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The influence of functional activities and specific curricular domains on choice in the curriculum for learners with severe handicaps

Mary Comfort DeBoer
Portland State University

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AN ABSTRACT OF THE THESIS OF Mary Comfort DeBoer for the Master of Science in Education presented July 7, 1988.

Title: The Influence of Functional Activities and Specific Curricular Domains on Choice in the Curriculum for Learners with Severe Handicaps.

APPROVED BY MEMBERS OF THE THESIS COMMITTEE:


Joel Arick, Chairman


David Krug


Kathleen Bowman-Wilgus


Gerald Guthrie

Literature is calling for the inclusion of choice into the curriculum for learners with severe handicaps, yet there are limited guidelines and materials for teachers to work with in longitudinal planning for choice.

The purpose of this study was to examine curricular elements in a sampling of existing programs and their relationship with choice. Three questions were asked within this analysis: (a) What relationship, if any, exists between the functionality of an activity and choice? (b) What relationship, if any, exists between a particular instructional domain and choice?, and (c) What relationship, if any, exists between a teacher's judgement of student affect and choice?

Eleven teachers in high school classrooms for students with moderate/severe handicaps were interviewed. A list of activities used to teach goals in these programs was obtained. These activities were then given a Functionality Score by the researcher by using a Functionality Rating Scale. Eighty activities were rated by eight of the 11 teachers on choice and performance variables, using the Choice/Performance Rating Scale. This scale consisted of ten items categorized into four variables: (a) Choice-programming Score, (b) Choice-fostering Score, (c) Choice-data Score (these three combined to be the Total Choice Score), and (d) Student Affect Score. Based on the questions analyzed in this study and the information derived from teachers' ratings of these variables, several findings about choice in the curriculum for learners with severe handicaps were indicated.

The mean Functionality Score for the 80 activities was 20.16 (with a possible minimum of 0 and maximum of 32). Activities with Functionality Scores higher than 20.16 had significantly higher levels of Choice-fostering Scores than activities with Functionality Scores lower than 20.16 at $t(40) = 1.94$, $p < .05$. No other choice variables were found to significantly vary by the categorized Functionality Score. No significant difference was found between curricular domains and a teacher's inclusion of choice at $p < .05$.

Activities with low-range Student Affect Scores had significantly lower levels of Total Choice, Choice-programming and Choice-fostering Scores. Activities with medium-range Student Affect Scores had this same set of choice scores that were significantly higher than choice scores in the low-range Student Affect level, and were significantly lower than choice scores in the high-range Student Affect level. High-range Student Affect Scores had significantly higher levels of the same choice scores. An analysis of variance was performed between the three Student Affect Score ranges and each choice score. For the Total Choice Score, this significance was shown at $F(2,73) = 6.06$, $p = .004$. For the Choice-programming Score, significance was shown at $F(2,75) = 6.77$, $p = .002$. For the

Choice-fostering Score, significance was shown at $F(2,73) = 13.51, p = .00$. No significant difference was found in the Choice-data Score at $p < .05$.

Other findings in this study showed that the Community domain differed significantly by Functionality Score at $F(3,76) = 5.566, p = .002$. All other domains examined did not significantly differ by Functionality Score.

These results indicate that there is a relationship between choice inclusion in the curriculum and a teacher's judgement of student affect. Additionally, there are differences within curricular elements that may enhance choice inclusion in a student's educational program. The Total Choice Score mean of 2.59 (with a possible minimum of 0, maximum of 4) across all 80 activities indicates that there is great room for development in this area. Teachers are encouraged to capitalize on inherently choice-enhancing aspects within curriculum for greater inclusion of choice, to begin this task at the preschool level, and to consolidate efforts with educators and professionals in future settings for longitudinal planning of choice and decision-making.

THE INFLUENCE OF FUNCTIONAL ACTIVITIES
AND SPECIFIC CURRICULAR DOMAINS
ON CHOICE IN THE CURRICULUM
FOR LEARNERS WITH SEVERE HANDICAPS

by

MARY COMFORT DEBOER

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TO THE OFFICE OF GRADUATE STUDIES:

The members of the Committee approve the thesis
of Mary Comfort DeBoer presented July 7, 1988.

[REDACTED]

Joel Arick, Chairman

[REDACTED]

David Krug /

[REDACTED]

Kathleen Bowman-Wilgus

[REDACTED]

Gerald Guthrie

APPROVED:

[REDACTED]

Richard Sonnen, Chair, Department of Special Education

[REDACTED]

Bernard Ross, Vice Provost for Graduate Studies

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CHAPTER I

INTRODUCTION

Literature is addressing the issue of choice-making and promoting its use in curriculum for learners with severe handicaps on ethical and behavioral grounds. Professionals are calling for the longitudinal inclusion of choice into educational programs beginning at the pre-school level. As independence in normalized activities is a goal in current programs, it only seems reasonable that longitudinal goals for choice, decision-making and personal autonomy follow along. Strategies for the implementation of choice programming are emerging in the literature, yet there is little for teachers to work with in providing longitudinal planning.

CHAPTER II

STATEMENT OF THE PROBLEM

Ethical considerations and behavioral technology currently provide major influences on programs for learners with severe handicaps. The inclusion of choice within the curriculum is now being looked at seriously by educators and researchers as both an ethical issue and as a significant behavioral variable.

Choice is a continuum of self-expressive abilities (conscious or unconscious) in response to options encountered in daily living experiences. Choice is not just the action of selecting one preference over another, but a continuum of actions ranging from exposure and response to preferences, choice- and decision-making, problem-solving, self-initiation, and autonomy (Zeph, 1987; Guess, Benson and Slegel-Causey, 1985). As choice is a process, it is also learned through process: within normal development, experience becomes a vehicle for the development of choice and autonomy (Riley, 1984; Erikson, 1950).

The principle of normalization (Wolfensberger, 1972), challenges the world of social services to

promote a normalized lifestyle for individuals with disabilities, comparable to that which the majority of society experiences. Being able to make choices and decisions about one's life with regard to likes, dislikes, and past experiences is one generic component involved in a normalized lifestyle. Nirje's (1970) thoughts on "self determination" also reflect an ethical rationale for the inclusion of choice within the lives of individuals with handicaps. A standard that later developed, in much the same vein as normalization, is the "criterion of ultimate functioning" (Brown, Nietupski and Hamre-Nietupski, 1976). It raises expectations for levels of functioning to those experienced by the majority of citizens. Within these standards and expectations, choice- and decision-making abilities play a major role.

Choice is a major factor constituting quality of life (O'Brien, 1987; Zola, 1983). Choice allows for the expression of self and preferences in "small, everyday matters (e.g., what to eat or what to wear) and in large, life-defining matters (e.g., with whom to live or what sort of work to do)" (O'Brien, 1987).

Choice should be an integral component in the education of students with severe handicaps (Knowlton, Turnbull, Backus and Turnbull, 1988; Zeph, 1987; Guess,

Benson and Siegel-Causey, 1985; Shevin and Klein, 1984). Arguments for its inclusion focus on ethical aspects and past practices. The historical developments in special education have done little to promote choice-making in the curriculum. Deviant role perceptions of individuals with disabilities (Wolfensberger, 1972) brought about indiscriminate institutionalization. Later, developmental approaches focused on assessments and curricula aligned with normal sequences, which often times resulted in teaching skill-based, nonfunctional, age-inappropriate tasks (Guess and Noonan, 1982). Behavioral technology (Skinner 1938, 1972) entered the educational scene to bring great success in teaching rote skills, but strong controls within these teaching methods brought little success in allowing students to make choices, decisions, and to control their own lives (Guess and Siegel-Causey, 1985).

Strategies for the inclusion of choice into the curriculum for learners with severe handicaps are emerging in the literature (Goode and Gaddy, 1972; Wuerch and Voeltz, 1982; Shevin and Klein, 1984; Guess, Benson and Siegel-Causey, 1985; Guess and Helmstetter, 1986; Brown, Evans, Weed and Owen, 1987; Zeph, 1987). These strategies may look at individual levels of choice within a continuum, or may provide a model that

includes choice. These strategies may provide teachers of students with severe handicaps a structure for implementing choice programming.

The inclusion of choice in the curriculum can be a variable that affects students' performance and behavior (Guess, Benson and Siegel-Causey, 1985). Studies have shown that when choice has been included in activities, performance and social climate has been positively impacted (Dattilo and Rusch, 1985; Peck, 1985).

There is a need for the inclusion of choice in the curriculum, as expressed in the literature, and models for its inclusion are emerging. Presently there are limited materials and guidelines available for teachers to use in longitudinal choice programming. Until a framework or structure emerges, teachers must rely on existing literature or their own personal philosophies and instincts. Are there elements within existing curricular programs that inherently promote or include choice-making? Do functional activities result in a greater amount of choice programming by teachers than do nonfunctional activities? Is there a difference in curricular domains as to the degree teachers program for choice? Does a teacher's impression of student affect improve in relationship to the degree of choice programming within an activity?

By looking at these questions, information may result that assists teachers or curriculum developers in capitalizing on particular elements as they consider longitudinal choice programming.

Null Hypotheses

1) There is no significant difference between functional activities and nonfunctional activities with regard to the degree that teachers program for choice.

2) There is no significant difference between activities in five specified curricular domains (social/sexual, community, recreation/leisure, vocational, domestic/self-care) with regard to the degree that teachers program for choice.

3) There is no significant difference between teacher judgement of student affect and degree of programming for choice within activities.

Operational Definitions

For the purpose of this study, choice is defined as a continuum of self-expressive abilities (conscious or unconscious) in response to options encountered in daily living experiences. This continuum includes exposure and response to preferences, choice- and decision-making, problem-solving, self-initiation, and autonomy.

The terms functional activities and nonfunctional activities are used in this study. Criteria for determining the functionality of an activity rests on the following points (Brush and Otos, 1988):

1. The activity is performed by nonhandicapped students of like age.
2. The activity will allow the student to be more independent.
3. The activity will allow the student to function in a less restrictive environment.
4. The activity is necessary for medical and physical reasons.
5. The activity facilitates peer interactions.
6. The activity can be used in current and subsequent environments.
7. If the student does not perform the activity, someone else will have to do it.

