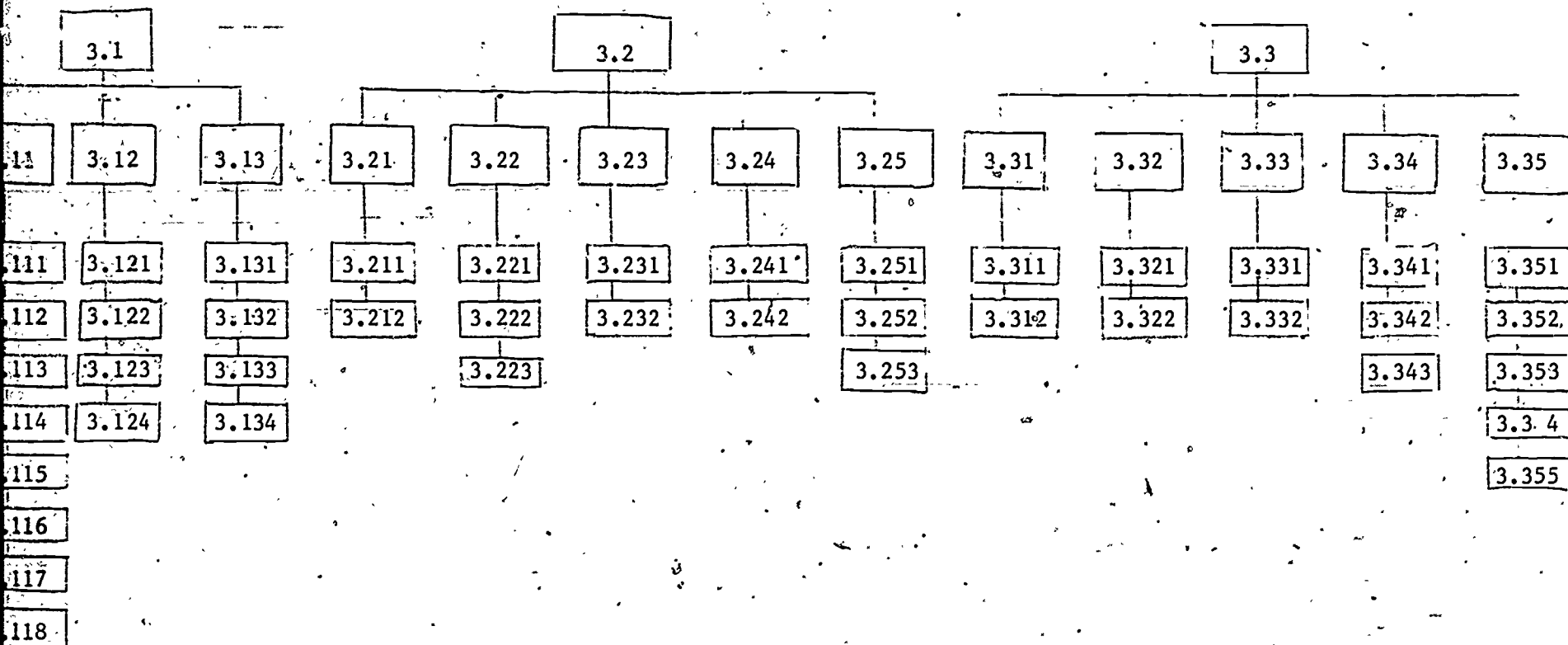
I. O. 3.354

Given a brochure and opportunity to talk to representatives, the student will be able to list four services offered by Health Clinics and how charges are determined according to teacher specifications.

I. O. 3.355

Given information on public education, the student will be able to verbally identify mandatory ages for school attendance and describe everyone's basic right to education, according to teacher specifications.

Table 2. Instructional Analysis for the Citizen



PART D

COMPETENCIES FOR THE CONSUMER*

DEVELOPED BY:

BARBARA LEGGETT
LINDA LEUNG
BERNADETTE LOCKE
KAY MOORE
MARY MORNINGSTAR
DONNA MORRIS

IV. SUGGESTED COURSE OPTIONS**

- A. MATH
- B. PERSONAL FINANCE
- C. ECONOMICS AND BUSINESS
- D. FREE ENTERPRISE
- E. ENGLISH - LANGUAGE ARTS

* Included in the Consumer Competencies, under the Instructional Objectives section are suggested, related competencies.

** Secondary Home Economics programs often address the competencies included in this area.

1. Consumer.

Each graduate should have the skills and understandings needed to function as an informed consumer and to use available resources in an efficient and beneficial manner.

Competency Performance Standards

The student knows the principles of sound personal financial planning and management.

The student identifies the legal rights and responsibilities of the consumer in buying and selling goods and services.

2. Cluster Goals

4.1 Financial Planning and Management

4.2 Consumer Awareness

4.3 Consumer in Action

3. Behavioral Objectives

C. G. 4.1

B. O. 4.11

Given a budget form, the student will be able to prioritize needs, identify resources and allowances, and calculate taxes so that the budget balances.

B. O. 4.12

Given a specified amount of money, student will be able to open and maintain checking and savings accounts; establish credit, and list the steps necessary to acquire a loan so that bank or company's regulations are followed.

C. G. 4.2

B. O. 4.21

In various shopping situations, the student will be able to demonstrate knowledge of consumer rights - by explaining the legalities of a contract and warranty, by identifying services that consumer agencies and advocates provide; by explaining techniques used in consumer fraud - so that the student makes the most appropriate purchases.

