

1991

## The current attitudes of principals and teachers regarding mainstreaming in Virginia middle-level schools

Janice Landmesser Farley  
*College of William & Mary - School of Education*

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**Farley, Janice Landmesser, Ed.D.**

**The College of William and Mary, 1991**

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THE CURRENT ATTITUDES OF  
PRINCIPALS AND TEACHERS REGARDING  
MAINSTREAMING IN VIRGINIA  
MIDDLE LEVEL SCHOOLS

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A Dissertation  
Presented to  
The Faculty of the School of Education  
The College of William and Mary

---

In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education

---

By  
Janice Landmesser Farley  
November 1991


THE CURRENT ATTITUDES OF PRINCIPALS AND TEACHERS  
REGARDING MAINSTREAMING IN VIRGINIA MIDDLE  
LEVEL SCHOOLS


by


Janice Landmesser Farley


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Approved November 1991 by

  
\_\_\_\_\_  
Thomas Ward, Jr. Ph.D.  
Chair of Doctoral Committee

  
\_\_\_\_\_  
Robert Hanny, Ph.D.  
Committee Member

  
\_\_\_\_\_  
Christine Walther-Thomas, Ph.D.  
Committee Member

  
\_\_\_\_\_  
Douglas Prillaman, Ed.D.  
Committee Member

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THE CURRENT ATTITUDES OF PRINCIPALS AND TEACHERS  
REGARDING MAINSTREAMING IN VIRGINIA  
MIDDLE LEVEL SCHOOLS

ABSTRACT

This study investigated the relationship between the attitudes of principals and teachers toward mainstreaming and the level of comfort participants felt toward special education and mainstreaming. Sixty-five large and small middle schools from the state of Virginia were randomly selected to participate in this study. Participants completed demographic/information sheets, the Attitude Towards Mainstreaming Scale (ATMS), and the Comfortability Scale for Special Education (CSSE). Data were analyzed using statistical methods.

The following research questions were explored 1) do the current attitudes of school personnel differ from previous findings, 2) does a middle level principal's attitude relate to a middle level teacher's attitude, 3) does the level of comfort of a middle level principal relate to a middle level teacher's level of comfort, 4) do the indirect factors such as number of years of experience, teacher level of education, number of special education courses and preservice training influence a teacher's or principal's attitude, and 5) does attitude and comfort relate to school division size and school personnel?

It was concluded the attitudes of middle school

personnel are similar to the attitudes of personnel who work in other grade levels. Furthermore, principals had more favorable attitudes towards mainstreaming than teachers. Principals can influence the attitudes of teachers toward mainstreaming, however, principals' level of comfort do not influence teachers' level of comfort. Specific factors were found to be indirectly related to attitude. The significant factors included prior experience working with persons with disabilities, educational background, and coursework in special education were significant. The size of a school division was related to the level of comfort of school personnel when working in team situations.

Further study is needed to evaluate the relationship between level of comfort and attitude. A disparity in an individual's attitude and level of comfort exists between large and small school divisions. Additional studies should examine the relationship between principal attitudes and teacher attitudes at all grade levels. Also, a principal's role in implementing special education programs should be studied.

Janice Landmesser Farley

DEPARTMENT OF EDUCATION

THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA

Dr. Thomas Ward, Jr., Ph.D.

Doctoral Committee Chair

Vita

Janice Landmesser Farley

Birthdate: May 27, 1955

Birthplace: Glen Ridge, New Jersey

Education:

1989-1990 The College of William and Mary  
Williamsburg, Virginia  
Educational Specialist

1978-1980 The College of William and Mary  
Williamsburg, Virginia  
Master of Education

1973-1977 Radford University  
Radford, Virginia  
Bachelor of Science

**THE CURRENT ATTITUDES OF PRINCIPALS AND TEACHERS  
REGARDING MAINSTREAMING IN VIRGINIA  
MIDDLE LEVEL SCHOOLS**

## CHAPTER 1

### INTRODUCTION

Students with disabilities are now being educated in general classroom settings. The integration of students with specific disabilities into the general classrooms requires planning, preparation, and instructional changes designed to meet the individual needs of students with disabilities (Wood, 1989). Full integration of these students into schools and communities requires schools to alter their traditional methods of servicing students with disabilities. Danielson and Bellamy (1989) reported nearly 70% of the students with specific disabilities are serviced either in general classroom settings or in resource rooms. Changes in service delivery programs are becoming the responsibility of general and special educators. Hudson, Graham, and Warner (1979) found the implementation of mainstreaming changes the normal operating procedures of a school program. Mainstreaming a student into a general classroom may interrupt a teacher's regular routine. Many special education programs require school administrators to modify existing programs to meet the individual needs of students. Typically, these changes in education programs occur in general classrooms (Hudson et al., 1979).

The impact of mainstreaming and the changes it has

imposed upon the general classroom have been examined through attitudinal studies of general educators, administrators, and special education personnel in the past two decades. Mainstreaming may require schools to provide special services in addition to the general classroom instruction. Successful mainstreaming is largely dependent upon the coordination of multiple activities with a large number of students (Hughes & Ubben, 1984). Meeting the individual needs of students is difficult for general classroom teachers because it requires teachers to individualize educational programs which were originally designed for groups (Truesdell, 1988). The integration of students with specific disabilities into classrooms also affects the environment of classrooms. Mainstreaming a student can conflict with the social norms established by a school (Siber, 1975). For example, students with disabilities who are considerably below the class average may be unable to perform social skills expected of other students.

Past studies related to attitudes and mainstreaming predominately examine primary and elementary teachers. Studies examining the attitudes of middle and secondary teachers and principals towards mainstreaming are not as abundant. Several studies examine the acceptance of students with disabilities in middle and secondary grades, a few of these same studies examine the attitudes of students

and teachers (Hiebert, 1982; Zigmond, Levin, & Laurie, 1985). However, little information is available (Reehill, 1987; Riedel, 1991), relating to the attitude of principals and teachers at the middle level with regards to mainstreaming.

Middle level schools are those schools which deal with students grades 5 - 9. These are separate schools that may be referred to as middle schools, intermediate schools, or junior high schools. Currently, there are more than 12,000 middle level schools in the country (Alexander, 1988). Programs for the middle level students are unique from both elementary and secondary programs. Middle level schools provide students with the basic knowledge and meet the individual and social needs of students who are going through a critical developmental period in their lives (Hertling & Getz, 1971).

The existing research indicates the middle level program is the pivotal point for a student's success (Alexander, 1988; Beane, 1986; Toepfer, 1988). Studies indicate at-risk students with disabilities need additional support during the middle level years in order for them to be successful (Alexander, 1988; Beane, 1986; Toepfer, 1988). Alexander (1988) determined at-risk students not only face normal adolescent difficulties but require specific and strong support from the general educators, as well as, other special support people. Middle level students with specific

disabilities tend to be mainstreamed into general classroom settings for a longer portion of the day than elementary students. Consequently, a close teacher/support service relationship is required (Lambie, 1980). In addition to support in the general classroom, students with specific disabilities also require teacher support and assistance outside of the general classroom (Lewis & Doorlag, 1987).

Rogers (1987) suggests a significant difference in teacher attitudes exists among different grade levels. The variability and exposure teachers receive can affect the teachers' overall attitude. Significant differences in attitudes among different grades level exist (Jamieson, 1985; Rogers, 1987). Rogers (1987) suggests an analysis of the middle and secondary levels to determine whether the same variables which affect the attitudes of teachers' and principals' at the lower grades will significantly affect teachers at the middle level grades. Rogers (1987) further recommends examination of middle level programs and environmental influences to determine whether additional factors affect teachers' attitudes.

Attitude refers to the interrelated beliefs a person has toward an object or person which causes a person to act in a certain manner (Donaldson, 1980). The more positive the attitudes of general educators towards mainstreaming, the higher the likelihood of student success (Horne, 1985; Shotel, Iano, & McGrettigan, 1970). Attitudes are



influenced by many direct and indirect factors. Gartner and Lipsky (1987) note the attitudes of general educators' toward mainstreaming and the educators' acceptance of mainstreaming must be present in order for mainstreaming to be effective.

Theorists suggest a relationship exists between personal beliefs and attitudes (Donaldson, 1980; Oskamp, 1977; Sherif, Sherif, & Nebergall, 1965; Towner, 1985). Attitudinal research regarding mainstreaming also indicates a relationship exists between classroom teachers' success and a successful mainstreaming program (Donaldson, 1980; Horne, 1985; Larrivee, 1985). If the concept of mainstreaming is to be successful, educators must understand the role of school personnel in relation to special education programs. Furthermore, personnel need to understand the relationship of specific factors to attitude and the influence these factors have upon persons's belief. A comprehensive study conducted by Larrivee (1982) determined specific factors can be associated with positive attitudes. These factors were: administrative support, availability of resources, and teachers' perception of their success.

Research has determined that personal attitude and the level of confidence have a direct effect on a person's ability to complete tasks related to special education (Harasymiw & Horne, 1975, Larrivee & Cook, 1979; Norlander &

Reich, 1984; Stephens & Braun, 1980). Positive attitudes have been viewed as a critical component of effective mainstreaming (Berdine & Blackhurst, 1985). Recent studies have also indicated that teacher effectiveness is also related to attitude and level of confidence (Kalahan & Freeman, 1987; Norlander & Reich, 1984). These studies are in agreement with earlier studies conducted by Elam (1971) who recognized teacher effectiveness and confidence are related to four components: skills, motives, habits and knowledge, and attitude.

Larrivee and Cook (1979) recognized the importance of a person's ability to work with students who were mainstreamed. A person's self confidence or "comfortability" relates to the ability to work closely with and effectively with mainstreamed persons. The "level of comfort" of an individual will depend upon a person's personal attitude, knowledge, willingness, and confidence. The leadership and level of confidence perceived by a building principal in relation to the general educator has not been investigated extensively (Lietz, 1980).

Kalahan and Freeman (1987) examined the confidence level of student teachers with regards to mainstreaming. Norlander and Reich (1983) also measured the perceptions of student teachers and the level of confidence of the respondents toward mainstreaming. Both studies by Kalahan and Freeman (1987) and Norlander and Reich (1984) suggest a

student teacher who felt "very comfortable" also possessed a more positive attitude toward mainstreaming. Little information regarding the confidence of principals and general educators towards mainstreaming is available. Furthermore, studies examining the attitudes and level of comfort towards mainstreaming of teachers and principals are nonexistent. Further research in the area of comfortability and personal attitude greatly extend the understanding of these factors on mainstreaming beyond just the identification of significant factors such as determined by Larrivee (1982).

Mainstreaming of students into the general classroom will not be successful if the teachers and administrators reject the concept of mainstreaming and believe students should be in special classrooms (Berdine & Blackhurst, 1985). The attitudes of primary and elementary teachers shows a moderate approval of the mainstreaming process (Berryman & Berryman, 1981; Stephens & Braun, 1980). Larrivee and Cook (1979) determined middle grade teachers' attitudes were less favorable than elementary and primary teachers. Yet in a recent study conducted by Reehill (1987) elementary and middle school personnel attitudes were not different. No consensus has been reached regarding attitudes of middle school teachers and principals. Therefore, further study of the attitudes of teachers and principals will help clarify the discrepancy of attitudes

between teachers of different grade levels.

Studies conducted over the past 20 years do not link together earlier findings which were cited by Larrivee (1982) and Berryman and Berryman (1981). Norlander and Reich (1984) noted many of the past studies do not continue to investigate relevant variables along with new variables. Larrivee (1982) states more information pertaining to direct and indirect factors and the relationship of these variables to attitude need to be investigated more thoroughly. The similarities and differences among variables as compared to specific grade levels has never been investigated.

The success of mainstreaming programs also depends upon the leadership of principals (Cochrane & Westling, 1977; Larrivee, 1982). Burrello, Schrupp, and Barnett, (1988) indicate principals can indirectly influence general classroom teachers' attitudes toward mainstreaming through their perceptions and support. Past studies have determined that the personal philosophy, level of confidence, and specific factors do influence the overall attitude of principals (Jamieson, 1985; Lietz & Towle, 1979). Therefore, does a principal's leadership and behavior influence the attitudes of general educators? Past investigations suggest a relationship exists between principals' role and their attitudes toward mainstreaming and teachers' attitudes at the elementary level (Cochrane & Westling, 1977; Wood, 1989).

The size of a school division as an indirect factor in the past has been overlooked when examining school personnel and attitude (Berryman & Berryman, 1981; Bidwell & Kasarda, 1975; Ornstein, 1990). Evidence from the research has shown that size of a school and school enrollment has an effect on the organizational structure of a school and pupils (Bidwell & Kasarda, 1975; Smith & DeYoung, 1988). Furthermore, school enrollment and school division size has been found to directly effect the qualifications of teachers working within a division. Teachers who work in larger communities tend to be more qualified than teachers working in smaller communities (Bidwell & Kasarda, 1975). The size of a school division has also been found to be significant when examining staffing and school morale (Barker & Gump, 1964; Berlin, 1989; Lam, 1985).

Barker and Gump (1964) conducted a study examining the differences of school divisions in Kansas. From the study, it was concluded school division size affected the overall program. The ecological environment and attitudes of school personnel were also affected by the size of school divisions. Ecological environment refers to a person's surroundings and how these surroundings effect a person's behavior (Barker & Gump, 1964).

Berlin (1989) determined in a recent study that a smaller school was more likely to be more effective. The size of a building and the size of a classroom directly

affected instructional programs, group achievement, and personal feelings of staff members. The size of a school was found to positively correlate with teacher salaries, per pupil expenditures, socio-economic levels, and enrollment. Berlin (1989) concluded people seem to prosper in situations which they have some control, personal influence, and efficacy.

It has been argued by several researchers that smaller school divisions have greater potential for effective mainstreaming than larger school divisions (Berryman & Berryman, 1981; Conoley, 1982). In 1979, Lietz and Kaiser noted principals from small schools were less favorable towards mainstreaming than principals from large urban schools. More data to support this argument is needed before any clear conclusions can be drawn. Furthermore, past studies examining school division size as one of the factors are at least a decade old (Berryman & Berryman, 1981; Larrivee & Cook, 1979; Payne & Murray, 1974). Geographic and population information has changed in the past 10 years, thus, information obtained in the late 1970's may not be consistent with today's school divisions. Information about the differences and similarities of school divisions in the state of Virginia with regards to mainstreaming is limited. Few studies have examined attitudes relative to school division size.

### Statement of the Problem

The success of a mainstreaming program appears to be related to not only the attitudes of teachers but also the attitudes of building principals (Burrello et al., 1988; Larrivee & Cook, 1979; Stephens & Braun, 1980). Since the federal mandate P.L. 94-142, many studies regarding attitudes, as related to mainstreaming, have been conducted examining primary and elementary teachers (Horne, 1985; Larrivee & Cook, 1979). These studies indicate the attitudes of general classroom teachers can influence the success of a student's academic progress (Horne, 1985; Shotel et al., 1970). Few of the studies conducted in the past focus on the middle level grades.

The purpose of this study was to investigate the attitudes of Virginia's middle school principals and general educators towards mainstreaming and to compare these attitudes with previous studies that have focused on primary and elementary grades. In addition, the study investigated the relationship between the level of comfort towards mainstreaming of a building principal to the level of comfort perceived by the general classroom teacher.

In addition, this study examined the relationship of specific variables which may indirectly influence middle school principals' or teachers' attitudes. These variables are number of years teaching, teacher level of education,

number of special education classes attended, prior experience, and preservice and inservice training. Finally, the study investigated the similarities and differences in attitudes and level of comfort towards mainstreaming as relative to school division size and school personnel.

#### Definition of Terms

The following terms are used in the study:

1. Attitude. Attitude is an interrelated belief or behavior towards an object or person (Sherif et al., 1965, p. 2). The term attitude is widely used by the public to denote a psychological state which causes a person to do a predetermined act (Jameison, 1985). Attitudes are self-perceptions which can be learned through one's surroundings (Oskamp, 1974). For the purpose of this investigation, attitude is defined as a belief or personal behavior which causes a person to act in a predetermined manner towards an object or a subject.

2. Direct variables. Larrivee (1982) in the study of teacher attitude found specific factors which influenced a teacher's attitude. These factors were: (a) philosophy of education, (b) willingness to work with mainstreamed students, (c) expectancy of a student's performance, and (d) general feelings of adequacy or confidence. For this study these factors will be considered the direct variables.

3. General education teachers. General classroom teachers are those teachers who teach non-disabled students



the majority of the day. General education teachers are not teachers who are considered support personnel such as art teachers, physical education teachers, vocational teachers or guidance counselors (Gloecker & Simpson, 1988).

4. Indirect variables. Specific demographic and educational factors have been noted in the literature to influence a principal's or teacher's attitude toward mainstreaming (Bond & Dietrich, 1983; Clarke, 1983; Larrivee & Cook, 1979; Lietz, 1980; Stephens & Braun, 1980). These factors included: (a) number of years in the teaching profession, (b) teacher's professional level of education, (c) number of special education courses, (d) prior experience, (e) grade level taught, and (f) preservice/in-service training. In this study these factors are considered indirect variables.

5. Large school division. School divisions that have more than 9,000 students based upon the end-of-year Average Daily Membership (ADM) as identified by the Virginia Department of Education (1989).

6. Level of comfort. The importance of a person's ability to work with or teach students with disabilities can be measured by examining a person's level of self-confidence (Larrivee & Cook, 1979). Norlander and Reich (1984) designed an instrument which measures a person's self-confidence or "comfortability" with the expected areas of competence needed to work with children with specific

disabilities. For this study, comfortability relates to a teacher's or administrator's perception of one's ability to use pertinent skills and knowledge to work effectively with mainstreamed children.

7. Mainstreaming. Mainstreaming is defined as:  
"the temporal, instructional and social interaction of eligible exceptional children with normal peers based on an ongoing, individually determined, educational plan and program process and requires clarification or responsibility among regular and special education administration, instructional and supportive personnel" (Kaufman, Gottlieb, Agard, & Kukic, 1975, p.11).

8. Middle level schools. Middle level schools refer to those schools which house students who are in the fifth, sixth, seventh, eighth or ninth grade and are recognized as middle, intermediate, or junior high schools. Students who attend a combined school (kindergarten through 8th grade) are not included in the definition.

9. Principal. The administrator of the building who oversees daily operations, instructional planning, staff development, decision making, and manages programs for individual groups (Hughes & Ubben, 1984).

10. School personnel. Administrators and general education teachers in a building will be referred to as the independent variable.

11. Small school division. School divisions whose

ADM for the end-of-the-year is fewer than 3,500 as defined by the Virginia Department of Education (1989).

12. Students with mild disabilities. As used herein refers to ... "those children who were placed in the general categories of mentally retarded sensory impaired, physically handicapped, health impaired, and behavioral disordered" (Berryman et al., 1980b, p. 20).

13. Students with limiting disabilities. The term students with limiting disabilities as used herein refers to ... "those children traditionally labeled as blind students who cannot read printed material and are using Braille, hearing impaired students with total hearing loss, orthopedically disabled students with severe motor problems" (Berryman, Neal, & Robinson, 1980b, p. 26). Additionally, Goupil and Bruent (1984) cite those students who possess limiting disabilities are those "moderately to severely mentally deficient (IQ from 30 to 55), multi-handicapped children" (p. 30). Garvar and Schmelkin, in 1989, developed a multidimensional scale examining over 30 different possible disabilities. These disabilities were sorted into four categories one of these categories classified persons with neurological impairments to be limited and dysfunctional in the general education setting. Specific categories found to be included as limiting disabilities were: autism, wheelchair confined, neurologically impaired, hard of hearing, cerebral palsy,

multiple handicapped, and sensory impaired.

14. Students with specific disabilities. Children and youth with specific disabilities are those who are eligible for services under the provision of P.L. 94-142, the Education for All Handicapped Act, and the Virginia Regulations (Department of Education Regulations, 1978). Prior to October of 1990, students with specific disabilities were typically referred to as "handicapped persons". The federal law, P.L. 101-476 Individuals with Disabilities Education Act (IDEA), now requires this group of persons to be referred as "persons with specific disabilities". To avoid any confusion this population will be henceforth referred to using the new name unless direct quotations are cited preceding this law.

#### General Research Questions

The following questions will be examined in the study:

1. Do the attitudes of general education teachers and principals regarding mainstreaming at the middle school level differ from the attitudes of other general education teachers and principals from previous findings?

2. Does a middle school teacher's attitude toward mainstreaming relate to the attitude of the principal?

3. Does a middle school teacher's level of comfort regarding mainstreaming relate to a principal's level of comfort?

4. Do the indirect variables such as number of years of experience, professional level of education, number of special education courses, and prior experience with persons with disabilities influence the attitude of teachers and principals towards mainstreaming at the middle level grades?

5. Are the attitudes and level of comfort towards the mainstreaming of students with specific disabilities at the middle level grades a function of school division size (large versus small) and/or type of school personnel (teacher versus principal)?

#### Rationale for Study

Question 1. Do the attitudes of general education teachers and principals regarding mainstreaming at the middle school level differ from the attitudes of other general education teachers and principals from previous findings?

The primary purpose for this study was to determine whether the attitudes of principals and teachers towards mainstreaming at the middle level grade are different from the attitudes of other school personnel. Since it has been determined attitudes can have a profound effect upon the success of the program further study is warranted (Larrivee & Cook, 1979, Stephens & Braun, 1980). Attitudinal studies pertaining to the middle grades are not robust nor do they examine the relationship between the middle school setting

and attitude (Larrivee & Cook, 1979; Rogers, 1987; Stephens & Braun, 1980). Sherif et al., (1965) noted an attitude may be formed by environmental factors as well as through personal beliefs. More studies examining the relationship between the structure and grade level of a school relative to mainstreaming needs to be examined closer. Similarities and differences in attitude based upon grade level should be examined.

Past studies indicate there is a significant difference among elementary and middle level teachers, however past studies have not examined the structure and design of middle school programs (Rogers, 1987). Earlier studies (Junkala & Mooney, 1986; Larrivee & Cook, 1979; Rogers, 1987; Stephens & Braun, 1980) report attitudes of principals and teachers at the primary and elementary levels were more favorable toward mainstreaming than middle level staff. Data obtained from this study will be compared to past information to determine whether school personnel attitudes' toward mainstreaming are similar to previous findings.

Question 2. Does a middle school teacher's attitude toward mainstreaming relate to the attitude of the principals?

Burrello et al., (1988) stated "more research needs to focus on the principal's leadership skills relative to effective special education programs" (p. 8). Lietz and

Towle (1979) recognized the need for a clearer understanding of the role of principals and how the leadership of principals will affect the implementation of P.L. 94-142. While mainstreaming may be an imposed mandate, without the help of the building principal the success of mainstreaming program will be less likely (Cochrane & Westling, 1977).

Past research has not verified if principals do influence the attitudes' of general education teachers towards mainstreaming. Studies by (Junkala & Mooney, 1986; Larrivee & Cook, 1979; Stephens & Braun, 1980) indicate the primary and elementary principals attitudes towards mainstreaming indirectly influence the attitudes of teachers. These studies alone do not clearly demonstrate whether principals at the middle level grades have similar influence upon teachers in the building.

Question 3. Does a middle school teacher's level of comfort regarding mainstreaming relate to a principal's level of comfort?