Curricular domain refers to an area of study in the curriculum for learners with severe handicaps. The five curricular domains used in this study are: social/sexual, recreation/leisure, community, vocational, and domestic.

Student affect is another term requiring definition in this study. This combined term refers to being alert, responsive and involved in an activity, while also displaying an observable level of enjoyment.

CHAPTER III

REVIEW OF THE LITERATURE

Selecting...considering...preferring...deciding: these are some of the definitive words for choice, referred to in Webster's Ninth New Collegiate Dictionary (1983). These are also components within the range of the human ability known as choice that are receiving attention from particular authors for inclusion in the educational curriculum for severely handicapped learners (Shevin and Klein, 1984; Guess, Benson and Siegel-Causey, 1985; Houghton, Bronicki and Guess, 1987). Ethical viewpoints and its interest as a significant behavioral variable supercede this interest in choice.

Ethical Aspects

How is choice important within human development? Erikson (1950), suggests that the beginnings of autonomy develop around the ages of 2 to 3 in the normal child; this is a time of exploration and a basic sense of self-direction. Riley (1984), sees opportunities for choice-making as critical to a child's development:

It is the accumulation of such experiences (that) will influence the development of his character.... Practice in the process of choosing is a must, with the options being in keeping with the age and ability of each child. When children are given practice in choosing, the chances are good that they will develop decision-making ability, insight, flexibility, and the imagination to cope with the loftier choices to come later (p. 8).

Over fifteen years ago, Wolf Wolfensberger (1972) presented the social services community with a principle that outlined philosophical standards for lifestyle planning of the severely handicapped. Today, the "principle of normalization" has become an umbrella term used by many service providers, including special educators. The standards embraced in this principle are guided by what the normal citizen experiences, not only in housing, work, and leisure, but also in daily rhythms, relationships, sexuality, and choices to be made.

Thoughts presented by Nirje (1970) on "self-determination" reflect an ethical rationale for the inclusion of "choice" within the lives of our handicapped citizens. He says:

One major facet of the normalization principle is to create conditions through which a handicapped person experiences the normal respect to which any human being is entitled. Thus the choices, wishes, desires, and aspirations of a handicapped person have to be taken into consideration as much as possible in actions affecting him. To assert oneself with one's family, friends, neighbors, co-workers, other people, or vis-a-vis an agency is difficult for many persons. It is especially difficult for someone who has a disability or is

otherwise perceived as devalued. But in the end, even the impaired person has to manage as a distinct individual, and thus has his identity defined to himself and to others through the circumstances and conditions of his existence. Thus, the road to self-determination is indeed both difficult and all-important for a person who is impaired (p. 177).

A philosophically similar message was addressed to the educational community by Brown, Nietupski and Hamre-Nietupski (1976). The "criterion of ultimate functioning" was set as a standard for program development in special education, focusing on the development of

a cluster of factors that each person must possess in order to function as productively and independently as possible in socially, vocationally, and domestically integrated adult community environments (p. 8).

A functional curriculum, teaching functional and age-appropriate routines and skills that will be required in current and future environments has become the mode of operation towards this criterion within educational settings (Williams, Brown and Certo, 1975; Brown, Falvey, Vincent, Kaye, Johnson, Ferrara-Parrish and Gruenwald, 1980). This "top down" strategy has as its goal quality, independent, adult living.

Using the principles of normalization, self-determination and the criterion of ultimate functioning as guidelines for educational practices and social services, the broader perspective points to them as

factors that measure quality of life. O'Brien (1987) addresses five lifestyle components that constitute quality of life: community presence, choice, competence, respect, and community participation. Within this reference, choice is the experience of autonomy in both "small, everyday matters (e.g., what to eat or what to wear) and in large, life-defining matters (e.g., with whom to live or what sort of work to do)" (p. 177). Choice gives people with severe handicaps an identity, an active role, and a voice, all of which will increase their significance in life.

With regard to quality of life, Zola (1983) looks at choice as a measure of independence:

We in the movement would argue that independence cannot be measured by the mundane physical tasks we can do but by the personal and economic decisions we make. It is not the quantity of tasks we can perform without assistance that matters but the quality of life we can live without help. (p.347)

The Inclusion of Choice in Educational Programs

References to choice as an integral component in the education of students with severe handicaps is being supported in professional literature. Knowlton, Turnbull, Backus and Turnbull (1988) promote a longitudinal curriculum for decision-making. With reference to adult transition, they argue that the primary aspect of this process involves the increase in decision-making about one's life. They provide a

framework for looking at how an individual makes lifestyle choices by identifying three levels of consent: direct, concurrent and substitute. They argue that adolescents and adults should be provided with increasing opportunities for direct consent. These authors make recommendations toward the inclusion of teaching decision-making in the curriculum. Those significant to this topic are the following:

1. Study instructional programs that have successfully taught people with varying degrees of mental retardation to engage successfully in decisionmaking, and identify the critical variables associated with the intervention and outcomes in the lives of people with mental retardation.

2. Develop assessment tools to identify one's current skills related to decisionmaking and to make an informed decision on the amount of support needed to learn more refined decisionmaking skills.

3. Develop and field test curricula that focus on decisionmaking skills beginning at the preschool level and extending through adult education.

4. At a policy level, insist that every program purporting to prepare adolescents for transition include a component on decisionmaking skills, and require projects to evaluate the extent to which people with mental retardation participated in programming and placement decisions concerning employment, residential living, recreation, and personal relationships.

5. Require the participation of adolescents in their conferences to develop IEP's and individual transition plans and the participation of adults in individual program plans, and avoid assuming that parents and professionals can automatically speak for adolescents and adults in these situations.

6. When conversing with people with mental retardation, ask them questions more frequently and observe their nonverbal communication concerning their preferences, needs, and choices. Then, actively respond to their messages (p. 62-63).

This outline of suggestions is a strong call for the inclusion of choice into the curriculum for individuals with severe handicaps. Others have expressed similar concerns and philosophies. Zeph (1987) lists ideologies that have contributed to the inclusion of choice in the curriculum:

1. The major premise of the concept of choice-making in the curriculum is that all human beings are growth oriented and will seek to grow and develop under almost any circumstances.

2. The ways that people grow and develop are based upon their exposure to, awareness of and interaction with other people, places, and things.

3. An individual's efforts toward choice-making or initiating behavior are based upon three factors: (a) what the student has been exposed to and has become aware of; (b) responses to the student's efforts to interact with those people, places, and things; and (c) the student's ability to communicate choices to others.

4. Choice-making is a critical factor in the development of an interactive level of functioning. If choice-making is thwarted, individuals will be unable to function on an interactive level within any sphere of society - no matter how limited that sphere may be.

5. Choice-making can be taught to students with severe handicaps (p. 2-3).

Guess, Benson and Siegel-Causey (1985) promote choice programming beginning at the preschool level and continuing through the school years. Similarly, Shevin and Klein (1984) call for an integration of choice-making throughout the curriculum.

Early Perceptions. Arguments for the inclusion of choice consider not only the ethical aspects, but also the history of educational programs for learners

with severe handicaps. Until recently, choice has not been a consideration for inclusion.

Wolfensberger (1972) discusses the various deviant role perceptions that individuals with handicaps have historically been prone to: "menace", "object of pity", "holy innocent", "diseased organism", "eternal child" to name a few. These subhuman perceptions did not encourage or promote integration and independent functioning in the community; rather a picture of deviancy existed that encouraged segregation from the mainstream of society.

Nonfunctional/Developmental Approaches. Early educative approaches tended to be developmental in focus, looking at the normal course of developmental skills that the student had acquired, and those he had yet to learn. These skill-based approaches often times resulted in a curriculum of nonfunctional tasks (i.e., building a tower of blocks, etc.). These programs, run by what is known as the "bottom-up" approach, gained support for their systematic methods which did not previously exist for the severely handicapped. Criticism for this approach lies in the fact that individuals with severe handicaps don't necessarily follow normal developmental sequences because of motor or sensory involvement (Guess and Noonan, 1982). Additionally, many students reached a point in age of

impending adult life while still struggling developmentally at the 16-20 month level on the developmental charts; lo and behold, they were not prepared to deal with independent living. Built into this approach was the tendency for the developmental age of the student to overshadow the chronological age; thus, choice of materials and activities to be used in teaching often times coincided with this developmental level. This aspect of labeling a person with a developmental age encouraged treatment of and attitudes toward this person as being in a child-like, dependent state. Additionally, the activities and tasks tended to be nonfunctional in nature. Older and more capable people were necessary to make decisions for the severely handicapped individual about lifestyle, relationships, and other major life events.

Functional Skills Via Behavioral Analysis. In the last 20 years, applied behavioral analysis has played a major role in special education. B.F. Skinner introduced the world to the behaviorist school of thought (1938, 1972); his theories of acquiring behaviors through manipulation of antecedents and consequences were adopted by special educators. Behavioral techniques were found to be very successful in teaching hard to teach students, and became pervasive throughout the special education system as

best practices. Because of this success, these techniques became the driving force in special education (Guess, Benson and Siegel-Causey, 1985). Special educators and researchers were saying, "look what we can teach these kids to do", as complex, functional tasks were broken into minute parts and taught one by one. With these practices, there was a focus on student compliance with teacher control, rather than any sense of a student's individuality and self-expression. These programs more often than not produced students who could only perform splinter skills upon command, only with the appropriate cue, or by being given a reinforcer. It has been this heavy emphasis upon control that has been one prohibitory factor in the promotion of choice-making in the curriculum (Guess and Siegel-Causey, 1985; Houghton, Bronicki and Guess, 1987).

Educative Strategies for Choice. Strategies for the inclusion of choice into the curriculum for learners with severe handicaps are emerging in the literature. Zeph (1987) outlines a structure for the systematic provision of experiences within which to incorporate choice-making into programs. Zeph considers the four phases of experience as exposure, awareness, interaction, and mastery experiences. Zeph suggests interfacing the levels of choice (exposure to

preference, responsiveness to preference, decisionmaking and problem solving) with these experience phases for longitudinal choice programming.

