

TEACHERS' CONCERNS ABOUT INTEGRATIVE PHYSICAL EDUCATION:
A CROSS-CULTURAL COMPARISON

A DISSERTATION
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
IN THE GRADUATE SCHOOL OF THE
TEXAS WOMAN'S UNIVERSITY
COLLEGE OF HEALTH SCIENCES

BY
CHRISTOPH LIENERT, MA

DENTON, TEXAS

MAY 1998

COMPLETED RESEARCH IN COLLEGE OF HEALTH SCIENCES

Texas Woman's University, Denton

J. Wilkerson

Institutional Representative

Lienert, C. Teachers' concerns about integrative physical education: A cross-cultural comparison. Ph.D. in Physical Education, May, 1998, (C. Sherrill).

The purpose was to investigate concerns of elementary school physical educators about integration of students with disabilities in regular physical education classes and to compare concerns in the USA and Germany. The Concerns-Based Adoption Model (CBAM) of Hall, Wallace, and Dossett (1973) provided the theoretical framework. Interview data were collected from 14 teachers in the USA and 16 teachers in Germany. Data were analyzed using grounded theory procedures. Findings support CBAM's assumption that change is largely individual. The influence of personal and contextual variables on teachers concerns is affected by cultural differences (e.g., working conditions). However, the theoretical implications for the relationships between concerns, personal variables, and contextual variables appears valid in both countries and not culture specific.

TABLE OF CONTENTS

ABSTRACT.....	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES.....	vii
LIST OF FIGURE.....	viii
Chapter	
I. INTRODUCTION.....	1
Changes in Professional Roles	3
Work Life of Teachers in the USA	8
Rationale of the Study	11
Theoretical Framework	12
Purpose of the Study	14
Statement of the Problem	15
Research Questions	16
Definitions of Terms	17
Delimitations of the Study	20
Limitations of the Study	20
Significance of the Study	21
II. REVIEW OF THE LITERATURE.....	23
Concerns Theory	23
Schooling in the Federal Republic of Germany	40
Schooling in the USA	77
A Comparison of Schooling in the USA	
and Germany	106
Conclusions about Schooling in the USA	
and Germany	122
III. METHOD.....	128
Comparative Education	128
Design of the Study	135
Participants	136
Instruments	138
Pilot Study	141
Procedure	143

	Analysis of the Data	144
IV.	RESULTS	146
	Personal Reflections	146
	Demographic Data	149
	DFW Sample	149
	Berlin Sample	150
	Integrative Physical Education in the USA and Federal Republic of Germany	152
	General Conditions	152
	Conditions Specific to Physical Education	173
	Summary of Section	184
	Concerns	184
	Personal Stage	188
	Management Stage	296
	Consequence Stage	210
	Collaboration Stage	220
	Refocusing Stage	226
	Other Concerns	228
	Summary of Section	239
	Personal Variables	241
	Gender	242
	Age	242
	Years of Teaching Physical Education	242
	Years of Teaching Integrative Physical Education	243
	Teacher Training	248
	Beliefs and Attitudes Toward Integration	255
	Teaching Style	258
	Personality	263
	Collaborative Abilities and Skills	266
	Summary of Section	267
	Contextual Variables	268
	Collaboration	269
	Program Organization and Working Conditions	281
	Students	292
	Summary of Section	306
	Summary of Results	307
V.	DISCUSSION	313
	Summary of the Study	313
	Discussion	329
	Conclusions	351
	Recommendations for Future Research	351

REFERENCES	354
APPENDICES	377
A. English Interview Questions	378
B. German Interview Questions	382
C. English Participant Questionnaire	386
D. German Participant Questionnaire	389

LIST OF TABLES

Table

1. Participant Demographics..... 151
2. Stages of Concern About the Innovation..... 185

LIST OF FIGURE

Figure

1. A paradigm to describe influences on teachers' concerns about integration..... 338

CHAPTER I

INTRODUCTION

The question of the extent to which and how children and youth with disabilities should be educated together with their peers without disabilities has been and likely will continue to be a social, educational, and political issue disputed in economically advanced Western countries (Bateman, 1995). Almost 30 years after the educational, political, and legal debate about restructuring the educational system with regard to the education of students with disabilities, this debate has gained new urgency (see chapter 2). According to Gallagher (1995),

We seem to be in another critical transitional era similar in this respect to the general social climate in which the Dunn and Deno articles appeared a quarter century ago. The present seems to be a watershed in education, a time when major changes are expected and anticipated by political decision makers (p. 97).

In the USA, physical education has been particularly affected by this debate for two reasons:

1. Physical education is the only subject specifically mentioned in the definition of special education in the Individuals with Disabilities Education Act (IDEA; Federal Register, 1992) that must be available to all students with disabilities. IDEA requires individuals with disabilities to be educated together with their peers without disabilities to

the greatest extent possible.

2. Physical education, along with music and arts, has traditionally been a subject area in which students with disabilities, according to general, nonexpert belief, could be accommodated easier than in academic subjects.

The issue is the implementation of the normalization principle in the educational system (Hübner, 1996). In many countries such as the USA, Scandinavian countries, Germany, and Italy, a continuous change toward a more integrative education of children with and without disabilities can be observed (Ellger-Rüttgardt, 1995; Hübner, 1996; Murray-Seegert, 1992; USA Department of Education, 1994). The terms integrative education and integration refer, in the context of the present investigation, to the placement of students with disabilities into those schools and classes in which they would be taught if they did not have a disability. In the interpretation of some German scholars, this is, in the area of schooling, the essence of the normalization principle (Hübner, 1996; Preuß & Hofsäß, 1991).

Teachers, besides the students themselves, are the ones most affected by changes such as those required by integration because teachers are the link between society's and parents' expectations for education provided by the state and local school districts and what students actually learn in school. Consequently, teachers and their concerns play an

essential role in operationalizing changes involved in educational reform. In the context of this study, changes refer to modifications that are involved in the movement toward integrative education. In this regard, Broadfoot (1990, p. 168) states, "for without some understanding of teachers' professional perspectives and their origins, attempts to change educational practice from without [sic] are unlikely to be successful unless they are explicitly coercive."