Information regarding a person's level of confidence towards mainstreaming has not been investigated extensively. Kalahan and Freeman (1987) examined the confidence level of student teachers and graduate students towards mainstreaming and special education programs. Kalahan and Freeman (1987) indicated the level of comfort can significantly affect the performance of student teachers. An earlier study conducted by Norlander and Reich (1984), measured the self-perceptions

of student teachers regarding their instructional abilities in relation to special education students. Norlander and Reich (1984) suggested student teachers who were "very comfortable" also perceived themselves having a more positive attitude towards the instructional skills needed to work with special populations.

More information is needed on school personnel perceptions of their ability to work with mainstreamed students and special education programs. Information obtained from this study could provide insight into the areas needed to train school personnel. Further research conducted in the field related to principals and general educators could be used to strengthen state wide programs related to effective teaming and collaboration.

Question 4 Do the indirect variables such as number of years of experience, professional level of education, number of special education courses, and prior experience with persons with disabilities influence the attitude of teachers and principals towards mainstreaming at the middle level grade?

Many indirect variables at the primary and elementary level have been examined in the literature regarding teacher attitude and mainstreaming (Junkala & Mooney, 1986; Larrivee & Cook, 1979; Lietz & Towle, 1979; Stephens & Braun, 1980). Past studies indicate factors which influence the attitudes of the teachers and principals were: (a) number of years of



experience, (b) level of education, (c) number of special education classes taken, (d) class size, and (e) prior experience with persons with disabilities.

Further clarification of the relationship between these variables needs to be completed at different grade levels to verify previous findings. Towner (1985) states future research could be "greatly improved if the researcher would examine specific variables which may provide information on the possible function of the attitudes and personality characteristics which may influence the subjects" (p. 254). A separate study examining middle level school personnel using similar variables would be highly valuable for personnel training. It is not clear whether the same variables which significantly affected teachers and principals at the elementary level will influence the attitudes of middle school personnel.

Question 5 - Are the attitudes and level of comfort of towards the mainstreaming of students with specific disabilities at the middle level grades a function of school division size (large versus small) and/or type of personnel (teacher versus principal)?

Past research regarding school division size and the attitudes of school personnel has been "inconclusive and somewhat confusing" (Jamieson, 1985, p. 208). The relationship between attitude and mainstreaming rural and urban settings has not been extensively studied over the

last 10 years (Riedel, 1991). The majority of studies were conducted shortly after the federal mandate for mainstreaming. Earlier attitudinal studies which included school division size as a factor were not based upon ADM. Thus it is hard to develop specific conclusions.

Reviews and research conducted over the past years indicate the individual size of a school division and the size of the community size can affect the attitude and morale of school personnel (Barker & Gump, 1964; Bidwell & Kasarda, 1975; Berryman & Berryman, 1981; Ornstein, 1990; Smith & DeYoung, 1988). Currently, no conclusive data exists regarding the relationship between school division size and the attitude and level of comfort of school personnel toward mainstreaming.

#### Limitations of the Study

Personal characteristics related to each subject must be considered during the collection of the data. Motivation, personal desire, personal feelings, and confidentiality were factors considered when attempting to gather the information for this study. Social norms and personal desire to answer the questionnaire appropriately was taken into consideration.

Participants used in the study come from a preexisting population. Subjects who have already chosen to work at the middle school level may already have predetermined attitudes

and goals. Furthermore, principals may have hired staff members who observe the same philosophy and standards as themselves. Caution was used when interpreting the results from this study.

Currently the state of Virginia is implementing Restructing Education in Virginia's Middle Grades (1989). The restructuring process began in 1989, however, state funding has delayed the process. Not all of the schools in the state have completed this process, thus the examined population will include those schools which house students in middle, intermediate, or junior high schools. School districts which use a combined (kindergarten through 8th grade) will not be included in the study.

Two additional limitations were considered when designing the study. Geographic location of the school divisions and the amount of monies available to a school division. This study exclusively examined public schools in the state of Virginia. The differences and similarities of geographic location was considered when selecting the school divisions. The school divisions which participated in the study were classified according to average daily membership.

The proximity of a school division to a metropolitan area was also considered when examining the data. Many small school divisions in Virginia are located near large metropolitan areas, therefore, participants from small school divisions may not be as rural as other small school

divisions located in the southwestern region of the state. It is important to understand small school divisions in Virginia are not exclusively located in rural portions of the state and they are not always the poorest divisions.

The allocation of state funding was also considered during the development of the study because of expenditures per pupil are different for each division. This factor was considered when drawing conclusions about teacher competencies and overall attitude of school personnel.

A pilot study was conducted prior to the planned study to validate the instruments and to assure reliability of the instruments. Methodology and design of the study were examined through the pilot study. A statistical analysis for reliability and validity was conducted.

#### Summary

The purpose of this study was to investigate the current attitudes of principals and teachers in Virginia middle schools toward mainstreaming. In addition, the study examined whether a principal's attitude and level of comfort influences the attitude and level of comfort of teachers. The study assessed whether specific factors influenced the attitudes and level of comfort of a principal and teacher towards mainstreaming. In addition, the study examined the differences between small middle schools and large middle schools.

The success of a mainstreaming program is highly dependent upon the teacher's attitude and the indirect support of a building principal. The chapter discussed the relationship between the success of the mainstreaming program relies heavily upon the teachers' attitudes and the administrative support teachers receive. Past studies have found elementary teachers to be moderately influenced by the building administrator.

Further research regarding principal attitude towards mainstreaming and the influence of a principal upon a teacher's attitude should be investigated. Inconsistencies in the literature concerning the role of principals and their relationship to teachers needs to be examined thoroughly. A limited number of studies have been conducted examining middle school principals and in relation to mainstreaming. Additional information examining the differences between school division size and attitude would be helpful for staff development needs across the state.

Information gathered from this study will help to determine whether attitude and level of comfort influences the behavior of the general classroom teacher and the principal. Furthermore, the study will help to determine whether a disparity in attitude and comfort exist according to school division size. Programs based upon the responses given to the questions could be designed to meet the individual needs of organizations.

## CHAPTER 2

### REVIEW OF THE LITERATURE

Chapter 2 discusses the attitudes of general educators as related to mainstreaming. A short review of the literature pertaining to middle level programs is presented. Attitudinal studies examining the direct and indirect factors related to mainstreaming are examined. This review also examines separately attitudinal studies directly related to principals and general education teachers.

An abundance of literature pertaining to the relationship between mainstreaming as related to school personnel attitude has been written for the primary and elementary level. This review examines those studies related to the attitudes of teachers and principals and the relationship between confidence and willingness to work in the general classroom with students with disabilities. The review also examines factors related to attitude. Personal characteristics and indirect factors such as number of years taught, professional level of education, prior experience, grade level, and preservice/in-service training are examined in the review.

Included in the review are relevant studies examining principal and teacher attitudes towards mainstreaming that were conducted outside of the United States (Center, Ward,

Parmenter, & Nash, 1985; Clarke, 1984; Goupil & Bruent, 1984; Harvey, 1985; Jordan & McLaughlin, 1986). Although they are foreign studies there are sufficient similarities that their results are relevant to studies conducted in the United States.

### Middle Level Schools

Middle level education has many different approaches throughout the United States (Hollifield, 1988). Whether the school is called middle school, junior high school, or intermediate does not matter, it is the program which makes it different (Alexander, 1988). Lawton (1987) determined middle level education is unique, it is designed specifically to meet students' learning needs and at the same time provide opportunities for developmental growth. According to a recent survey conducted by the Center for Research on Elementary and Middle Schools many variations of the middle school education exist (Lawton, 1987). The structure or grade levels offered makes a middle school different. Many variations in middle level programs exist, grade span, coursework, and delivery of services are not always the same. All of these programs, however are based upon the same basic principle (Lawton, 1987).

The National Association of Secondary School Principals (NASSP) Council on Middle Level Education stated in 1977 middle level education "depends upon the interaction of a

student's ability to comprehend, analyze, project, and speculate" (NASSP REPORT, 1977, p. 18). The National Middle School Association (NMSA) in 1977 also stated the purpose of the middle school is to provide "academic needs to middle school students who are affected greatly by their physical, social, and emotional needs" (George & Oldaker, 1985).

George and Oldaker (1985) cite a middle level program is designed for children between the ages 10 to 15 years of age who are experiencing developmental and social changes. Lawton (1987) suggests students' developmental growth stages are affected by a students ability to learn, consequently teacher instructional style must be responsive to the students' individual stages of development, growth, and academic readiness. For example, students who attend the middle grades may need to learn through more concrete tasks or more formal instruction than older learners (Alexander, 1988).

Lawton (1987) suggests middle level programs should provide a wide variety of activities such as fine and practical arts which capitalized upon academic programs and units. Preadolescents should be given the opportunity to participate in a wide variety of group activities. In addition, middle level students can acquire new knowledge and information by participation in elective courses or mini-classes. Mini-courses also help students learn to transfer basic knowledge into concrete information.



The middle school model is based upon several common objectives (George & Oldaker, 1985). In 1977, the National Middle School Association (NMSA) wrote goals and objectives of programs for schools to use when working with students during the middle years. The five goals were: 1) at least one adult will accept responsibility for the student's guidance using home base teachers, 2) students will achieve mastery of skills and be committed to improving one's ability, 3) every school should provide ample experiences for the student to develop decision-making and problem solving skills, 4) every student should acquire a functional body of knowledge, 5) every student should have the opportunity to explore and develop personal interests in aesthetics, leisure, career, and other aspects of life (George & Oldaker, 1985).

Many unique middle level programs exist throughout the country. These programs are designed to meet the needs of students who are academically independent and socially oriented (Hertling & Getz, 1971). Curriculum is designed to use sequential concepts which are also of interest to the students (Finks, 1990). Middle level programs help students make the transition from protective-nurtured environments at the elementary level to more depersonalized secondary programs (Fletcher, 1986). The overall design of the curriculum requires principals and teachers to work together more closely (Lounsbury, 1983). Lounsbury (1983) described

the middle level program designed around regularly scheduled meetings with teams members. Team meetings discuss issues related to academic, personal, and social needs. Lounsbury (1983) determined success of a middle level program depends upon the teachers self-confidence and ability to work with other staff members.

#### Similarities and Differences of Grade Levels

The grades typically included in a middle level program are grades six through eighth (Hollifield, 1988). Research conducted by Commission on the Reorganization of Education in Middle Schools (CREMS) and Alexander (1988) determined the top grade is usually the eighth grade and the lowest grade is the sixth grade. Individual school divisions frequently compromise middle level structure to meet economic needs. A large grade span in a middle level program can result in the use of departmentalization. Typically, large middle schools use departmentalization to group students (Finks, 1990).

Departmentalization, the dividing of a program according to grades or teams is one method for organizing the structure of a middle level program. Departmentalization can increase the quality of instruction but it may also take away from the individual needs of specific groups. Hollifield (1988) determined the use of departmentalized instruction may weaken the teacher-student relationship while it may strengthen the instructional

quality of a program. Tracking and ability grouping are also used by large school divisions to eliminate overcrowding and maintain specific groups of students to be together (Alexander, 1988).

Student-teacher ratio for the middle grades is different from other graded programs. Elementary classroom teachers were reported to keep students at least 80 percent of the time. Conversely, homeroom teachers in the lower grades are more familiar with the student's individual needs because the homeroom teachers see students more often than other teachers. By the time a student reaches the fourth grade 50% of the student's time is spent in multiple classrooms. Middle grade programs only allow students to see individual teachers less than 20% of the day (Alexander, 1988). CREMS (1977) determined that by grade seven most students are grouped by interest and ability. This concept is still followed in most middle schools (George & Oldaker, 1986).

Instructional strategies for the middle level school include a wide variety of methods and service deliveries (Fibkins, 1985). Methods used for middle level curricula are different from other graded programs. Bower (1983) found the daily schedule of a middle level program was different from both the elementary and secondary schedules. Students used flexible schedules to enable them to attend multi-media classes, for example, students participate in

group instruction in geography using materials from reference libraries, media centers, and computers. Middle level students were frequently allotted a specific block of time to complete tasks or activities independently. Students were also grouped according to interest, ability, or team.

#### Middle School Staffing

Elementary and secondary staffing arrangements are different from middle level staffing procedures (Lounsbury, 1983). Staffing, grouping, and scheduling practices for the middle grades are heavily influenced by the curriculum. Elementary schools typically staff teachers according to grades, secondary schools staff teachers according to subject matter. Middle level schools usually staff teachers by examining the developmental and academic needs of students (Hollifield, 1988). Hollifield (1988) noted teaching staff in the middle grades have different responsibilities than the other grades. Middle school teachers in the lower grades may use a team approach or teach in self-contained classrooms.

Staffing practices reflect three methods of instruction: 1) self-contained classrooms, where a single teacher gives instruction, 2) team-block instruction, where several teachers are grouped together as a team, and 3) semi-departmentalized instruction, where teachers present only one academic subject to a group of students

(Hollifield, 1988). Lawton (1987) found in recent studies more middle level schools are beginning to organize school programs through the use of cooperative teaching, flexible scheduling, such as block scheduling, and team teaching.

Bower (1983) noted the staffing patterns for the middle grades is made up of a variety of service deliveries. The most effective method in instructing students was by using multi-media classes. Teachers which use multi-media instruction tend to be flexible, since they must be willing to work closely with auxiliary staff and resource personnel. Bower (1983) found the level of experience of principals and teachers in middle schools appears to affect willingness to experience new programs. In order to be successful, staff members of a middle school must utilize new ideas and be willing to share new ideas with colleagues (Bower, 1983).

#### The Role of a Principal

The role of a middle school principal is different from principals of other grades. Bower (1983) states that middle school principals are typically between ages 40 and 54, and predominately male. In general, middle school principals who participated in Bower's (1983) study held a masters degree plus 15 credit hours. Bower (1983) reported the majority of the principals who had participated in the study were formerly assigned as assistant principal. The majority of the principals surveyed, indicate middle school programs should provide a variety of activities to help students

transition into adulthood. Principals stated the purpose of middle level programs was a time for students to master basic skills, however, at the same time develop good skills as a citizen.

Principals who work in middle schools can help create a healthy atmosphere, however principals must also provide the necessary leadership to effectively and efficiently operate a school (Alexander, 1988). The principal leads and serves as the role model for the school. Lounsbury (1983) determined middle school principals were sensitive to the needs of teachers. Studies indicate teachers at the middle grades rely upon the principal's leadership and ability to encourage interdisciplinary activities (Alexander, 1988). If the school is "vibrant and innovative one can always point to the principal's leadership " (Sergiovanni, 1987, p. 51). The personal philosophy and characteristics of a principal can also affect leadership skills of a principal (Jamieson, 1985; Stephens & Braun, 1980). The beliefs and experiences of a principal have been found to be the most significant factor to the success of special education management (Burrello et al., 1988; Wood, 1989). Principals must present a clear philosophy, both verbally and non-verbally. The level of enthusiasm towards mainstreaming exhibited by principals can directly affect the success and relationship principals have with general education teachers (Burrello et al., 1988). Studies indicate principals who

accept the philosophy of mainstreaming appear to be more willing to implement mainstreaming programs (Donaldson, 1980; Knight, 1986).

The most common and most effective organizational vehicle associated with the middle grades is the use of interdisciplinary teams. Interdisciplinary teams help to provide a positive environment and encourage the faculty to share ideas. Principals who encourage teachers to have small groups which work together have been found to have the highest morale and best performance (George & Oldaker, 1985).

#### The Role of a General Classroom Teacher

Gloecker & Simpson (1988) describe the general classroom teachers' roles as challenging. General classroom teachers are responsible for meeting the individual needs of every member of the classroom. The classroom teacher is responsible for meeting the student's academic, social, personal, and environmental needs.

Typically, middle level teachers have taught 7 to 9 years in the classroom (Gloecker & Simpson, 1988). Gloecker and Simpson (1988) reported many general education teachers held a baccalaureate degree plus additional hours in a field of personal interest. In general, many of the general education teachers had taught at the elementary level or the secondary level before teaching at the middle level.

Teaching and effectively managing individual needs of

students requires support and proper planning (Lietz, 1979). "To address the needs of regular and exceptional students, teachers, principals and other school personnel need to establish specific goals" (Gloeckler & Simpson, 1988, p. 40). Achieving the objectives outlined by a school division requires a teacher to accommodate or change personal goals and objectives. A lack of proper preparation, training, or knowledge, may cause a teacher to become reluctant to address all the needs of students with specific disabilities (Larrivee, 1985).

Hollifield (1988) determined middle level teachers use different teaching strategies than elementary teachers and secondary teachers. Although staff members may hold an elementary certificate or a secondary certificate they do not use the same teaching techniques as other teachers. Team-teaching, departmentalization, and self-contained classrooms are the most typical staffing patterns used in the middle school setting.

Middle level teachers perform duties and responsibilities different from elementary teachers. Middle level teachers who are also homeroom teachers are typically responsible for student instructional and developmental programs (Hollifield, 1988). Teachers who work in middle schools are responsible for large number of students, which, also reduces the teachers' ability to attend to the special needs of individual students. Homeroom teachers are also



responsible for identifying those students who need individual assistance. Typically, the homeroom teacher is the students' only link to school communication (Finks, 1990).

Past experiences can also influence the attitudes of middle level teachers toward those students who are not typical students (Diebold & Trentham, 1987). Leibfried (1984) notes teachers sometimes have a difficult time adjusting to students who require individual assistance. Teachers are frequently lacking knowledge and support regarding the students needs (Bond & Dietrich, 1983; Larrivee & Cook, 1979; Ringlaben & Price, 1981). Some students with individual needs may require specific techniques and strategies from a general classroom teacher in addition to support services outside of a classroom.

Summary. Middle level education is very different than both the elementary and secondary education programs. The objective of middle level education is to assist students with academic and developmental needs simultaneously. Students attending a middle school may be organized in small groups or teams according to interest, ability, or grade. Teachers who work with preadolescents are responsible for larger numbers of students than the primary or elementary grades. Departmentalization of staffing can sometimes cause the teachers to be less familiar with each individual student's needs. Principals who work with middle school

students are usually older and more experienced principals. Most principals feel the middle school setting is a period in which a student can catch up on basic skills and work in a group setting on skills which will be helpful later in life.

### Attitude Theory

There is reason to believe attitudes toward mainstreaming are important. The attitudes of principals and general classroom teachers can have a profound effect upon the success of a program. Oskamp (1977) refers to an attitude as an "interrelated belief towards an object or person which predisposes a person to act in a certain manner" (p. 7). Attitudes and behavior are related to each other. Viewed in a broad sense an attitude predisposes a particular action. Actions can also shape attitudes. Attitudes can be shaped by events which occur in our surroundings (Oskamp, 1977). Sherif et al., (1965) concluded an attitude may be formed by environmental factors which can influence a person to dislike or to approve of an action. Theorists believe an attitude is a combination of beliefs which are directly related to events and environmental factors.

Many attitude theorists state an attitude cannot be restricted to one definition (Donaldson, 1980; Oskamp, 1977; Triandis, Adamopoulos, & Brinberg, 1985). When defining

attitudes, several components need to be included in the overall definition. The components which need to be considered are the affective component, the behavioral component, and the cognitive component (Donaldson, 1980; Sherif et al., 1965; Triandis et al., 1985; Watts, 1985).

The affective component is related to the feeling of "liking or disliking a belief" (Triandis et al., 1985, p. 22). Usually, the total effect attached to an object depends on the connection an individual has toward the object. Humans cannot think of feelings without attaching them to either positive or negative beliefs (Triandis et al., 1985). Judgments are usually formed based upon the way a belief influences a persons thinking (Triandis et al., 1985). Humans cannot think of many things without placing an evaluative statement to the object by using a good feeling word or a bad feeling word (Sherif et al., 1965; Triandis et al., 1985). For example, when a person hears the word "house" they reflect upon words which describe feeling. The house is pretty or the house is drab. The affective component is usually measured by using physiological tests, such as a heart rate or a skin test or through the use of qualifying statements similar to the one above (Sherif et al., 1965).

The cognitive component refers "to the beliefs and knowledge a person has toward an object" (Donaldson, 1980, p. 505). People relate their responses to stimuli based

upon personal stereotypes. A stereotype is a belief an individual has towards a certain type of trait or object (Sherif et al., 1965). Sometimes a person's stereotype is accurate, however, in many instances people do not form stereotypes based upon careful research (Watts, 1985). For example, people who go to church regularly may be considered very religious. This belief may not be based upon valid research thus the belief could be inaccurate. Often stereotypes are based upon the beliefs of others who possess a different set of norms and values. Triandis et al., (1984) recommends using adjective checklists to examine a person's beliefs.

The behavior component refers to the beliefs an individual has toward an object as a result of his social behavior (Sherif et al., 1965). Social actions and social interactions appear to both formally and informally affect the behavior of a person. For example, dislike by an individual towards another may be influenced by the social situation and the past relationship between the individuals. Measuring the behavioral component can be complex because this requires the examination of multiple characteristics associated with a person's attitude. Fiedler, Mitchell, and Triandis (1971) recommend examining each dimension of an individual's attitude to determine overall behavior. To change a person's beliefs one needs to examine those characteristics associated with a person's likes or

dislikes. Once a person's behavior is understood an individual can help determine what beliefs create covert actions towards an object (Watts, 1985).

#### Changing Attitudes

A series of steps or phases are required to change an existing attitude. Theorists believe in order to change an attitude a person must replace the old attitude with a new opinion (Oskamp, 1977; Triandis et al., 1985; Sherif et al., 1965). Attitude change can occur as a result of new communication regarding a belief, personal relevance of the belief or through direct encounter with the object (Sherif et al., 1965). Harasymiw and Horne (1975) and Triandis, et al., (1985) determined active participation is the most effective way to alter an individual's belief towards mainstreaming. Active participation is sometimes difficult to execute due to time and availability of participants (Donaldson, 1980). Researchers have determined other methods which are less effective but can be used more easily (Johnson & Cartwright, 1979). Providing information on a given object or subject can help create a positive attitude (Donaldson, 1980). Providing a person with additional information can help a person question personal beliefs or opinions. Information gathered through formal classes or lectures, television, video tapes, or direct exposure to the stimulus can help a person form a more positive attitude (Harasymiw & Horne, 1975; Harvey, 1985; Horne, 1985; Johnson

& Cartwright, 1979; Salend & Johns, 1982; Smith & Kallevang, 1985; Truesdell, 1988). Gathering information helps "create the credibility that an individual needs to formulate a more positive attitude" (Donaldson, 1980, p. 509).

Providing new or different information causes a person to doubt the negative information previously believed. To reduce the discomfort associated with a negative belief, a person changes their opinion to match the new information (Lewin, 1944). Donaldson (1980) determined specific intervention strategies can help produce a positive attitude change. Intervention strategies such as role playing, simulations, discussions, and workshops have been found to significantly shift attitudes to more positive positions (Anderson, 1982; Horne, 1985; Threlkeld, 1982).

The use of social interaction is another method to help change a person's attitude (Sherif et al., 1971). Interaction with other individuals help to increase an individual's knowledge and can change a person's attitude in a positive direction (Lewin, 1944). For example, Harasymiw and Horne (1975) studied the use of integration and how it affects the level of comfort teachers towards disabilities. Harasymiw and Horne (1975) noted those schools which used integration throughout the building reduced the discomfort and uncertainty of mainstreaming.