Wuerch and Voeltz (1982) have included "choice training" into a leisure skill curriculum (Longitudinal Leisure Skills for Severely Handicapped Learners: The Ho'onanea Curriculum Component). Students are taught to play/interact with toys/materials; then choice training sessions with these trained activities provide systematic programming to teach students to make choices during free time.

Shevin and Klein (1984) suggest three contexts for fostering choice-making skills. These include:

(a) classroom activities designed to teach specific choice-making skills; (b) integration of choice-making opportunities throughout the student's day, across curricular domains; and (c) provision of opportunities, both inside and outside of school, for students to experience the benefits and consequences of choices they have made (p. 162).

These authors recommend that real-life experiences become the selected mode for fostering choice through specific curricular units. These experiences naturally occur when functional, age-appropriate objectives are intact.

In order to prepare for optimal learning with choice-making as a component, assessment becomes very important (Shevin and Klein, 1984). How are choices

Indicated by the student? How refined are the student's sensory discrimination skills? Within this framework, it is often times difficult and frustrating to interpret non-conventional communication.

The teacher should be sensitive to expression of student preference, to model the affective terminology ('grapefruit tastes sour'), to point out to the child that a choice has been made, and to elicit feedback from the child about whether she likes the choice (Shevin and Klein, 1984, p. 163).

In the provision of choice-making experiences throughout the day, these authors see a difficult balancing for the teacher: the development of student independence may often times contradict with professional responsibilities (safety, behavior, and parent priority aspects). These authors see the balance between choice and professional responsibility relying on the following:

(a) Incorporating student choice as an early step in the instructional process; (b) increasing the number of decisions related to a given activity which the student makes; (c) increasing the number of domains in which decisions are made; (d) raising the significance in terms of risk and long-term consequences of the choices which the student makes; and (e) clear communication with the student concerning areas of possible choice, and the limits within which choices can be made (p. 164).

Finally, they promote a fostering of choice-making by following through with logical or natural consequences. By allowing the child to live with his choice, the teacher provides the student with an opportunity to see the results of his actions.

To assist in interpreting non-conventional communication in the beginning stages of choice-making, Goode and Gaddy (1976) suggest a coding scale in recording communicative intent. This five-category continuum includes a range from highly preferred to highly dispreferred. Such records help to create "conscious rather than unconscious ideologies" (Wolfensberger, 1972, p. 10).

Guess, Benson and Siegel-Causey (1985) place importance in providing opportunities for establishing preferences and choices, and being responsive to possible communicative intentional behavior. Choices within a classroom setting can be made among activities, whether or not to engage in an activity, when to terminate an activity, means of accomplishing an activity, and choosing partners for the activity. Referring to higher levels of choice-making, these authors believe that contingent experiences become the vehicle for teaching, and they suggest that such experiences be provided or arranged for students with severe handicaps. These authors define contingent experiences as "environmental events, both positive and negative, that are directly affected and controlled by the individual" (p. 83).

Two functional curriculum models have evolved in recent years that provide for the inclusion of

choice-making as a program component. These are The Component Model of Functional Life Routines (Brown, Evans, Weed and Owen, 1987) and The Individualized Curriculum Sequencing Model (Guess and Helmstetter, 1986).

The Component Model of Functional Life Routines broadens the functional competencies that educators have historically held for individuals with severe handicaps. Rather than looking at the teaching of functional skills as the basis of the curriculum, Brown, et al, focuses on the teaching of functional life routines. The distinction between the two is that a routine begins with a natural cue and ends with a critical effect or outcome (Donnellan and Neel, 1986), while conventionally, a skill may consist only of a task analysis that focuses on the individual steps of a task, often times to the exclusion of the function and demands of the environment. Brown, et al, divides routines into three components: core components, extension components, and enrichment components. Core components can be considered those elements of the routine that are essential for completion of the task; they can be thought of as the task analysis. Extension components "extend the core to create a more comprehensive routine" (p. 121). They consist of initiation, preparation, monitoring quality, monitoring

tempo, problem solving, and termination. Enrichment components add meaning to the routine; they consist of communication, social interactions, and expression of choice or preference.

This model provides a systematic structure for adding quality and meaningfulness into the curriculum for individuals with severe handicaps. Thus, choice can consciously be integrated into all curricular routines, along with the other enrichment components of communication and social interaction.

The Individualized Curriculum Sequencing (ICS) Model (Guess and Helmstetter, 1986) utilizes the following in the instructional process:

(a) using distributed trial training; (b) relating skills to one another in clusters; (c) using multiple examples of materials, activities, locations, instructors, and learner responses; (d) providing learners with choices; (e) teaching in nonschool environments; (f) using functional materials and activities; (g) using natural cues and consequences; (h) scheduling learning at appropriate times; and (i) incorporating learner-initiated behavior (p. 256).

The above components are incorporated into a comprehensive program by the use of an events/skills matrix that integrates the components into daily events. It provides a model where the inclusion of choice into the curriculum can be a conscious decision and occur regularly throughout the daily schedule. One feature of this model is that can be applied in both

individual and group settings.

Choice and Student Affect. When opportunities are provided for students to express preferences, make choices, discover the consequences of their decisions, and feel their own sense of control emerge over the environment, what behavioral or affective changes occur? Guess, Benson and Siegel-Causey (1985) refer to "indices of self-satisfaction, perceived competence by others, self-initiated behavior, and success in community living" (p. 84) as suggested measures of impact of choice within a student's curriculum.

Research has shown that the inclusion of choice does affect behavior. Peck (1985) looked at student behavior and classroom climate when opportunities were increased for social control. Teachers were taught to increase choices for students to make, to respond more to student initiations, and to imitate communication and behavior. Results showed substantial increases in spontaneous social/communicative behavior when opportunities were increased for choice and social control. The following items were compared and rated during intervention in this study:

1. Students are involved and interested.
2. Students are expected to stick to the scheduled task.
3. Students have choices on some aspect of the activity.
4. The teacher enjoys carrying out this instruction.

5. The teacher is flexible in response requirements for students.

6. The teacher is more of an authority than a partner.

7. The instruction is likely to improve the student's ability to carry out social interactions.

8. The teacher is sometimes directed by the student.

9. The students enjoy these interactions.

10. These activities are likely to improve the students' ability to carry out cognitive/academic tasks.

11. Task performance is emphasized to the exclusion of any social interaction.

12. The teacher is responsive to student-initiated attempts to communicate (p. 191).

Peck sees that these items can provide informal information pertaining to the effectiveness of specific instructional activities, and an overall assessment of choice-fostering within an educational setting.

Dattilo and Rusch (1985) compared the behaviors of four children with severe handicaps during chosen leisure activities to the same activity with choice opportunities withheld. It was found that attending and manipulations increased during the chosen activity.

These issues involving choice-making in the curriculum for learners with severe handicaps bring about an examination of practices within current educational programs that may promote choice.

CHAPTER IV

METHODS

Subjects

Researcher. The researcher in this study was a female graduate student in a special education master's program, focusing on individuals with severe handicaps.

Study Subjects. Interviewees included 11 high school teachers of students with moderate to severe handicaps. Of these 11, one teacher was male, ten were female.

A total of 80 curricular activities were extracted from the above mentioned teacher interviews and rated by eight of the 11 teachers using the Choice/Performance Rating Scale. Of these 80 activities, 16 were in each of the following five domains: social/sexual, recreation/leisure, community, vocational, and domestic.

Reliability Subjects. One graduate student in special education completed the Functionality Rating Scale on 29 activities to determine inter-rater reliability.

Five educational assistants employed in classrooms with five of the above mentioned eight

teachers completed identical copies of the Choice/Performance Rating Scale to determine inter-rater reliability.

Instruments

Two instruments were utilized in this study: (a) the Functionality Rating Scale, for the purpose of establishing a functionality score for each curricular activity named in the interview, and (b) the Choice/Performance Rating Scale, for the purpose of determining a teacher's impressions of choice-fostering elements, curricular elements (choice programming and data on choice) and student affect with regard to each activity.

Functionality Rating Scale. The Functionality Rating Scale is a Likert scale used in this study by the researcher to determine functionality of an activity. (See Appendix A for a copy of this scale.) This scale was obtained from a packet of materials provided by Brush and Otos (1988) during a workshop describing the Individualized Curriculum Sequencing Model (Guess and Helmstetter, 1986). It was included in this packet to assist teachers in prioritizing activities by determining a Functionality Score for them. Its content aligns itself with issues involved

in "the criterion of ultimate functioning" (Brown, Nietupski and Hamre-Nietupski, 1976).

Once each activity was given a Functionality Score, it was necessary to determine reliability of that score by having another person re-employ the identical rating process. A graduate student in special education was selected for the reliability check, because of familiarity with curricular issues within special education. Within this task, the Pearson Correlation Coefficient for inter-rater reliability was .68.

As many of the activities were repeated by teachers (i.e., bowling, going to a fast food restaurant, etc.), inner-rater reliability was determined for consecutive scorings of twenty similar activities. Within this task, the Pearson Correlation Coefficient for inner-rater reliability was .91.

Choice/Performance Rating Scale. The Choice/Performance Rating Scale (see Appendix B for a copy of this scale) is a ten item Likert scale developed by the researcher that blends variables in four areas: choice-programming, choice-fostering, choice data keeping, and student affect. A description of these measures follows:

1. Choice-programming: three items (#4,7,9) ask information that is similarly included in special

education practices promoting assessment of current level of functioning and needed level of functioning in future environments. This mean score is referred to as the Choice-programming Score.

2. Choice-fostering: three items (#1,6,10) come from elements that denote fostering of choice-making and student initiations within educational programs (Peck, 1985). This mean score is referred to as the Choice-fostering Score.

3. Choice-data: two items (#2,8) look at level of record keeping regarding choice for a specified activity, reflecting Wolfensberger's (1972) call for "conscious rather than unconscious ideologies" (p. 10). This score is referred to as the Choice-data Score.