The present investigation was planned to (a) identify the concerns of physical education teachers about including students with disabilities in regular physical education classes, (b) explore personal and contextual variables affecting these concerns and how teachers cope with them, and (c) compare these concerns and variables across two cultures with different educational systems and different approaches toward integrative education.

Changes in Professional Roles

Including students with disabilities in regular classes requires certain attitudes, knowledge, teaching approaches, instructional skills, and professional responsibilities of regular educators and special educators, including adapted physical educators. The conditions relating to integration differ to a certain extent from the conditions of a dual system of regular and special education and involve a change

of professional roles by both regular educators and special educators, including adapted physical educators (Ellger-Rüttgardt, 1995).

Regular (Physical) Educators

The Education for All Handicapped Children Act of 1975, now reauthorized as the Individuals with Disabilities Education Act (IDEA), has changed the roles and professional responsibilities of regular educators. For the physical educator, new tasks include (a) assessing students with disabilities to determine psychomotor needs, (b) participating in individualized education program (IEP) meetings, (c) writing IEPs, and (d) adapting instruction to accommodate students with various disabilities in their classes. IDEA requires physical education instruction to be individualized to meet the needs of students with disabilities in regular classes to the greatest extent possible (Block, 1994; Sherrill, 1993; Stein, 1987). Because regular physical educators, by their training, do not have strong adapted physical education competencies, most have to consult with adapted physical educators on how to address the special needs of students with disabilities in their classes. This process requires collaborative skills.

For integration to be successful, there must be the willingness and ability to modify instructional practices (Bundschuh, 1976). The questions are, whether regular

educators possess these competencies and skills and what the factors are that influence teachers' ability and willingness. Examining general teaching competencies as one aspect of work perceptions of secondary teachers in five countries (England, USA, Japan, Singapore, and West Germany), Poppleton (1990) compared proportions of teachers in five countries who were qualified or certified to teach their assigned subjects. For physical education/health, the data showed 36% of American teachers were certified or thought they were qualified to teach the subject compared to 97% in England or former West Germany.

Research on perceptions of regular education teachers toward integration suggested that teachers in general are unprepared for the task of including students with disabilities in regular classrooms (Stoler, 1992). Of the 182 teachers surveyed, 141 had never taken a class in special education and the same number of teachers had not participated in any in-service training about special education (Stoler, 1992). A study of postsecondary teacher training programs in New York state indicated that teacher training institutions do not adequately prepare prospective teachers for integrative classroom settings (Kearney & Durand, 1992). A study in the area of physical education indicated that, although a majority of the physical educators surveyed received general in-service training for

integration, only 4% had received in-service training specific to physical education content (Potter-Chandler & Greene, 1995).

Most regular physical educators are not and cannot reasonably be expected to be qualified to include students with disabilities in their classes in a safe, successful, and satisfactory way without the support of qualified adapted physical educators (Block, 1994; Block & Garcia, 1995; Yilla & Piletic, 1995). Recent court decisions in the USA have acknowledged the need of and supported the right for professional support of regular educators in integrative classrooms (Block, 1996). These circumstances put special educators and adapted physical educators in a critical position.

Special Educators and Adapted Physical Educators

The trend toward integration also requires a change in the professional roles of special educators (Preuß & Hofsäß, 1991). This change, in turn, affects regular educators and may influence their concerns about integration.

This role change, as conceived by Preuß & Hofsäß (1991), is based on three educational and professional principles that the specialist teacher has to implement. These principles are (a) advocacy for young people with special needs, especially with regard to their civil rights; (b) normalization, which aims at making the lives of people with

individuals as normal or similar to the lives of their peers without disabilities as possible; and (c) individualization of the learning environment.

When implementing these principles, the teacher functions "as the key-person to improve the life of young people with special needs" (Preuß & Hofsäß, 1991, p. 133). According to Preuß and Hofsäß, "to become a teacher and at the same time a key-person in the process of integration for people with special needs means basically a change in the professional role of teachers in special education" (p. 133). Preuß and Hofsäß see several changes in the professional role of teachers as a consequence of the movement toward integration. Specialist teachers will have to become an agent for the following functions: (a) individualizing the learning process, (b) diagnostic procedures to pinpoint the individual competence of people with special needs, (c) professional cooperation to facilitate the learning process for people with special needs, (d) professional coordination to provide an appropriate setting for the learning process, (e) professional counselling to structure the educational environment, and (f) working in the community with social-legislative engagements to initiate innovation that improves the general educational setting and the social environment for people with special needs. Special educators and adapted physical educators will have to play a critical role in the

curricular movement toward more integration because they are experts concerning the specific learning needs of students with disabilities.

Work Life of Teachers in the USA

Working conditions are another variable influencing teacher concerns. Comparing the work life of teachers in six countries (Denmark, Germany, England, Canada, Japan), McAdams (1993) characterizes the school reality that teachers face in the USA as follows:

The workday of the American teacher proceeds at a frenetic pace and with bone-crushing intensity. American teachers have little time to meet with colleagues to resolve school problems or to improve teaching practices. They are often poorly educated for their tasks and do not have sufficient time to prepare effective lessons, or to critically evaluate student work. (p. 240)

Preparation time is essential if teachers are to individualize their instruction to meet individual needs of all students. However, teachers in the USA do not have much time to prepare their classes, as McAdams (1993) points out:

As a practical reality, such a schedule limits the teacher to 10 to 15 minutes of preparation time for each lesson. Another 10 to 20 minutes per class may be allotted for evaluating student classwork and homework. Even these minimal time allocations represent a work week of more than 40 hours. (p. 235)