In summary, schools which implemented integration had a tendency to be more accepting than those schools which were

not involved in integration. Schools involved in mainstreaming had general educators who appeared less fearful and more confident. Teachers with previous experience or knowledge of mainstreaming were more confident in ability when working with students with specific disabilities (Harasymiw & Horne, 1975).

#### Specific Variables Related to Attitude

Larrivee and Cook (1979) indicated specific variables appear to influence the attitudes of teachers. Larrivee (1982) in a later study determined direct and indirect variables affect at least 33% of a person's attitude. Those variables which were found to directly influence teachers' attitudes were personal philosophy, individuals' willingness to work with students with disabilities, teachers' expectancy of students' performance, and the overall confidence teachers possessed towards mainstreaming. Some indirect variables which appeared to influence teachers' attitudes were age, number of years teaching, preservice and inservice training regarding special education, class size, size of a school, prior experience, and grade levels taught. Similar studies conducted by other researchers indicated the same findings (Berryman & Berryman, 1981; Bond & Dietrich, 1983; Harvey, 1985; Nader, 1984; Rogers, 1987). Past studies noted specific variables were consistent for primary and elementary grades, few studies provide information concerning the middle grades.

### Relationship Between Comfort and Attitude

Positive attitudes have been viewed as a critical component of effective mainstreaming. Larrivee (1982) recognized the perception of an individual and the level of comfort felt were also influenced by attitude. Recent studies have indicated teacher effectiveness is also related to teacher attitude and level of confidence (Kalahan & Freeman, 1987; Norlander & Reich, 1984). These studies are supported by earlier studies conducted by Elam (1971) which recognized that teacher effectiveness is related to four components: a) skills, b) motives, c) habits and knowledge, and d) attitude.

Norlander and Reich (1984) developed a scale to measure a person's self-perceptions and level of comfort toward mainstreaming. Comfortability refers to a person's comfort to complete a task. Norlander and Reich (1984) suggested examining the self-confidence of a person one would be able to determine a person's level of favorableness towards mainstreaming (Kalahan & Freeman, 1987).

Level of confidence studies have only been used in the past few years. Studies cited in the literature were performed on student teachers and students in practicum situations. Past studies have examined specific characteristics of teacher candidates and determined the high or low levels of confidence. Typically, a self-confidence scale would be administered to teacher candidates



when they exited a college program.

#### Ecological Environment and Attitude

The behavior of an individual can be influenced by their environment (Barker & Gump, 1964). In order to understand more about attitude one needs to consider the immediate surroundings and the on-going events. Barker and Gump (1964) refer to this setting to be the ecological environment. The ecological environment is built upon the relationships a person has within a particular setting. For example, individuals within a setting may experience changes but the actual setting remains constant.

The size of school division can also influence the availability of personnel and programs offered to students (Barker & Gump, 1964; Ornstein, 1989). Large school divisions have a greater mass of people which offers a richness of programs and employs more varieties of people (Barker & Gump, 1964). Ornstein (1989) notes large schools tend to be less efficient, more institutional and bureaucratic, and students and staff members feel more alone. Barker and Gump (1964) noted small school districts did not have a wide variety of programs and teachers were more coercive and dominating than teachers from large school divisions. Small school divisions were more apt to give responsibilities to their staff. Many of the people working in a small school settings felt they had more responsibility and obligation to their schools (Ornstein, 1989).

Leadership roles and responsibility are two assets students and teachers develop from working in a small school or small division (Ornstein, 1989). Furthermore, research has shown individuals in small schools develop more personal pride and loyalty (Barker & Gump, 1964; Ornstein, 1989). Barker and Gump (1964) noted teachers believed these characteristics were necessary for students to become good citizens (Barker & Gump, 1964).

Bidwell and Kasarda (1975) conducted a study examining school divisions in Colorado to determine if any differences existed among school divisions. This study revealed school organizations from small school divisions have unique characteristics not found in large schools. The study also found the size of a school divisions can affect the number of qualified personnel willing to work in the divisions. Small school divisions are unable to keep well-qualified personnel due to salary and availability of support services. By dismantling organizational structure one can examine the similarities and differences among communities (Bidwell & Kasarda, 1975).

The size and performance of a school system appears to be related to the effectiveness of a school (Friedkin & Necochea, 1988). In a recent study, Friedkin and Necochea (1988) determined that size was related to socio-economic status and student performance. These results are similar to earlier findings cited by Bidwell and Kasarda (1975).

In 1979, Lietz and Kaiser conducted a study examining the differences between principals from rural schools and principals from large urban schools. The study noted principals from small school divisions are less willing to mainstream students than principals from large urban divisions. Small school divisions lack the knowledge and support staff to adequately train principals for mainstreaming. Few principals feel confident in mainstreaming students without further knowledge.

A few attitudinal studies have taken into account the size of a school division when examining attitudes. It has been argued in the past that small school divisions are not able to adequately support mainstreamed students but little evidence is presented in the literature. Both Berryman and Berryman (1981) and Larrivee and Cook (1979) examined school division size a decade ago. Major implications from these studies are the size of school divisions does affect the overall role of teachers and students. School divisions which are large may have a wider variety of programs. However, large schools may not inspire staff members to take on responsibility and show commitment to the organization. Small school divisions are more cohesive and allow staff members to have more responsibility.

Summary. Attitudes are complex behaviors which include several components. Attitude are not solely based upon the knowledge a person possess about an object, but also include

an individual's personal thoughts and surroundings. All attitudes appear to be influenced by social history and the relationship of an individual to the group.

Changing attitudes is a process which requires several steps to be completed before attitudes are altered. Direct experience is the most effective way to change attitudes. Since it is unlikely that this method is always available, Harasymiw and Horne (1975) suggest using social interaction and providing information as an alternative method for changing attitudes. Attitude change using only information is not as affective because the credibility and attractiveness of the communication may not be as powerful as the actual object.

Specific variables appear to influence the attitudes of teachers towards mainstreaming. Variables which were found to directly influence a teacher's attitude were: philosophy, willingness, teacher expectancy, and confidence. Indirect variables found to affect a person's attitude as related to mainstreaming were: age, teaching experience, training, class size, school size, grade level taught, and prior experience. The literature does not have sufficient evidence to state whether the indirect variables stated above are consistent for teachers and principals at all grade levels.

A relationship exists between individuals' level of comfort and attitude. Recent studies have found the level

of comfort and a person's self-perceptions can influence existing attitudes. Larrivee (1982) and Norlander and Reich (1984) determined by enhancing an individual's self-confidence an individual's overall attitude will increase. Past studies have investigated the level of confidence of student teachers upon exiting college, however little information is available about general educators in the field.

Personal beliefs are influenced by a person's environment. The ecological environment, those things occurring in a person's surroundings needs to be examined when evaluating a person's attitude towards mainstreaming. Factors such as school division size and availability of support services will indirectly influence a person's overall attitude.

#### Mainstreaming and Attitudes of Educators

##### Building Principal's Role as Related to Mainstreaming

Field-based research pertaining to principals' attitudes toward mainstreaming is not robust. The majority of the research related to principals' attitudes and their willingness to integrate students with specific disabilities into general settings was conducted in the late 1970's. Although staff training and administrative preparation is being conducted in most school districts, little research has been written which focuses on principal training

(Burrello et al., 1988). Several studies conducted in the past focus on the role of the principal as related to the administration of special education programs (Gage, 1979; Hallard, 1977; Lietz & Towle, 1979).

Research indicates the role and leadership of a building principal can affect the overall climate of school (Sergiovanni, 1987). Cochrane and Westling (1977) found effective mainstreaming is also related to a principal's leadership, without support from a principal, general educators do not feel confident executing the daily instruction. Principals who are successful with special education duties also understand the law as related to special education (Burrello et al., 1988). Furthermore, principals who are able to plan and administer special education programs are usually more positive towards the mainstreaming process (Leibfried, 1984; Lietz & Towle, 1979; Shepherd, 1980).

Mainstreaming was unfamiliar to many educators during the conceptualization of P.L. 94-142. Still today, many building principals express lack of knowledge inhibits them from performing many administrative duties confidently (Reehill, 1987). In 1977, The National Association of State Directors of Special Education (NASDSE) provided the definition of a principal's role as related to mainstreaming, "to ensure the effective and complete provision of necessary and appropriate services to

handicapped children in school" (Raske, 1979, p. 645). Along with this definition a short booklet was provided to principals which described at length 30 of the typical duties a principal would perform related to special education (Raske, 1979). Shortly after the national guidelines were distributed to the principals, the Special Education Administrative Policies Board (SEAP) developed its own guidelines (Raske, 1979). This manual helped clarify the guidelines suggested by NASDE. The SEAP Manual identified specific duties and responsibilities which a principal was to complete with regards to mainstreaming.

In 1979, Lietz and Towle conducted a study examining principals throughout the United States regarding the duties and responsibilities suggested by SEAP. The study compared principals' roles and responsibilities to special education administrators' perceptions of a principals duties and responsibilities as outlined by SEAP in 1977. Principals and administrators from 30 large-city school districts were examined. The principals were asked to rank the statements in order of responsibility and function.

The response from the principals indicated principals did not perceive themselves the same as special education administrators (Lietz & Towle, 1979). Over 60% of the principals felt their role was more than a coordinator of exceptional services than an administrator. Many principals indicated that they lacked sufficient knowledge and input to

complete the job effectively. Furthermore, principals stated that they lacked the understanding and support of the special education administrators to do the job effectively. These findings are in agreement with a study conducted by Hallard (1977). Large-city special education administrators wanted the building principals to have more responsibility, especially in the coordinating staff, planning programs, and evaluating students with disabilities.

Lietz and Towle (1979) concluded a principal's reluctance to assert greater authority and leadership was directly related to the principal's lack of knowledge and ability to administer special education programs. Although the delivery of services is a shared responsibility, principals were lacking initiative to become involved. Lietz and Towle (1979) noted principals were unwilling to accept special education responsibilities due to a lack of knowledge and understanding in how to lead the staff.

Shepherd (1980) investigated the differences between the opinions of elementary principals, special education personnel, general classroom teachers, and special education administrators regarding the mainstreaming of disabled students. The role of principals and their degree of involvement in the planning, organizing, and coordinating special education was also examined. One hundred and thirty-five principals in the Dallas School District were questioned. An additional 80 school personnel and parents



were included in this study.

Shepherd (1980) reports that differences exist between elementary principals' perceptions and the special education administrators' perceptions of responsibilities as related to special education. Principals do not feel as comfortable as the administrator for special education programs. The survey indicated a significant difference existed between the principals' ideal role and the actual performance of principals. Furthermore, the principals' ideal role differed from the special education administrators' ideal role for a principal. Special education administrators' and principal generally agreed on specific functions of organizing and directing programs for students with disabilities, however, the opinions of both administrators concerning communication procedures and evaluating with school personnel were different. Elementary principals felt communication and cooperation were not successful using the present system.

Shepherd (1980) concluded a large portion of the elementary principals have had little or no professional preparation regarding mainstreaming through graduate courses or through inservice training. Few principals have had special education training before they became one principals. Both the principals and the special education administrators agreed it was the responsibility of the principals to organize and direct special education programs

in the buildings. Results from the study indicate elementary principals do not feel confident in planning and coordinating specific activities for students with disabilities. Elementary principals viewed communication and cooperation to be the main factor for a program to be successful.

Raske (1979) studied the role of building principals to determine the duties and responsibilities of a principal as related to mainstreaming. This study examines elementary principals in Michigan. Principals completed a survey which suggested 30 tasks an administrator may complete in a day. On a daily basis, general administrators identified 14% of their time was spent completing administrative duties related to special education. Raske (1979) noted principals routinely completes several duties related to special education functions on a daily basis. Duties cited by the principals included: participating in the development of Individualized Education Plans (IEP's), filling out paperwork associated with special education, and reviewing referrals. Some principals cited supervising teachers was also a duty completed by principals.

Nied (1980) studied the perceptions of elementary principal's regarding mainstreaming and the role of the administrator. The study examined 142 elementary principals in the state of Massachusetts. Respondents placed in rank order those activities related to special education which

principals perform on a regular basis.

Nied (1980) indicate principals most often deal with the following problems when working with special education programs. In rank order from most frequent to least: 1) resolving problems between general and special education staff, 2) participating in evaluations, 3) supervising and evaluating, 4) monitoring student progress, 5) screening referrals, 6) adapting facility space, 7) negotiating with other administrators, and 8) arranging transportation for special education students. The least performed task by building principal was the development of special education budgets.

Nied (1980) states principals identify themselves as negotiators and leaders. Principals do not perceive themselves as a strong resource, nor do they perceive themselves to be the initiator of special education programs. Principals overall response was influenced by grade level and location of the school. Nied (1980) found principals from schools which also housed Special Education Administrative Office were more likely to be active in the special education process.

Nied's (1980) study provides significant information regarding the principals' role as related to the administration of special education. The majority of the principals surveyed stated that resolving problems between general and special education personnel was the most

frequent duty performed. Few respondents indicated they actively participate in the budgeting of special education.

#### Summary

Often principals feel that lack of knowledge and the inability to design effective programs causes principals to be less willing to integrate students with disabilities into general education classrooms. Lacking experience dealing with special education can also affect the principals' leadership ability. Principals who are unfamiliar with special education programming are less likely to lead and implement mainstreaming programs within a building. Communication and cooperation influence a principals' ability to work with special education administrators. Principals do not perceive their role to include administrating special education programs. Studies indicate the primary duties principals perform related to special education include: participation in IEP meetings, teacher supervision, and negotiations between general classroom teachers and special education teachers.

#### Principal's Personal Characteristics

The personnel characteristics of principals appear to influence a principals attitude and acceptance of mainstreaming (Lietz, 1980; O'Rourke, 1980). Age, personal philosophy, leadership ability, principal willingness to integrate, and interpersonal relationships affects the attitudes of principals (Center et al., 1984). Some studies

indicate that race, sex, and past experiences can also influence the attitude of principals (Clarke, 1984; Shepherd, 1980; Reehill, 1986). Center et al., (1984) and Reehill (1987) note that attitudes appear to be affected by each of these factors. In addition, Center et al., (1984) determined direct and indirect factors are related to attitudes.

Payne and Murray, (1974) determined the individual differences of principals, personal knowledge, and philosophical beliefs can affect the attitude of principals toward mainstreaming. Some principals indicated personal decisions related to integration were not based solely on written information or reports. Principals stated important factors to consider before placing a child into the general classroom were related to a principals ability to support classroom teachers and the knowledge teachers possessed regarding mainstreaming. Furthermore, before placing a child into a general classroom, several principals stated in addition to reviewing a student's record principals should consider the impact a student would have upon the general program. Principals reported it was necessary to consider the effect integration has on the non-disabled students.

In 1980, Orr examined the characteristics of principals and their ability to implement P.L. 94-142. Seventy-two principals, whose average age was 43, were surveyed in Mississippi. A questionnaire distributed to the

participants examined the background and role a principal held related to P.L. 94-142.

Orr (1980) noted several characteristics were associated with principals in this study. Most respondents had obtained their masters degree in administration. Principals who had additional course preparation in administration or special education were also more favorable in attitude. Few of the respondents had received special education training, although they reported they were familiar with P.L. 94-142. The majority of the respondents in the study had taught in the general classroom, some participants had prior administrative experience.

The respondents were asked information regarding their role and responsibility in relation to P.L. 94-142, the majority of principals felt more special education courses should be required for school administrators (Orr, 1980). The majority of principals who responded felt they had a good knowledge of P.L. 94-142 and special education programming. In addition, the respondents saw the need for change in the physical plant structure and the need to provide preservice training and inservice training for general administrators. The principals did not feel completely confident in the implementation of P.L. 94-142.

In a study conducted by Center et al., (1984) it was reported that the attitude of Canadian principals was influenced by the number of years of service as a principal,

prior teaching experience, or administrative experience. Principals who spent less than 7 years as a school administrator appeared to be significantly more positive towards the integration of special students particularly those students with mild to limiting disabilities. Center et al., (1984) found principals who had special education experience along with teaching experience were less tolerant with regards to integration of students with disabilities.

Principals who perceived their staff's ability to successfully mainstream students with disabilities were generally more favorable toward mainstreaming. Center et al., (1984) determined unless general classroom teachers had adequate support principals were reluctant and unwilling to integrate moderate and severely disabled students into the general classroom. Principals who have had special education training appear to be less willing to integrate students in classrooms where general classroom teachers are not prepared. Center et al., (1984) concluded principals who are resistant to the integration of students are aware of the skills required by general education teachers to be successful. Principals appear dissatisfied with current methods used to train teachers. Until teachers and principals receive further training regarding support services principals will remain less positive towards the integration of students with disabilities. The study determined principals would not implement mainstreaming

unless they felt confident in the teacher's ability to work with students with disabilities. Furthermore, the study indicated principals from large metropolitan areas, government schools, or special schools were less positive about integrating students with disabilities than principals from small provinces which were in the country or rural areas.

Results from Center et al., (1984) reveal attitudes of principals are directly related to the creation and success of a mainstreaming programs. Furthermore, certain individual characteristics of principals will influence the overall attitude of principals towards mainstreaming. A principal's personal perception and individual characteristics has been found to influence a principal's overall attitude towards the integration of students with specific disabilities. Although this study was conducted outside of the United States many of results are relevant to studies conducted in the United States.

Knight (1986) examined the attitudes of elementary educators, special educators, elementary principals, and special education administrators in Louisiana. The data revealed similar findings as Center et al., (1984). The attitude of the respondents was influenced by individual philosophies. The years of professional experience and classroom management style also appeared to affect the response of principals. Age, race, and course preparation



in special education only moderately affected the attitude of the respondents.

Reehill (1987) surveyed 71 elementary school principals and 39 middle school principals in the Bronx to compare the knowledge and attitudes of principals towards the placement of disabled students in the least restrictive environment. The study also compared the knowledge and attitudes of the respondents to personal background and previous experience. The principals were administered the Rucker-Gable Educational Programming Scale and a brief background sheet.

Reehill (1987) concluded both the elementary and middle school principals lacked the knowledge needed for educational programming of students with disabilities. Elementary and middle school principals perceived similar levels of knowledge and ability. There was no significant difference between the attitudes of elementary and middle school principals towards the placement of students with disabilities in the least restrictive environment. Both groups of principals favored the placement of students with mild disabilities in environments which were more restrictive than the environment recommended by the professionals. Reehill (1987) noted the attitude of elementary and middle school principals was not influenced by the number of years of experience and a principal's level of knowledge regarding programs for students with disabilities.

### Summary

A principal's personal characteristics appear to affect a principal's attitude and acceptance of mainstreaming. Studies have determined principals' personal philosophy and interpersonal skills can affect the willingness of principals toward the integration of students with disabilities. The number of years of experience and previous training also appears to affect the attitudes of principals.

The perception of principals regarding a teachers' ability to effectively mainstream influences the overall willingness of principals to integrate students with disabilities. Principals who are willing and accepting of mainstreaming usually have had previous training through inservice workshops or collegiate courses. The management style of principals also appears to be a factor which influences attitude.

Studies show elementary and middle school principals have the same level of acceptance regarding mainstreaming. More studies examining these two groups need to verify these findings. Finally, some principals reported communication between the special education administrators and the building staff needed to improve. Many principals reported the physical layout of the buildings did not always make integration realistic.

## External Factors Which Influence

### A Principal's Attitude

The attitudes of principals can be indirectly influenced by their surroundings such as school size, location of the school, size of the district, and past experiences (Berryman & Berryman, 1980; Cononley, 1982; Lietz & Kaiser, 1979). Training and inservice education regarding special education appears to also influence principals. Grade level, previous knowledge, teaching experience, and number of years experience as a principal can indirectly influence the attitudes of principals (Lietz, 1980; Payne & Murray, 1974; Truesdell, 1988).

Junkala and Mooney (1986) examined special education administrators, principals, general classroom teachers, and special education teachers from Massachusetts. The respondents were administered a questionnaire regarding the placement of students with disabilities into general classrooms. A total of 100 special education administrators responded to the first phase of the study. Special education administrators were asked to select two principals and two general education teachers whom they recommended to complete the questionnaire. Three hundred and twenty-four responses were recorded.

The results clearly indicate principals from schools which utilize mainstreaming are significantly more positive

than those principals from low participating schools. Furthermore, principals from schools with high participation appeared more positive completing administrative duties related to mainstreaming. Principals who were actively involved in mainstreaming were more willing to get involved in developing an Individualized Education Plan (IEP). The overall study determined those principals who felt more positive also felt positive about inservice training, and responsibilities associated with mainstreaming.

Junkala and Mooney (1986) concluded those schools which made high use of mainstreaming were more in agreement with the philosophy of mainstreaming than those schools which infrequently implemented mainstreaming programs. Teachers from high participation schools also participated in a large number of inservice or afterschool training sessions than schools which minimally implemented mainstreaming. Principals from high use schools were more in favor of staff attending workshops and inservices regarding mainstreaming than principals from low use schools.

O'Rourke (1980) investigated the relationship between principals' attitude and the effect principals have toward the staff and student morale. The study examined junior and senior high school principals and teachers from rural, urban, and suburban settings in Nebraska. Building principals, staff members, and selected students with disabilities were used in the study. The Rucker-Gable

Educational Programming Scale was used to examine the attitudes of the participants. The School Morale Inventory was administered to a small group of students.

Results from the study indicate there was a significant relationship between principals' attitude and teachers' attitude toward students with disabilities. Teachers who had previous experience working with students with disabilities possessed a better level of confidence and were better able to identify student needs. Subsequently, those teachers with previous experience also expressed a more positive attitude towards the philosophy of mainstreaming and accepted students with mild disabilities. No significant differences between school district size were noted in the study.

Conoley (1982) determined principals in small rural schools are more successful with mainstreaming than principals counterparts in large urban schools. The administrator of a small school can help to provide an organized program which enables persons working with the students to be supportive and successful. Through the use of cooperative planning, administrators, resource personnel, and general education teachers can develop successful mainstreaming programs for students. Conoley (1982) notes that two positive outcomes of cooperative teamwork was utilization of resources and an increase in communication among staff members.

Conoley (1982) states principals should be role models and they need to become the leader of the building. Principals who are knowledgeable and supportive to the staff help develop the confidence of the staff. Staff personnel who trust each other are more likely to participate in an open communication system. Additionally, staff members will also view mainstreaming more positively. Conoley (1982) suggests a small school can exhibit acceptance of other staff members ideas more readily than large schools. Ideas which are formulated in a small school are more readily adopted than in large schools. Problem solving techniques used by staff members in small schools help to develop a shared responsibility.

Mainstreaming of students was highly successful when the principal advocated the need for mainstreaming. Lietz (1980) and Truesdell (1988) concluded the interactive relationship of elementary school principals was the most significant factor in the success of mainstreaming. The size of a school, the degree of administrative support, and the culture of the school also influences the attitudes of school personnel.

Lietz (1980) noted demographic variables and leadership characteristics significantly influence the attitudes of principals. Task-oriented principals with extensive training, in special education or who have had previous experience with special education were only slightly higher

in attitude than nonparticipating principals. Principals from small community settings had lower positive relationships toward mainstreaming than principals in urban settings.