The mean of the above three scores are combined to create the Total Choice Score, reflecting the total degree that a teacher programs for choice. Another measure is included, referred to as the Student Affect Score. This consists of the mean of two items (#3,5) that look at a teacher's judgements of student affect with regard to observable behavior during an activity (Dunlap & Egel, 1982).

To establish reliability for each teacher's ratings on the Choice/Performance Rating Scale, they were asked at the time of the interview if an educational assistant in their classroom would be able

to fill out an identical rating scale. Ten of the 11 teachers replied affirmatively. The remaining teacher needed the educational assistant to assist her in filling out her rating scale because she (the teacher) was hired mid-year. This was the only case of the head teacher not independently filling out an entire Choice/Performance Rating Scale. Of the eight teachers who responded by returning the packet of Choice/Performance Rating Scales, five educational assistants similarly responded. Among these five settings, inter-rater reliability for the Total Choice Score was .82. Inter-rater reliability for the Student Affect Score was .72.

Procedures

Three regional, public education service districts having a combined total of 19 high school classrooms for students with moderate/severe handicaps were contacted. (See Appendix C for a copy of the letter to program supervisors.) Permission was given by program supervisors to directly contact the teachers for voluntary participation in the study. Letters were sent to each of the 19 teachers, and 11 of them responded with agreement. (See Appendix D for a copy of the letter to individual teachers.) These letters outlined their requirements as: (a) a 20 minute

interview, reviewing one randomly chosen IEP, and specifying activities used to teach to one annual goal in each of the following domains: social/sexual, recreation/leisure, community, vocational and domestic/self-care; and (b) completion of follow-up rating scales (Choice/Performance Rating Scale) applied to ten of the reported activities. Eleven teachers responded affirmatively to participation in the study. They were then contacted for the purpose of setting up an interview appointment.

At the beginning of each interview, the teacher was asked to obtain a class roster. (See Appendix E for the procedural checklist used by the researcher in the interview process.) Using a table of random numbers, one student was selected for a review of his/her IEP for purposes of this study.

The student's initials and age were written at the top of an interview worksheet and the worksheet was coded with a number for the school. It was also noted whether or not this student attended his IEP meeting this year, and if so, to what extent: direct consent, concurrent consent, or substitute consent (Knowlton, Turnbull, Backus and Turnbull, 1988).

The teacher was requested to go through this IEP and choose one annual goal for each of the following curricular domains: social/sexual, recreation/leisure,

community, vocational, and domestic/self-care. Each goal was recorded on the worksheet, and the teacher was asked to name all the activities he/she uses to teach to this goal. The same procedure was followed with the other four domains. All activities were listed under their associated goal.

The teacher was then shown a sample page of the ten page Choice/Performance Rating Scale he/she would receive in the mail. Each of the ten pages corresponded to one of the activities listed in the interview. Also shown briefly was a coversheet containing the operational definition of choice so a common frame of reference could be established among the teachers when completing the rating scales. (See Appendix F for a copy of this coversheet.) The teacher was then asked if an educational assistant in the classroom would be willing to fill out an identical scale for the purposes of inter-rater reliability. This was noted on the worksheet.

Following the interview, each activity named was assigned a Functionality Score by the researcher. After all activities were rated, one highest scoring activity and one lowest scoring activity in each of the five specified domains were selected to attach to the Choice/Performance Rating Scale (for a total of ten activities). Each of the ten scales contained the

following information: student's initials, curricular domain, annual goal, and activity. The cover sheet was attached, and the whole packet was coded and sent to the teacher. An identical form, but with appropriate coding, was sent to the educational assistant if he/she was participating.

As the researcher reviewed the compiled list of activities, it was discovered that a teacher's determination of an activity's domain varied greatly. For example, one teacher may consider grocery shopping to be in the domestic domain, while another teacher may consider it to be in the community domain. The researcher decided it was necessary to recategorize the list of 80 activities into new domain categories. The 80 activities were recategorized by the following criteria:

1. All work-related, vocational and pre-vocational activities were determined to be in the Vocational domain.

2. Of the remaining activities, those that involved students in recreational or leisure activities were determined to be in the Recreation/Leisure domain.

3. Of the remaining activities, those that occurred in the community were determined to be in the Community domain.

4. The remaining activities were determined to be in the Personal Management domain. These activities tended to be ones that previously had been listed in the social/sexual and domestic domain. Personal Management became a more convenient and definitive domain.

This new domain categorization resulted in 34 activities in the Personal Management domain, 16 activities in the Vocational domain, 18 activities in the Community domain, and 12 activities in the Recreation/Leisure domain.

When results were received by the researcher in the mail, scores from all Choice/Performance Rating Scales were recorded and prepared for statistical analysis.

CHAPTER V

RESULTS

Of the 80 activities rated by the eight teachers on the Choice/Performance Rating Scale, 76 were rated completely on all ten choice/performance variables. Four activities were incompletely rated, but because statistical analysis used combinations of variables within each activity, scores may have been available for inclusion. Because of this, the total number of activities varies between 76 and 79 across the study. Missing data were always accounted for in the statistical analysis. All statistical operations were performed with SYSTAT: The System for Statistics (Wilkinson, 1987).

Descriptive Data

Functional Ratings of Activities. The Functionality Score mean for the 80 activities was 20.16 with a standard deviation of 6.9. The Functionality Rating Scale had a possible low to high score of zero to 32 respectively. A distribution of Functionality Scores across all activities is shown in Figure 1.

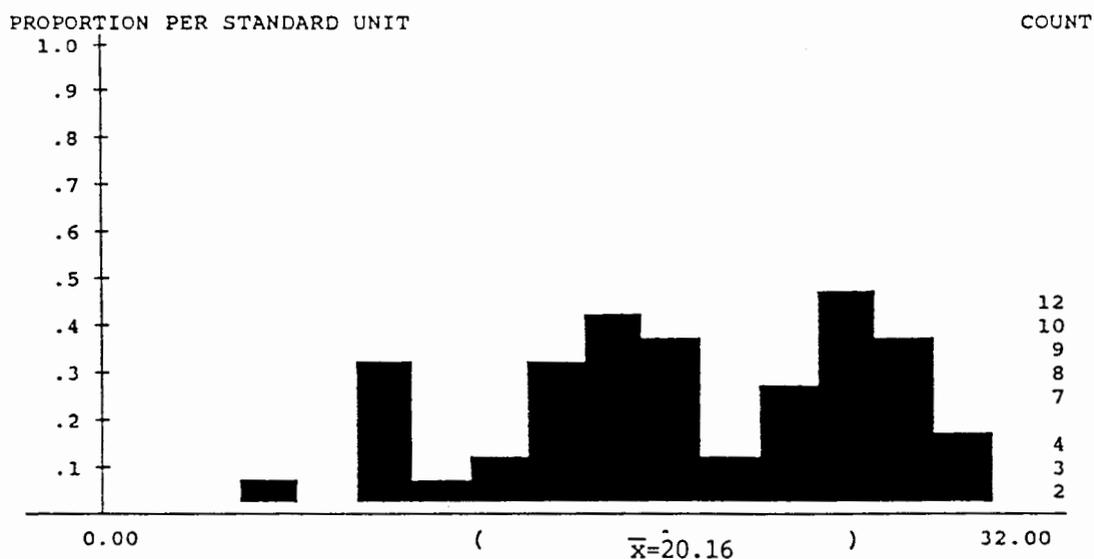


Figure 1. Distribution of Functionality Scores across all activities.

Total Choice Score. The Total Choice Score was derived from the mean score of eight Likert scale scores (Likert ratings of 0-4, 4 being high) on the Choice/Performance Rating Scale. The Total Choice Score mean across activities (n=76) and all teachers was 2.590 with a standard deviation of 0.93. A display of Total Choice Score distribution across all activities is shown in Figure 2.

Sub-scores that combine to make up the Total Choice Score are defined by the following categories:
1)Choice-programming, 2)Choice-fostering, and
3)Choice-data. Comparative data for each of the three sub-score/categories follows:

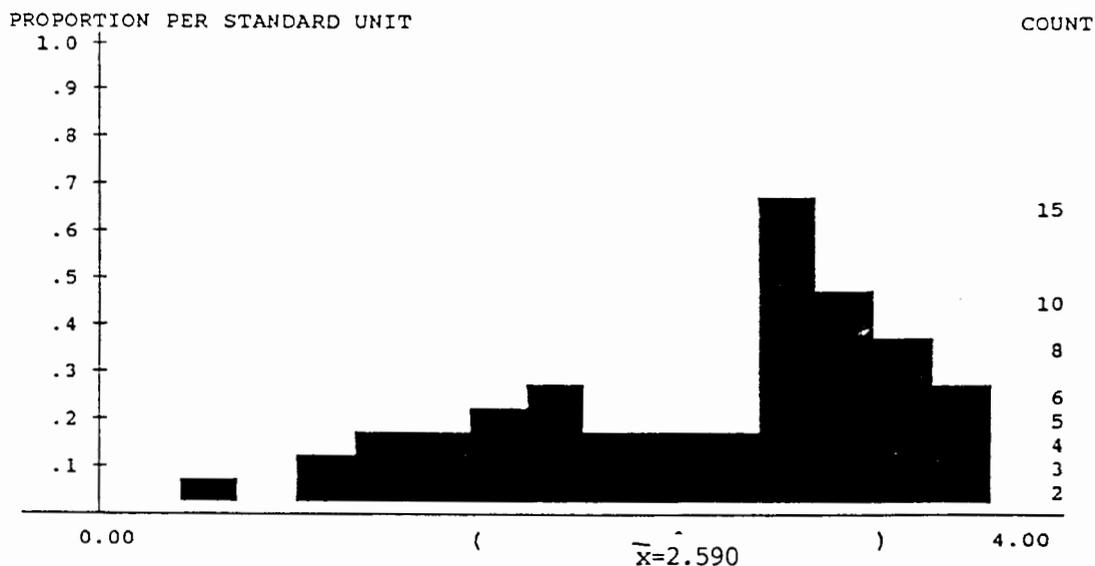


Figure 2. Distribution of Total Choice Scores across all activities.