Given this analysis of the work situation of American teachers, it is not surprising that a study by the Texas Education Agency (1995) recently revealed that 19% of beginning teachers quit after their first year, and 50% of teachers quit by their fifth year of teaching. These

9

circumstances reflect on the professional status of teachers in a society. Teachers in the USA teach approximately 50% more instructional hours per week and have about 50% less preparation time than teachers in many of the other countries surveyed (McAdams, 1993). The author concludes: "The number of hours weekly that teachers directly instruct and supervise students, provides a measure of the society's judgement regarding the nature and complexity of the teaching act." (p. 235)

The evidence gathered by McAdams (1993) leads him to conclude that in the USA "teachers typically have very little control over their work schedules, have little influence on policy making within their school or district, and frequently work under the traditional industrial model of management-labor relations" (p. 41). A look at teacher salaries, compared to blue collar worker salaries, seems to support the notion of a low professional status of teachers in the USA. Comparing the ratios of teacher/worker salaries in different countries in 1982/84, McAdams (1993) showed that the USA was the only country where teachers earned less than workers (in 1982) or just the same in 1984. In the other countries, teachers earned between 12% and 77% more than workers.

However, while the variables examined by Poppleton (1990) and McAdams (1993) (e.g., teacher qualification, salary, work schedule and responsibilities) certainly

influence teachers' work perceptions, teachers' concerns cannot be directly inferred from the data reported previously. For example, while good pay, shorter working hours, and comparative freedom from routine administrative and supervisory tasks are characteristics of teachers' work life in Germany (McAdams, 1993; Phillips, 1987) suggesting more favorable working conditions than in England or the USA, these circumstances do not bring higher job satisfaction (Poppleton, 1992). While teachers in the USA experience significantly more work-related stress than their colleagues in former West Germany, they are at the same time significantly more satisfied with their job and their work (Poppleton, 1990).

It is possible that one variable contributed to these seemingly paradoxical results that is not directly related to the teaching profession. Poppleton's data show that, of the teachers in the USA, only 40% went straight into teaching without working in a different job before compared to 84% in Germany. This could mean that the job satisfaction of teachers in the USA might be influenced by experience in other jobs, whereas in Germany this comparison with other jobs is not available to teachers. Besides this and other personal variables (e.g., training, experience, beliefs), job-related variables (e.g., teaching practices, roles and responsibilities) may influence teachers' work perceptions

and concerns (Broadfoot, 1990; Poppleton, 1992). For example, one study revealed differences in perceptions of teachers in the USA and the Federal Republic of Germany with regard to freedom to experiment with instructional techniques or participation in policy making (Poppleton, 1990).

In conclusion, these data imply that teacher concerns need to be studied within a dynamic force field of personal and contextual variables. However, this duality of objective and subjective variables has seldom been addressed by comparative education (Broadfoot, 1990, p. 167). While qualitative studies are needed to explore this issue, very few have been done. Far more studies have taken a structural-functionalist approach, focusing on the educational system itself.

Rationale of the Study

The rationale of this study is based on two assumptions. First, both personal variables (e.g., training, experience, beliefs) and contextual variables (e.g., work conditions, roles, responsibilities) affect the professional life of teachers and the learning of students (Broadfoot, 1990; Brophy & Good, 1986; Chapman, 1983; Duke, 1984; Ellson, 1986; Menlo & Poppleton, 1990). Given this relationship, understanding and addressing of teachers' concerns is an essential prerequisite for the success of integrative education.

Second, a cross-cultural perspective over a unicultural perspective has been proposed to address educational issues (Menlo & Poppleton, 1990). Advantages are

1. Cross-cultural studies allow examination of the generalizability of educational phenomena and theories beyond specific socio-cultural frameworks.

2. Cross-cultural studies allow identification of culture specific aspects of the phenomena under investigation and make it possible to better understand one's own system (or the systems studied) because an "outside" is added to the "inside" perspective.

The discipline that addresses cross-cultural comparisons of educational issues is comparative education. This study, therefore, is a study in comparative education.

Theoretical Framework

Social theory includes both general and specific theories (Alexander, 1987; Bogdan & Biklen, 1982). General theories or paradigms synthesize several special theories; they are theories about everything, a way of looking at the world, a means to perceive and interpret reality. General theories usually involve nonempirical presuppositions or a priori positions. In contrast, specific theories are much narrower in scope. They consist of a set of testable propositions about a more specific phenomenon.

Based on the assumption of a multidimensional reality, the general theoretical ground of this study is a synthesis of several basic theoretical presuppositions (Alexander, 1987). Individuals' actions are thought to be determined by both internal subjective variables in a nonrational paradigm (e.g., beliefs, values, norms) as well as external objective variables in a rational paradigm (e.g., tendency to maximize gains, cost-benefit calculations).

With regard to the social context of individuals' actions, it is assumed, following the collectivist paradigm or structural-functionalist approach, that the individual's perceptions and actions are, to a certain extent, determined by the social environment (e.g., institutions, roles). At the same time, the individual is thought to play a critical role in the shaping of his/her social context (individualistic paradigm or interactionist approach). The approach taken in the present study acknowledges the observation that teachers not only perform their tasks according to certain role expectations but that they are also active players in creating their roles (Broadfoot, 1990). A combination of selected general theories was used as the theoretical grounding for this investigation because the goal of the study was to examine external and individual variables as they influence teachers' concerns about integration.

The Concerns-Based Adoption Model (CBAM) of Hall, Wallace, and Dossett (1973) provided the theoretical framework for the present study. The model was developed in response to the frequently observed failure of educational innovations. The introduction of an innovation in educational settings "often results in major role changes for teachers and administrators; changes in role often require new professional and interpersonal skills as well as personal value changes" (Hall et al., 1973, p. 2).

Members of an organization, or user system (e.g., teachers in a school), who are facing the introduction of an innovation (e.g., integrative education), will examine several things. Among these are (a) how compatible the innovation is with their value system, job functions, and skills; (b) how compatible the innovation is with institutional goals, structures, and resources; and (c) how the innovation might affect their personal goals (Hall et al., 1973). The results of these evaluations are likely to determine the willingness of individuals to accept and implement the innovation. The manifestation of this initial evaluative process can be observed as expressed concerns.