#### Summary

Studies show attitudes of principals can be indirectly influenced by the size of a school district, current surroundings, past experience, and knowledge. Principals who actively implement mainstreaming have a more favorable attitude towards mainstreaming and in general feel more confident. Those principals who have participated in training programs felt more positive towards mainstreaming than non-participants. Junkala and Mooney (1986) determined principals who do not participate or attend inservice programs do not see the benefits from such programs. The impact of the behavior of principals toward mainstreaming, the relationship of principals to their staff, and the morale of the building were found to be significant. School principals who were more positive towards mainstreaming not only affected the teacher's level of comfort, but also the student's level of comfort. The morale of students with disabilities was found to be highly favorable when students attended a school which favored mainstreaming.

The literature indicates the success of mainstreaming programs in rural districts is still uncertain (Conoley, 1982; Jamieson, 1985). Previous studies are inconclusive.

School personnel from small rural schools appear to be more favorable towards mainstreaming than large urban schools. Earlier studies, however, indicate principals from rural divisions were less favorable with regards to mainstreaming (Berryman & Berryman, 1981; Bond & Dietrich, 1983; Lietz, 1980). Insufficient data are available to draw conclusions at this time.

#### Principals' Attitude Toward Specific Disabilities

Principals in general are more willing today to mainstream students than a decade ago (Garvar & Schmelkin, 1989; Center et al., 1984). Studies indicate some principals still favor placing students with moderate or severe disabilities into special classes (Center et al., 1984; Goupil & Bruent, 1984). Most principals felt those students which require additional teacher training or extra support services outside the general education programs should be educated in special program (Goupil & Bruent, 1984; Pinhanas & Schmelkin, 1984).

Goupil and Bruent (1984) conducted a study outside of the United States investigating attitudes of principals and teachers. The attitudes of 42 principals and 124 elementary and secondary teachers in the Montreal region were surveyed. The survey examined the attitudes of the respondents by using a questionnaire solely designed for the study. The questionnaire examined 11 types of disabilities (Goupil & Bruent, 1984).



Goupil and Bruent (1984) determined although mainstreaming has been a part of the educational process for over a decade, some principals and teachers are not convinced of the value of mainstreaming for some students. Several groups of students appear to be more favorably accepted by teachers in the general classrooms. School principals and teachers are willing to integrate only specific types of students with disabilities into the general classrooms. Students who require more than the conventional methods of instruction were not as readily accepted.

Results from Goupil and Bruent (1984) indicate principals preferred those students with mental retardation or partial hearing loss to be placed in special settings. Principals felt students with visual impairments should be taught using special education measures outside the general classroom. Both principals and teachers agreed overwhelmingly those students who were moderate mentally retarded need to be educated in special settings.

Goupil and Bruent (1984) indicated the attitudes of principals and teachers regarding integration was moderately favorable. One-third of the school principals and teachers examined preferred educating over half of the students with specific disabilities in special classes. Students with mild disabilities were more favorably accepted in the general classroom than other disabilities. Building

principals also favored students with physical handicaps who could be served in the general classroom setting.

Pinhanas and Schmelkin (1984) conducted a study in metropolitan New York examining the attitudes of elementary principals, special education administrators, classroom teachers, and special education teachers. The purpose of the study was to compare the attitudes of the four groups of respondents. A multi-dimensional attitude scale was used to examine the attitude of the participants towards mainstreaming. The questionnaire included statements related to academic, social-emotional problems, and behavioral development of students with disabilities.

Participants in the study chose a set of cards which displayed a specific disability. Each participant sorted the cards into categories which they saw appropriate. The process resembled the process of classification and categorization of individuals. The number of distinct categories that were sorted ranged from 2 to 16 (Pinhanas & Schmelkin, 1984).

Pinhanas and Schmelkin (1984) reported special education administrators and special education teachers classify students with specific disabilities into more specific categories than other groups tested. The majority of the participants found unique differences among each category. The general classroom teachers categorized the individuals with disabilities according to physical versus

perceptual impairments; behavioral versus sensory impairments. Principals organized the individuals according to physical disabilities versus perceptual; developmental versus neurological; communication versus behavioral-emotional disabilities. None of the responding groups significantly differed in their categorization of students with regards to socio-emotional needs.

Pinhanas and Schmelkin (1984) reports academic progress in the classroom was the highest concern for the general classroom teachers and the special education teachers. Both the special education administrators and principals believed mainstreaming would have a less adverse effect on students with disabilities than those who do not have disabilities. Additionally, the teacher's perception of students with disabilities may have a profound effect on the kinds of intervention strategies developed by a school. Pinhanas and Schmelkin (1984) noted a potential conflict may occur between the principal's attitude and the teacher's attitude. Different perceptions were held by all four groups but principals' and teachers' perceptions were significantly different. A principals perceptions appears to be more global than those of general classroom teachers. Pinhanas and Schmelkin (1984) concluded placement decisions could be impacted due to a difference of opinion among the school staff.

Center et al., (1984) examined attitudes and the use of

support services in all grade levels. The study revealed 83% of the principals felt integration of individuals with disabilities individuals into the community and school was a desirable goal. Furthermore, 83% of the principals strongly agreed that in order to achieve community acceptance it was necessary to integrate students with disabilities into general classrooms. The study reported individual variations within the sub-groups which responded to the survey. Catholic and Independent school principals who responded to the survey displayed a more positive attitude towards integration than the principals of governmental schools. Principals with appropriate special education qualifications were also found to be more accepting, suggesting principals who have received preservice training or inservice training appeared to be more prepared to deal with the integration of students with disabilities. Principals who work in rural settings appear to be slightly more positive than those principals who work in metropolitan regions. Principals who worked with students in the primary grades were more positive than the high school principals surveyed. The authors suggest perhaps this was related to the structure of a primary program which places less demands on curriculum and is more flexible.

Center et al., (1984) noted that principals either strongly accepted the integration of students with disabilities or principals opposed the integration of

students with disabilities. Characteristics considered acceptable for inclusion in a general classroom were described as students who would not create extra work for the classroom teachers (e.g., toilet training). Students with mild to moderate disabilities, moderate visual and auditory disabilities, and withdrawn students were more favorably accepted by principals to be in general classrooms.

Principals were less certain of integrating students who were disruptive, required extra teacher competencies, or extra care. Students who were hyperactive, dangerous, or exhibited a short attention span were also considered not as acceptable in the general classroom. Students with moderate to severe sensory disabilities or those individuals with moderate to severe physical disabilities with mobility were also less favorably accepted by general classroom teachers. Students with mild to moderate intellectual or emotional disabilities were also found in this category.

Principals were unwilling to accept individual students whose educational and behavioral characteristics were not tolerable in the general classrooms. Students with multiple or severe physical disabilities were also unacceptable in the general classroom. Principals marginally accepted students who required extra time by a teacher to do non-academic duties (e.g., changing catheters).

Despite the individual variations among the sub-groups

the data indicated the concept of integrating individuals with disabilities into the general classroom was overwhelmingly endorsed by building principals. Catholic and Independent schools principals from Canada responded more positively towards integration than the governmental schools (Center et al., 1984). Principals with appropriate training in special education also were found to be more accepting of the integration of students with disabilities. Findings from this investigation suggest preservice or inservice training in special education may help to create more positive attitudes. This survey indicated that the attitudes of northwestern Canadians were more favorable than the attitudes of principals who were surveyed in the study conducted by Payne and Murray (1974).

#### Summary

The literature suggests there is a wide degree of acceptance of principals regarding individual disabilities. In general, principals are currently favorable towards the mainstreaming of students into general classrooms. Center et al., (1984) supports previous findings which have been conducted over the past 10 years. Although many principals still view some disabilities as inappropriate for the general classroom setting, principals were also more favorable towards the mainstreaming process. In general, principals felt those students who require additional modifications beyond the basic program should be provided

assistance outside of the general classrooms. For example, most principals feel those students who are using Braille or who were totally deaf should be taught in special settings. Principals do not favor integrating students with mental retardation, disruptive behavior or multiple disabilities. Principals are willing to mainstream individuals who have physical disabilities, developmental delays or communication disorders.

#### General Education Teachers

The classroom teachers' attitude and understanding of mainstreaming is vital for the success of the mainstreaming. Research has shown teacher attitudes directly affect student attitude (Horne, 1985; Hummel, 1982). Numerous studies appear in the literature related to teacher attitudes' toward mainstreaming (Berryman & Berryman, 1981; Donaldson, 1980; Garvar & Schmelkin, 1989; Goupil & Bruent; 1984; Harasymiw & Horne, 1975; Hanrahan & Rapagna, 1987; Harvey, 1985; Jamieson, 1985; Johnson & Cartwright, 1979; Knight, 1986; Larrivee & Cook, 1979; Nader, 1984,; O'Rourke, 1980; Smith & Kallevang, 1985; Zigmond, Levin, & Laurie, 1985). Current literature regarding general education teachers and mainstreaming focuses on the attitudes of teachers, specifically: 1) as related to personal characteristics (e.g., personal philosophy, age, level of education, knowledge about students with disabilities, 2) as related to different types of disabilities, and 3) the influence of

indirect factors upon teachers. Many studies examined the cognitive or affective changes which occur in teachers after they attended a class or special workshop related to mainstreaming (Harasymiw & Horne, 1975; Johnson & Cartwright, 1972; Stephens and Braun, 1980). The majority of the studies examined teachers by using a paper-pencil test. Few studies conducted follow-up interviews or did in-class observations.

Personal Characteristics Which Directly  
Influence Teachers' Attitude

Teacher attitude is also related to an individual's perception and willingness to accept students with disabilities into the general classrooms (Larrivee & Cook, 1979). Bond and Dietrich (1983) determined that teachers who were more successful with mainstreaming also had positive attitudes towards mainstreaming. Successful mainstreaming depends upon collaboration between the general education teachers and the resource teacher (Bond & Dietrich, 1983). A teacher's self-perception has been found to be the most influential factor to the success of a mainstreaming program.

"Teacher perception of success is a function of many variables, such as information level, knowledge level, attainment, specific skill acquisition, contact and experience with exceptional children, and their attitude. While



the relationship of these variables can be viewed as interactive, the degree to which each has an impact on a teacher's self-perception of effectiveness is still not clear" (Larrivee, 1982, p. 375)

Larrivee (1985) who studied kindergarten through 12th grade, reported that teacher attitude became less positive in the higher grades. Primary and elementary teachers possessed positive attitudes toward mainstreaming than teachers at the secondary level.

Berryman and Berryman (1981) reported significant differences among teachers according to age. Older teachers were less favorable towards mainstreaming than younger teachers. Furthermore, teachers who were 30 to 40 years of age were significantly more favorable towards mainstreaming than those respondents over the age of 40. Teachers from the middle grades appeared to be more opposed to mainstreaming than those teachers who taught the primary or elementary grades (Berryman & Berryman, 1981). Those teachers who were the most experienced in teaching were less favorable towards mainstreaming (Berryman & Berryman, 1981; Stephen & Braun, 1980).

Teacher expectations can also affect student success (Horne, 1985). Jordan and McLaughlin (1986) determined several direct factors help to shape a teacher's attitude towards mainstreaming: 1) personal philosophy, b) perceived

needs of students with disabilities, c) management style, and d) availability of support in a building.

An earlier study conducted by Larrivee and Cook (1979) identified similar factors related to teacher attitude and mainstreaming. Teachers in grades kindergarten through 12th were examined. Thirty factors which were determined significant from previous studies were further examined. Five important factors were significant: a) general philosophy, b) classroom behavior of special needs students, c) perceived ability to teach students with disabilities, d) classroom management, and e) academic and social growth of students with disabilities. A high correlation was found between the attitudes of teachers and their success and confidence.

Larrivee and Cook (1979) determined that one-third of the factors cited relate to a teachers' personal perception and confidence. Teachers who scored low on the survey were less confident about working with mainstreamed students. The level of success also correlated positively with the availability of support services. Another significant correlation was the relationship between support services and the level of administrative support a teacher received. Larrivee and Cook (1979) determined that teachers who perceive themselves as successful will then exhibit a more positive attitude. The availability of support services and the level of administrative support was found to contribute

to the success of teachers. Furthermore, Larrivee and Cook (1979) noted principals can help foster a positive learning environment for both teachers and students.

Diebold and Trentham (1983) identified six factors which significantly influenced the attitudes of teachers. The factors identified from this study were similar to those factors identified by Larrivee and Cook (1979). The factors were: a) willingness to teach students with disabilities, b) knowledge of students with disabilities, c) confidence to teach students with disabilities, d) the effect of mainstreaming on the classroom, e) sufficient time for planning, and f) the effects of teacher opinion upon the student's academic progress.

Sixty-four percent of the elementary classroom teachers examined by Diebold and Trentham (1983) were willing to work with students with disabilities. However, only 40 percent of the willing teachers felt they had the knowledge or skills to be effective. Furthermore, teacher confidence level and level of knowledge were both found to be only 43%. Fifty-five percent of the general classroom teachers felt that they would be adversely affected by mainstreaming. General classroom teachers expressed concern with regards to planning appropriate educational and social programs to meet the needs of general and special education students. Instructional time and preparation time were deemed insufficient to work effectively with both general and

special students. Diebold and Trentham (1983) also found general education teachers who participated in at least one course related to mainstreaming were more positive towards mainstreaming. The positive attitude was attributed to recent college curriculums which better prepared teachers for mainstreamed students.

Ringelaben and Price (1981) conducted a study in Wisconsin examining the attitudes of teachers who taught grades kindergarten through 12th. Each participant completed a 22 item questionnaire and background sheet. The questionnaire was designed to investigate the attitudes and opinions of the teachers towards mainstreaming. The results indicated that earlier success with students with disabilities along with the basic knowledge of mainstreaming helped to increase teacher attitudes' toward mainstreaming.

Thirty-one percent of the teachers surveyed indicated a relationship existed between attitude and philosophy of mainstreaming (Ringelaben & Price, 1981). The respondents indicated mainstreaming was the schools responsibility and social duty. Teachers favored students with disabilities in the general classroom. Yet, 54% of the respondents felt they were unprepared to integrate students because they lacked the knowledge and confidence. The majority of the teachers had not received any inservice training about mainstreaming. Thirty-three percent of the respondents indicated teacher preparation and training helped to

influence the respondents attitude towards mainstreaming.

Ringlaben and Price (1981) concluded teachers who perceive themselves as successful with mainstreaming also had a sufficient level of knowledge and confidence. Teachers indicated the importance of educational preparation and inservice training. Furthermore, the study reported inservice training could help prepare teachers to work with students with disabilities.

#### Summary

A general education teacher's attitude towards mainstreaming may be influenced by personal characteristics, background, and personal beliefs. Those teachers who perceive themselves as having a positive attitude also are confident and willing to participate in mainstreaming. The most influential factors which appear to influence a teacher's attitude towards mainstreaming is self-perception and a person's ability to do a job. In addition, personal philosophy and willingness to work with mainstreamed students was highly influential in the teachers' overall attitude. Knowledge, skill acquisition, contact with special students, teacher's age, and experience also appear to affect teacher attitudes'. Teachers who were between the ages 30 to 40 were found to be the most favorable towards mainstreaming. Teachers who were experienced in teaching were less favorable towards the mainstreaming of students with specific disabilities.

### Teacher Attitudes As Related to Indirect Factors

A negative attitude can be related to a teachers lack of knowledge, non-preparedness, and insufficient training. Workshops, inservice training, support from an administrator can help remove negative opinions towards mainstreaming. Teachers can be influenced by the setting, the size of the school, or the district size. Negative attitudes can also be related to the population or culture norms of a setting (Berryman & Berryman, 1981; Donaldson, 1980; Harasymiw & Horne, 1975; Harvey, 1985; Jordan et al., 1986; Ringlaben & Price, 1981).

Smith and Kallevang (1985) noted teachers in the lower grades (primary and elementary) were more positive than teachers in other grades. The examiners attributed the more favorable attitude to the loose structure and flexibility that elementary teachers have in their classrooms. Results from Smith and Kallevang (1985) indicate teachers who are recent graduates from college were generally more positive toward mainstreaming than other teachers. Similar findings were also reported in a study conducted by Stephens and Braun (1980).

In a similar study, Rogers (1987) studied the differences in teacher attitudes in the elementary, middle, and secondary grades. This study indicated specific variables do impact the attitudes of teachers. The

variables identified were a teacher's exposure to the students with disabilities, years of teaching experience, certification level, and previous training in special education.

In general, teachers and support staff members were positive towards the concept of mainstreaming. The majority of the participants viewed mainstreaming to be necessary for academic success. Teachers felt, however, that students with some specific disabilities do not benefit from the socio-emotional aspects of mainstreaming.

Rogers (1987) reports a significant difference appeared in the attitudes of elementary, middle, and high school teachers and support personnel. In addition attitudes were influenced by the type of school in which school personnel worked in. The greatest degree of difference occurred between elementary and high school settings.

Rogers (1987) reported that the level of exposure to students with disabilities varied according to school level. Elementary teachers had more opportunities to interact with the disabled students than secondary teachers. Middle and secondary level teachers did not have enough contact with mainstreamed students. General education teachers in the upper grades were found to be less positive than other teachers and support personnel.

It was concluded no significant difference occurred between the attitudes of teachers according to grade level

(Rogers, 1987). The variables exposure to students with disabilities, certification level, previous training in special education, and teaching experience were not significant for any of the groups studied. Significant differences, however, were noted in the grade level teachers taught and their attitude. Further analysis determined that high school teachers appear to have less positive attitudes than middle and elementary teachers. The data suggest that further analysis needs to be conducted at the middle and secondary level to determine what variables affect attitudes of teachers and whether these variables are the same for elementary teachers.

Rogers (1987) suggests a relationship between school setting and attitude exist. The inherent structure of the school may account for why differences in attitude exist. The difference in attitude may also be related to the academic structure of the secondary school as compared to the elementary school. This suggests that secondary schools are less likely to support the mainstreaming concept due to the academic structure.

The degree of positive attitude appears to be influenced by the amount of education a teacher possessed. Harasymiw and Horne (1974) investigated a teacher's level of education and its relationship to teacher attitudes. Teachers with less education were significantly more favorable toward integration. Teachers holding bachelor



degrees were more positive towards mainstreaming than teachers holding advanced degrees; older teachers were found to be the least positive towards mainstreaming. Harasymiw and Horne (1974) suggested that those teachers having more educational and classroom experiences were less willing to accept mainstreamed students. The authors further conclude, older teachers are more difficult to change because the educational philosophy they hold is different from current philosophies.

Johnson and Cartwright (1979) conducted a study which investigated the relationship between teachers' attitudes toward mainstreaming and the influence of information regarding mainstreaming and prior experience. The study investigated whether college courses offer information related to mainstreaming and which of these experiences provide for a more positive attitude towards mainstreaming. Participants were placed in two groups. One group participated in a course and a small workshop which included direct experience with persons with disabilities. Data were gathered regarding the attitude, level of knowledge regarding mainstreaming, and background information.

The results indicated that teachers who work with students with disabilities appear to have a better understanding of the student's characteristics and needs (Johnson & Cartwright, 1979). Furthermore, teachers who worked with students with disabilities were less fearful,

they appeared more confident, and they were more willing to work with students with disabilities (Johnson & Cartwright, 1979).

Johnson and Cartwright (1979) determined the attitude of teachers did not improve significantly when they only participated in coursework related to special education. Results from the study indicated teachers who were more positive towards mainstreaming were also those teachers who had participated in both the coursework and direct experience. Johnson and Cartwright (1979) further concluded to ensure success and confidence among teachers certain strategies and techniques need to be taught. In addition, teachers need to have more direct exposure to students with disabilities.

Harvey (1985) examined the attitudes of teachers and administrators in Australia. The study reaffirmed earlier findings conducted by Johnson and Cartwright (1979) which determined coursework and direct experience does help to improve attitudes. Harvey (1985) determined participants who responded favorably towards mainstreaming were more willing to implement mainstreaming. In addition, a respondents personal philosophy towards mainstreaming appeared to be more favorable if they had previous experience with students with disabilities.

Harvey (1985) reported administrators were more favorable towards mainstreaming than general education

teachers. Teachers in the primary grades appeared more willing to accept students with disabilities than upper elementary teachers. The study reported principals were less willing to place students with behavioral disabilities in the general classroom unless classroom teachers receive additional training.

In summary, Harvey (1985) revealed that philosophy of educators regarding mainstreaming are more favorable toward integration when they have had previous experience. Administrators expressed more positive attitudes than teachers toward the concept of mainstreaming. Teachers who have had personal experiences or prior experience with students with disabilities were more receptive to mainstreaming than those teachers lacking experience with students with disabilities.

Stephens and Braun (1980) conducted a study examining elementary and upper elementary teachers. The attitudes and perceptions of teachers as related to mainstreaming were examined. This study found teachers who taught lower primary grades felt more positive toward the concept and philosophy of mainstreaming. Furthermore, specific variables were found to influence the attitudes of teachers toward mainstreaming. Prior experience with students with disabilities influenced the attitudes of teachers toward integration. The study reported different categories of disabilities also affected the willingness of teachers to

accept a student into the general classrooms. A relationship between teacher confidence and teacher preparation was also found in the study. Teachers who had one or more courses pertaining to special education were more favorable toward students with disabilities (Stephens & Braun, 1980).

Findings reported by Stephens and Braun (1980) agree with earlier conclusions (Harasymiw & Horne, 1975; Johnson & Cartwright, 1979). Stephens and Braun (1980) noted knowledge is an essential element but it is not as important as direct exposure and teaching experience when working with special students. Furthermore, the results indicate teachers who taught in the lower grades also appeared to be more successful with the mainstreaming process. Teachers who recently graduated, regardless of grade level taught were generally more positive towards mainstreaming. Teachers who were the least favorable towards mainstreaming were older teachers who were also more experienced in teaching. The study suggested older teachers were less favorably toward mainstreaming because they lacked the training in special education and were less experienced with mainstreamed students.

Smith and Kallevang (1985) conducted a survey to determine whether a relationship exists between the attitudes of teachers toward mainstreaming and classroom management procedures. Smith and Kallevang (1985) surveyed

75 primary and elementary teachers and found teachers who utilize management techniques and place more emphasis on the role of the student and his responsibilities, had higher classroom success. Furthermore, teachers who use positive reinforcement, and ignore inappropriate behavior were more likely to be effective managers in the classroom.

A case study was conducted by Salend and Johns (1982) which examined the relationship between a second grade teacher and a mainstreamed student. Salend and Johns (1982) proposed mainstreaming and direct experience can help change the attitude of a teacher and student. Over a period of 22 weeks a classroom teacher wrote statements or verbal comments about the student with disabilities and the mainstreaming process. The teacher discussed her personal reactions to the mainstreaming process with a special education teacher. Academic and social changes in the entire class were noted in her log. The participating teacher also received additional support and inservice training from several specialists during this period.

The outcome of the study supports earlier findings, a positive attitude toward mainstreaming is related to the extent to which a person is exposed to students with disabilities. Furthermore, the teacher's attitude and her level of confidence changed from unfavorable to a more favorable attitude as a result of her exposure and support. The extra support and assistance from trained staff members,

helped the teacher to feel more confident. Salend and Johns (1982) concluded the direct exposure and extra support helped to improve the teacher's attitude.