B. O. 4.22

Given a shopping situation, a responsible consumer will be able to read and interpret advertising, labels and tags; compare the quality of consumer goods; and state the consequences of shoplifting, so that the student makes informed purchasing decisions.

C. G. 4.3

B. O. 4.31

Given a shopping situation, the student will be able to choose between alternatives when purchasing goods and managing the time needed to shop by listing student priorities and goals.

B. O. 4.32

When interacting with the public, the student will be able to demonstrate consumer interpersonal relationships by asking for assistance, by resisting pressure sale tactics and by conducting himself properly in public places according to community standards.

B. O. 4.33

Given the situation where the student must go from one location to another, the student will be able to obtain appropriate transportation to desired or necessary locations.

B. O. 4.34

Given examples of consumer expenditures, the student will be able to identify the necessary procedures to select and obtain consumer investments such as a car, house and insurance, and personal consumables such as food and clothing so that the specific procedures are completed.

4. Instructional Objectives and Related Competencies

B. O. 4.11

I. O. 4.111

Given that the student has a monthly budget of \$250.00, the student will be able to prioritize his necessities in importance, and identify the consequences of not adhering to his budget.

A. follows decision-making procedures

B. states consequences of bad credit ratings and debts

I. O. 4.112

In a situation where the student needs to devise a personal budget, the student will be able to identify all possible resources upon request.

A. familiarity with paychecks

B. awareness of appropriate government programs and financial aid

I. O. 4.113

Given a monthly check, the student will be able to list and deduct his allowances so that he spends his money effectively and wisely as judged by his teacher.

- A. knowledge of bills
- B. knowledge of expenditures
- C. academics needed to deduct from budget

I. O. 4.114

Given an appropriate tax form and a W-2, the student will be able to calculate his taxes or find assistance so that he avoids paying fines.

- A. identifies services: government and private
- B. has necessary academics
- C. acquires tax forms at proper time of year

B. O. 4.121

I. O. 4.121

Given a specified amount of money, the student will be able to open and maintain a checking account so that debts and credits balance.

- A. knowledge of location and transportation to a local bank
- B. knowledge of mechanics of opening a checking account
- C. academics required to maintain a checking account

I. O. 4.122

Given a specified amount, the student will be able to open and maintain a savings account so that withdrawals do not exceed deposits.

- A. knowledge of location and transportation to local bank
- B. knowledge of mechanics of opening a savings account
- C. academics needed to maintain savings account

I. O. 4.123

Given a specified amount of money and a situation in which more is needed, the student will be able to apply for credit so that he establishes a good credit rating.

- A. knowledge of types and sources of credit available in community
- B. knowledge of the cost of credit (i.e. interest)
- C. knowledge of payment procedures of an account

I. O. 4.124

Given a specified amount of money and a situation requiring a loan, the student will be able to identify the steps necessary to acquire a loan so that the loan is obtained.

- A. knowledge of types of loans available: consumer, commercial
- B. knowledge of mechanics of filling out loan forms
- C. knowledge of installment policies

B. O. 4.21

I. O. 4.211

Given a written contract, the student will be able to demonstrate proper purchasing procedures by reading the contract, explaining its terms, and requesting a copy of everything signed in order to avoid a

"consumer rip-off". The student will be able to do this with several different contracts.

- A. awareness that unordered merchandise arriving in the mail is free
- B. awareness of a 3-day "cooling-off" period after signing a contract with a door-to-door salesman
- C. explains "wage-assignment"
- D. academics needed to read contract

I. O. 4.212

Given a blank warranty or guarantee form, the student will be able to explain its advantages and disadvantages in terms of consumer protection and decide whether or not to send it to the manufacturer so that the wisest decision is made as judged by the teacher.

- A. necessary academics
- B. knowledge of minimum product standards

I. O. 4.213

Given several shopping situations where consumer rights are being violated, the student will be able to identify those consumer agencies and advocates appropriate to each situation so that proper action against the manufacturer is taken and a refund is obtained.

- A. knowledge of when to go to consumer agencies
- B. knowledge of agencies and advocates: private, local, state, government
- C. knowledge of those agencies' location within their community and state agencies' location

I. O. 4.214

Given the need to buy a product, the student will be able to identify possible fraudulent activities connected with that product and certain safeguards against such activities. The student will be able to do this with a wide variety of products.

- A. identifies some common frauds from the over 800 schemes operating at any one time.
- B. keeps accurate and complete records
- C. obtains promises in writing
- D. academics needed: reading with comprehension, etc.

B. O. 4.22

I. O. 4.221

In various shops, the student will be able to state the advertising tactics being practiced to sell the merchandise so that he meets teacher requirements in being able to interpret that advertising.

- A. identifies advertising from factual information.
- B. necessary academics
- C. awareness of types of advertising: generalities, testimonial, name calling, etc.

I. O. 4.222

In a shopping situation, the student will be able to read labels and/or tags attached to various products and explain what they mean so that he meets the teacher's instructional criteria.

- A. necessary academics
- B. identifies nutritional information

I. O. 4.223

Given the need to make a purchase, the student will be able to utilize his skills in comparison shopping (listed in 4.311) so as to make a high quality/low cost purchase.

- A. uses telephone book and also the phone effectively
- B. has necessary reading and computation skills
- C. awareness of benefits gained by shopping comparatively

I. O. 4.224

Given a hypothetical situation in which a person shoplifts, the student will be able to state the consequences of the act for the person and the store so that he mentions the moral, legal and economic issues involved in shoplifting.