The Choice-programming Score mean for all activities ($n=78$) across all eight teachers was 2.748 with a standard deviation of 1.194. For each activity this consisted of the mean of three Likert items on the Choice/Performance Rating Scale.

The Choice-fostering Score mean for all activities ($n=76$) across all eight teachers was 3.055 with a standard deviation of 0.75. For each activity this consisted of the mean of three Likert items on the Choice/Performance Rating Scale.

The Choice-data Score mean for all activities ($n=78$) across all eight teachers was 1.686 with a standard deviation of 1.249. For each activity this

consisted of the mean of two Likert items on the Choice/Performance Rating Scale.

Figure 3 displays a comparison between these three subscores showing distribution of teacher ratings across all activities.

Student Affect Score. A total of 77 Student Affect Scores corresponding to individual activities were placed into low, medium, and high-range categories. The low-range category indicated a low level of affect in a student, while the high-range category indicated a positive affect level in a student. Twenty-two activities were placed in the low range of performance/behavior, with scores from 0 to 2.500 in value ($\bar{x} = 2.068$; S.D. = 0.355). Thirty-three activities were placed in the medium range, with scores from 3.000 to 3.500 in value ($\bar{x} = 3.197$; S.D. = 0.248). Twenty-two activities were placed in the high range, with scores from 3.750 to 4.000 in value ($\bar{x} = 3.989$; S.D. = 0.053). The Student Affect Score mean across all activities was 3.101 with a standard deviation of 0.776.

Comparative Data

Null Hypothesis #1. This hypothesis states that there is no significant difference between functional

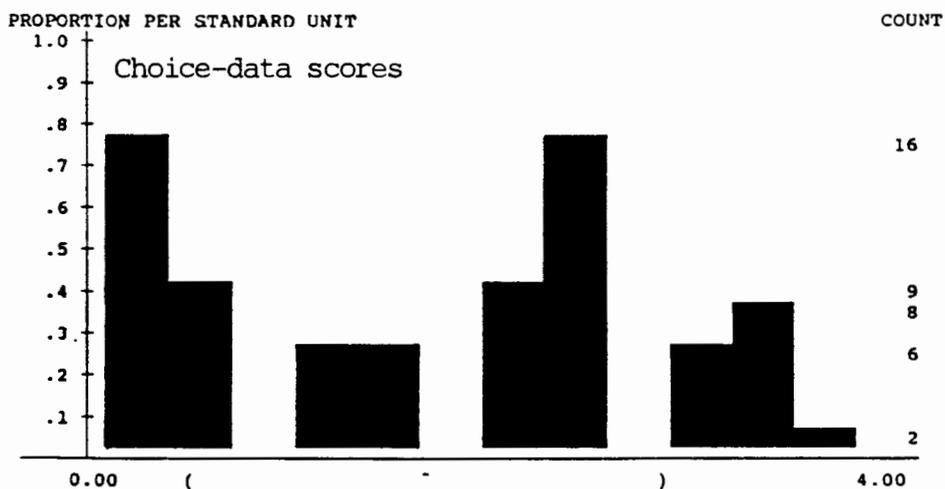
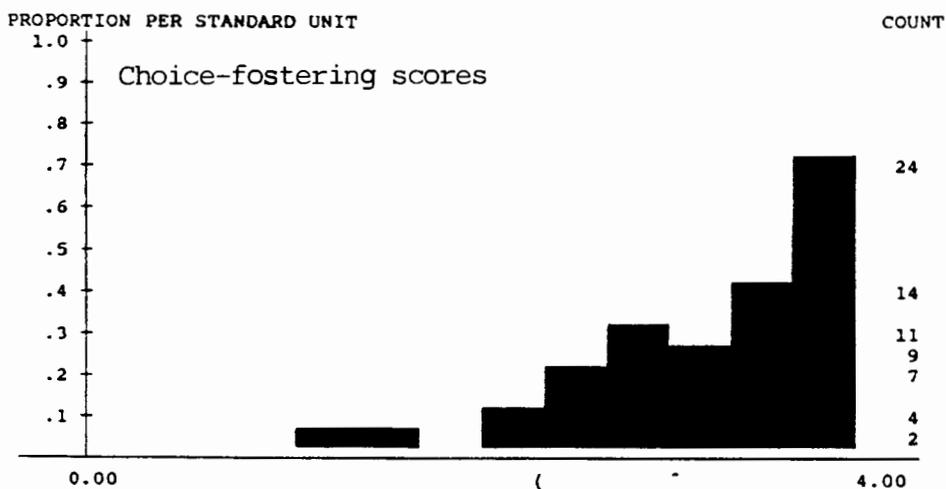
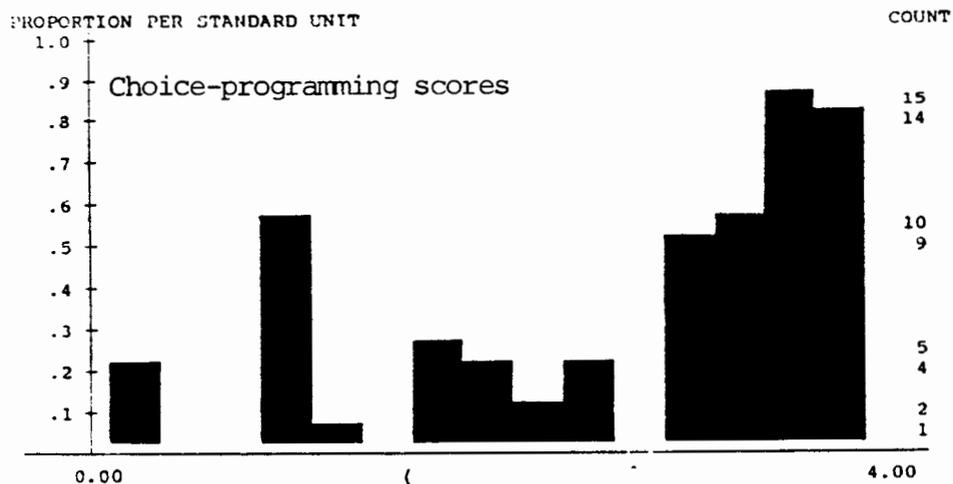


Figure 3. Distribution comparison between Choice-programming, Choice-fostering, and Choice-data scores across all activities.

activities and nonfunctional activities with regard to the degree that teachers program for choice.

A comparison was made between activities with a Functionality Score lower than 20.16 (labeled "nonfunctional") and activities with a Functionality Score higher than 20.16 (labeled "functional") for each of the grouped Choice Scores (Total Choice, Choice-programming, Choice-fostering, and Choice-data).

Activities with Functionality Scores higher than 20.16 had significantly higher levels of Choice-fostering Scores than activities with Functionality Scores lower than 20.16 at $t(40) = 1.94, p < .05$. Figure 4 shows a comparison between Choice-fostering Score distribution in functional activities and nonfunctional activities. No other choice variables were found to significantly vary by the categorized Functionality Score.

Functional activities ($\bar{x} > 20.16$) had a mean Total Choice Score of 2.701 with a standard deviation of 0.989. Nonfunctional activities ($\bar{x} < 20.16$) had a mean Total Choice Score of 2.479 with a standard deviation of 0.885.

Null Hypothesis #2. This hypothesis states that there is no significant difference in activities between the five specified curricular domains (social/sexual, community, recreation/leisure,

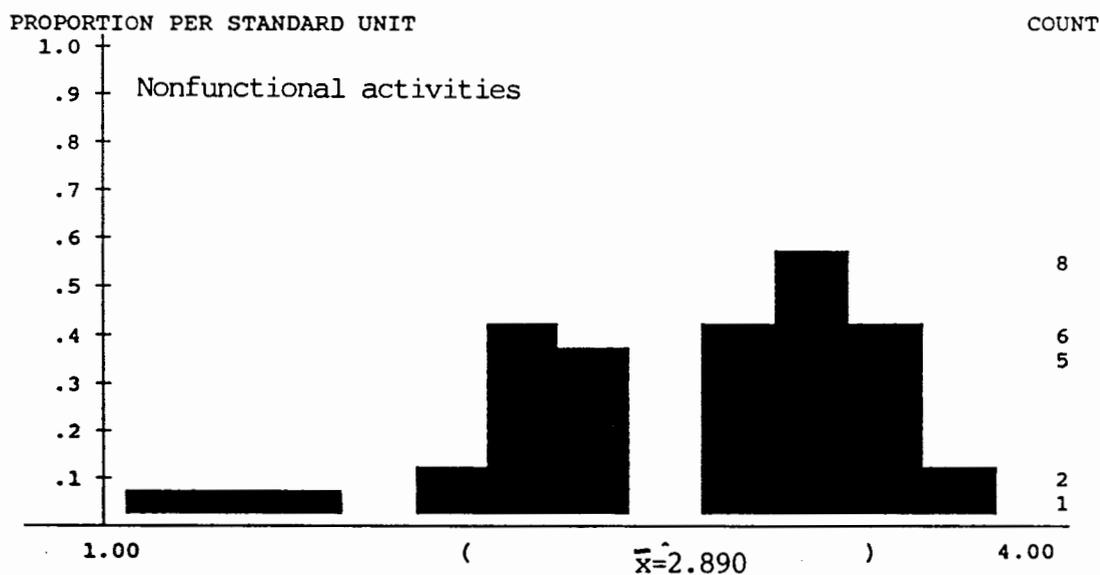
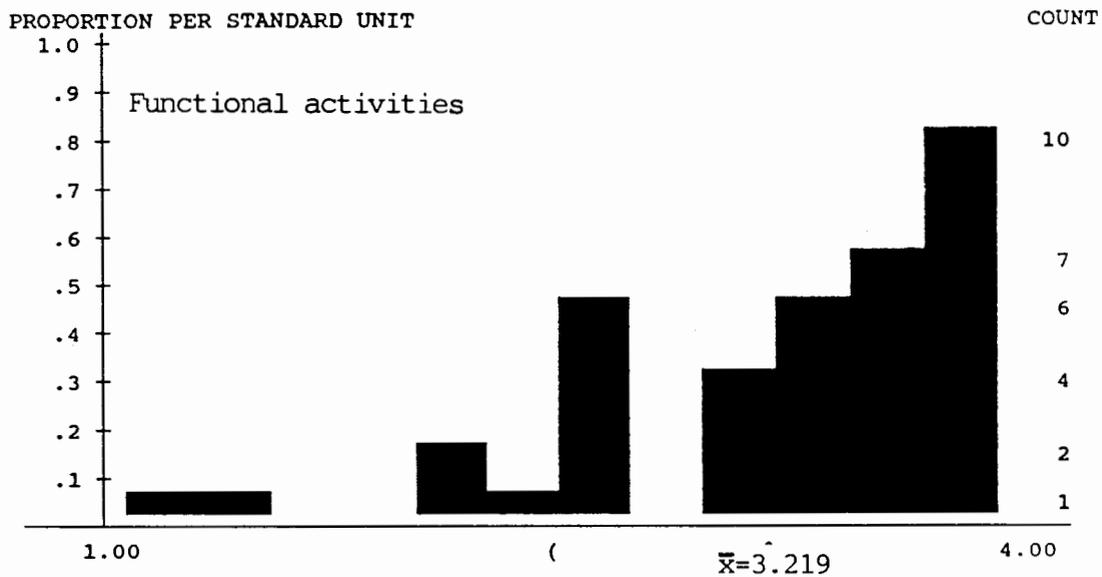