Purpose of the Study

The specific purpose of this study was to investigate concerns of physical educators about integration of students

with disabilities in regular physical education classes and to compare the concerns of teachers in two countries.

Statement of the Problem

The problem of the investigation was (a) to identify concerns about integration of physical educators in two countries; (b) to expand concerns theory by identifying personal and contextual variables influencing concerns; (c) to examine cultural influences (e.g., educational system, approach to integration, professional life of teachers) on concerns and their determining variables (including examining the role of each of the four general theoretical presuppositions) as well as aspects that are not culture specific; (d) to examine how teachers in both countries cope with their concerns; and (e) to consider implications for teacher training programs as well as educational policies in the two countries.

The design of the study can be described as an in-depth comparison (Halls, 1990b) of a specific issue (i.e., concerns of physical educators about integration) or a problem-centered approach (Klauer & Mitter, 1987; Thomas, 1990). The proposed research was a comparative study at the micro level. Using in-depth interviews (Taylor & Bogdan, 1984), concerns and the variables influencing them were examined in an inductive way. This approach seems to be most appropriate, given the purpose of the study and the nature of the subject

investigated. The interviews were recorded, transcribed, and analyzed using grounded theory procedures and techniques (Strauss & Corbin, 1990). 16

Participants were drawn from two metropolitan areas, Berlin, Germany, and Dallas/Fort Worth/Denton metroplex area (DFW area), USA, using theoretical sampling (Strauss & Corbin, 1990; Taylor & Bogdan, 1984). Participants were 30 elementary physical education teachers, 14 in the USA and 16 in Germany, who had students with disabilities participating in their regular physical education classes.

Research Questions

The data were analyzed in order to produce information relative to the following research questions:

1. What are physical educators' concerns about integration?
2. What are the contextual and personal variables that influence teachers' concerns about integration in physical education, and what are the relationships between these variables and teachers' concerns?
3. How do cultural factors influence teachers' concerns about integrative physical education, and what aspects of concerns are not influenced by culture?
4. How do teachers in two cultures cope with their concerns?

Definitions of Terms

Terms and concepts that play a central role in this study were defined as follows:

Integrative Physical Education

For the purpose of the present study, integrative physical education refers to the placement of students with disabilities into regular physical education classes. This definition is deliberately kept general. As a comparative study, this investigation examines integrative physical education (i.e., how physical education teachers experience and perceive it) in rather different contexts. The definition includes settings where specially designed instruction (e.g., IEP) is provided (Giangreco & Putnam, 1991) and settings where no such individualized instruction is provided. The definition also includes integrative settings in which students with disabilities, including severe disabilities, are represented in classes in the same proportion as found in the general population (Craft, 1994) and settings in which this proportion is greater than or smaller than that in the general population. Further, the definition includes classes whose composition is not changed for physical education and classes to which some students with more severe disabilities are added during physical education only. Finally, the definition includes integrative

educational practices that are governed by different laws and regulations in the DFW area and in Berlin.

Innovation

Innovation is "the issue, object, problem, or challenge, the thing that is the focus of the concerns" (Hall, George, & Rutherford, 1977, p. 5). In this study, integration of students with and without disabilities in regular physical education is the innovation that is addressed.

Concerns

Concerns are "the composite representation of the feelings, preoccupation, thought, and consideration given to a particular issue or task....All in all, the mental activity composed of questioning, analyzing, and re-analyzing, considering alternative actions and reactions, and anticipating consequences" (Hall et al., 1977, p. 5). Concerns consist of a cognitive dimension (e.g., perceiving, thinking, memorizing) and an affective dimension (e.g., feelings, emotions, arousal). Concerns are influenced by contextual variables (e.g., work environment, work responsibilities, working conditions, other individuals such as students, colleagues, supervisors, or parents) and personal variables (e.g., training, experiences, personality, demographic characteristics).

Contextual Variables

Contextual variables are situational or external variables that describe the environment of teachers. These variables can be other individuals, type of school, job responsibilities, working conditions, salary, etc.

Personal variables

Personal variables are internal or individual variables that describe a person. Broadfoot (1990) calls these variables idiosyncratic factors and lists personality of the teacher, family background, current personal circumstances, professional experience, and training as examples. Beliefs and attitudes are also important personal variables.

Culture

Culture is a multifaceted phenomenon. Two general dimensions that are relevant to this study, structure and interaction, are identified by the following concepts of culture.

Culture is defined as "the man-made part of the environment" (Herskovits, 1948, p. 17; Segall, Dasen, Berry, and Poortinga 1990, p. 5). Smith and Bond (1993) note that culture entails not only material objects but also social institutions including education that are regulated by laws, norms, and rules. Halls (1990b, pp. 31-32) refers to Bordieu and Passeron who define culture as "standardized patterns of activity and belief that are learned and manifested by people

in their collective life." This definition points out that culture and education are linked and "act reciprocally on each other."

In contrast, Spindler and Spindler (1987) see culture as "the dialogue of action, interaction, and meaning." (p. 5) With regard to education, this dialogue specifically centers around "what is to be taught, and how much of it is to be learned, how the teaching and learning will be conducted." (p. 5)

Delimitations of the Study

The study was subject to the following delimiting factors:

1. Two metropolitan areas (one in the USA and one in Germany) were chosen for this comparison. A metropolitan area was defined an urban area with more than one million inhabitants.
2. Primary education (i.e., Grades 1 to 6) was the focus.
3. Only regular physical educators who have students with disabilities in their classes were studied.

Limitations of the Study

The following limitations are based on the methodology chosen for this study:

1. The generalizability of the results was limited to user generalizability, defined as leaving generalizing to

readers who can apply the findings of a carefully described and interpreted study to their own situations (Thomas & Nelson, 1996). This is because of the small sample size, nonrandom selection of participants, use of a nonstandardized instrument, and differences in educational policies between states, districts, and schools.