- A. knowledge of the law
- B. knowledge of effects: higher prices, jail
- C. knowledge of situations where a person might be tempted to steal
- D. knowledge of who to go to for legal aid

B. O. 4.31

I. O. 4.311

Given a shopping situation, the student will be able to demonstrate skill in comparison shopping so that appropriate choices are made 4 out of 5 times.

- A. distinguishes quality of consumer goods
- B. looks for sales

- C. has academics needed to evaluate whether a product is worth its listed price

I. O. 4.312

Given a shopping situation, the student will be able to manage his time according to personal goals and priorities so that meaningful time is not wasted.

- A. constructs a shopping list in light of his personal budget
- B. makes up a daily schedule
- C. identifies personal shopping from most to least important

B. O. 4.32

I. O. 4.321

Given a situation in which the student needs help, the student will be able to ask for assistance so that assistance is received.

- A. identifies persons whom he can go to for help
- B. identifies possible situations when a person will need help
- C. makes requests courteously

I. O. 4.322

Given a shopping situation, the student will be able to recognize pressure tactics used in selling so that he avoids buying unnecessary or unsuitable items.

- A. recognizes the value of merchandise
- B. identifies commonly used sale tactics and gimmicks

I. O. 4.323

In a public place, the student will be able to display behavior appropriate to his surroundings so that he is neither ridiculed nor thrown out of an establishment.

- A. identifies behavior appropriate to different places
- B. awareness of society's standards
- C. recognizes the personal rights of others

B. O. 4.33

I. O. 4.331

Given a form of transportation and the need to get to a specific location, the student will be able to demonstrate knowledge of his community and places within that community so that he does not become lost.

- A. knowledge of local community and its outlying areas
- B. interprets business and residential maps that are provided by the community

I. O. 4.332

Given the need for mobility, the student will be able to identify and use available sources of transportation so that his mobility needs are satisfied.

- A. knowledge of public and private transportation services
- B. makes transportation choices that are appropriate to his needs.

B. O. 4.34

I. O. 4.341

In demonstrating knowledge of consumer expenditures, the student will be able to identify the necessary procedures to select and obtain consumer investments such as a car, house and insurance so that instructional requirements are met.

Buying a house:

- A. seeks assistance from real estate agencies
- B. knowledge of advantages and disadvantages of types of housing
- C. lists personal considerations like location of house and number of people in house

Buying a car:

- A. seeks assistance from car dealers
- B. knowledge of what makes a car efficient
- C. considers personal needs and likes (air, radio, etc.)

Buying insurance:

- A. seeks assistance from insurance agencies
- B. knowledge of types of insurance policies available
- C. knowledge of needed insurance versus superfluous policies pushed by agents
- D. knowledge of terms of contract in regard to one's budget

I. O. 4.342

Given examples of consumer expenditures, the student will be able to select and obtain personal consumables

such as food and clothing by shopping at three different stores under teacher supervision.

Food:

- A. selects suitable store
- B. identifies items needed
- C. purchases quality and seasonal foods
- D. utilizes skills listed under decision-making

Clothing:

- A. selects suitable store
- B. selects suitable clothing: seasonal, size
- C. utilizes decision-making skills like comparison shopping

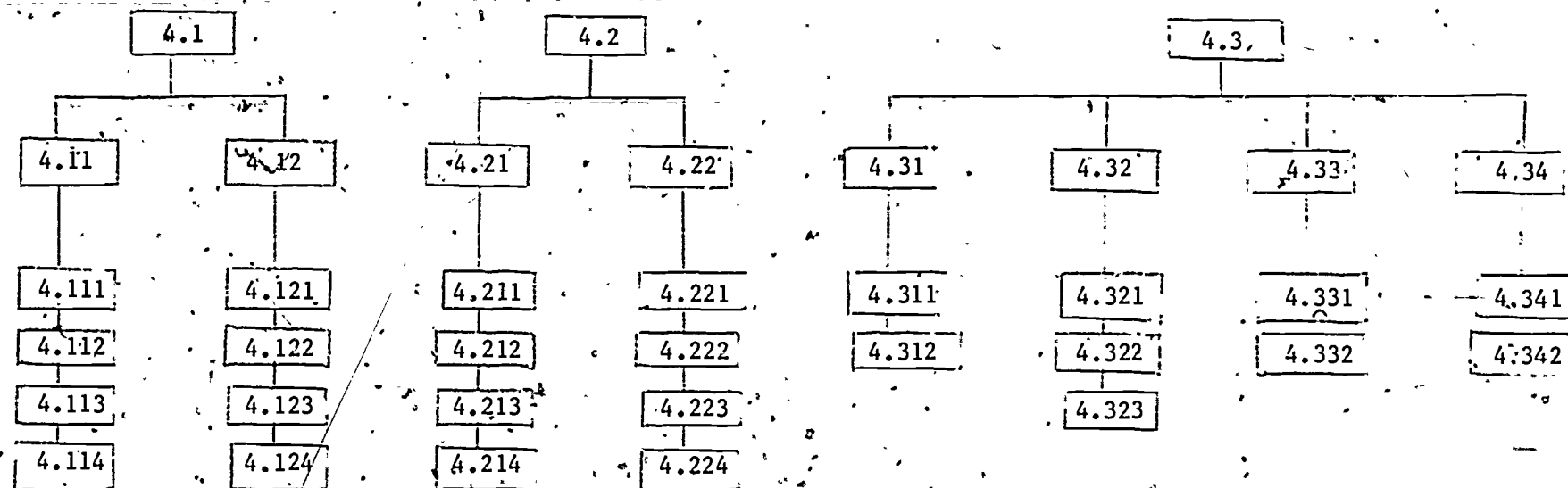


Table 3. Instructional Analysis for the Consumer

PART E

COMPETENCIES FOR THE PRODUCER

DEVELOPED BY:

KIM PLOTTTS
SUSAN PLUNKET
KATHLEEN ROSE
PAULA ROWELL
GENIENE SMELL
TODD SNIDER

V. SUGGESTED COURSE OPTIONS

- A. FREE ENTERPRISE
- B. ECONOMICS - BUSINESS
- C. CAREER PLANNING
- D. MATH
- E. PERSONAL FINANCE
- F. ENGLISH - LANGUAGE ARTS

1. Producer

Each graduate should have the skills and knowledge necessary to select and pursue a career reflecting personal interests and abilities. Each graduate should also have the skills needed to pursue a new career should situations arise which dictate career changes.

Competency Performance Standards

The student analyzes personal career opportunities and choices in career planning and management.

The student demonstrates the skills necessary to obtain employment.

2. Cluster Goals

5.1 Analyze career opportunities

5.2 Demonstrate skills

3. Behavioral Objectives

C.G. 5.1

B. O. 5.11

Given a need for a personal evaluation, the student will be able to identify his/her needs, interests, abilities and values to full potential.

B. O. 5.12

Given a community inventory, the student will be able to identify occupational classifications and opportunities available in order to find a job.

B. O. 5.13

Given a need for a job, the student will be able to identify a job that appropriately satisfies personal and community needs with enough accuracy to acquire

gainful employment.

C. G. 5.2

B. O. 5.21

Given a state of unemployment, the student will be able to seek, secure, and maintain employment.

B. O. 5.22

Given a place of employment, the student will be able to obtain transportation to and from the job site.

B. O. 5.23

Given a job the student will be able to demonstrate manual and cognitive skills in order to maintain a particular job.

B. O. 5.24

Given a job, the student will be able to exhibit proper work habits that will enable him to maintain employment.

B. O. 5.25

Given specific job rights related to unions, benefits, pay, and legal rights, the student will be able to define his rights as an employee, defend those rights, and take advantage of them.

B. O. 5.26

Given a job, the student will be able to demonstrate all interpersonal skills necessary to maintain employment.

4. Instructional Objectives

B. O. 5.11

I. O. 5.111

Given counseling, the student will be able to identify his/her own vocational abilities to his/her own realistic potential.

I. O. 5.112

Given counseling, the student will be able to identify all existing areas of interest necessary to finding a job.

I. O. 5.113

Given counseling, the student will be able to identify all of his/her basic needs required of employment.

I. O. 5.114

Given counseling, the student will be able to identify the personal and social values of employment to teacher specifications..

B. O. 5.12

I. O. 5.121

Given an average community setting, the student will be able to identify the general job classifications and their related components (major categories, wages, and training) necessary in finding a job.

I. O. 5.122

Given a local community, the student will be able to identify all occupational opportunities with 90% accuracy.

B. O. 5.13

I. O. 5.131

207

Given vocational counseling, the student will be able

to identify his/her own major occupational interests
necessary in selecting a job.

I. O. 5.132

Given an occupation, the student will be able to
identify all skills important in maintaining the
job to employer's specification.

I. O. 5.133

Given a personal evaluation, the student will be
able to identify realistic job choices to meet tea-
cher's specifications.

I. O. 5.134

Given an appropriate job, the student will be able
to identify all occupational requirements for a par-
ticular job with 90% accuracy.

B. O. 5.21

I. O. 5.211

Given a state of unemployment the student will be
able to exhaust all possible means of finding avail-
able jobs with 90% accuracy.

I. O. 5.212

Given an available job the student will be able to
set up an appointment and conduct himself appro-
priately (on time, in proper clothing, and with
appropriate papers).

I. O. 5.213

Given a standard job application the student will
be able to fill out the application with 100% accu-
racy.

B. O. 5.22

I. O. 5.221

Given a need to get from home to work, the student will be able to choose the most appropriate and economical means of transportation available.

B. O. 5.23

I. O. 5.231

Given a specific job the student will be able to exhibit gross motor skills in order to fulfill duties of that job.

I. O. 5.232

Given a specific job the student will be able to exhibit fine motor skills necessary for accurate performance.

I. O. 5.233

Given a specific job the student will be able to exhibit the cognitive skills (sorting, colors, numbers) necessary to maintain that job.

I. O. 5.234

Given a job situation the student will be able to understand the meaning and use vocabulary essential to the work environment according to teacher specification.

I. O. 5.235

Given money (coins and currency), the student will be able to identify and make change with 100% accuracy.

I. O. 5.236

Given an actual bank setting the student will be able to correctly perform 5 operations (writing check, depositing, withdrawing, opening checking account, and opening savings account) with 100% accuracy.

I. O. 5.237

Given a checkbook and savings book the student will be able to maintain the records with 100% accuracy.

B. O. 5.24

I. O. 5.241

Given a job the student will be able to arrive at work and leave work at the appropriate times as specified by the employer.

I. O. 5.242

Given a job setting the student will be able to demonstrate proper safety rules at his areas of work with 100% accuracy.