Figure 4. Distribution comparison between Choice-fostering Scores in functional activities and nonfunctional activities.

vocational, domestic/self-care) with regard to the degree that teachers program for choice.

As described earlier, new domain categories of Personal Management, Vocational, Community, and Recreation/Leisure were created in order that there would be consistency of criteria for belonging to a particular domain. An analysis of variance was used to test for significant differences between Choice Scores and domains. No grouped Choice Scores (Total Choice, Choice-programming, Choice-fostering, and Choice-data) were found to significantly vary by any domain at $p < .05$.

The Community domain showed a high Total Choice Score mean of 2.978 (S.D.= 0.873), followed by the domains of Recreation/Leisure ($\bar{x} = 2.635$, S.D.= 0.825), Personal Management ($\bar{x} = 2.482$, S.D.= 1.019), and lastly the Vocational domain with a mean Total Choice Score of 2.352 (S.D.=0.872). Figure 5 shows a comparison between Total Choice Score distribution across activities in each of the four specified domains.

Null Hypothesis #3. This hypothesis states that there is no significant difference between teacher judgement of student affect and degree of programming for choice.

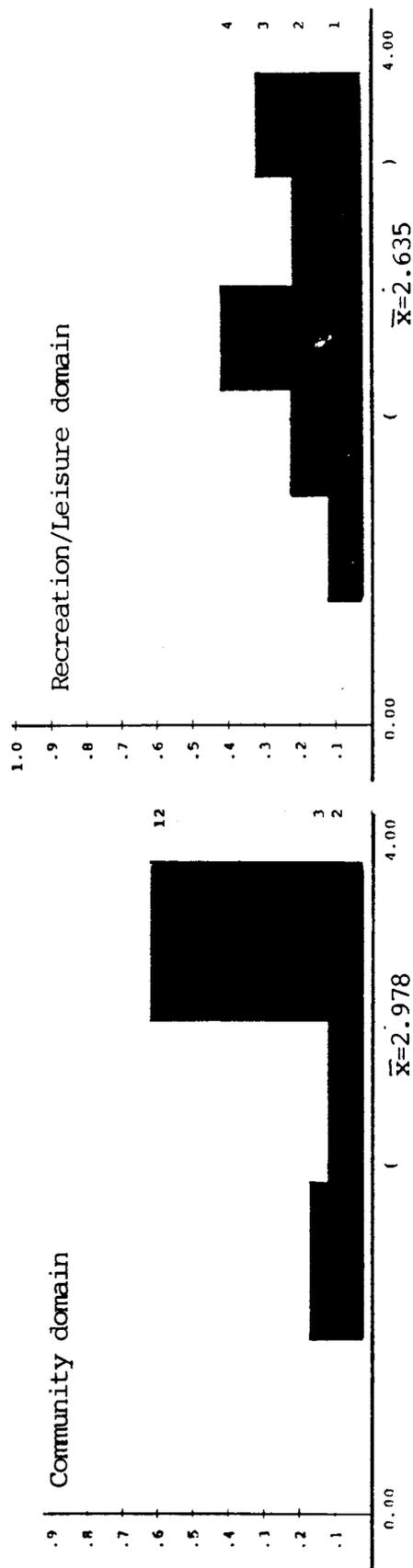
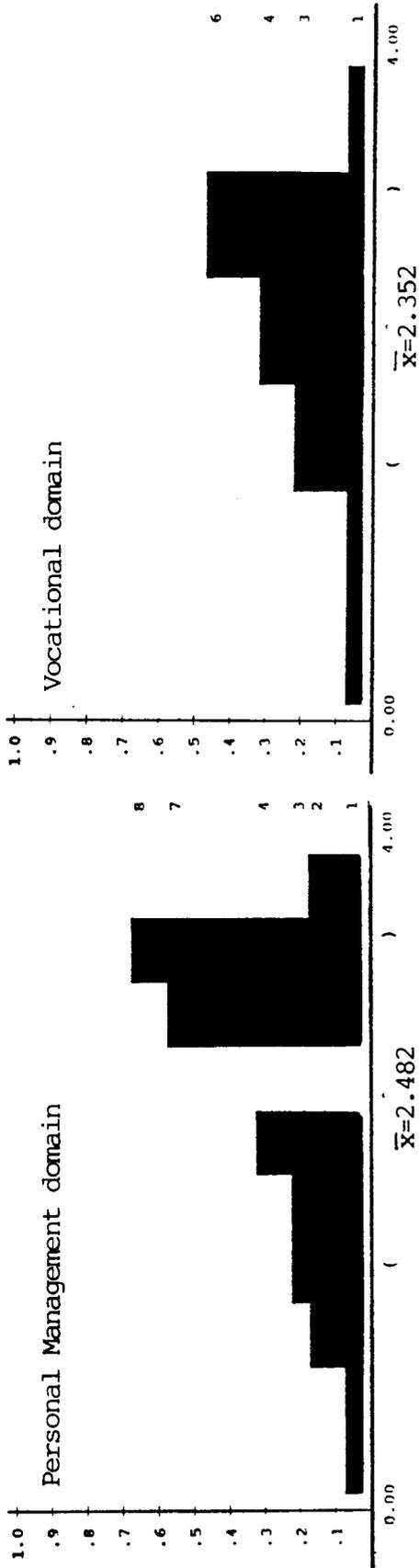


Figure 5. Distribution comparison between Total Choice Scores across activities in each of the four specified domains.

A comparison was made between teacher judgement of student affect (Student Affect Score) and each of the following choice scores: Total Choice, Choice-programming, Choice-fostering, and Choice-data.

Activities with low-range Student Affect Scores had significantly lower levels of Total Choice, Choice-programming and Choice-fostering Scores. Activities with medium-range Student Affect Scores had these same choice scores that were significantly higher than choice scores for low-range Student Affect level, and were significantly lower than choice scores in the high-range Student Affect level. High-range Student Affect Scores had significantly higher levels of the same set of scores. A summary of mean scores and standard deviations within each of the three Student Affect Score ranges is found in Table I. An analysis of variance was performed between the three Student Affect Score ranges and each Choice score. For the Total Choice Score, this significance was shown at $F(2,73) = 6.06, p = .004$. For the Choice-programming Score, significance was shown at $F(2,75) = 6.77, p = .002$. For the Choice-fostering Score, significance was shown at $F(2,73) = 13.51, p = .00$. No significance was found in the Choice-data Score at $p < .05$. Figure 6 shows a comparison between Total Choice Score distributions in low, medium, and high-

TABLE I

SUMMARY OF TOTAL CHOICE SCORES AND SUBSCORES
WITHIN LOW, MEDIUM, AND HIGH
STUDENT AFFECT RANGES

Student Affect Scores	Total Choice Score		Choice-Programming		Choice-Fostering		Choice-Data	
	\bar{x}	S.D.	\bar{x}	S.D.	\bar{x}	S.D.	\bar{x}	S.D.
LOW ($x = 2.068$ S.D. = 0.355)	2.168	1.032	2.250	1.301	2.522	0.790	1.625	1.253
MEDIUM ($x = 3.197$ S.D. = 0.248)	2.563	0.906	2.646	1.158	3.125	0.643	1.594	1.353
HIGH ($x = 3.989$ S.D. = 0.053)	3.092	0.625	3.349	0.772	3.532	0.470	1.886	1.112
	$F(2,73) = 6.06,$ $p = .004.$		$F(2,75) = 6.77,$ $p = .002.$		$F(2,73) = 13.51,$ $p = .00.$		$F(2,75) = .393,$ $p = ns.$	

range Student Affect Scores.

Other Findings

Functionality Score by Domain. A statistical comparison was made between mean Functionality Scores within individual domains. An analysis of variance showed that the Functionality Score of an activity varied significantly by domain at $F(3,76) = 5.566$, $p = .002$. A Duncan's post hoc analysis was performed on this data to see which domain or domains significantly differed. It was found that only the Community domain varied significantly, while the other three did not vary at $p < .05$. The Community domain showed a significantly higher mean Functionality score ($\bar{x} = 25.39$; S.D. = 4.50) than any of the other three domains. The Personal Management domain showed a Functionality Score mean of 19.47 (S.D. of 7.65), followed by the Vocational domain mean of 17.81 (S.D. of 7.04), and lastly, the Recreation/Leisure domain mean of 17.42 (S.D. of 3.19). Table II displays distribution of functional and nonfunctional activities within each of the four domains.