#### Summary

Indirect factors which influence the attitude of teachers have been cited in the literature (Berryman & Berryman, 1981; Harasymiw & Horne, 1975; Harvey, 1985; Ringlaben & Price, 1981; Salend & Johns, 1982; Smith & Kallevang, 1985). The attitudes of teachers who have had direct experiences with students with disabilities tend to be more positive. Teacher acceptance of mainstreaming will depend upon the personal philosophy of the teacher, personal beliefs, and a teacher's desire to change. Researchers cannot confidently measure whether inservice programs cause a change or whether the change is a result of other factors (Harvey, 1985; Stephens & Braun, 1980). Research indicates knowledge and participation (directly or indirectly) combined assures a higher degree of acceptance and willingness to work with students with disabilities (Harasymiw & Horne, 1974; Rogers, 1987).

It has been determined that education does influence the attitude of teachers. Teachers who have participated in special education courses appear to be more positive towards mainstreaming than teachers who have not participated in a special education course. Research indicates that those teachers who participate in a course and receive additional

experience with students with disabilities are more likely to have a favorable attitude toward mainstreaming (Johnson & Cartwright, 1979; Rogers, 1987).

Inservice workshops which deal with methodologies and classroom management are effective methods for developing positive attitudes towards mainstreaming. Past studies indicate that active learning, role playing, simulations, and discussions can help to improve teacher attitudes (Harasymiw & Horne, 1974; Harvey, 1985; Johnson and Cartwright, 1979). Active learning was found to be more effective than preparation and management skills. Participants who view a tape, or who actually work with persons with disabilities were more comfortable and favorable toward mainstreaming than non-participants (Harvey, 1985; Stephens & Braun, 1980).

The relationship between school settings, grade level taught, and school division size have been found to affect the attitude of teachers. Most of the studies conducted over the past 20 years have focused on the primary and elementary levels, few studies include the upper grades. Preliminary research suggests that a relationship exists between these indirect factors (Berryman & Berryman, 1981; Larrivee, 1985; Stephens & Braun, 1980). Research has of general classrooms may also affect the overall attitude of teachers (Smith & Kallevang, 1985).

### Teacher's Attitude Towards Specific Disabilities

The perceptions and attitudes of teachers toward specific disabilities has been examined extensively in the literature. In general, teachers are more willing to accept students with mild disabilities (Center et al., 1984; Jordan & McLaughlin, 1986; Garvar & Schmelkin, 1989). Teachers were in favor of mainstreaming if it did not require additional programming and instructional planning (Center et al., 1984). Teachers were less likely to accept mainstreaming if it meant working with students with behavioral disorders or socially-emotionally maladjusted students (Jordan & McLaughlin, 1986)

In 1984, Goupil and Bruent conducted a study examining 124 secondary and elementary teachers and administrators attitudes towards mainstreaming in Montreal. Each respondent was given a questionnaire pertaining to mainstreaming and personal feelings towards specific disabilities. Respondents classified students into 11 different categories. These categories were based upon Deno's list of 11 types of students with disabilities (Goupil & Bruent, 1984). Participants were further asked to place students they would be willing to teach in general classrooms into a separate stack.

The general education teachers believed that over half of the different types of disabilities should be taught in



special classes. General educators who participated in the study placed students with multiple disabilities, or who were moderate mentally retarded, or students with total hearing loss into a category which served students outside the general classroom. Students with serious learning disabilities, or who were mentally retarded, or possessed visual disabilities were categorized as students needing special assistance from special teachers. Students who had visual disabilities and used Braille, were not favorably accepted by general education teachers. Students with emotional disabilities who required special measures were also placed in separate classrooms. Students with mild learning disabilities, physical disabilities, or visual disabilities and used ordinary materials were accepted more often by general education teachers in the general classroom setting.

Garvar and Schmelkin (1989) recently conducted a study similar to Goupil and Bruent (1984). Garvar examined the respondents by using a multidimensional questionnaire to classify students with disabilities. The scale examined the perceptions of general educators and their attitudes toward persons with disabilities. The form included 11 different categories of students with disabilities based on Deno's (1970) list of exceptionalities. This study also gathered information regarding the respondents self-perceptions, past experiences, philosophy, values, and future educational

goals. Eighty general education teachers participated in the study along with administrators and special education personnel.

Results from the study showed general classroom teachers classified students differently than principals and special education administrators. General education teachers placed students into categories based upon cognition, behavior problems, sensory disabilities, physical disabilities, and perceptual disabilities. Each participant classified these students according to ability to function in the general classrooms. The widest difference among categories were in the areas related to mental disabilities and physical disabilities. Those students with physical disabilities were more accepted by general classroom teachers. Results indicate that students with social-emotional disabilities and students with sensory disabilities were the least likely groups of students to appear in general classrooms.

The results from current studies (Goupil & Bruent, 1984; Garvar & Schmelkin, 1989) confirm earlier studies which had been conducted in the United States (Jamieson, 1985; Johnson & Cartwright, 1979; Harasymiw & Horne, 1974). These findings reveal that if teachers are given a choice, more than half of the students with disabilities will be placed in special classes for all or a good portion of the school day. Teachers are still moderately in favor of

mainstreaming students who have mild learning disabilities, physical disabilities, or visual disabilities but do not require special assistance.

#### Summary

Teacher perceptions towards mainstreaming students with specific disabilities has been investigated extensively in the literature. Recent studies indicate similar findings to studies conducted early after the implementation of P.L. 94-142. Teachers are less likely to accept students with behavioral disorders in the general classroom than students who have physical disabilities. Typically, general classroom teachers classify students according to academic ability rather than according to specific categories.

Over half of the general education teachers examined in these studies revealed students with limiting disabilities should be placed in special classrooms. Teachers indicated students with serious learning problems or students with mental disabilities should be taught in separate classrooms. Students with visual disabilities who require special materials, or students using Braille, or students who were deaf should be instructed in a separate program. Students with mild disabilities, students with physical disabilities, and students with visual disabilities who can use ordinary classroom materials were favorably accepted by general education teachers. Teachers indicated students with socio-emotional disabilities or students with behavioral

disabilities should not be placed in general classrooms.

### Summary of Literature

Despite the abundance of research pertaining to attitudes and mainstreaming, few studies have specifically examined the middle grades and the relationship between a principals and teachers attitudes and level of comfort toward mainstreaming. Middle school education has been cited in the literature as a critical stage in a student's development and academic success (George & Oldaker, 1985). Past studies have indicated the attitudes of general educators at the middle level grades is less favorable than general education teachers at the elementary and primary grades. More information at the middle level grades needs to be obtained to verify past findings.

It has been over a decade since Larrivee and Cook (1979) described the factors which influenced the attitudes of school personnel toward mainstreaming. Larrivee and Cook (1979) determined teachers' personal perception, willingness to accept students, and level of comfort were related to attitude. The degree to which these variables impact upon one another has not been recently investigated.

An attitude is a complex behavior that is not solely based upon one's knowledge. Attitudes will not change unless new or different information is presented to a person (Jamieson, 1985; Oskamp, 1977). To reduce the discomfort a

person feels towards an object, specific intervention strategies need to be provided to help relieve a person's discomfort (Sherif et al., 1965; Triandis et al, 1985). For example, workshops, courses in special education, and direct exposure to students with disabilities appear to influence the degree of favorableness a person has towards mainstreaming (Harasymiw & Horne, 1974; Harvey, 1985; Rogers, 1987).

Past findings indicate a relationship exists between specific factors and attitude (Berryman & Berryman, 1981; Larrivee, 1985; Stephens & Braun, 1980). Factors which have been cited in the literature to affect attitude are: a person's willingness to mainstream, knowledge, and overall school climate (Larrivee, 1985). An additional factor that indirectly influences the attitudes of teachers is the attitude of the building principal (Riedel, 1991). The findings suggest principals who were supportive towards mainstreaming achieve greater success with the mainstreaming process (Junkala & Mooney, 1986). Furthermore, findings reveal those principals who use cooperative planning and utilize school resources were more favorable towards mainstreaming (Riedel, 1991; Smith & Kallevang, 1985). Finally, the management style of elementary principals appears to also affect the attitude of the staff, however, more information at the middle level grades is needed before any conclusions can be drawn.

Earlier findings in the literature state that a relationship exists between student success and teacher attitude (Wood, 1989; Horne, 1985). Further research regarding the direct and indirect factors which influence the attitudes of teachers and principals needs to be investigated. Educational philosophy, confidence, success rate, and willingness to work with students with disabilities are all direct factors which have been found to contribute to the attitude of teachers with regards to mainstreaming (Berryman & Berryman, 1981; Larrivee & Cook, 1979). Indirect factors which have been cited to influence the attitudes of teachers toward mainstreaming are: administrative support, education level of the teacher, grade level taught, and inservice or preservice training (Bond & Dietrich, 1983; Harvey, 1985; Nader, 1984; Rogers, 1987). The relationship between attitude and confidence has not been extensively studied examining practicing educators. Some studies indicate self-perceptions and the ability of teachers to complete tasks can also influence attitudes (Norlander & Reich, 1984; Larrivee, 1982). Larrivee (1982) notes the degree of comfort can also indirectly affect the performance of a person when working with disabled students. More information is needed regarding a educators level of comfort before clear conclusions can be drawn.

The ecological environment, or size of a school has not been fully investigated in relation to mainstreaming. A

person appears to be influenced by his environment, school personnel, and program availability. Small school divisions are more apt to have limited resources and funds (Berryman & Berryman, 1981; Lietz & Kaiser, 1979). Findings indicate school personnel from small school divisions are less likely to favor mainstreaming programs. Currently, few attitudinal studies have taken into account school division size. Studies conducted in the late 1970's and early 1980's are outdated, newer information needs to be obtained.

## CHAPTER 3

### PROCEDURES

The purpose of this chapter is to describe the research methods and procedures used in the study. The population sample, instrumentation, research questions, design of the study, and analysis of data are described in this chapter.

#### Population Sample

A stratified random sample of general education teachers and building principals employed in the Virginia Public School System was examined. The study only included teachers or principals who worked in grades 5 - 9 and whose school was considered a middle, intermediate, or junior high school. For the purpose of this paper these schools are referred to as middle level schools.

All city and county school divisions were categorized as either small or large based upon end-of-year Average Daily Membership (ADM). A school division containing student enrollment less than 3,500 students was categorized as a small school division. School divisions enrolling more than 9,000 students were categorized as a large school division. School divisions greater than 3,500 and less than 9,000 were excluded from the study.



Table 1  
Population Sample

Size of Division sample	Number of School	Number of Middle Divisions	Schools in the Schools	Principals in the sample	Teachers in the sample
Small (<3500)	35	36	(35)	23	120
Large (>9000)	30	132	(40)	32	119

Of the 144 school divisions in the state, 35 small and 30 large school divisions were chosen for inclusion in the study. The 35 small school divisions and the 30 large school divisions have a total of 168 middle schools. Seventy-five middle schools were randomly chosen for the study. Five questionnaires went to teachers in each school and 1 questionnaire went to the principal. A total of 450 questionnaires were distributed. Three hundred and twenty-one questionnaires were returned. Due to omissions and incorrect answers only 294 or 65% of the questionnaires were useable. Fifty-five principals and 239 middle school teachers participated in the study resulting in a return rate of 61% and 64% for the principals and teachers, respectively. A summary of the population sample is presented in Table 1.

Demographic information and school background

information was collected. A copy of the demographic/information sheets are presented in Appendix A. A summary of the information collected from the respondents is included in Appendix B.

The demographic/information sheets collected personal information as well as educational background. The information sheets examined the structure of the school, the availability of services, and the degree of exposure a participant had students with disabilities.

Seventy percent of the respondents were females. The average age of the participants in the study was between the ages of 40 and 49. Eighty-one percent of the participants were general education teachers and 19% were building principals. Fifty-one percent of the participants came from large school divisions.

Twenty-eight percent of the participants held a bachelor's degree, plus 15 credit hours. Twenty-three percent of the participants held a bachelor's degree or a master's degree. Thirty-nine percent of the respondents had taught general education for at least 16 years. Principals typically had between one and seven years experience as an administrator. Forty-eight percent of the participants indicated they had not participated in courses, workshops, or mini courses on special education. One fourth of the respondents have had at least a 3 credit course in special education. Fewer than 2 percent of the participants have an

endorsement in special education.

More than 70% of the participants worked in a school which used a departmentalized setting. Fifty-nine percent of the participants were currently teaching a student who was considered disabled. The five most frequent categories in which students with disabilities were taught were: Learning Disabilities, Emotional Disorders, Speech and Language Disorders, Hearing Impairments, and Physical Disabilities. Participants were asked to indicate the amount of exposure they have had with persons with disabilities. More than 50% of the participants have taught students with specific disabilities in the past six years.

#### Methodology

All principals were initially contacted by phone to ascertain their interest in participating in the study. A sample questionnaire, and response card, and a brief overview of the study was included with the introductory letter sent to each principal. Principals used a stamped envelope to indicate on the response card willingness or unwillingness to participate in the study.

Questionnaire packets were sent directly to those schools willing to participate. An introductory letter to the principal was included in the questionnaire packet. Principals were asked to select five general education teachers (non-resource personnel) who work with non-disabled students for the majority of the day. Follow-up letters and

phone calls were conducted the week following the distribution of packets. A second mailing to additional schools followed the same procedures to insure an adequate number of responses.

Completed questionnaires by the participants were returned using individual prepaid envelopes. Follow-up letters and phone calls were completed the following week to each participating school to assure the packets had been received and the information had been distributed. Results from the study were sent to those participants who provided the examiner with an address.

#### Instrumentation

Two instruments were used to examine the perceived attitudes and level of comfort towards mainstreaming held by teachers and principals. Two paper-pencil scales, the Attitude Towards Mainstreaming Scale (ATMS) (Berryman, Neal, & Berryman, 1980a) and the Comfortability Scale in Special Education (CSSE) (Norlander, Reich & Brettschneider, 1982) were used to examine attitude and level of comfort. Participants also completed demographic/information sheets.

The questionnaire required principals to respond to 71 questions and general education teachers responded to 64 questions. The questionnaires for principals included seven additional questions pertaining to the administration of special education programs. The two instruments, the demographic sheets, and an introductory letter describing

the purpose of the study were enclosed in a packet and distributed to each participant. Directions for completing the instruments were provided at the top of each instrument. A self-addressed prepaid envelope was included with each individual survey. Respondents were offered an incentive to complete the questionnaire. Also, participants wanting to receive a summary of the study indicated on the questionnaire.

#### Attitude Towards Mainstreaming Scale (ATMS)

The ATMS measures three attitude factors: general philosophy of mainstreaming, attitude towards persons with mild disabilities, and attitude towards traditional limiting disabilities (Berryman et al., 1980a). This instrument and the letter of consent are presented in Appendix C. The above factors are referred to in this paper as general philosophy, mild learning problems, and limiting disabilities, respectively. Each of these factors are related to specific questions on the 18 item questionnaire. A six-point Likert scale ranging from strongly agree to strongly disagree was used to determine a person's attitude towards the general philosophy, mild learning problems, and limiting disabilities.

The ATMS was validated and cross-validated through the use of factor analysis (Berryman et al., 1980b). Participants from two samples were examined to determine which set of variables were common. Cronbach alpha

reliability coefficients for the total scale were 0.89 and 0.88. "Pearson product moment correlations between individual factors and the total scale ranged from 0.81 to 0.86 with factor intercorrelations ranging from 0.42 to 0.55" (Berryman et al., 1980b, p. 5).

The ATMS was administered to teachers grades kindergarten through 12th and education professionals in rural Georgia during the fall of 1980. A mean total scale score of 58.45 and a standard deviation of 36.52 was obtained. The scale showed a moderate approval of mainstreaming, but a wide range of variability. Eighteen of the 22 items which were included in the revised scale had factor loadings greater than 0.37. Four statements from the original questionnaire were eliminated, a split-half correlation coefficient was computed for the new 18 statement instrument. "Statements were paired on an even-odd basis within factors, which resulted in a coefficient of 0.85 that was significant beyond the 0.01 level. The adjusted reliability coefficient was 0.92 using the Spearman-Brown method" (Berryman et al., 1980b, p. 202).

#### Comfortability Scale in Special Education (CSSE)

The CSSE, the second instrument, is a 40 item scale designed to assess an educator's attitude toward perceived competence or comfortableness with a variety of issues and practices in the field of special education. A copy of the CSSE scale and permission to use the instrument is presented

in Appendix D. Each item is rated on a seven-point Likert-like scale. The scale is divided into six categories: basic knowledge/terminology, the role of team approaches, using data for referrals, writing reports for educational purposes, identifying commonalities and differences, and writing of summary reports. The sample for the preliminary study used graduate students who were attending the University of Connecticut during the summers of 1980 and 1981. All subjects had been enrolled in a special education course. The final form of this instrument was developed after the preliminary scale was administered.

An analysis was conducted identifying constructs or factors which were internally consistent from one sample to another. A factor intercorrelation of 0.96 was obtained. Measures of alpha internal consistency were first calculated for the subscales. Categories were defined as those factors with three or more items. Category reliability ranged from the 0.89 to 0.94. These coefficients indicate that the use of individual categories would provide reliable data. Total instrument reliability was 0.97.

A follow-up study was conducted with 36 graduate students who were participating in a practicum experience. The reliability of the categories ranged from 0.87 to 0.94. The authors cautioned the use of the instrumentation since the follow-up study only examined a small population. Norlander and Reich (1984) recommend using each of the

categories of the questionnaire. However, the authors suggest that specific questions in each category may be "combined or clustered differently to make the questionnaire easier to administer" (Norlander & Reich, 1984, p. 19).

K. Norlander (personal communication, January, 1990) granted permission to change the scale and terminology. The author suggested design and format changes to make the scale easier to administer. The questionnaire for this study was redesigned following those suggestions. To increase the effectiveness of the scale with persons who are general educators, titles, terminology, and statements were reworded for easier understanding. The original five categories were updated using current definitions and terminology. Statements which were repetitive in the original questionnaire were omitted. A six-point Likert scale was developed instead of the original seven-point scale. A new category pertaining to administrative duties was added to the instrument. This section of the instrument was completed only by the building principals. The revised scale was tested in a pilot study.

#### Pilot Study

The sample for the pilot study was made up of 17 principals and 16 teachers from local school divisions or graduate education classes. Average age of the respondents was 41.8 years. Forty percent of the respondents held a bachelor's degree plus an additional 15 hours. Thirty-three



percent had a master's degree, and 27% had a master's degree and 15 additional credit hours.

The Attitude Towards Mainstreaming Scale (ATMS) and the Comfortability Scale (CSSE) were distributed to the participants through local school divisions or through graduate classes at the college. Code numbers were used to maintain anonymity. It was stressed information obtained would remain in the strictest confidence. Directions were printed on the cover of each questionnaire booklet. In addition to responding to the questionnaire the respondents were asked to examine question for coherence. Several respondents indicated grammatical or typographical errors, none of the items were found confusing or ambiguous.

#### Variability and Reliability of the ATMS

The variability of the responses to each item was examined for the combined sample and for teachers and principals separately. The ATMS contained 18 items using a 6-point Likert Scale. Responses to all items were varied over at least 3 categories. The full scale had a mean total of 43.4 and a standard deviation of 13.3. The mean indicated moderate approval but it also showed some variability within the sample.

The reliability of the scale was examined using Cronbach's Coefficient Alpha. Reliability for the eighteen item scale was 0.99. Each subcategory was also examined for reliability. The first subcategory, Mainstreaming in

General, included statements related to philosophy, willingness, and overall confidence towards the mainstreaming process. Subcategory two dealt with Learning Capability. These statements dealt with items related persons with mild disabilities which do not necessarily impede academic progress. The third category persons with Limited Disabilities, included specific statements referring to persons with disabilities who had vision, hearing problems, or hearing loss. This category was traditionally taught in private or separate schools before mainstreaming became an educational practice. The reliability for each subcategory ranged from 0.96 to 0.98. Individual scores are presented in Table 2. The pilot results indicate that the ATMS had adequate reliability.

Table 2

Reliability Check for ATMS

<u>Subcategories</u>	<u>Reliability Coefficient For Each Subcategory</u>
General Philosophy Questions 1,2,3,4,16,17,18	.98
Mild Learning Problems Questions 5,11,9,13,14,10,15	.97
Limiting Disabilities Questions 6,7,8,12	.96

Validity and Reliability of the Comfort Scale

Thirty-two of the respondents completed the administrative and teacher component of the CSSE, 16 respondents completed those items specifically for administrators. One respondent did not complete three questions therefore the questionnaire was not included in the analysis. For the combined scale a mean score of 143.9 was obtained and a standard deviation of 48.4. The reliability coefficient for the total items was 0.98. The reliability coefficient for each subcategory ranged from 0.73 to 0.97. A summary of the reliability coefficients for each subcategory is listed in Table 3.

Table 3

Reliability Check for  
Comfort Scale for Special Education

<u>Subcategories</u>	<u>Reliability Coefficient For Each Subcategory</u>
Knowledge Questions (1 - 8)	.73
Team Situation Questions (9 - 21)	.97
Writing Educational Reports Questions (22 -29)	.96
Writing Summary Reports Questions (30 - 33)	.94
Administrative Management Questions (34 - 40)	.97

The comfortability scale used for the pilot study included items specifically for administrators. A mean score of 42.7 and a standard deviation of 9.8 was obtained for these seven items. Item variability among these questions was within the moderate range. The reliability coefficient for the administrative items was 0.97.

Results from the pilot study indicate the instruments are consistent with earlier studies. Revision of the Comfort Scale for the pilot study appears to have not affected the reliability of the individual items. Since few of the respondents choose to use the seven-point Likert scale, a six-point Likert scale was incorporated. Grammatical and spelling errors were corrected.

The comfortability scale used in the pilot study included items specifically for administrators. A mean score of 42.7 and a standard deviation of 9.8 was obtained for the seven questions for administrators. Item variability among these questions was moderate. The reliability coefficient for the administrative items was 0.97.

Results from the pilot study indicate the instruments are consistent with earlier studies. Revision of the Comfort Scale for the pilot study appeared to have no affect on the reliability of the individual items. Since few of the respondents choose to use the seventh-point on the Likert scale, a six point Likert scale was incorporated for

the study.

### Research Questions

The following research questions were examined in the study.

Question 1. Do the attitudes of general education teachers and principals towards mainstreaming at the middle school level grades differ from the attitudes of other general education teachers from previous studies?

Question 2. Does a middle school teacher's attitude towards mainstreaming relate to the attitude of the principal?

Question 3. Does a middle school teacher's level of comfort regarding mainstreaming relate to a principal's level of comfort?

Question 4. Do the indirect variables such as number of years of experience, professional level of education, number of special education courses, and prior experience with persons with disabilities influence the attitude of teachers and principals towards mainstreaming at the middle level grade?

Question 5. Are the attitudes and level of comfort towards the mainstreaming of students with specific disabilities at the middle level grades a function of school division size (large versus small) and/or type of personnel (teacher versus principal)?

### Experimental Design

A survey was designed to examine the possible effects of a person's attitude and level of comfort towards mainstreaming. A demographic/information sheet was used to gather educational background and information regarding the respondents school structure. A self-rating attitude scale and a level of comfort scale were used to determine the differences between teacher and principal attitude and level of comfort. The study examined general education teachers and principals from small and large school divisions. Thus, a 2 x 2 design was replicated for this study. The moderator variables (age, professional level of education, number of years of experience, coursework related to special education and size of school division) were examined to determine a relationship between attitude and level of comfort.