I. O. 5.243

Given a job setting the student will be able to recognize authority and properly interact with authority and co-workers with enough accuracy to maintain a good working relationship.

I. O. 5.244

Given a job the student will be able to identify proper quality and production rate as specified by the employer.

B. O. 5.25

I. O. 5.251

Given an opportunity to join a union at his job, the student will be able to identify its benefits, join the union, and be an active participant if he so desires, according to employer and/or union specifications.

I. O. 5.252

Given various employee benefits (vacation, insurance, disability payments) the student will be able to define these benefits and take advantage of those to which he or she is entitled.

I. O. 5.253

Given situations involving pay or deductions, (overtime, pension, paycheck, raise) the student will be able to state the reasons and justifications for them and use them to his or her advantage.

I. O. 5.254

Given possible legal problems on the job (harassment, discrimination) the student will be able to recognize the problem and go to the proper people or agencies for assistance.

I. O. 5.255

Given a lay-off or dismissal from his job, the student will be able to obtain any severance pay to which he is entitled; to identify qualifications he may have for unemployment benefits; and collect them if it becomes necessary.

B. O. 5.26

I. O. 5.261

Given an actual interview the student will be able to listen and respond appropriately with enough accuracy to complete the interview.

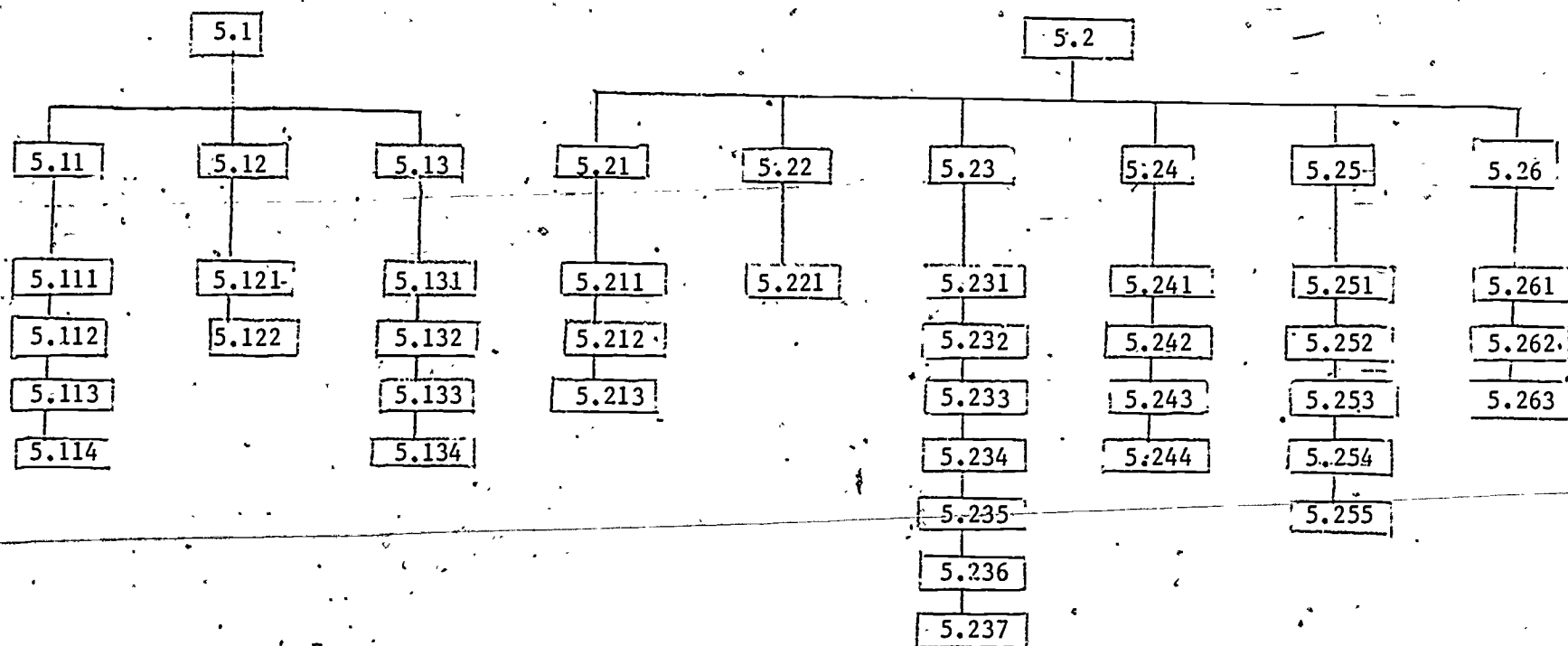
I. O. 5.262

Given an actual work setting the student will be able to converse appropriately with co-workers with enough accuracy to keep a good working relationship.

I. O. 5.263

Given a situation involving members of the opposite sex, the student will be able to establish an appropriate relationship, according to social standards.

Table 4. Instructional Analysis for the Producer



APPENDIX A

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES DATA SHEETS

Date 5/20/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Georgia Kraft Company

ADDRESS: Veasey Road
Greensboro, Georgia
Bell Road/Madison, Georgia

PRODUCT/FUNCTION: Plywood Studs

PHONE #: 342-4300

VOLUNTEER OPPORTUNITIES: 0

PERSONNEL MANAGER: Andy Harris

OF VOLUNTEERS: 0

NUMBER OF EMPLOYEES: 425 male
175 female 600

	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Job Titles:						
1. production	X					
2. industrial maintenance	X					

TURNOVER RATE:

FEDERAL SUBSIDY: No

TRAINING PROGRAMS: Supervisors do some--structure programs

EMPLOYEE BENEFITS: Insurance

ADVANCEMENT OPPORTUNITIES: Yes, moderate amount

COMMENTS: No students-- can't take because of insurance.