2. The interpretation was based mainly on participants' statements as recorded in the interviews.

3. Only one semistructured interview (approximately 45 min) was conducted with each participant. The fact that responses could not evolve during a series of conversations, was a limiting factor with regard to the depth and completeness of the responses.

Significance of the Study

Persons attempting to reform educational practice should take into consideration teachers' concerns because teachers are the ones who will implement the reform. Although integration of students with disabilities in physical education has been a reform effort for more than 20 years, it is still far from being accepted and practiced successfully across the USA and Germany. Educational reform is a complex process involving multiple variables. These variables must be studied if integrative physical education is to become regular practice accepted by and benefiting everyone involved.

To date, no researcher has investigated physical educators' concerns about integrative physical education using a qualitative research design. Qualitative designs are necessary, however, to fully understand concerns from the teachers' perspective (i.e., without pressing them into a preformulated schema). In this study, CBAM provided the theoretical framework for development of many of the interview questions and for interpreting much of the tape recorded data. Application of CBAM offered a structure for examining how integration affected different teachers and thus enhanced the significance of the study.

Further, a better understanding of teachers' concerns about integrative physical education can be gained if these concerns are compared with concerns of teachers in another country who are facing a similar problem under different circumstances. This study therefore uses a cross-cultural perspective.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter is divided into two parts: (a) a description of concerns theory, and (b) a description and comparison of the schooling systems of Germany and the USA.

Concerns Theory

Concerns theory, the framework for this study, can be considered a grounded theory. Grounded theory is a theory that has been developed from field research and therefore has ecological validity (Strauss & Corbin, 1990).

Concerns theory has evolved from the Concerns-Based Adoption Model (CBAM) of Hall et al. (1973), which was developed in response to frequently observed failure of educational innovations (Hord, Rutherford, Huling-Austin, & Hall, 1987). The importance of teachers' concerns in the successful implementation of educational reform has been well documented (Broadfoot, 1990; Hall et al., 1973; Hord et al., 1987; Knowles, 1981; Menlo & Poppleton, 1990). CBAM addresses (a) how change affects individuals, their attitudes, and behavior; (b) how change can be facilitated, and (c) how individuals and groups can be led to accept, use, and internalize innovations.

Change and Educational Reform

CBAM is based on six assumptions about change:

1. Change is a process, not an event.
2. Change is accomplished by individuals; therefore, individuals must be the focus of attention in implementing an innovation.
3. Change is a highly personal experience; individuals adapt differently to change, and these differences must be taken into account when introducing change.
4. Change involves developmental growth; this developmental growth can and should be anticipated and planned by facilitators of change.
5. Change is best understood in operational terms; teachers, and others, will evaluate change in concrete terms of what it means to them and, what changes in their own or their students' values, beliefs, and behavior will be required.
6. Change requires attention to individuals, innovations, and context; this means the process and implications of change must be understood in a systemic way, taking into consideration the interrelations of the innovation, the people affected, and their social and institutional context.

Hord, Rutherford, Huling-Austin, and Hall (1987) pointed out two observations regarding school change. First, school

change can have different meanings to educators in individual schools, districts, and countries. In a cross-cultural comparison, these researchers found that educational or school change is viewed in a much more holistic way in Japan and Sweden than in the USA. In the USA, school improvement is often "associated with specific, frequently single-focused or single-subject curriculum initiatives introduced by local school districts, with increasing input from the state level." (p. 7)

Second, there are two change strategies, bottom-up and top-down. Both strategies have advantages and disadvantages. The bottom-up approach, starting with one teacher or a small group of teachers and spreading out by means of persuading and convincing others, has the advantage of commitment to the innovation. The top-down approach, starting with higher levels (e.g., administration), has the advantage of change occurring more rapidly. However, the change mandated by the top will not be as easily accepted by those who have to implement it in their daily work.

Hersey and Blanchard (1993) called these two change strategies participative change cycle and directive change cycle. The line of change in the participatory change cycle, based on personal power, is knowledge, attitudes, individual behaviour, and group behavior. The line of change in the directive change cycle, based on position power, is group

behavior, individual behavior, knowledge, and attitudes (Hersey & Blanchard, 1993).

The Concerns-Based Adoption Model

The CBAM is based on research by Fuller (1969), who identified a predictable developmental sequence of teachers' concerns. The pattern of these concerns follows a continuum from concerns about self and the demands of a new situation to concerns about the nature of the task and the quality of task performance (i.e., the quality of teaching) to concerns about impact on pupils. The concerns hypothesis thus applies to the process that individuals go through when they are faced with new situations in general. Hall et al. (1973) hypothesized that Fuller's developmental concept of concerns and their sequence can be generalized to the process of adopting innovations. The analysis of concerns, in turn, can serve as a diagnostic basis for actions facilitating change.

CBAM is a process model consisting of three systems: (a) a user system (e.g., teachers) faced with an innovation and concerns about the change involved with the innovation, (b) a change facilitator or collaborative system, and (c) a resource system to resolve the concerns and needs of the user system and to guide the members of the user system through the developmental sequence of stages of concern (Hall et al., 1973; Hord et al., 1987). The tasks of the change facilitator include (a) analyzing the innovation

configuration (i.e., the description of an innovation in operational terms and the patterns of innovation that result when different teachers use the innovation in their classrooms), (b) identifying the present stages of concern, (c) identifying the levels of use of the innovation that correspond with the stages of concern, and (d) intervening by addressing and resolving concerns using available resources (Hall et al., 1973; Hord et al., 1987).

The key component of CBAM is the concept of stages of concern about the innovation (SoC) of Hall (1979). Because of its central role in the process of change, this chapter now focuses on the concept of stages of concern.