IEP Involvement. Each teacher was asked the extent of the student's involvement in their IEP meeting. For this there were four possibilities: no attendance, substitute involvement, concurrent

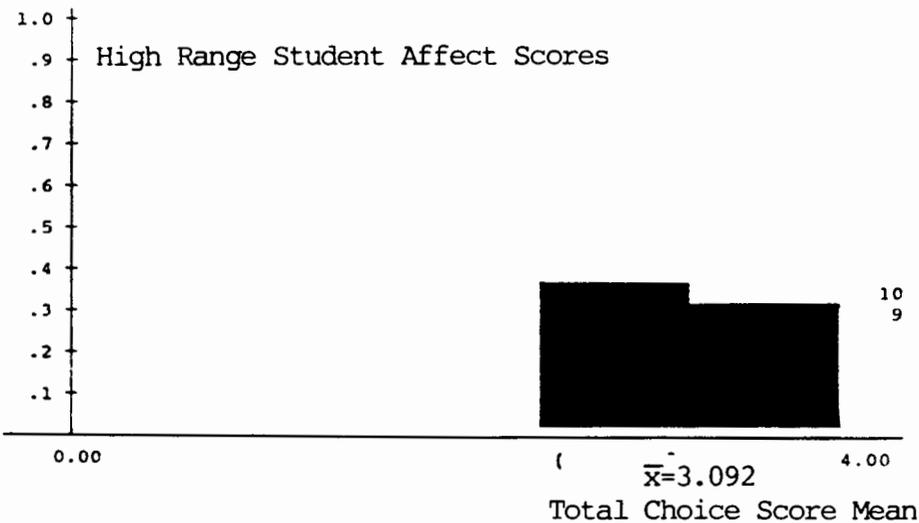
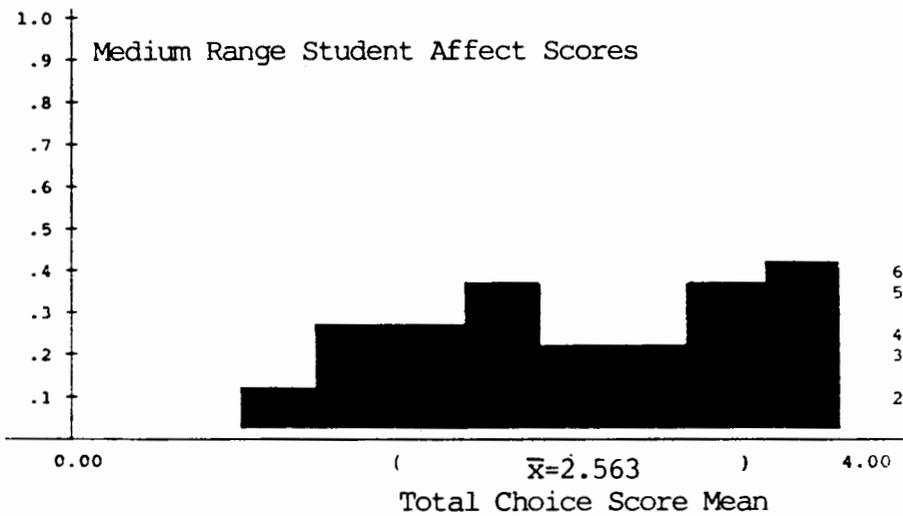
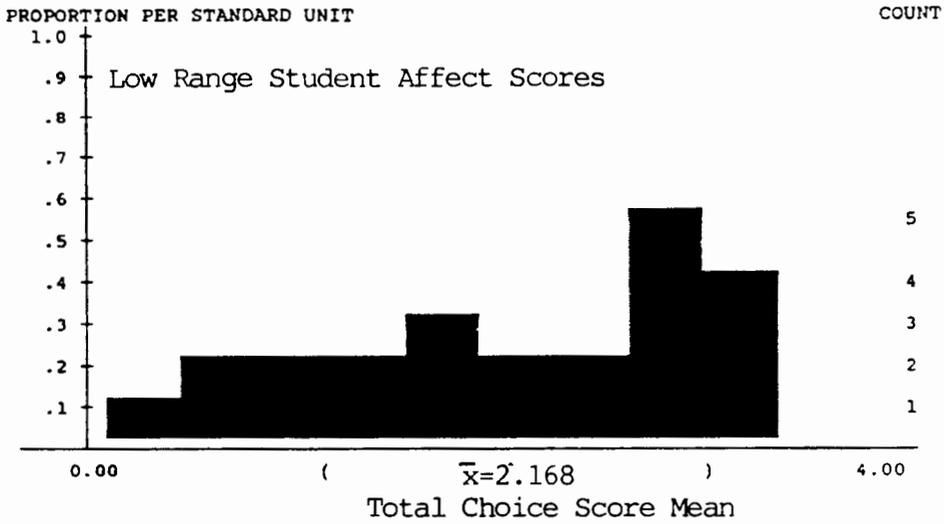


Figure 6. Distribution comparison between low, medium, and high range Student Affect Scores across Total Choice Scores.

TABLE II

FREQUENCY DISTRIBUTION OF FUNCTIONAL
AND NONFUNCTIONAL ACTIVITIES
IN CURRICULAR DOMAINS

	Total Activities	Functional Activities	Nonfunctional Activities
Personal Management	34	18	16
Vocational	16	6	10
Community	18	14	4
Recreation/ Leisure	12	2	10

involvement, or direct involvement (Knowlton, et al, 1988). Among the eight high school students (whose eight IEP's were reviewed) it was found that four students (50%) did not attend their IEP meetings. Three students (37.5%) had substitute involvement, while one student (12.5%) had concurrent involvement.

An analysis of variance was not able to be used with this data with relation to Total Choice Score because there were not enough subjects in each IEP involvement level. Student's with no IEP attendance had a Total Choice Score mean of 2.759 with a standard deviation of 0.804. Students with substitute IEP involvement showed a Total Choice Score mean of 2.056 with a standard deviation of 0.971. Students with

concurrent IEP involvement had a Total Choice Score mean of 3.436 with a standard deviation of 0.356.

CHAPTER VI

SUMMARY

Summary of Subjects and Methods

Literature is calling for the inclusion of choice into the curriculum for learners with severe handicaps, yet there are limited materials and guidelines for teachers to work with in longitudinal planning for choice. The purpose of this study was to examine curricular elements in a sampling of existing programs and the influence they may have on choice programming. Three questions were asked within this analysis: (a) What relationship, if any, exists between the functionality of an activity and choice? (b) What relationship, if any, exists between a particular instructional domain and choice?, and (c) What relationship, if any, exists between choice programming and a teacher's judgement of student affect?

Eleven teachers in high school classrooms for students with moderate/severe handicaps were interviewed to compile a list of activities used for teaching to goals in these programs. Eight of the 11 teachers rated 80 of these activities on choice and performance variables, using the Choice/Performance

Rating Scale. Based on the questions analyzed in this study and the information derived from teachers' ratings of these variables, several findings about choice in the curriculum for learners with severe handicaps were indicated.

Summary of Results

The Total Choice Score mean of 2.59 across all 80 activities indicates room for growth in the area of choice curriculum development. As mean scores were based on teachers' perceptions, this mid-range score does not suggest an overall high level of personal use or confidence in choice inclusion. We do not know whether teachers have attitudes that prevent choice inclusion or if they need greater curricular structure, but further research could look at these and other possible controlling variables.

Functional Activities and Choice. With regard to functional and nonfunctional activities as rated by the Functionality Rating Scale and the degree that teachers report their curricular inclusion of choice, mean Choice-fostering Scores were significantly higher for functional activities than for nonfunctional activities. This was the only sub-score that varied significantly with regard to functional activities. This data may have shown more significance if

definitions were provided for the Functionality Rating Scale. The moderate level of inter-rater reliability of .678 shows that there was generous room for subjectivity in ratings. An establishment of criterion referenced validity for the Choice Performance Rating Scale would also increase significance for this data.

Despite the lack of significance across all choice score categories, the difference in mean Choice-fostering Scores should be an indication that curriculum for learners with severe handicaps should be functionally based. Although there has been a call for functional, age-appropriate, longitudinal activities for over a decade (Brown, et al, 1976; Brown, et al, 1980), perspective shifts in rationale for a functional curriculum can do no harm. Teachers looking to increase choice in their programs can begin by asking themselves if a functional curriculum is intact. The Functionality Rating Scale used in this study can be used as a resource for determining functionality of an activity and prioritizing its inclusion in an educational program.

Curricular Domains and Choice. Although the results did not significantly differ between curricular domains with regard to the degree of choice, mean scores for individual domains show them to be arranged in a hierarchy from high choice to low choice: the

Community domain is at the high end, followed by Recreation/Leisure, Personal Management, and the Vocational domain at the low end. The Community domain is logically a natural for its high ranking Total Choice mean status, for Community provides a wealth of real life experiences with real life choices and decisions to be made. Recreation/Leisure activities seem to provide an inherent factor of flexibility and fun which gives them an additional motivational advantage for any kind of programming. On the low end of the spectrum for Total Choice Scores are the Personal Management and Vocational domains. Granted, these domains may have an inherent factor of lack of flexibility, but these lower scores should be an indication that greater awareness needs to be given to choice possibilities, and teachers will need to actively include them into programs. Teachers looking to imbue choice into their curriculum may look toward the Community and Recreation/Leisure domains for the greatest assistance with the inherency of choice. By using educational models such as the Individualized Curriculum Sequencing Model (Helmstetter and Guess, 1986) and the Functional Skills Component Model (Brown, et al, 1987), or an existing curriculum such as The Ho'onanea Curriculum Component (Wuerch and Voeltz,

1982), further structure may be given to the inclusion of choice.

Despite lack of significance, it should be observed that there are definite differences between domains with reference to choice inclusion. Individualized considerations for choice will need to be made from domain to domain.

Student Affect and Choice. Information from this analysis found Student Affect Scores to significantly increase with increased Total Choice Scores. Two of the three subscores within the Total Choice Score increased significantly: Choice-programming and Choice-fostering Scores. Total-data Scores did not differ significantly from Student Affect Scores which should provide us with information that data-keeping is not an indicator of choice. It may help us to be aware of communicative intent (Wolfensberger, 1972) but does not act as a choice variable in itself.