Date 2/19/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Gulf Station

ADDRESS: Highway 441

PRODUCT/FUNCTION: Service Station

PHONE #: 342-0969

VOLUNTEER OPPORTUNITIES: Not interested PERSONNEL MANAGER: Pops

OF VOLUNTEERS: 0

NUMBER OF EMPLOYEES: 3 (family)

Job Titles:	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
1: Attendants	salary			X		

TURNOVER RATE: 0

FEDERAL SUBSIDY: No

TRAINING PROGRAMS: None

EMPLOYEE BENEFITS: None

ADVANCEMENT OPPORTUNITIES: No

COMMENTS: backwoods people - negative attitude toward students

Date 5/20/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Hillcrest Dairy

ADDRESS: Highway 441
Madison, Georgia

PRODUCT/FUNCTION: Milk Production

PHONE #: 342-2823

VOLUNTEER OPPORTUNITIES: No-Small dairy PERSONNEL MANAGER: Dave Clark

OF VOLUNTEERS: _____

NUMBER OF EMPLOYEES: 2

	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Job Titles:	125.00					
1. milking	a Week			X		X

TURNOVER RATE:

FEDERAL SUBSIDY: Yes

TRAINING PROGRAMS: None

EMPLOYEE BENEFITS: None

ADVANCEMENT OPPORTUNITIES: None

Date 2/19/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Hillsman Farm & Garden Supply
ADDRESS: Highway 441
Madison, Georgia

PRODUCT/FUNCTION: retail-feed, etc. PHONE #: 342-0449.

VOLUNTEER OPPORTUNITIES: DCT program in PERSONNEL MANAGER: Don Hillsman
operation.

OF VOLUNTEERS: 0 very willing

NUMBER OF EMPLOYEES: 6

	H/W	P/W	-AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Job Titles:						
1. Clerk	weekly					

TURNOVER RATE: very low (12 years)

FEDERAL SUBSIDY: No

TRAINING PROGRAMS: None

EMPLOYEE BENEFITS: Insurance

ADVANCEMENT OPPORTUNITIES: No

COMMENTS: No handicapped employed

Date 5/20/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Holiday Inn of Madison ADDRESS: U. S. 441 South
Madison, Georgia

PRODUCT/FUNCTION: Resturant/all other PHONE #: 342-2121
employees

VOLUNTEER OPPORTUNITIES: PERSONNEL MANAGER: Robert Wilbanks

OF VOLUNTEERS: None

NUMBER OF EMPLOYEES: 50 and up

	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Job Titles:						
1. desk clerk	X			X		X
2. maids						
3. resturant help						

TURNOVER RATE: Very low

FEDERAL SUBSIDY: No

TRAINING PROGRAMS: On-job-training

EMPLOYEE BENEFITS: Insurance, vacation

ADVANCEMENT OPPORTUNITIES: Not much in position, salary yes

Date 5/20/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME:

Hospitality Care Center

ADDRESS:

2036 Main St.
Madison Ga.

PRODUCT/FUNCTION:

Direct Hospital Care

PHONE #:

342-3200

VOLUNTEER OPPORTUNITIES:

very willing to have H.S. students

OF VOLUNTEERS: approx. 5

PERSONNEL MANAGER:

Jeff Nortor

NUMBER OF EMPLOYEES: 25

Job Titles:	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Housekeeper	X		CAN NOT PROVIDE BECAUSE THEY DON'T HAVE			
Nurse	X					
Aide	X					
Cook	X					

TURNOVER RATE:

Very low

FEDERAL SUBSIDY:

yes- not sure what kind

TRAINING PROGRAMS:

Some Employees are hired skilled, some trained on the job

EMPLOYEE BENEFITS:

Insurance, vacation

ADVANCEMENT OPPORTUNITIES:

small hospital so there isn't much advancement

Many H.S. students work part-time- very satisfied with their work

Date 5/20/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Little River Farms

ADDRESS: Monticello Highway
Madison, Georgia

PRODUCT/FUNCTION: cattle

PHONE #: 342-0536

VOLUNTEER OPPORTUNITIES: Not interested PERSONNEL MANAGER: Bob Brocks

OF VOLUNTEERS: 0

NUMBER OF EMPLOYEES: 3

Job Titles:	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
	salary			NOT AVAILABLE		

TURNOVER RATE: Very low

FEDERAL SUBSIDY: No

TRAINING PROGRAMS: on-job-training not formal

EMPLOYEE BENEFITS: insurance

ADVANCEMENT OPPORTUNITIES: No

COMMENTS: Small business (10 cows)

Date 5/20/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Mack's Department Store ADDRESS: 121 West Jefferson Street

PRODUCT/FUNCTION: Variety of household goods PHONE #: 342-2114

VOLUNTEER OPPORTUNITIES:

PERSONNEL MANAGER: Family owned & operated

OF VOLUNTEERS: None

NUMBER OF EMPLOYEES:

Job Titles:	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
1. Salesperson 90	X			X		X
2. Clerical 1	X			X		X