### Analysis of Data

A one-way analysis of variance was performed on the scores from each instrument. An additional analysis of variance was conducted examining the independent variables school personnel (teachers and principals) and school district size (small and large), and the dependent variables (attitude and level of comfort). The statistical difference between the samples should not exceed the level of 0.05, otherwise the null hypothesis was rejected. In addition to the one-way analysis of variance, a Tukey test was

administered to compare subscales which were determined statistically significant.

A correlational analysis was conducted to determine whether certain subgroups of the sample had a more favorable attitude towards mainstreaming. A step-wise regression analysis was conducted to determine favorableness of specific factors toward mainstreaming. The Tukey test examined the interaction of teacher and principals and school division size.

A qualitative analysis was performed examining the similarities and differences between the present data with previous literature pertaining to mainstreaming and attitudes. Sufficient studies have been conducted in the past at the elementary and primary level to draw conclusions. These similarities and differences are discussed at length in Chapter 5.

#### Summary

This study examines factors which influence the attitudes of principals and teachers towards mainstreaming at the middle level grades. Furthermore, the study examined the similarities and differences of teachers and principals at the middle level grades to past research. In addition, the study compared and contrasted the subgroups according to school division size. Indirect variables were examined to determine whether specific variables influence a person's

attitude and to what degree attitudes are influenced.

The procedures included the distribution of questionnaire packets to randomly selected middle school principals and general education teachers who work in Virginia's public schools. Subjects were compared through a variety of statistical methods. A one-way analysis of variance was conducted to determine the relationship between dependent variables. A Tukey test was administered to determine which groups were significantly different from another. A step-wise regression analysis and a correlational analysis was also conducted. Finally, a qualitative analysis of data collected from this study was compared to previous data regarding the attitudes of school personnel toward mainstreaming.



## CHAPTER 4

### RESULTS OF THE STUDY

The results of the study regarding attitude and level of comfort of teachers and principals towards mainstreaming in middle level grades are presented in this chapter. These results represent separate analyses performed on the dependent variables (attitude and level of comfort) and the independent variables school personnel (principals and teachers) and school division size (large versus small). Attitude Towards Mainstreaming Scale (ATMS) and the Comfort Scale of Special Education (CSSE) were used to evaluate the participants responses. The ATMS and CSSE raw scores range from 18 to 108 and 33 to 198, respectively. The smaller the score, the more positive the attitude or higher the level of comfort. Using a Likert scale on the ATMS a (1) represented a very favorable attitude, (2) indicated a favorable attitude, (3) indicated a somewhat favorable attitude, (4) indicated a somewhat unfavorable attitude, (5) indicated a unfavorable attitude, and (6) indicated a very unfavorable attitude. The CSSE also used a six-point Likert scale. A (1) indicated high comfort, (2) indicated comfort, (3) indicated a person was somewhat comfortable, (4) indicated a person to be somewhat uncomfortable, (5) a person was uncomfortable, and (6) indicated a high degree of uncomfortableness towards persons with disabilities or

special education.

Participant demographic information was summarized to compare the results to previous studies and provide insight into why specific trends from the ATMS and the CSSE were obtained. Results from Demographic/Information sheets are presented in Appendix A. Population, participants age, and sample size from the present study were very similar to past studies (Larrivee, 1982; Pinhanas & Schmelkin, 1989).

The respondents were predominately female (70%) between the ages of 40 and 49. Eighty-one percent of the respondents were teachers, 51% of the participants came from large school divisions. Thirty-nine percent of the respondents indicated they had taught for at least 16 years. Twenty-eight percent held a bachelor's degree plus 15 credit hours.

In the present study, nearly half of the school personnel had not participated in special education coursework or received any formal training in special education. Fifty-three percent of the respondents were currently working with students with disabilities. Fewer than twenty-five percent have taken one 3-credit hour course in special education. The data regarding coursework is different from studies conducted in the early 1980's. Past findings showed less than 10 percent of the general education teachers and principals had any coursework in special education (Berryman & Berryman, 1981; Larrivee,

1982; Stephens & Braun, 1980). Twenty-five percent of the participants in the current study had previous experience with mainstreamed students, whereas a decade ago only 10 percent of the school personnel were working with persons with disabilities (Bond & Dietrich, 1982; Harasymiw & Horne, 1974; Ringlaben & Price, 1981).

Fewer than 30% of the respondents work in a school which did not use departmentalization. Respondents indicated the most frequent type of assistance teams available to them was the child study team, only 26% had or were using team teaching. Fifty-seven percent of the participants indicated students were allowed to participate in Exploratory programs.

The following research questions were investigated and a summary of the findings are presented.

#### Question 1

Do the attitudes of general education teachers and principals towards mainstreaming at the middle level grades differ from the attitudes of other general education teachers and principals from previous studies?

The ATMS scale was used to examine the respondents overall attitude towards mainstreaming and each subscale. The subscales were philosophy towards mainstreaming, mild learning difficulties, limiting disabilities, and the overall attitude towards mainstreaming. The number of questions related to each scale, the mean raw scores, the

associated standard deviations, and the mean Likert scaled scores are presented in Table 4. The mean Likert scaled score is the mean raw score divided by the number of questions (K).

The current data indicate a principal's overall attitude towards mainstreaming is favorable. Principals were generally in favor of the current Philosophy Towards Mainstreaming. Principals were very favorable towards students with Mild Disabilities, however they were less favorable towards mainstreaming students with Limiting Disabilities (e.g., blind, hearing impaired, deaf, or students with cerebral palsy).

General education teachers possessed a favorable attitude towards mainstreaming, however teachers were less favorable in all subscales than principals. Teachers were more favorable towards the integration of students with Mild Disabilities than towards students with Limiting Disabilities. General education teachers had a less favorable attitude relative to the Philosophy of Mainstreaming than any other subscale. In general, the current study indicates the greatest difference between principals and teachers at the middle level grades was in subscales Overall Attitude and Philosophy Towards Mainstreaming. These findings will be compared to previous studies in Chapter 5.

Table 4

## Summary of results for the ATMS

	K	Mean Raw Scores	Standard Deviation	Scaled Scores
<b>Philosophy towards Mainstreaming</b>				
Principal	7	19.927	4.451	2.84
Teacher	7	23.498	6.173	3.35
<b>Mild Learning Problems</b>				
Principal	7	14.491	5.196	2.07
Teacher	7	16.167	6.083	2.30
<b>Limiting Disabilities</b>				
Principal	4	10.273	3.759	2.56
Teacher	4	12.096	4.191	3.02
<b>Overall Attitude</b>				
Principal	18	42.873	9.185	2.38
Teacher	18	49.782	12.800	2.76

Question 2

Does a middle school teacher's attitude towards mainstreaming relate to the attitude of the principal?

A correlation analysis was conducted to determine whether a relationship exists between teacher and principal attitudes. Philosophy Towards Mainstreaming, attitude towards students with Mild Learning Disabilities, attitude towards students with Limiting Disabilities, and Overall Attitude were examined to determine whether a relationship exists between principals' and teachers' attitude. The results from the analysis are depicted in Table 5. Correlations of 0.2875 or greater indicated the existence of a relationship (Fisher & Yates, 1984). Therefore, a relationship between the attitudes' of principals and teachers exist for Philosophy Towards Mainstreaming (0.344) and for Limiting Disabilities (0.288). These results indicate a moderate relationship exist for principals and teachers Philosophy towards mainstreaming and a weaker, but significant relationship exist with regards to principals and teachers attitudes towards students with Limiting Disabilities.

Table 5  
Pearson correlation of principal and  
teacher attitude using ATMS

---

		PRINCIPAL		
TEACHER	Philosophy	Mild Disabil- ities	Limiting Disabil- ities	Overall Attitude
Philosophy	0.344*			
Mild Disabil- ities		0.210		
Limiting Dis- abilities			0.288*	
Overall Attitude				0.185

---

\* 0.2875 or greater indicates existence of a relationship

Question 3

Does a middle school teacher's level of comfort regarding mainstreaming relate to a principal's level of comfort?

A correlation analysis was conducted to determine whether a relationship exists between the level of comfort of teachers and principals toward mainstreaming. The analysis included the overall score for CSSE and each subscale. A summary of these analyses are included in Table

Table 6

Pearson correlation examining principal and teacher level of comfort on the Comfortability Scale

TEACHER	PRINCIPAL				
	Knowledge of Spec. Educ.	Teaming	Writing Educ. Reports	Writing Summary Reports	Overall Scale
Knowledge of Spec. Ed.	0.249				
Teaming		0.269			
Writing Educ. Reports			0.182		
Writing Summary Reports				0.106	
Overall Scale					0.275

\* 0.2875 or greater indicates existence of a relationship



6. Correlations equal to or greater than 0.2875 were significant (Fisher & Yates, 1984). The results from the analyses indicate no correlation existed for any subscale or for the overall score as related to school personnel's comfort towards special education.

#### Question 4

Do the indirect variables, number of years of experience, professional level of education, number of special education courses, and prior experience with persons with disabilities, influence the attitude of teachers and principals towards mainstreaming at the middle level grades?

A stepwise multiple regression analysis was used to identify factors which could influence a person's attitude regarding mainstreaming. The predictor variables used in the analysis were teacher experience, coursework, educational background, and contact with mainstreamed persons. Based upon the results of this analysis, as seen in Table 7, three factors were found to be predictors of a person's attitude towards mainstreaming. The factors were a) contact with mainstreamed persons, b) coursework in special education, and c) educational background. The variable (0.255) had a standardized coefficient below 0.300 therefore, this variable only marginally impacted attitude,

Table 7

Summary of stepwise regression analysis  
of indirect predictors related to attitude

Variable	Coefficient	Std Error	Std Coef (B)	T	p 2 tail
Constant	1.732	0.255	0.000	6.782	0.000
ED	1.219	0.049	0.573	24.910	0.000
CWK	0.962	0.053	0.420	18.308	0.000
MAIN	1.504	0.058	0.596	25.940	0.000

ED = Education background

CWK = Course work related to special education

MAIN = Exposure to mainstreamed children

Dep Var: Indirect      N = 294      Multiple R = 0.921  
Squared Multiple R = 0.849      Adjusted squared multiple R =  
0.847  
Standard Error of estimate = 1.086

whereas the values (0.049, 0.053, 0.058) indicated a moderate association (Glass & Hopkins, 1984).

The predictor with the largest standardized coefficient was related to prior experience with mainstreamed students ( $B = 0.596$ ) followed by educational background ( $B = 0.573$ ), and coursework in special education ( $B = 0.420$ ). The results indicate persons who have had prior experience, possess educational training, and who have had coursework in special education will be more positive towards mainstreaming. It should be noted, the number of years teaching was not a predictor.

#### Question 5

Are the attitudes and level of comfort towards the mainstreaming of students with specific disabilities at the middle level grades a function of school division size (large versus small) and/or type of personnel (teacher versus principal)?

#### Attitude Scale

ATMS total. An analysis of variance (ANOVA) with school division size and school personnel as the independent variables was performed on the overall scale and each subscale of the ATMS. The results of the analysis of ATMS Total indicated a significant difference in attitude between teachers and principals ( $F(1,290) = 13.249, p < 0.05$ ). Table 8 shows the results from the ANOVA. There were no effects

Table 8

## Analysis of Variance of Attitudes of Mainstreaming

## Dependent Variable: ATMS (Total)

---

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
SDS	1	13.858	0.093	0.761
PER	1	1983.721	13.249	0.000 *
SDS * PER	1	111.783	0.747	0.388
ERROR	290	149.732		

---

SDS = school division size

PER = school personnel

\*p < .05.

for school division size or for the interaction of school division and school personnel.

The results from the analysis show teachers differ from principals in the total mean score for favorableness in Overall attitude. Principals were not only more favorable in their Overall attitude but in each of the subscales. Mean scores for the principals' Overall attitude was (42.873), whereas the mean score teachers' attitude was (49.782). As indicated earlier in the chapter, lower scores indicate a greater degree of favorableness. Table 4 presents a summary of the total mean scores for principals and teachers.

Table 9 presents a summary of the total mean scores for principals and teachers according to school division size. Mean scaled scores and the total number of items for each subscale of the ATMS are also included in Table 9. Principals from larger school divisions were more favorable in Overall attitude toward mainstreaming than principals from small school divisions. Teachers from large school divisions exhibited a less favorable Overall attitude than teachers from small school divisions.

Table 9  
Principal and teacher mean score for large and  
small school divisions attitudes

$\bar{x}$	Number of items	Principal total mean score	Scaled score	Teacher total mean score	Scaled score
(Large School Divisions)					
Philosophy of mainstreaming	7	19.563	2.79	23.950	3.42
Mild learning difficulties	7	12.375	1.79	14.437	2.06
Limiting disabilities	4	10.031	2.50	11.916	2.97
ATMS Total score	18	41.969	2.33	50.303	2.79
(Small School Divisions)					
Philosophy of mainstreaming	7	20.435	2.91	23.050	3.29
Mild learning difficulties	7	13.087	1.86	13.942	1.99
Limiting disabilities	4	10.609	2.65	12.275	3.06
ATMS Total score	18	44.130	2.45	49.267	2.73

Scaled score = Total mean score divided by the number of items

Table 10  
Analysis of Variance for Philosophy Towards Mainstreaming

---

**Dependent Variable: ATMS (Philosophy)**

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
SDS	1	0.008	0.000	0.988
PER	1	536.076	15.424	0.000 *
SDS * PER	1	34.325	0.988	0.321
ERROR	290	34.755		

---

SDS = school division size

PER = school personnel

\*p < .05.

ATMS philosophy. Analysis of the Philosophy subscale indicated a significant difference between school personnel ( $F(1,290) = 15.424, p < 0.05$ ). Table 10 depicts the results related to personal Philosophy. Mean scores for school principals was significantly more favorable than teachers in the subscale related to the Philosophy towards mainstreaming. Table 4, which presents a summary of mean scores for ATMS, indicate principal mean raw score for Philosophy Towards Mainstreaming was (19.927); teachers mean raw score was (23.498). Results of the mean scores according to school personnel and school division size are included in Table 9.

ATMS limiting disabilities. An ANOVA on the Limiting Disabilities subscale of the ATMS indicated a main effect for school personnel ( $F(1,290) = 8.107, p < 0.05$ ). These results are presented in Table 11. A non-significant result was reported for the independent variable school division size and the interaction. Mean scores presented in Table 4, reveal principals (10.273) were more favorable towards mainstreaming students with Limiting Disabilities than general education teachers (12.096). Table 9 presents the mean scaled scores according to school division size and school personnel.

Table 11

## Analysis of Variance for Limiting Disabilities

---

**Dependent Variable: ATMS (Limiting Disabilities)**

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
SDS	1	9.588	0.564	0.453
PER	1	137.864	8.107	0.005 *
SDS * PER	1	0.522	0.031	0.861
ERROR	290	17.005		

---

SDS = school division size

PER = school personnel

\*p < .05.



Table 12  
Analysis of Variance for Mild Disabilities

---

**Dependent Variable: ATMS (Mild Learning Disabilities)**

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
SDS	1	0.133	0.004	0.951
PER	1	118.007	3.341	0.069
SDS * PER	1	10.152	0.287	0.592
ERROR	290	35.322		

---

SDS = school division size  
PER = school personnel

ATMS mild disabilities. The ANOVA for the subscale Mild Disabilities revealed nonsignificant results as shown in Table 12.

Comfortability Scale

Five dependent variables were examined to determine the relationship of level of comfort of school personnel and school division size. The analysis was completed for CSSE Total as well for each subscale.

CSSE total. The ANOVA of CSSE Total revealed main effects for both school division size ( $F(1,290) = 47.508$ ,  $p < 0.05$ ) and school personnel ( $F(1,290) = 5.648$ ,  $p < 0.05$ ). These results are presented in Table 13. Comparison of the mean scores for school personnel and school divisions

Table 13  
Analysis of Variance Overall Level of Comfort

---

**Dependent Variable: CSSE (Total)**

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
SDS	1	3047.313	5.648	0.018 *
PER	1	25634.515	47.508	0.000 *
SDS * PER	1	1367.895	2.535	0.112
ERROR	290	539.580		

---

SDS = school division size

PER = school personnel

\*p <.05.

revealed large school divisions were more comfortable with mainstreaming and special education than small school divisions. Total mean scores for principals and teachers according to school division size are presented in Table 14. The mean scaled scores for Total comfort was greater for large divisions than small school divisions. Furthermore, results from the mean scaled scores indicate the Total comfort of principals was greater than the Total comfort for general education teachers.

Table 14  
Principal and teacher mean scores for large and small school division  
level of comfort towards special education.

$\bar{x}$	Number of items	Principal total mean score	Scaled score	Teacher total mean score	Scaled score
		(Large School Divisions)			
Knowledge	8	17.250	2.10	25.496	3.10
Teaming	13	19.531	1.50	32.378	2.49
Writing					
Educ. Reports	8	15.281	1.90	20.773	2.59
Writing					
Sum. Reports	4	7.560	1.80	10.782	2.69
CSSE					
Total Score	33	59.625	1.80	89.429	2.74
Admin. Duties	7	11.375	1.60	-----	-----
		(Small School Divisions)			
Knowledge	8	20.435	2.55	26.242	3.28
Teaming	13	26.348	2.02	32.825	2.52
Writing					
Educ. Reports	8	18.043	2.25	21.700	2.71
Writing					
Sum. Reports	4	8.739	2.18	11.417	2.85
CSSE					
Total Score	33	73.565	2.22	92.183	2.79
Admin. Duties	7	14.522	2.00	-----	-----

Scaled score = Total score divided by the number of items

CSSE knowledge of special education. Results from the ANOVA related to Knowledge of Special Education subscale are shown in Table 15. The analysis revealed main effects for school personnel ( $F(1,290) = 47.766, p < 0.05$ ) and school division size ( $F(1,290) = 3.894, p < 0.05$ ). Furthermore, comparison of scaled Likert scores, as seen in Table 14, reveal school personnel from large school divisions are more comfortable in knowledge of special education than school personnel from small school divisions. Also, principals were in general more comfortable than teachers.

Table 15

Analysis of variance for knowledge of special education  
as related to comfort

---

**Dependent Variable: CSSE (Knowledge of Special Education)**

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
SDS	1	168.917	3.894	0.018 *
PER	1	2159.055	47.766	0.000 *
SDS * PER	1	65.034	1.499	0.222
ERROR	290	539.580		

---

SDS = school division size

PER = school personnel

\*p < .05.

CSSE child study teams/eligibility teams. The ANOVA of CSSE Child Study Teams/Eligibility Teams revealed a significance for both school personnel ( $F(1,290) = 41.580$ ,  $p < 0.05$ ) and school division size ( $F(1,290) = 5.874$ ,  $p < 0.05$ ) as shown in Table 16. An interaction between school division size and school personnel ( $F(1,290) = 4.518$ ,  $p < 0.05$ ) was revealed. This interaction indicates that CSSE Child Study Team/Eligibility team is dependent on both type of personnel and school division size. The cell means from each of the groups from the interaction were examined using

Table 16

## Analysis of Variance for Participating on Teams

---

**CSSE (Comfortability on Child Study Teams/Eligibility Teams)**

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
SDS	1	576.804	5.874	0.016 *
PER	1	4082.655	41.580	0.000 *
SDS * PER	1	443.595	4.518	0.034 *
ERROR	290	43.384		

---

SDS = school division size

PER = school personnel

\* $p < .05$ .

Figure 1  
Cell Means of Tukey Test

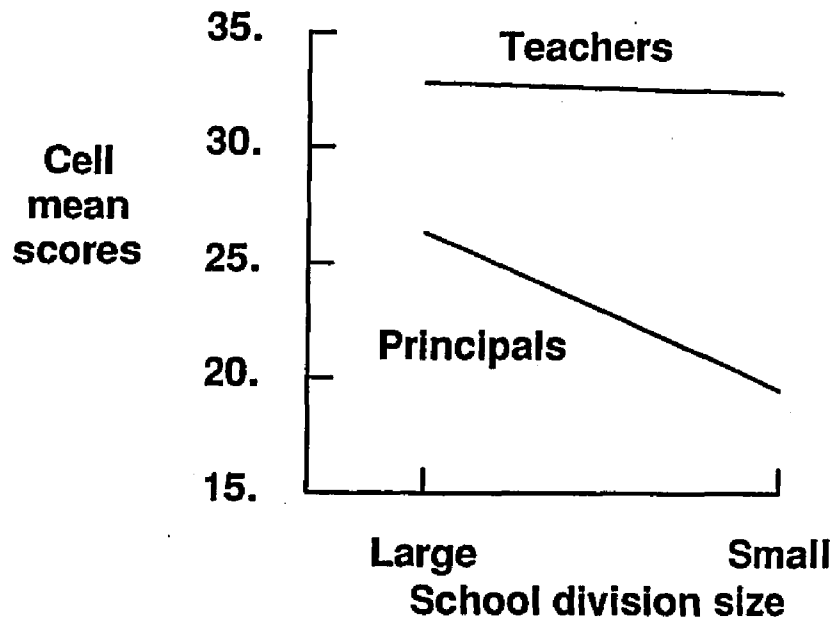
Principal	$\bar{X} = 26.34$ n=23	$\bar{X} = 19.53$ n=32
Teacher	$\bar{X} = 32.82$ n=120	$\bar{X} = 32.37$ n=119
	Large	Small
	School division size	

a Tukey test, these results are presented in Figure 1. The results indicate the principals and teachers from large school divisions level of comfort was not substantially different. The level of comfort between principals and teachers from small school divisions was significantly different. The comfortability of principals relative to school division size was substantially different. No significant difference in comfort was reported between teachers of different school division size. Therefore, it can be stated principals from large school divisions (mean = 26.34) were significantly more uncomfortable working on teams than principals from small school divisions (mean = 19.531). Furthermore, principals from small school divisions were more comfortable than any other group when working on teams.

Figure 2 illustrates the comparison of cell means for school division size and personnel. Principals and teachers from large school divisions exhibited similar levels of comfortability. A large discrepancy in level of comfort exists between teachers and principals of small school divisions. The results further indicate teachers from large and small school divisions have similar levels of comfort towards child study teams/eligibility teams.

Figure 2

Graphic Drawing of Differences Between Cell Means



CSSE writing educational reports. The ANOVA of CSSE Writing Educational Reports revealed a main effect for school personnel ( $F(1,290) = 27.548, p < 0.05$ ). These results are shown in Table 17. Comparisons of the level of comfort of principal and teacher indicate principals were more comfortable writing educational reports than teachers, these results as shown in Table 14.

Table 17

## Analysis of Variance for Writing Educational Reports

---

**Dependent Variable: CSSE ( Writing Educational Reports)**

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
SDS	1	35.889	2.601	0.108
PER	1	380.138	27.548	0.000*
SDS * PER	1	3.206	0.232	0.630
ERROR	290	13.799		

---

SDS = school division size

PER = school personnel

\*p &lt; .05.

CSSE writing summary reports. An ANOVA was conducted for CSSE Writing Summary Reports, results revealed significance for school personnel ( $F(1,290) = 19.163, p < 0.05$ ). Results from these analyses are illustrated in



Table 18. Mean comparisons of school personnel comfortability in Writing Summary Reports indicate principals from large school divisions (M = 7.560) were the most comfortable and teachers from small school divisions (M = 11.417) were the least comfortable when writing summary reports as shown in Table 14.