Stages of Concern About the Innovation

A concern is "the composite representation of the feelings, preoccupation, thought, and consideration given to a particular issue or task" (Hall et al., 1977). Hall (1979) also defines concerns in relation to innovations as "a composite description of the various motivations, perceptions, attitudes, feelings, and mental gyrations experienced by a person in relation to an innovation." (p. 203)

The concept of stages of concern is based on the work of Fuller (1969), who examined the various kinds of concerns of preservice and inservice teachers. Fuller identified three types of concerns depending on the amount of teaching

experience: (a) no concerns with the specifics of teaching of student teachers without teaching experience, (b) concerns with self in the early teaching phase, and (c) concerns with pupils of more experienced teachers. Hall et al. (1977) described how, by the end of the 1960s, the concerns concept was abstracted to self, task, and impact concerns.

Investigations of concerns of teachers involved in change indicated that these concerns follow similar patterns as described by the concerns model (Hall et al., 1977).

Hall and his colleagues at the Research and Development Center for Teacher Education at the University of Texas in Austin have further developed this concept through quantitative and qualitative research. Their model of stages of concern about the innovation, originally developed by Hall et al. (1973), comprises seven levels of concern (Hall, 1979):

1. The awareness level is characterized by little concern about or involvement with the innovation.

2. The informational level is characterized by a general interest in the innovation and little concern about the consequences of the innovation for oneself.

3. The personal level is characterized by concerns about the demands of the innovation, his/her capabilities to meet those demands, and other implications of the innovation in

regard to the individual's role and position within the organization.

4. The management level is characterized by concerns about how the innovation can be used most efficiently; issues related to organizing, managing, scheduling, and time demands are important.

5. The consequence level is characterized by concerns about the impact of the innovation on his/her students; the focus is on the relevance of the innovation to the students, student outcomes, and how the innovation can be changed to increase student outcome.

6. The collaboration level is characterized by concerns about coordination and cooperation with others regarding use of the innovation.

7. The refocusing level is characterized by concerns related to changes of and alternatives to the innovation to make it more powerful.

Individuals faced with innovations and change tend to develop the different concerns in a developmental progression (Hall, 1979). The developmental nature of concerns is reflected in the three dimensions mentioned previously (i.e., self, task, impact), into which the seven stages may be grouped (Hord et al., 1987). The developmental sequence of the stages of concerns does not mean, however, that the different levels are mutually exclusive. Individuals are

likely to demonstrate concerns to some extent on all levels, but the degree of different concerns changes with the implementation of the change process (Hord et al., 1987).

While this developmental sequence of concerns is influenced by situational or contextual variables, there are also personality factors influencing the concerns of individuals facing innovations and change. The perception of a situation differs depending on personality factors such as individual history, motivations, needs, feelings, and education (Hall et al., 1977). This means that professionals who are implementing and facilitating change need to take into consideration contextual and personal variables influencing the concerns of the persons affected by the change.

In addition to the cognitive component, concerns also have an affective component. Hall et al. (1977, p. 5) describe this as follows: "All in all, the mental activity composed of questioning, analyzing, and re-analyzing, considering alternative actions and reactions, and anticipating consequences is concern. An aroused state of personal feelings and thought about a demand as it is perceived is concern". The intensity of arousal depends on the degree of personal involvement. Certain demands of an innovation and change are perceived as being more important than others at a given time (Hall et al., 1977). As a person

moves through the stages of concern in relation to a specific innovation or novel situation, certain types of concern will be more intense, then less intense, before arousal of other types will occur (Hall et al., 1977). The intensity of earlier concerns must fade before concerns on a developmentally higher level can increase in intensity. Again, the arousal and resolution of concerns is highly influenced by personality variables and requires intervention addressing cognitive and affective dimensions such as the acquisition of new knowledge, skills, attitudes, and successful experience (Hall et al., 1977).

The development of higher level concerns cannot be forced by outside agents but only facilitated. Higher level concerns will only develop when the input is stage relevant. For example, attempts to address concerns on the management level will only increase the intensity of lower level concerns if the person facing the innovation is still preoccupied with the consequences of the innovation for herself or himself. How a person will move through the stages of concern will depend on the person, the innovation, and the environmental context (Hall et al., 1977). Furthermore, the development of different kinds of concerns will not necessarily be a linear progression. For instance, individuals can have equally strong concerns on the management and the personal level. Also, there are

intraindividual variations of concerns in regard to different innovations or new situations a person is facing. The development of concerns about one area of change can differ markedly from the concerns about another area of change (Hord et al., 1987).

Levels of Use of an Innovation

Related to the stages of concerns about the innovation is the concept of levels of use of the innovation. The levels of use concept describes in operational terms how an individual is using the innovation. This description in operational terms is based on the concept of innovation configuration, a catalog containing the components of the innovation in operational terms. Eight levels of use have been identified (Hord et al., 1987). The parallels between the concepts of stages of concerns and levels of use are obvious. The following are of use: (a) nonuse, (b) orientation, (c) preparation, (d) mechanical use, (e) routine, (f) refinement, (g) integration, and (h) renewal (Hord et al., 1987).

Assessing Concerns

Three procedures are used to determine concerns (Hord et al., 1987). The first technique is the interview that allows analysis of individual concerns, their causes, and the situational context in depth. The need for a qualitative analysis of concerns is indicated by Hall et al. (1973), who

writes that "the concerns stages are determined by talking with individual users or by reading their correspondence and analyzing what they are worrying about, the problems they report having, the information or help they request, and what they are pleased with." (p. 15)

The second technique is the open-ended statement (Newlove & Hall, 1976). This tool is more standardized than the interview and more appropriate to assess the concerns of groups. With this procedure, individuals are asked to write whole sentences as answers to open-ended questions about an innovation (e.g., When you think about _____, what are you concerned about?).

One limitation of these two techniques that researchers need to be aware of is their tendency to elicit only the strongest concern. However, individuals usually have concerns at other stages as well that need to be examined by the investigator (Hord et al., 1987).