TURNOVER RATE: 0 or extremely low

FEDERAL SUBSIDY: No

TRAINING PROGRAMS: inform

EMPLOYEE BENEFITS: Insurance no union

ADVANCEMENT OPPORTUNITIES: None

Date 2/17/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Modern Manufacturers

ADDRESS: 374 Park Street
Madison, Georgia

PRODUCT/FUNCTION: Apparel (shirts)

PHONE #: 342-1366

VOLUNTEER OPPORTUNITIES: Not interested PERSONNEL MANAGER: Al Strozeir (President)

OF VOLUNTEERS: None

NUMBER OF EMPLOYEES: 60-100

	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Job Titles:						
1. sewing machine oper.		X	only higher skilled			X
2. cutting (3)	X					X

TURNOVER RATE: High turn

FEDERAL SUBSIDY: NO

TRAINING PROGRAMS: None

EMPLOYEE BENEFITS: Insurance, not unionized

ADVANCEMENT OPPORTUNITIES: No

COMMENTS: speed need to be increased, no jobs for physical or mental handicapped individuals

Date 5/20/81

NEEDS ASSESSMENT OF MORGAN COUNTY

OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Morgan Memorial Hospital ADDRESS: 1077 South Main
Madison, Georgia

PRODUCT/FUNCTION: direct care PHONE #: 342-1666

VOLUNTEER OPPORTUNITIES: will take some PERSONNEL MANAGER: Mike Rutledge

OF VOLUNTEERS: 0

NUMBER OF EMPLOYEES: 11

	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Job Titles:						
1. Nurses						
2. Aides						

TURNOVER RATE: Low

FEDERAL SUBSIDY: Yes, not sure what kind

TRAINING PROGRAMS: Skilled employees only, aides are trained on-the-job

EMPLOYEE BENEFITS: insurance, sick leave, vacation

ADVANCEMENT OPPORTUNITIES: Yes - for everyone

COMMENTS: This is for nursing service only.

Date 5/20/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Parks & Historic Sites
Division

ADDRESS: Hard Labor Creek Road
Rutledge, Georgia
(only site in Morgan County)

PRODUCT/FUNCTION: regional parks office
supervise 12 parks &
sites in region 2 N.
Ga. region

PHONE #: 557-2521

VOLUNTEER OPPORTUNITIES: No/Yes at Hard
Labor Creek

PERSONNEL MANAGER: Mr. Fanning

OF VOLUNTEERS: 0

NUMBER OF EMPLOYEES: Seasonal - 12
Fulltime - 15

	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Job Titles:						
1. Superintendent		Not		X		
2. Asst. Superintendent						
3. Security ranger		Allowed				
4. Housekeeper		To				
5. Greens keeper (golf)						
6. 4 utility workers		Divulge				

7. Park senior arranger 8. Mechanic
TURNOVER RATE: slight

FEDERAL SUBSIDY: No

TRAINING PROGRAMS: No

EMPLOYEE BENEFITS: Regular state of Georgia benefits

ADVANCEMENT OPPORTUNITIES: Yes

COMMENTS: People would welcome students at site

Date 5/20/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Porter's Dairy

ADDRESS: Buckhead Road
Madison, Georgia

PRODUCT/FUNCTION: eggs, milk

PHONE #: 342-0451

VOLUNTEER OPPORTUNITIES: None

PERSONNEL MANAGER: None

OF VOLUNTEERS: 0

NUMBER OF EMPLOYEES: 2 - 3 owners

	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Job Titles:						
1. Milker	5.50 hr.					
2. Supervise feeding	5.50 hr.					
3. Growing feed	5.50 hr.					

TURNOVER RATE:

FEDERAL SUBSIDY: None

TRAINING PROGRAMS: None

EMPLOYEE BENEFITS: None

ADVANCEMENT OPPORTUNITIES: None

COMMENTS: This is a very small dairy with only 2 employees and 3 owners. They do not need any outside help now and will not unless production increases greatly.

Date 2/16/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Schnadis Corporation

ADDRESS: Atlanta Highway
Madison, Georgia

PRODUCT/FUNCTION: manufacture furniture PHONE #: 342-2274

VOLUNTEER OPPORTUNITIES: Not interested PERSONNEL MANAGER: Bud Price. (plant manager)
Mr. Brett (plant. hiring)

OF VOLUNTEERS: 0

NUMBER OF EMPLOYEES: 140

	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Job Titles:						
1. Upholsters		X		X		X
2. Production-assemblers		X		X		X
3. Framing		X		X		X
4. Sewing		X		X		X
5. Cushioning		X		X		X
6. Cutting		X		X		X

7. Dispatchers

TURNOVER RATE:

has been a problem

FEDERAL SUBSIDY: No

TRAINING PROGRAMS: on-the-job (all skilled work)

Production crew - 13 week training period - 90 days evaluation

EMPLOYEE BENEFITS: Union - all benefits come under union

ADVANCEMENT OPPORTUNITIES: must bid for the jobs not much

COMMENTS: No handicapped, generally hires older employees, all need work on responsibilities

date 2/16/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Siemon-Madison Manufacturing Company. ADDRESS: Monticello Highway
Madison, Georgia.