Table 18  
Analysis of Variance for Writing Summary Reports

---

**Dependent Variable : CSSE (Writing Summary Reports)**

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
SDS	1	148.796	3.116	0.079
PER	1	915.027	19.163	0.000 *
SDS * PER	1	36.828	0.771	0.381
ERROR	290	47.750		

---

SDS = school division size

PER = school personnel

\*p <.05.

CSSE administrative tasks. An examination of the mean scores as related to an administrator's level of comfort performing administrative tasks for special education was completed. The results from the **t-test** indicate a significance occurred between large (Mean = 14.522) and small (Mean = 11.375) school divisions as shown in Table 19. In general, principals from large school divisions exhibited less comfortability in administrating special education programs than teachers. Principals from both large and small school divisions were comfortable in completing tasks related to special education. Principals from large school divisions were less comfortable than principals from small school divisions.

Table 19  
Mean scores of principal comfortability  
towards administrating Special Education

	Large			Small		
	<u>n</u>	Means	SD	<u>n</u>	Means	SD
Principal	23	14.522	5.230	32	11.375	3.714

Pooled Variances

T = 2.612, DF = 53, PROB = 0.012

Summary of Question 5

The analysis for school division size and school personnel using the ATMS showed effects for the school personnel in all subscales, except Mild Disabilities. Principals in general were the most favorable towards mainstreaming. A summary report of the analysis is presented in Table 20. Table 20 includes the test method used and the independent variables examined. Those variables which indicated an effect are briefly described in the results section of Table 20.

A summary analysis of the independent variables as related to comfortability is presented in Table 21. The analysis showed significant effects for division size, type of personnel, and the interaction of these variables. Generally, personnel from large school divisions were found to be more comfortable than personnel from small school divisions. The exception to this was related to comfortability of principals in administering special education programs. Principals from small school divisions were found to be more comfortable administering special education programs and working with Child Study/Eligibility Teams. In examining personnel differences, principals were found to be more comfortable than teachers.

Table 20  
 Summary of results of attitudes as related  
 to school division size and school personnel

Dependent variable	Test method	Independent Variable that showed an effect			Results
		<u>PER</u>	<u>SDS</u>	<u>INTER</u>	
<b>ATMS</b>					
ATMS Total	ANOVA	X			* Principals more favorable attitude than teachers
Philosophy	ANOVA	X			* Principals more favorable towards mainstreaming
Limiting Disabilities	ANOVA	X			* Principals more favorable attitude than teachers
Mild Disabilities	ANOVA			no significant results	

NOTE.  
PER = PERSONNEL  
SDS = SCHOOL DIVISION SIZE  
INTER = INTERACTION

Table 21  
 Summary of results of level of comfort as related  
 to school division size and school personnel

Dependent variable	Test method	Independent Variable that showed an effect			Results
		PER	SDS	INTTER	
<b>CSSE</b>					
CSSE Total	ANOVA	X	X		* Large SDS most comfortable * Principals most comfortable
Knowledge	ANOVA	X	X		* Large SDS most comfortable * Principals most comfortable
Child study/	ANOVA	X	X	X	* Large SDS most comfortable
	Tukey	X	X	X	* Principals from large SDS were more uncomfortable than principals from small SDS * Principals and teachers from large SDS had similar level of comfort * Discrepancy between personnel from small SDS * Teachers from large and small SDS have similar comfort

Writing Educ Reports	ANOVA	X	X	* Principals more comfortable
Writing Summary Reports	ANOVA	X	X	* Principals more comfortable
Administrative	WSD			* Large SDS less comfortable

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Note.  
 PER = SCHOOL PERSONNEL  
 SDS = SCHOOL DIVISION SIZE  
 INTER = INTERACTION

### Respondents' Personal Comments

Participants from the study were invited to make comments or react to the survey. A summary of these responses is included below. These comments are described in detail in Appendix B. The comments were classified into the following topics; a) mainstreaming, respondents agreement or disagreement to the concept, b) comfortability as related to exposure to mainstreaming, and c) the use of team support.

Mainstreaming agree or disagree. Respondents indicated either a strong agreement for mainstreaming or a strong disagreement. Participants indicated that in order for mainstreaming to be successful it needed to be an arranged interactive program requiring all teachers to work together. Mainstreaming requires support from staff because no two situations are identical. Respondents indicate mainstreaming is not the cure for students with special problems. Not only does a person need to consider students with disabilities, but the organizational needs should also be considered. Respondents reported specific groups of students with disabilities are successfully placed in a mainstream program, whereas, other students can not be served as easily in the general classroom. Schools should not rush into trying to place students with disabilities back into the general education classrooms without preparing the student and the teachers.

Participants opposed to mainstreaming stated that mainstreaming is a dumping ground for administrative problems. Without proper resources the program is not useful. All special education students are not easily integrated into general classrooms. Respondents opposed allowing students who have behavior problems, or required special health care needs, sensory disabilities, diabetes, mild mental retardation, or communication disorders into the general classrooms.

Comfortability. The level of comfort was related to the amount of exposure a person previously experienced with persons with disabilities. The majority of the respondents expressed feelings of satisfaction when they had worked with students with disabilities. Frequently, individuals commented that being a parent of a special education student or having a family member with a disability helped them understand and relate to students with disabilities. Those respondents who had direct experience with students with disabilities were also willing to accept mainstreamed students in general classrooms.

Some key elements expressed which made school personnel feel uncomfortable towards persons with disabilities was the lack of support from the special education teacher and a teacher's lack of training. Respondents indicated they were not adequately prepared to work with students with disabilities. They needed more planning time to help prepare



for class. The size of the general classrooms and the number of students who were requiring assistance also influenced the respondents attitude. One respondent complained "the size of a class for special education teachers is smaller (total number of students), but the general classroom teacher has a larger class and more problems to deal with!"

Discipline and classroom management were frequently cited as reasons for not wanting students with disabilities in the general classroom. Tracking of students also creates problems when attempting to integrate students with mild retardation into a gifted program. Respondents indicated without special support mainstreaming students would not be successful.

Relationship of support services to attitude and comfortability. The respondents indicate mainstreaming would be successful, as long as, everybody helped and tried to plan a program. Communication between school personnel was cited as an essential element of mainstreaming, that is, people need to work together to improve the student. Several respondents remarked that they felt excluded from the special education process, yet, general education teachers were expected to work with students with disabilities. Individual respondents indicated that the use of group planning and team teaching helped in the placement of students with disabilities. Successful programs are

usually the result of trying to find the correct fit between the student and the teacher. In addition to team support and group planning respondents reported the availability of aides, classroom space, etc., not only helped in the placement of students with disabilities but it helped the entire class.

## CHAPTER 5

### DISCUSSION AND CONCLUSIONS

This study examined the attitudes and level of comfort towards mainstreaming of general education teachers and principals at the middle level grades from small and large school divisions in Virginia. Findings and conclusions for each of the five questions and the respondents statements are discussed in this chapter. The limitations of the study and future recommendations are presented.

#### Findings and Conclusions

The demographic information obtained from the study was compared to previous studies. The profile of the participants for the current study was similar to the profile of previous studies in the areas of age, educational level, and gender. A decade ago less than 10 percent of the participants had received training in special education, whereas in the current study 24 percent of the participants have had coursework in special education. The increase in participants taking classes in special education may be a result of recent collegiate endorsement requirements. Although the percentage of school personnel who have taken coursework is low, the increased knowledge and information may have helped to improve the attitudes of school personnel

towards mainstreaming.

Question 1

Do the attitudes of general education teachers and principals regarding mainstreaming at the middle school level differ from the attitudes of other general education teachers and principals from previous studies?

Both principals and teachers in the current study responded favorably toward mainstreaming. The respondents personal philosophy, willingness to work with persons with disabilities, and overall confidence was somewhat favorable. These findings are in agreement with earlier studies which examined elementary and primary school personnel (Center et al., 1984, Diebold & Trentham, 1983; Harvey, 1985; Larrivee & Cook, 1979). Furthermore, earlier studies determined school personnel willing to work with persons with disabilities were favorable towards mainstreaming (Center et al., 1984; Junkala & Mooney, 1986; Reehill, 1987).

General education teachers at the middle school level appear to have less favorable attitudes towards mainstreaming than principals. Earlier studies (Center et al., 1984; Garvar & Schmelkin, 1989; Goupil & Bruent, 1984; Payne & Murray, 1974; Pinhanas & Schmelkin, 1984) found similar results when examining the attitudes of teachers and principals at the elementary and primary levels. In the current study, principals indicated a higher or more favorable attitude and philosophy towards mainstreaming than

teachers which is consistent with results from studies conducted by Center et al., (1984) and Pinhanas & Schmelkin, (1984). Current findings indicate an individual's attitude toward mainstreaming is affected by specific types of persons with disabilities. Teachers and principals were more favorable towards students with mild disabilities than towards students with limiting disabilities. These results are similar to the findings of Center et al., (1984), Garvar & Schmelkin (1989), and Reehill (1987) for teachers and principals at the elementary levels. Reehill (1987) determined that both principals and teachers at the elementary level favored the placement of students with mild disabilities in general classrooms because these students did not require materials or additional help from teachers.

Results from the current study indicate principals and teachers are not in agreement with the basic concept of mainstreaming. Teachers and principals still view mainstreaming differently, principals appear to be in agreement with the basic philosophy of mainstreaming whereas, general education teachers are not as favorable. Furthermore, principals and teachers do not share the same beliefs towards the philosophy of mainstreaming.

In summary, there has been no change in the last decade in the attitudes of principals and teachers towards mainstreaming. Although mainstreaming has been in place for the past 17 years, school personnel attitudes' have not

changed. Data shows middle school personnel are favorable towards mainstreaming in the broad sense. Under the surface, middle school personnel are less favorable towards the philosophy of mainstreaming and the integration of students with limiting disabilities. The current findings are similar to earlier attitudinal studies which examined the elementary and primary grades. Therefore, it is concluded middle school personnel view mainstreaming the same way as other school personnel.

These results indicate that if the principal and teachers are not positive in attitude and are not in agreement with the philosophy of mainstreaming, then the program will be less successful. In the future, more educational training sessions and staff development should focus on uniting the organization and aligning personal beliefs with the philosophy of the organization. Mainstreaming can not be successful unless teachers and principals understand the basic philosophy of the program and develop common goals. It is important to provide information and develop direct experiences with persons with disabilities.

#### Question 2

Does a middle school teacher's attitude towards mainstreaming relate to the attitude of the principal?

The findings reveal the attitude towards mainstreaming of a principal relates to the philosophy and attitude of

teachers towards mainstreaming. A principal's leadership and management of an organization has been examined in the literature (Burrello et al., 1988; Cochrane & Westling, 1977; Sergiovanni, 1984). Past studies examining the role of principals determined interpersonal skills of principals and their management skills can influence the attitudes of general educators. Findings from the current study indicate issues related to mainstreaming and special education are not the exception; mainstreaming is influenced by personal attitudes and management style. Past studies (Lietz & Towle, 1979; Nied, 1980; O'Rourke, 1980; Raske, 1979; Shepherd, 1980) have shown that a positive role by the principal is essential for the success of any special education program. The findings from the current study suggest principals can influence the attitudes of teachers towards the philosophy of mainstreaming and principals can influence the teachers attitudes towards students with disabilities. Goupil and Bruent (1984) found a principal's willingness to integrate specific types of students conversely affected the teacher's attitude to accept specific types of students. Students who required additional support services were less likely to be mainstreamed, that is teachers were less likely to accept students with limiting disabilities into the general classroom.

Results from the current study found that the

willingness of teachers to accept students with limiting disabilities is related to a principal's willingness to accept students with limiting disabilities. The principal's own preference for students can influence the classroom teacher's acceptance. Therefore, the findings show a principal's attitude may influence the attitude of teacher's or subordinates.

Leibfried (1984) found that principals who are able to plan and administer special education programs were more favorable towards mainstreaming in general and the philosophy of mainstreaming. These findings by Leibfried (1984) along with the current study confirm that principals do influence the attitudes of teachers towards mainstreaming.

The current study also indicates principals who have favorable attitudes towards mainstreaming also influence the teachers' attitude towards mainstreaming. Junkala and Mooney (1986) determined principals who aggressively mainstreamed students were significantly more positive towards mainstreaming than principals who minimally mainstreamed students with disabilities. Furthermore, Junkala and Mooney (1986) determined teachers from buildings which implemented mainstreaming and who were directly involved in the program were more favorable towards mainstreaming than other teachers. This same trend was identified in this study.



Results from the current study indicate the attitude of the principal can impact a teacher's behavior. This study shows the need for principals to receive the proper training related to mainstreaming. These results are in agreement with Burrello et al., (1988). Principals need to be given assistance in developing mainstreaming programs. The structure of a middle school and overall climate in a building depends upon the principal's leadership. Therefore, it is essential to provide a principal with the knowledge needed to operate an effective special education program.

### Question 3

Does a middle school teacher's level of comfort regarding mainstreaming relate to a principal's level of comfort?

The results from this study indicate the principal's level of comfort is unrelated to the teachers' level of comfort. The personal knowledge, ability to work in teams, writing educational reports, or writing summary reports related to special education does not influence the confidence of teachers to complete tasks related to special education.

Previous studies (Elam, 1971; Norlander & Reich, 1984) have determined a person's level of comfort is influenced by several elements: skill, motivation, habits, knowledge, and attitude. The level of comfort is a multifaceted level of

security which is based upon specific elements (Elam, 1971). Personal attitude is just one of the several elements to affect comfort. Basic knowledge and skill appears to also influence the ability of a person to complete a task.

Although attitude is related to comfort, it does not appear to be the sole factor which influences the comfort of the respondents. The results suggest the attitude of people can be influenced. Level of comfort, however by itself is not significant with regards to overall attitude. This study did not investigate all of the elements related to comfort. Further investigations need to be conducted examining all of these factors simultaneously.

Elam (1971) found an individual's drive and personal motivation to complete a task may be the most influential element in an effective teacher. Effective teachers are motivated by personal drive and desire to help a student (Elam, 1971). Frequently a teacher will disregard obstacles to complete a task. Perhaps the inner drive of a person to be successful can cause them to disregard personnel feelings when working with disabled students. To further understand the concept of comfort and its relationship to attitude further study is warranted.

#### Question 4

Do the indirect variables such as number of years of experience, professional level of education, number of special education courses, and prior experience with persons

with disabilities influence the attitude of teachers and principals towards the mainstreaming at the middle level grades?

Specific factors were found to indirectly influence the attitude of middle level school personnel. Three important factors were found to be related to an individual's attitude: exposure or contact with persons with disabilities, coursework in special education, and educational training. The data indicate school personnel who possess all of these factors were more likely to have a favorable attitude towards mainstreaming.

Past research regarding indirect factors (Berryman & Berryman, 1981; Center et al., 1984; Garvar & Schmelkin, 1989; Harasymiw & Horne, 1975; Larrivee, 1982; Lietz & Towle, 1979; Smith & Kallevang, 1985) found the number of years of experience also influenced the attitude of school personnel. For the present study, the number of years of experience was not a significant factor. One reason for this occurrence may be related to the recent development of middle school programs in Virginia. The expertise of school personnel currently working in middle schools is made up of a wide variety of teachers and administrators (Bower, 1983). Furthermore, principals who are chosen for the middle school programs are typically those who have less than 7 years of prior administrative experience (Bower, 1983; Gloecker & Simpson, 1988).

There is evidence of a significant relationship between indirect factors (exposure to persons with disabilities, additional coursework in special education, and educational training) and attitude (Berryman & Berryman, 1981; Larrivee, 1982). The current findings suggest principals and teachers with these factors will have a higher degree of favorableness towards mainstreaming. This study suggests colleges and universities should focus more on preservice training and provide collegiate students with the necessary coursework and experience to successfully operate a mainstreaming program.

At the building level, schools should provide the opportunity for staff members to learn more about persons with disabilities. School personnel need to meet and learn how to work with all types of students. Providing staff members with knowledge and information regarding different disabilities is not sufficient. This study has shown exposure to persons with disabilities is most beneficial. It is essential for staff to be knowledgeable and familiar with all types of disabilities.

#### Question 5

Are the attitudes and level of comfort towards the mainstreaming of students with specific disabilities at the middle level grades a function of school division size (large versus small) and/or type of personnel (teacher versus personnel)?

The results from the study reveal a wide difference exists between the overall attitudes of principals and teachers toward mainstreaming. This is in agreement with past studies (Center et al., 1984; Goupil & Bruent, 1984; Pinhanas & Schmelkin, 1984) which have determined general classroom teachers view students with disabilities differently than principals. The current findings indicate the overall attitude, philosophy, and willingness of teachers to work with students with disabilities is less favorable than administrators. Research by Jordan and McLaughlin (1986), Larrivee (1982), and Ringlaben and Price (1981) indicate attitudes are related to the relationship a teacher has with students. Teachers are less willing to work with students with disabilities on a daily basis. Principals are more willing than teachers to work with disabled students because principals are detached from the daily routines of the classroom.

Teachers from small school divisions were the least comfortable completing tasks related to child study teams/eligibility teams as related to school personnel and school division size. These results are not in agreement with an earlier study conducted by Conoley (1982). Conoley (1982) determined teachers from small school divisions were more willing to accept mainstreamed students because of the organizational structure and team teaching. Conoley (1982) suggests school personnel from small schools have more

loyalty towards the organization and feel an obligation and responsibility towards the organization. That is, if the building principal views mainstreaming favorable then the staff will also be willing to accept mainstreaming.

Results from the present study are in agreement with the findings of Lietz and Kaiser (1979). Lietz and Kaiser (1979) explain the disparity among urban schools and small schools is related to the different socio-economic profile of the schools. Teachers who work in large schools have a wider variety of resources, whereas in a small school fewer resources are available to the teacher. The more favorable attitude of teachers from large school divisions may be also related to school culture. The level of comfort to work on teams may be influenced by the existing ability of general education teachers working together as a team. Teachers in small schools may lack the confidence and understanding to execute special education tasks due to the lack of time and availability of support.

The current study determined the degree of comfort as related to school division size and school personnel was significant. The personnel from large school divisions were more comfortable with regards to knowledge of special education and ability to complete written or end of year summary reports than personnel from small school divisions. Studies by Barker and Gump (1964) and Bidwell and Kasarda (1975) indicate large school divisions have sufficient

resources and assistance programs to implement successful mainstreaming programs. Consequently, tasks which may be cumbersome or difficult for small school divisions are easily completed by large school divisions.

Results from the current study indicate principals were more comfortable dealing with special education tasks and mainstreaming than general education teachers. The findings from this study differs from the findings by Lietz and Kaiser (1979) and Shepherd (1980). Lietz and Kaiser (1979) and Shepherd (1980) found principals lacked the knowledge and confidence to execute special education programs on a daily basis. The current findings indicate principals are more confident completing tasks related to special education administration than administrators a decade ago. A further explanation for the possible increase in confidence may be related to recent certification requirements and state initiatives to help train principals in issues related to special education.

The present findings indicate principals are still uncomfortable completing certain tasks. Principals from large school divisions were significantly less comfortable working with child study teams and eligibility teams than principals from small school divisions. Principals from large school divisions were also less comfortable administrating and implementing special education programs than principals from small school divisions. These findings

are similar to earlier studies conducted by Conoley (1982) and Nied (1980). Conoley (1982) suggests administrators from large organizations do not deal with special education issues on a daily basis. Consequently, principals from large school divisions are likely to feel uncomfortable completing special education administrative tasks. Administrators in large schools are more likely to delegate tasks to other staff members. Therefore, administrators from large school divisions would be less familiar with the actual operations and role of a school (Barker & Gump, 1964). Although Americans value bigger programs the results from this study indicate that large schools and large school districts cannot provide sufficient services due to the size of the division. These findings are in agreement with the findings cited by Berlin (1989).

The current findings were in agreement with an earlier study conducted by Shepherd (1980). Shepherd (1980) determined principals tend to be less familiar with students with limiting disabilities. Current findings show that principals were still less favorable towards mainstreaming students with limiting disabilities. Principals from small schools indicated they lack information regarding mainstreaming and administering special education programs. Information from the current study indicates principals from small schools are more comfortable completing special education tasks than a decade ago.



Future planning of facilities should consider the population of the building and the ability of the principal to manage large numbers of staff and students. The current trend for large schools could affect a principal's ability to administer special education programs. In addition, principal training programs should be developed which enable a principal to remain current with special education issues and program management. Principals should use small teams or core groups as a means for keeping informed of special education programs.

Teachers from small school divisions indicated they were the most uncomfortable when writing educational reports or special education reports. A classroom teacher's understanding of special education is vital. Numerous studies have found the attitude of a teacher is directly related to the lack of knowledge of special education (Horne, 1985; Hummel, 1982; Johnson & Cartwright, 1979; Larrivee & Cook, 1979; Smith & Kallevang, 1985). General education teachers need additional information and training relative to mainstreaming.

Teacher expectations and overall willingness to mainstream students with disabilities can be improved by designing teams to help assist staff members who are unfamiliar with special education. The use of collaboration and teaming in a building could help to strengthen the teacher's willingness to work with mainstreamed students.

Results indicate direct exposure is an effective tool for improving the attitude of general educators. Based upon these findings colleges and universities need to include direct experience with persons with disabilities. College courses should provide more field-based situations and experience to help build the confidence level of future educators.

In summary, the attitude and level of comfort of a school division is influenced by its size and by its personnel. These results are summarized in Table 20 and 21 of Chapter 4. The disparity between large and small school divisions needs to be addressed. Currently, in the state of Virginia not all middle schools hold the same degree of favorableness towards mainstreaming. The personnel of many schools do not feel as confident in executing special education programs. Additional inservice training is needed for principals with regards to administrative duties. In addition, large school divisions need to develop collaborative teams which help bring together the principal, general education teachers, and resource specialists. Although the large divisions were more favorable in attitude there were several areas related to comfort which need to be strengthened. For example, large school divisions need to develop strategies related to administration of special education, specifically issues related to working with teams and other staff members, understanding legal issues, and

provide inservice training.

The current findings have raised some strong questions regarding the disparity of attitudes relative to school division size. The study provides evidence that differences in attitudes exist among school personnel. Organizational structure and staffing at a school can affect the overall attitudes and confidence of the staff members. Further study is necessary to examine whether these differences in attitude among school personnel are related to special education or whether a disparity exists in other academic programs.

#### Respondents' Summary

Several key issues were presented in the respondents personal comments which relate directly to attitude and level of comfort. Respondents strongly indicate that in order for mainstreaming to be effective an interactive program is required. General education teachers, support staff, and administrators need to work together in a collaborative effort.

The respondents opposed mainstreaming when it was used as a "dumping ground" for children. Students are placed in the general classrooms without a systematic plan. Many participants indicate mainstreaming is not always the correct choice. Many factors must be considered before student should be mainstreamed. Respondents were less favorable towards mainstreaming students with limiting

disabilities when a teacher lacked the knowledge and ability to teach students with disabilities using conventional methods.

The level of comfort and the amount of direct exposure to disabled persons are related. Respondents who had prior experience with persons with disabilities were also found to be more favorable, confident, and willing than respondents who had little contact with persons with disabilities. School personnel felt uncomfortable towards persons with disabilities when they lacked training and knowledge. Extra planning and firmer classroom discipline was suggested as a way to improve mainstreaming.