This data provides educators with important information verifying the relationship between student affect and choice. As this information is based on teachers' perceptions, we do not know whether affect or choice is the driving force. Does a happy, cooperative student attitude encourage a teacher to provide more choice, or does choice inclusion produce students with an increased positive affect? To this question we have

no answers, but can look to further research for analysis of the causal relationship.

Functionality Score by Domain. Data was available to look at Functionality Score by individualized domain. The Community domain was significantly higher in Functionality Score mean than the other three specified domains. With Community's high ranking in both Total Choice Score and Functionality Score, this should be an additional indicator that a student's Community involvement should be a natural foundation for longitudinal choice programming.

IEP Involvement. Information regarding a student's involvement at their IEP meetings indicates that Total Choice Scores were highest with concurrent IEP involvement, and lowest with substitute involvement. Students who did not attend their IEP meetings showed mid-range Total Choice Scores. These results indicate that the worst situation for a student's choice enhancement is to have substitute involvement with regard to IEP decisions. It is better choice-wise for a student not to attend the IEP meeting at all than to have substitute involvement. Looking at the better case scenario, concurrent involvement shows highest Total Choice Score means. Higher involvement in decision-making processes should be goals for

students preparing for independence.

Additional Educational Implications

With limited materials and guidelines for teachers to work with in longitudinally planning for choice inclusion in the curriculum, the preceding results give educators much food for thought when looking at curricular elements that promote choice. This study and its results encourages educators to scrutinize the programs they provide for their students. Are activities functional? Are there domains that inherently increase functional activities? What domains might encourage choice and decision-making abilities? What domains will take more active planning for choice inclusion? What level of IEP involvement should a student have with regard to choice and decision-making abilities? How might increasing choices improve student affect? How might an increase in positive affect increase choice inclusion? Increasing choices and opportunities for choice should be considered within all behavior plans as "a positive intervention strategy when working with students with severe handicaps who demonstrate challenging behavior" (Zeph, 1987, p. 2).

Not only is it important for educators to take a close look at current programs, but to do so as early

as possible in a student's educational career (Shevin and Klein, 1984; Guess, et al, 1985; Zeph, 1987, Knowlton, et al, 1988). If educators are to take students from point A to point B as efficiently and thoroughly as possible, many opportunities for choice will need to be imbedded and planned for along the entire path. Transitioning students from one setting to the next also takes on increasing importance, just as it does in any type of longitudinal planning.

Study Limitations

The primary limitation with this study was with lack of criterion-referenced validity in the Choice/Performance Rating Scale. As there is no available scale for measuring choice in an educational setting, the researcher compiled variables that authors have considered in the promotion of choice. Despite this presence of content validity, there still was no assurance or measure that these variables measured choice.

Other limitations included:

1. Both rating scales, the Functionality Rating Scale and the Choice/Performance Rating Scale, left generous room for rater subjectivity. Clearer definitions for variables need to be provided within these ratings.

2. Although 80 activities were rated, this only involved eight individual teacher ratings, thus limiting input into the data set.

3. The element of a teacher's personal attitudes toward choice inclusion needs to be considered as a control variable in future studies.

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APPENDIX A

FUNCTIONALITY RATING SCALE

Domain:	0 = No/Never				
Goal:	1 = Rarely				
Activity:	2 = Sometimes/Maybe				
	3 = Usually				
	4 = Yes/Always				
1. Is the activity one performed by nonhandicapped students of like age?	0	1	2	3	4
2. Will the activity allow the student to be more independent?	0	1	2	3	4
3. Will the activity allow the student to function in a less restrictive environment?	0	1	2	3	4
4. Is the activity necessary for medical and physical reasons?	0	1	2	3	4
5. Will the activity facilitate peer interactions?	0	1	2	3	4
6. Can the activity be used in current environments?	0	1	2	3	4
7. Will the activity be required in subsequent environments?	0	1	2	3	4
8. If the student does not perform the activity, will someone else have to do it?	0	1	2	3	4

APPENDIX B

CHOICE/PERFORMANCE RATING SCALE

Student's initials: 0 = No/Never
Domain: 1 = Rarely
Goal: 2 = Sometimes/
Maybe
Activity: 3 = Usually
4 = Yes/Always

1. Student-initiated attempts to communicate during this activity are responded to: 0 1 2 3 4

2. Program data is kept on this student's "choice" abilities or opportunities within this activity: 0 1 2 3 4

3. Student responds readily and willingly, is alert and involved in the activity: 0 1 2 3 4

4. Within this activity, the student's present level of "choice" abilities are considered, and he/she is allowed to exercise those abilities: 0 1 2 3 4

5. During this activity, the student smiles, and/or laughs appropriately, and seems to be enjoying him/herself: 0 1 2 3 4

6. Response requirements are flexible for this student within this activity: 0 1 2 3 4

7. For this activity, the "choice" abilities necessary for ultimate functioning of the activity in the student's next environment are considered: 0 1 2 3 4

8. Anecdotal notes are kept on this student's "choice" abilities or opportunities within this activity:

0 1 2 3 4

9. "Choice" opportunities are consciously included into this activity that may enhance the student's ability to better function in the next environment:

0 1 2 3 4

10. This activity is likely to improve the student's ability to carry out social interactions:

0 1 2 3 4

APPENDIX C

LETTER TO PROGRAM SUPERVISORS

TO: Special Education Supervisors

My name is Mary DeBoer, and I am a graduate student in special education, with a focus on learners with severe handicaps. Currently I am organizing my master's thesis, looking at choice in the curriculum. My study will involve an interview procedure with teachers in high school classrooms for TMR students. I am interested in activities these teachers involve students in to teach to IEP goals, and their degree of consideration towards facilitating choice-making within these activities.

I will soon be scheduling interviews to occur during the month of May. I will need to spend 30-45 minutes with each teacher during one interview session. I would greatly appreciate your assistance in identifying teachers to participate in this study, and by arranging permission to review the IEPs. Kindly fill out the attached sheet with requested information and return to me in the enclosed envelope no later than April 1st. Thank you for your cooperation.

Please return this form to : Mary DeBoer
(address)

To be filled out by the supervisor for TMR high school settings:

Name: _____

District: _____

Address: _____

Phone: _____

High school teachers to participate in CHOICE study:

Name:
School:
Phone:

Would you like to further discuss this project with me prior to my direct contact with the above teachers in order to schedule interviews?

YES

NO

Other comments:

APPENDIX D

LETTER TO TEACHERS

Dear teacher,

My name is Mary DeBoer and I am a graduate student in special education, with a focus on learners with severe handicaps. I am currently working on a thesis regarding "choice" in the curriculum for these students. I contacted your supervisor regarding the possibility of working with high school teachers. She recommended I contact you directly to see if you would be willing to voluntarily assist in the study.

This is what is involved:

1. I will contact you to set an appointment for us to meet for approximately 20 minutes. My schedule is very flexible, so I am willing to work around yours. You will need to have a few IEP's on hand to review activities and goals by domain. I am not interested in any names, rather more interested in the activities you use to teach to specific goals. Also, at this meeting I will be providing you with a working definition of "choice" for the purpose of this study, and answering any questions you may have.

2. From the list of activities, I will be choosing 10 and attaching each to a rating scale. These 10 scales will then be mailed to you for completion. This should take about 10 minutes.

This is not a teacher or program evaluation. Your name, school or district will not be cited by name in the study, nor will any information be cited regarding students.

I am hoping you will assist me in this study. Please return the enclosed postcard as soon as possible with your reply. Thank you.

Sincerely,

Mary C. DeBoer

APPENDIX E

PROCEDURAL CHECKLIST

1. Obtain class roster. Assign number to each student. Use random number chart, select student by this method.

2. Teacher obtains student's IEP.

3. Site 5 domains: social/sexual, recreation/leisure, community, domestic/self-care, vocational.

4. Teacher goes through IEP, stops at first annual goal that fits in any of the above domains. (Record goal)

5. What activities does teacher use to teach to this goal? Name ALL. (Record activities) Continue through all domains.

6. Explain procedure for mailed survey. Teacher will receive:

(a) definition sheet: this will include a definition of choice, a continuum of what this study considers to be choice, an example and a non-example.

(b) 10 rating scales; 1 for each of 10 goals selected from above list. The student's initials and the activity will be listed at the top of each; they are to be individually considered for each rating scale. Circle appropriate number. Please circle all items. Teacher's survey will be coded, only for purposes of organization, not identification or evaluation.

7. Is there instructional aide in class who might also fill out a rating scale without comparing answers to teacher's? If yes, 2 scales will arrive in mail, labeled "teacher" and "instructional assistant". Please return ASAP in return envelope.

8. Teacher will receive results of study. If aide participates, teacher will also receive a reliability rating. Thank you.

APPENDIX F

COVERSHEET FOR CHOICE/PERFORMANCE RATING SCALE

CHOICE

"Choice" is a continuum of self-expressive abilities (conscious or unconscious) in response to options encountered in daily living experiences.

Included in the choice continuum are the following (these are provided for definitive purposes only):

- AUTONOMY- Independently making decisions/choices, experiencing and learning from the results.
- SELF-INITIATION- Intersecting the self into choices/decisions throughout daily living experiences.
- PROBLEM-SOLVING- Weighing the outcomes of choices/decisions.
- DECISION-MAKING- Using internal drives or criteria to choose between options.
- CHOICE-MAKING - Choosing between two or more options.
- PREFERENCE RESPONSE- Preferences appear to be random.
- PREFERENCE EXPOSURE - Reacting to different people, environments, stimuli, materials, etc.

For the purposes of this study, please limit your consideration of "choice" to what happens DURING instruction, not AFTER.

EXAMPLE: The student has opportunities to use preferred materials or make choices DURING the task of teethbrushing.

NON-EXAMPLE: The student has the opportunity to choose a reinforcer AFTER the task of teethbrushing.

Please return the completed survey to me in the envelope provided. I appreciate your time and involvement. Many thanks.