PRODUCT/FUNCTION: custom molders/plastic PHONE #: 342-1916

VOLUNTEER OPPORTUNITIES: DCT program, PERSONNEL MANAGER: Bob Rehmert
are open to suggestions

OF VOLUNTEERS: 10 students (paid)

NUMBER OF EMPLOYEES:

	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Job Titles:						
1. Shipping clerks				X		X
* 2. Press operators		X		X		X
* 3. Finishers		X		X		X
4. Maintenance				X		X
5. Pool makers				X		X

TURNOVER RATE: 1 per month (low)

FEDERAL SUBSIDY: No

TRAINING PROGRAMS: on-job-training

EMPLOYEE BENEFITS: medical, major medical, retirement

ADVANCEMENT OPPORTUNITIES: Not much - pay incentives

COMMENTS: have employed physically handicapped, open to MR

* Responsibilities that go with a job needs to be stressed in schools

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Wellington Puritan Mills ADDRESS: Monticello Highway
Madison, Georgia 30650

PRODUCT/FUNCTION: Marine Products
cordage, twines, yarns PHONE #: 342-4864
342-1916

VOLUNTEER OPPORTUNITIES: 0 PERSONNEL MANAGER: John Lill
Roger Hawk

OF VOLUNTEERS: 0

NUMBER OF EMPLOYEES: 400. Female 200
Male 200

	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
Job Titles:						
1. Industrial engineer						
2. Cost Accountants						
3. Electrical technician						
4. Computer programmer						
5. Accountants						
6. Purchasing agents						

7. Sales manager 8. Machine operators (7 & 8 based on incentive production after minimum)
TURNOVER RATE:

FEDERAL SUBSIDY: target guaranteed tax credits

TRAINING PROGRAMS: on-job-training

EMPLOYEE BENEFITS: Insurance, vacation, retire

ADVANCEMENT OPPORTUNITIES: Limited

Date 2/17/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Woodkraft

ADDRESS: Highway 278
Madison, Georgia

PRODUCT/FUNCTION: plywood/studs

PHONE #: 342-4300

VOLUNTEER OPPORTUNITIES: Not interested PERSONNEL MANAGER: Julin Ulmer

OF VOLUNTEERS: 0

NUMBER OF EMPLOYEES: 460

Job Titles:	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
1. production unskilled	X		SOME SKILLED/UNSKILLED			
2. Mechanics	X		NO ANALYSIS ARE			
3. dry tenders	X		AVAILABLE -			
4. utility	X		SUPERVISOR DOES ALL			
5. lathe operator	X		TRAINING			

TURNOVER RATE: very high - no problem replacing

FEDERAL SUBSIDY: No

TRAINING PROGRAMS: on-job-training, supervisors do all training

EMPLOYEE BENEFITS: insurance, workers comp., etc.

ADVANCEMENT OPPORTUNITIES: Yes both lateral and upward movement

COMMENTS: teach attendance, don't seem to be interested in hiring handicapped employees

Date 5/20/81

NEEDS ASSESSMENT OF MORGAN COUNTY
OCCUPATIONAL OPPORTUNITIES

COMPANY NAME: Youngblood Motor Company ADDRESS:

Greensboro Road
Madison, Georgia

PRODUCT/FUNCTION: Body, paint glass, PHONE #: 342-2242
repairs, wrecker, rent-a-car

VOLUNTEER OPPORTUNITIES:

OF VOLUNTEERS: None

PERSONNEL MANAGER: Scott Youngblood

2 DCT workers willing for more

NUMBER OF EMPLOYEES: 20

Job Titles:	H/W	P/W	AVAILABILITY OF JOB ANALYSIS		CAN PROVIDE	
			YES	NO	YES	NO
1. Mechanics	X					
2. Body workers	X			X		X
				X		X

TURNOVER RATE: Not a big problem although at lower levels it sometimes hard to keep positions filled.

FEDERAL SUBSIDY: No

TRAINING PROGRAMS: on-the-job informal, 1/2 come trained, 1/2 come untrained

EMPLOYEE BENEFITS: Free insurance, vacation, sick days, no union

ADVANCEMENT OPPORTUNITIES: higher jobs have been filled for a long time so not much advancement

APPENDIX B

FLOW CHART OF THE PROCESS FOR TRACKING
STUDENTS THROUGH THE MORGAN COUNTY CURRICULUM

- STEP 1. Student enters the system at the secondary level.
- STEP 2. Assessment strategies completed in any or all curricular areas pertaining to needs identified in staffing meetings (refer to appropriate section of guide)
- 2-A Assessment of vocationally related skills
 - 2-B Assessment of academically related skills
 - 2-C Assessment of content related skills as identified by the CBE cluster areas.
- STEP 3. Decide the secondary level that student will be placed in (1st year, 2nd year, etc.) and identify course content options as a result of assessment data (refer to appropriate section of guide).
- STEP 4. Decide the source offering modification that will be needed based on the strengths and weaknesses of the learner. NOTE: Each program option should be reviewed separately (refer to appropriate section of guide).
- STEP 5A. Special educator and appropriate general and
- B. vocational educators meet to identify strategies and
 - C. and conduct curriculum modification (refer to appropriate section of the guide).
- STEP 6. Enroll learner in chosen course options.
- STEP 7. Monitor the effects of curriculum and instructional interventions using formative evaluation techniques (refer to appropriate section of guide).
- STEP 8. Initiate minor program modification if necessary (revision within original course options).
- STEP 9. Initiate major program modification if necessary (revision by changing course options).

STEP 10. Repeat process for learner advancement to other secondary levels (e.g. 3rd year, 4th year).

STEP 11. Student exits system and a student followup is initiated at six month, one year, two years and five years in order to gather data for program modification and revision.