#### Limitations

Attempts were made in this study to have a random sample of teachers, however building principals may have biased the selection when research packets were distributed to the teachers. For this reason, caution should be taken when comparing the responses. The size of the sample may have also affected the overall results of the study. Participants were given the opportunity to not return the questionnaires. Individuals who chose not to return the questionnaires may have altered the results.

Only half of the school divisions in the state of Virginia are currently implementing the middle school concept. At the time of the study many of the schools were

beginning the initial phases of the middle school program. Results obtained may not be vastly different from other grade levels because the change has not been in effect long enough to impact the middle grades. Within the next few years it would be beneficial to examine more closely the relationship of school structure and mainstreaming once the middle school program has been fully implemented.

#### Future Recommendations

Past studies attributed differences in attitudes among principals and teachers to be related to the roles and duties of school personnel, personal philosophy, and a person's willingness to implement a mainstreaming program. The results of this study suggest further research regarding the attitudes of principals' and their behavior relative to mainstreaming should be investigated. More information regarding preservice training needs of principals and how leadership style of principals can influence the organization should be examined.

Training programs related to the administration of special education should be offered to principals. These programs should be designed to meet the individual needs of principals in a positive manner to encourage more favorable attitudes. In addition, principals must provide staff members within the building appropriate knowledge to help increase their favorableness towards mainstreaming.

Principals must also be willing to create an environment in their schools which encourages teaming, collaboration, and sound mainstreaming practices. Through the use of collaboration and group teaming staff members could become more familiar with special education procedures and learn new strategies for working with students with disabilities. Results from the study indicate that all staff members need to understand students with specific disabilities, especially those students with limiting disabilities.

After almost 17 years of mainstreaming, teachers are still less willing to integrate students than principals. Teachers need to be provided with information and training which will assist them to become more comfortable when working with persons with disabilities. This study and earlier research has shown that through the use of direct exposure and knowledge a person's attitude can be improved. Collegiate training programs need to include coursework with direct experience with persons with disabilities.

Specific variables were found to influence the attitudes of middle level school personnel towards mainstreaming. Institutions of higher learning should consider these factors when training and preparing personnel for education programs. More research regarding the indirect factors and the relationship between these factors and attitude should be conducted.

The Department of Education should evaluate the

disparity in attitude and comfort among schools. The disparity in the attitude and comfort among principals may not be avoidable. With additional training principals can become more comfortable in executing special education programs.

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## APPENDICES

Appendix A

DEMOGRAPHIC\INFORMATION SHEET

Please complete the following questions. Put a check ( ) before the best response which describes you and your present position.

I) School District \_\_\_\_\_

II) Occupation:

- 1. Principal
- 2. Teacher

III) Gender:

- 1. Male
- 2. Female

IV) Education:

- 1. B.S.
- 2. B.S. + 15 credit hours
- 3. M.S.
- 4. M.S. + 15 credit hours
- 5. Ed.S. / CAGS
- 6. Ed.S + 15 credit hours
- 7. Ed.D. or Ph.D.

V) Age:

- 1. 20 - 29 years old
- 2. 30 - 39 years old
- 3. 40 - 49 years old
- 4. 50 - 59 years old
- 5. 60 - 69 years old

VI) Your school uses what type of organizational pattern?  
(Check all that apply):

- 1. Departmentalized (a teacher presents one academic subject to four or five groups)
- 2. Team teaching (two or more teachers share the teaching responsibilities)
- 3. Multi-graded (teachers work with several grade levels)
- 4. Self contained (single teacher provides instruction)
- 5. Resource Consultant Teacher (activities, materials, or methods are provided by a specialist to regular classroom teachers)

VII) Years of teaching experience:

- 1. Less than one year
- 2. 1 - 5 years
- 3. 6 - 9 years
- 4. 10 - 15 years
- 5. Over 16 years



VIII) Years of administrative experience:

- 1. Not applicable
- 2. 1 - 7 years
- 3. 8 - 15 years
- 4. Over 16 years

IX) Describe your pupil/teacher ratio:

- 1. Not applicable
- 2. 0 - 15 students per teacher
- 3. 16 - 20 students per teacher
- 4. 21 - 25 students per teacher
- 5. 26 - 30 students per teacher
- 6. 31 or more students per teacher

X) Select the type of support services in your school that are available to teachers/administrators (check all that apply):

- 1. Teacher Assisted Teams
- 2. Consultation
- 3. Interdisciplinary Team (a team which focuses on human behavior problems not academic problems)
- 4. Home Base Advisor (a teacher who is familiar with the student)
- 5. Decision-Making Team (Students meet with staff to do problem solving skills)
- 6. Exploratory Programs (self-interest programs for students)
- 7. Paid Aide in the classroom
- 8. Child Study Team
- 9. Other \_\_\_\_\_

XI) Have you taken any coursework in special education?

- 1. Have not taken coursework
- 2. Have taken 1 credit mini-course
- 3. Have taken one 3 credit course
- 4. Have taken up to 15 credit hours
- 5. Have endorsement in Special Education
- 6. Have endorsement in 2 or more areas of Special Education

XII) Years of teaching experience with identified mainstreamed students:

- 1. 0 years
- 2. 1 - 2 years
- 3. 3 - 5 years
- 4. 6 or more years

XIII) How much contact do you have with the special education teacher in your building?

- 1. Daily
- 2. Weekly
- 3. Twice a month
- 4. Seldom
- 5. Never

XIV) Are you currently teaching any students who are disabled?

- 1. Yes
- 2. No
- 3. Don't know

XV) How much time do you spend each class period providing special help to mainstreamed students?

- 1. No extra time
- 2. At least 1 minute
- 3. At least 2-5 minutes
- 4. Over 5 minutes
- 5. Not applicable at present

XVI) How would you rate the quality of classroom support received from the special education teacher(s)?

- 1. No support
- 2. Some support
- 3. Average support
- 4. High support

XVII) Select the type of support services available for mainstreamed students (check all that apply):

- 1. Psychologist for individual counseling
- 2. Social Worker
- 3. Guidance Counselor
- 4. Speech Therapist
- 5. Reading Teacher
- 6. Other \_\_\_\_\_

XVIII) Which specific categories of students (if any) are mainstreamed in your building (Check all that apply)?

- 1. Students with Learning Disabilities
- 2. Students with Behavior Disorders
- 3. Multiple Handicaps
- 4. Students with Mild Retardation
- 5. Students with Moderate Retardation
- 6. Students with Severe and Profound Retardation
- 7. Students with Visual Impairments
- 8. Students with Physical Impairments
- 9. Students with Orthopedic Disabilities
- 10. Students with Neurological Impairments
- 11. Students with Special Health Problems
- 12. Students with Speech and Language Disabilities
- 13. Students with Hearing Impairments

## Appendix B

### Summary Sheet of Demographic/Information of Respondents

Item Sample	Teacher	Principal	Total
<b>Gender</b>			
male	21%	79%	30%
female	81%	19%	70%
<b>Average Daily Membership</b>			
small < 3500	84%	16%	49%
large > 9000	79%	21%	51%
<b>Age</b>			
20 - 29	14%	-	11%
30 - 39	32%	16%	29%
40 - 49	42%	44%	42%
50 - 59	12%	36%	17%
60 - above	-	4%	1%
<b>Education</b>			
B.S.	30%	2%	23%
B.S. + 15 Credits	34%	-	28%
M.S.	25%	18%	23%
M.S. + 15 Credits	11%	52%	19%
Ed.S	-	20%	5%
Doctorate	-	7%	2%
<b>Years of Teaching Experience</b>			
Less than 1 year	6%	2%	5%
1 - 5	13%	13%	13%
6 - 9	16%	27%	18%
10 - 14	26%	18%	24%
15 or more	39%	40%	39%
<b>Administrative Experience</b>			
not applicable	70%	-	70%
1 - 7	-	11%	
8 - 15	-	9%	
Over 16	-	10%	

**# of Years Working With Disabled Persons**

0 Years	10%	34%	15%
1 - 2	13%	4%	10%
3 - 5	22%	20%	22%
6 years or above	55%	42%	53%

**Special Education Training**

No Training	48%	49%	48%
1 Credit Mini Course	13%	10%	12%
Participated in 3 Credit Course	24%	24%	25%
Taken 15 Credits	15%	14%	13%
Sp.Ed. Endorsement	-	2%	2%

**School Structure**

Departmentalized	44%	43%	42%
Team Teaching	25%	27%	26%
Multi-graded	16%	18%	16%
Self-Contained	6%	13%	10%
Resource Consultant	8%	13%	10%

**School Programs Available in the Building**

Teacher Assisted Teams	35%
Consultation	37%
Interdisciplinary Program	32%
Home Base Instruction Time	37%
Decision-Making Teams	21%
Exploratory Programs	53%
Child Study Teams	65%
Classroom Aides	30%
Other(	12%

**Time Spent with Disabled Mainstreamed Students**

no extra time	11%
at least 1 minute per period	10%
at least 2 - 5 minutes per period	26%
over 5 minutes per period	27%
not applicable	26%

**Children Served**

Learning Disabled	95%
Emotionally Disturbed	72%
Speech and Language Disordered	71%
Hearing Impaired	57%
Physically Disabled	56%
Other Health Impaired	51%
Visually Impaired	47%
EMR	46%
Orthopedically Impaired	34%
Multihandicapped	30%
Severe and Profound	26%
Neurologically Impaired	22%
Moderately Retarded	22%

**PLEASE NOTE**

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**Appendix C, Attitude Towards Mainstreaming  
Scale (ATMS)  
and  
Appendix D, Comfortability Scale in Special  
Education (CSSE)**

**University Microfilms International**



The University of Georgia

College of Education  
Department of Communication Sciences and Disorders

January 28, 1991


Janice L. Farley  
School of Education  
Jones Hall, Rm 310  
William and Mary  
Williamsburg, VA 23185

Dear Ms. Farley:

You have my permission to use the Attitudes Toward Mainstreaming Scale for your doctoral research. Find enclosed a copy of the revised manual and the scale.

Please let me know if you have questions. I would appreciate learning of your results.

Sincerely,



Joan D. Berryman, Ed.D.  
Associate Professor and  
Department Head

JDB/jd

Enclosure



School of Education  
Department of Educational Psychology  
Box U-64  
249 Glenbrook Road  
Storrs, Connecticut 06269-2064

January 28, 1991

Janice L. Farley  
School of Education  
Jones Hall 310  
The College of William and Mary  
Williamsburg, VA 23185

Dear Ms. Farley:

I am please that you are considering the use of the Comfortability Scale as part of your research efforts. In fact, we are currently completing a study using the scale with both special and regular education undergraduates at The University of Connecticut.

You most certainly have my permission to use "portions" of the scale in your work. I would request that you inform me of the changes you will need to make. The factor structure and reliabilities of each subsection may assist you in making these changes. I've attached a copy of these for your information.

As you are well aware, since the time of the scale's publication, terminology in special education has changed. In response to these changes we have modified the language of the scale (but have not changed item stems or item order). I have enclosed a copy of the revised scale for your use.

If I can be of further assistance please do not hesitate to call.

Sincerely,

Kay A. Norlander, Ph.D.  
Professor  
Special Education

Encl.  
KAN/jq



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**Appendix E**  
**Comments from Surveys**



"Interesting study, we need to know more about these areas"

"The answers to this questionnaire may vary as the success of students in programs also varies. Generally I believe that students in a school are the responsibility of all the teachers in that school regardless of shape, color or needs."

"I feel very comfortable in working with all aspects of special education from referral to evaluating curricula. My frustration arises from "regular education" teachers who either do not fully understand the ramifications of the various "labels" or do not remain consistent in carrying out a program due to ignorance or impatience. or perhaps because of the time constraints attached to these demands.

In addition, I feel that perceptions of the special education teachers by the regular education teachers is critical to the success of any mainstreaming program. I suppose this study will add credibility to my statement."

"Students with diabetes should not be allowed in the regular classroom unless the parents and doctor agree."

"Educable mentally retarded children cannot maintain in a regular classroom all day. Students who stutter and do not

object to being in a regular classroom should be allowed. Physically handicapped students cannot also be allowed in the regular classroom because there are no ramps or the doorways are not large enough."

"In the 20 years I have taught one blind student, one deaf student, and have counseled many students who are EMR and ED.

"I have a heterogeneous grouped class with gifted and educable retarded in the same class. My least favorite group to teach are the emotionally disturbed. I do not have the patience when they constantly disrupt my class."

"Mainstreamed students are frequently put into regular classrooms. I am not uncomfortable with the students, but I feel unprepared for teaching them. Very little communication occurs between the regular classroom teacher and the special education teacher. Once every six weeks I fill out a brief form on each student's progress. I receive no feedback whatsoever!"

"I do believe regular meetings with these teachers would be beneficial. I'm sure they could give suggestions that would help me, and I believe my observations of the students could also help. Everyone seems "too busy" for this to happen. It's frustrating! These kids deserve the best we can give

them and it's not happening."

"I have also noticed that many of the special education teachers cannot truly relate to the regular classroom teacher. A good friend of mine asked for a conference with the special education teacher last year concerning behavior problems of two of their students. My friend, the regular classroom teacher, was told, "Well, I don't have behavior problems in my room." Of course she didn't have problems, she only had 5 kids in her room, my colleague had 27! It makes a big difference in the regular classroom."

"The comfortability scale refers to the idea that the Child Study Team have a medical component. I wouldn't be comfortable being that person. I don't know if I'd be comfortable with that person or not. Some problems can arise from this situation."

"Mainstreaming a deaf or blind student would depend on the facilities available."

"Mainstreaming in (our) school has been great! the students are motivated, accepted by the others, and fit right in. the special education teacher is extremely supportive! She and I have been able to do some co-teaching and the students have benefitted greatly!"

"When the special education is integrated with the handicapped students then mainstreaming is successful. But with this arrangement, the program is ineffective."

"With 25 to 30 students in a class, some of my LD students get overwhelmed and frustrated. I spend a lot of time with them which is difficult considering the other students. I feel some of those students should be mainstreaming into smaller classrooms."

"I am very much opposed to educating children who prevent other children from learning. If a classroom teacher has to spend most of the class period with special students, i do not feel it is fair to the students with no problems. i have had days when good students were given no time at all due to the demands of ED students."

"For a parent of a special needs child, they want as much as possible. Parents of regular kids don't want their child's education cut short either."

"Have you spent an entire year with ED students in your class? Exhausting isn't it?"

"The regular classroom is too often a dumping ground when the "powers that be" which to be perceived as having a successful program. Regular students do not benefit from

this disruption in what constitutes a proper education. As you can tell, you are not reading the response of a bleeding liberal. I'm up to my neck in screening minorities and I've had enough. We aren't as stupid as we appear to be."

"Mainstreaming is not a cure-all for all students but it can be real effective on a case by case basis. Unfortunately it appears that often mainstreaming is used to reduce the load of the special education classrooms and the child is often embarrassed in the placement. Many times other students will indirectly cause the student to have problems."

"Mainstreaming requires support staff and these two situations require special instruction and skills which I do not have. School systems need to be sure aids, etc. are available so all children benefit not just the handicapped child."

"I feel I have a positive attitude toward working with students with special needs. However, I have not received any training in this area. I would really like to learn more. I feel students should be mainstreamed, however, I believe classroom teachers need to be educated on how to incorporate these students (teach them in a way that they can learn)."

"My grandparents aunt and uncle are deaf. I had a sister

who was down's syndrome. I have a cousin with muscular dystrophy and another cousin with hypoglycemia. I have had students who are mainstreamed into my classroom with special needs. I have no problems with this as a teacher. I can work with other people."

"I believe special children belong in a regular classroom unless their presence interferes with the ability of the others to learn."

"The ATMS scale obviously looks at only a specific situation. I agree with certain situations. There are however certain situations which I feel would not be a benefit for the individual student. I assume the attitude is what your looking at on the ATMS"

"The ATMS scale was difficult to answer because every situation is different. I feel a "handicapped child" should be in a regular classroom as long as the child is comfortable there. I worked with a blind student while student-teaching. He was in the regular classroom all the time and was very comfortable. I worked with another blind student who was embarrassed about being blind and did not do well in the regular classroom, it was obvious that he needed special help. I think mainstreaming is fine as long as the child wants to be there and can benefit from being there."

"At my school, we work as a team for the overall advancement of each child. we use monitor sheets, handwritten notes, and verbal communication for the best interest of the child. The child understands we're all working together to improve his or her situation, so he/she will continue to improve."

referring to the ATMS scale..

"I would be more than glad to have a deaf student in my classroom, however, since I do not know sign language, I feel that the child would be at a great disadvantage. I'm certain that the child could learn a lot from being in the regular classroom. I am willing to try to learn sign language, but I don't think I could learn enough to teach my subject area very well. I would be willing to write everything for the student to read, but could she read well enough to understand?"

"The questions on the ATMS scale were difficult to answer. If any student is able to handle the academic material, he should be mainstreamed. The whole idea of special education, in my opinion, is to help those with problems adapt and be moved into regular classrooms. Those with health problems need to be placed into rooms where the teacher has been trained in the proper procedures to handle the emergencies if they arise. The whole key to placing a child into the regular classroom is related to his/her ability to academically succeed."

"Our school system is currently a junior high. We will be moving to a middle school setting in 1992. I think this will help our school to do more team-work and individualized planning. Mainstreaming can be talked over in a team more easily."

"I do not have a lot of contact with special education beyond a student in my classroom. My degree is in English, not education and I have had no training or coursework dealing with these issues. I have no background in special education."

"Many teachers, including myself, find it difficult when a child is mainstreamed because of lack of knowledge. Our background is not special education so we don't have the knowledge or resources to help us to deal with these issues. I don't think any teachers would turn a student away because of the handicap, it would be because of "not knowing what to do with them". "

Sometimes I feel that we spend so much time in testing and having children placed in special education only to have them continue or to be quickly mainstreamed into the regular classroom. Many times these students just can't function in the regular classroom. I don't think that they should be rushed back into the classroom after receiving a special



education placement."

"My answers are based upon the following things:

- a) caring for a mildly retarded daughter (now 34 years of age)
- b) teaching adapted p.e. to children who are handicapped but are not really that different than regular kids.

In the past I have worked with physically handicapped children, mentally retarded, blind, deaf, orthopedically disabled and cerebral palsy. I believe they can all succeed in the regular classroom."

"While I had no anxiety about working with students with a broad range of handicapping conditions, I was concerned about including a TMR child in my regular reading class. after several planning sessions with the TMR teacher and her visits to answer questions posed by my students, the results were delightful. The TMR student brings her work, they help the TMR student with her work. attitudes and behaviors are very positive. My concerns were that the TMR student should feel comfortable and secure and that my regular students should be accepting and sensitive to whatever the need. I feel that laying the groundwork of having my students write their concerns for the TMR teacher to discuss, helped set the tone of my expectations that everything should run smoothly. Some of my students had made comments that

indicated everyone would not be comfortable in our expanded class situation. Now everything seems to be progressing nicely."

"I have had excellent resource teachers who helped the students and me. It was great to have the expert advice of a resource teacher when I was in doubt as to what to do ."

"I teach in the Foreign Language area, which would create special difficulties for a mainstreamed student."

"As an "old world" re-entry teacher, I am most comfortable with "tracking" instead of mainstreaming. However my readings and seven years of current experiences lead me to believe that all students develop best in mainstreamed situations if:

- a) teachers are totally trained and supported
- b) class sizes are SMALL
- c) planning time is adequate and realistic
- d) the planning time, evaluation time, conference time is kept to a minimum"

"Some key fears or uncomfortableness I feel are...

- a) unfairly focusing too much time on too few students
- b) discipline problems
- c) special students need extra time and attention,

47 minutes per period is inadequate time to meet the needs of all students fairly

d) why do states, counties and federal governments spend tons of money on "identifying students" and then place them back into the general program on a mainstreamed basis where only some of their needs can be met"

"I feel mainstreaming would work more effectively, if the classroom teacher had a aide for each class having a 'special student'. I have received very little training in any area. More in-services and course need to be offered. I don't think the average classroom teacher in a departmentalized situation has adequate training in these areas of special need."

"I use cooperative learning, mainly the John Hopkins Method, and having the special education students has not been any problem in my classroom."

" Special education is a misused and poorly administered national problem. It is a dumping ground for behavior problems and not remotely close to serving the learning disabled youth it was meant to serve.

It would be very challenging to change the public sectors current point of view."

"I am very favorable towards mainstreaming students only if

proper resources are available, and we have the right support personnel."

"I would be more comfortable is I had inservice (or training) on standardized tests. I see patterns in LD/ED children but I do not know how to understand these discrepancies exist."

"The questions presented in this survey tend to sway the reader to agree with mainstreaming all special education students into a regular classroom. All special education students are not adaptive for the regular classroom. All teachers are not trained to deal with all special education students, all 'regular' students do not have the capability of handling special education students as classmates. To subject teachers, "regular students" and special education students to mainstreaming will have a devastating effect on all involved. As a classroom instructor for 11 years, the public schools have been used for all types of research, our students have suffered enough! Our school have suffered. Our parents are confused by the constant change in trends.

"With the many irritants during the course of a school day that prevents 'pure' uninterrupted instruction from going forth. Now we are faced with a new trend, "mainstreaming". A trend that has not been researched is the long term effects that mainstreaming will have on everyone."

"I am concerned on how to control behavior of mainstreamed students that have many physical or mental handicaps while trying to teach the other students topics like writing and communicating."

"Everyone has rights; the rights of 29 students should not be jeopardized for 1 disabled student. Generally, teachers I know are tired of the attention given to special education programs. The trend is to not justify the means, the time, money, and work required to educate so few students. The same results could be achieved with a lot less money and time. We've spent a fortune to get children into special education programs only to put them back into the regular classroom it's a farce!"

"Handicapped and mainstreamed students are very well accepted by classroom students in my school. The classroom students are very concerned with the individual progress of mainstreamed students. They are very over-protective of handicapped students."

"Mainstreaming is a process that every student should experience during their educational years."

"As a teacher I have only benefitted and have been touched by every mainstreamed student I have had in my classroom."

"I have never been a member of a child study team so the responses I indicated on questions (9 - 21) are from a viewpoint of a teacher who makes referrals, but seldom sees the results."

"I am an advocate for mainstreaming in our building, and will always make adaptations for these students with whom other teachers often don't want to bother with. However, I feel strongly that the average, non-handicapped child has an equal right to an education, and I will revoke the privilege of any special education child who "presents persistent discipline problems" and violates this right of others who are trying to learn. We house the county's ED self-contained program and my class is always open to any of these students who want to try the regular classroom, but they must control their behavior or they go back to self-contained (usually for one or two days; seldom on a permanent stay)."

"I am not apart of the Child Study TEam, but I would be comfortable with all of the areas listed on questions 9 - 21. The areas seem the same except the input from the p.e. teachers."

"I agree that blind students should be able to attend a regular classroom provided the materials and support are

available."

"I am the parent of a learning disabled child and I was the responsible person in my former school for Child Study and Eligibility Teams. I also supervised an EMR/ED program that was housed in the building where I was the administrator. I am a strong advocate of least restrictive environment, of developing program for kids (not kids for program), and of early identification/ intervention programs."