A third technique for assessing concerns is the Stages of Concern Questionnaire (SoCQ) of Hall et al. (1977). This instrument is a 35-item paper-and-pencil tool that measures concerns on the seven stages described previously. The evaluation of the results yields individual or group profiles of concerns across the seven stages. This instrument, however, cannot be used to examine contributing personal and

contextual variables of the concerns, which can be explored using the interview.

Research Using Concerns Theory

Four research projects are reviewed in this section to illustrate how concerns theory has been used in different contexts and parts of the world. Knowles (1981) evaluated the effectiveness of teacher inservice training on how to use individualized instruction in the physical education setting. Knowles administered the the Stages of Concern Questionnaire (SoCQ) to 15 participants before and after a 7-week workshop on the process of individualized instruction. In addition to the administration of the questionnaire, Knowles interviewed each participant about his or her concerns. The results indicated that change takes time. While the subjects' awareness and informational concerns decreased, the 7-week workshop was not enough to affect concerns at the consequence and collaboration levels. Results also indicated that each teacher had different concerns profiles, demonstrating that everybody adapted to change in a different, personal way. Furthermore, the data from the interviews showed that, while the SoCQ can identify different kinds of concerns, it cannot reveal the causes of these concerns.

Knowles' study was subject to two limitations:

1. The study investigated only one independent variable, the effects of an inservice training program. Other

contextual and personal variables influencing teachers' concerns were not addressed.

2. The main method used constituted a further limitation. The concerns of the participants were documented using a questionnaire, which forced them to state their concerns in standardized categories. Subsequent interviews of the participants revealed aspects of concerns that cannot be explored by a standardized instrument.

Matthews (1993) used SoCQ data to design a staff development program for secondary school head teachers in the Philippines. Subjects were 21 female and 2 male secondary school head teachers. The SoCQ posttest data showed that the strongest concerns of the head teachers before the workshop, informational concerns, dropped significantly while management concerns increased slightly. A second peak in the pretest group profile indicating rather high collaboration concerns remained unchanged. Unfortunately, no interviews were conducted in this study to examine the nature of these relatively high collaboration concerns. Matthews concluded that an assessment of concerns can provide staff developers with a tool to help ensure that programs effectively meet participants' needs.

Noad (1995) used the CBAM in a pilot study in Australia to address teachers' concerns about the introduction of the competency-based Certificates of General Education for Adults

(CsGEA). The pilot study was conducted over a period of 3 months with 31 teachers being introduced to CsGEA.

Interviews were used to assess the teachers' concerns.

Results showed that most teachers proceeded through the concerns stages SoC 1 (informational) through SoC 4 (consequence). Noah concluded that CBAM is an effective tool for leading the teachers through the different stages of concern and identifying barriers to change as perceived by teachers.

Hope (1995) examined the initiation and implementation of microcomputer technology in the educational environment of an elementary school and assessed its impact on teachers. Participants were 32 certified teachers who were members of the instructional staff at an elementary school in Ocala, Florida. One instrument used to collect data was the CBAM. The research questions included:

1. What concerns did teachers have about microcomputer technology?

2. Were there factors in the school environment that promoted the diffusion and use of microcomputer technology by teachers?

3. Were there perceived barriers that impeded teacher acceptance and use?

4. What levels of use did teachers attain using the innovation microcomputer technology?

The case study was conducted over a period of 2 years. Results showed that teachers had self and task concerns at the beginning of the study, changing to impact, consequences, and refocusing concerns as their involvement with the technology increased. Results revealed that teachers clustered in mechanical and routine user levels. Hope concluded that (a) teachers' concerns about an innovation can be reduced with a strategy that understands, accepts, and works with parameters of the teachers' point of view; (b) certain factors in the school environment promote the diffusion and use of microcomputer technology by teachers; (c) lack of training, access, and interest, fear of failure, and too many other responsibilities are barriers in the school environment that impede acceptance and use of the innovation; and (d) the complexity of an innovation has an effect on the rate in which teachers master innovation.

The reviewed studies demonstrated that teachers' concerns are an important variable in regard to the planning and implementation of change in school settings. The studies further revealed that teachers' concerns are influenced by personal variables (e.g., lack of training, fear of failure) and contextual variables (e.g., lack of access, too many other responsibilities). Knowles' (1981) interview data demonstrated that qualitative research methods are necessary to better understand concerns.

Change, Attitudes, and Concerns

Many adapted physical activity leaders have emphasized the importance of attitudes in the change process and investigated the attitudes of physical education teachers toward integration (e.g., Doll-Tepper, Schmidt-Gotz, Lienert, Döen, & Hecker, 1994; Rizzo & Vispoel, 1992; Rizzo & Vispoel, 1991; Rizzo & Wright, 1987). Although the importance of attitudes for integration has been recognized (Doll-Tepper et al., 1994; Heikinaro-Johansson & Sherrill, 1994; Sherrill, 1993), the link between attitudes and behavior is vague. Wicker (1969) reports that measures of the relationship between attitudes and behavior rarely exceed correlation coefficients of .30. Addressing this problem of low correlation between attitudes and behavior, the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) posits that specific attitudes need to be measured in order to predict specific behavior. When this approach is taken, correlation coefficients greater than .30 often result. Although the attitude studies cited previously claim to be based on the theory of reasoned action, the statistical relationship between teacher attitudes and teacher behavior has not been investigated in integrative physical education. Further, the concept of attitudes is too broad and generic to allow a differentiated analysis of the multitude of variables affecting teachers working in integrative physical education

settings. With the exception of the study by Doll-Tepper et al. (1994), which included interviews with instructors and coaches, the attitude studies in adapted physical activity thus far fail to examine situation-specific factors that are critical to the success of educational reform.

Two researchers have examined aspects of integrative physical education within cross-cultural context (Doll-Tepper et al., 1994; Downs & Williams, 1994). Both studies focused on attitudes toward integration and are subject to the same limitations as the attitude studies mentioned previously. Fishbein and Ajzen (1975), referring to these limitations, point out that only very specific behavior can be predicted by specific attitudes toward that behavior. Including students with disabilities in regular classrooms, however, involves more complex behaviors and decisions than, for example, participating in an aerobics class at a fitness center. For these reasons, the approaches taken in the attitude studies mentioned do not seem to be appropriate for the purpose of this investigation.

However, some studies examining physical educators' attitudes toward integration have identified several variables that seem to influence attitudes and perceptions of integration (Doll-Tepper et al., 1994). Student variables are the kind of disability and grade level. Teacher variables are experience, self-perceived competence,

knowledge, age, gender, and culture. Because results with regard to some of these variables are conflicting, and because all studies used standardized questionnaires that did not investigate the nature of the variables, these variables need further investigation.

Schooling in the Federal Republic of Germany

The special education system in Germany is in a state of transition from a more segregated to a more integrated state. An understanding of the debate about integration in Germany is not possible without an understanding of the special education system as part of the regular schooling system in Germany. Understanding the regular schooling system helps to understand the training and educational background of teachers.

General Political Aspects and History

After World War II, the Allies decentralized the educational system in Germany and gave educational control back to the states (Länder) where it had been located before the National Socialists came to power (Sengstock & Ellger-Rüttgardt, 1994). Control over education is given to the states in Article 7 of the German Constitution, the Basic Law (Grundgesetz). Consequently, educational goals, structure, and methods are the responsibility of the 16 individual states that comprise Germany. The educational administrative structure in each state consists of three

levels. The state department of education is the highest authority. The second level is the district office, and the third level is the municipal or community administration. The city state (Stadtstaat) of Berlin is different from the 16 states in that it has only two levels. The Department of Schooling, Vocational Education, and Sport (Senatsverwaltung für Schule, Berufsbildung und Sport) is the upper level, which supervises the school system and decides all matters of essential meaning for the schools in Berlin (Senatsverwaltung für Schule, Berufsbildung und Sport, 1995a).

The top executive offices of the Department of Schooling, Vocational Education, and Sport are political offices. The head of the administration (Senator/in für Schule, Berufsbildung und Sport) is appointed by the mayor of Berlin, usually after state elections. The Senator/in, in turn, appoints one or more Staatssekretär(e) (deputy secretary) to assist in leading the administration.

The state's supervision of the school system includes designing, planning, and organizing the school and instructional system as well as the supervision of professional, subject, and legal matters (Senatsverwaltung für Schule, Berufsbildung und Sport, 1995a, p. 3, translation by Lienert).

The lower administrative level (Landesschulamt) is responsible for organizing schooling for Berlin's 23 municipal districts. Rules and guidelines established by the Department of Schooling, Vocational Education, and Sport are followed.

Officials from these municipal offices are in direct contact with school principals (Adams, 1993). School boards, like those in the USA, do not exist in Germany. Decisions regarding curriculum, funding, staffing, and salary levels, typically made by local school boards in the USA, are made at the state level in Germany. Individual schools have parent councils that serve as advisory bodies to school authorities. Members of these councils are elected by other parents.

Parent councils, also organized at the state level, consist of members elected at the school level. Educational values and the role of the state in education are summarized by Adams (1993):

Schools in Germany reinforce societal values such as competence or a whole job, definable and strict achievement standards, and significant individual effort to achieve a goal. Education is very much controlled by the state bureaucracy with little opportunity for individual parents or parent and community groups to directly influence the schools. Some tensions have developed as parents have sought to make the more desirable options of the school system available to their children, while the controlling state bureaucracy, including the teachers, seeks to ensure that current academic standards are maintained." (p. 125)

Although control over education is given to the states, two committees function at the federal level (Ellger-Rüttgardt, 1995; Porter, 1986). One committee, the Bund-Länder Kommission für Bildungsplanung und Forschungsförderung (BLK, Commission of the Federal Government and the Länder for Educational Planning and Research Promotion), promotes cooperation and supports innovation in association with both Federal (e.g., the Department of Education) and Länder authorities. The other committee, the Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland (KMK, Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany), coordinates the educational policies of Germany's 16 Länder. The resolutions of the KMK, which are of recommendatory character, must be passed unanimously.

Basic Structure of the Educational System

The German educational system, including the schools in Berlin, is by and large still a selective system (Hübner, 1996; Porter, 1986). After completing the comprehensive elementary school, Grades 1 to 6 (Grades 1-4 in most other states), students attend one of several types of secondary schools distinguished by different curricula. The type of secondary school diploma attained determines to a large extent the further education and career opportunities of the

graduates. The German educational system uses exit examinations that qualify for further educational opportunities (principle of entitlement). Vocational training institutions of some professions require certain secondary school diplomas. University education is only available to students who graduate from the Gymnasium (secondary grammar school) or an equivalent school.

Although educational reform has made the academic tracking system of German secondary education more permeable, it still remains differentiated into predominantly academic and vocational channels. By and large, "students in the Gymnasium are prepared for academic study at the university. Students at the Hauptschule and Realschule are prepared to join the work force" (Porter, 1986, p. 2). This selectivity of the school system can be traced back to the foundation of the German Kaiserreich in 1872 (Ellger-Rüttgardt, 1995).

While Germany's selective secondary school system is commonly called a "tripartite educational system" (Adams, 1993, p. 97), referring to the three types of secondary schools available to students based on their academic achievements at the elementary level, it actually consists of five components.

In the late 1960s, when an educational reform movement in Germany fought for a mainstream-oriented school system, the comprehensive secondary school (Gesamtschule) was added

(Ellger-Rüttgardt, 1995). Ellger-Rüttgardt points out that the beginning discussion about the integration of students with disabilities in general classes at the same time with the Gesamtschul movement was no coincidence.

Before the comprehensive school was added to the three regular types of selective secondary schools, special schools have existed for students who could not meet academic or social standards of the regular schools. Segregated special education has a long history in Germany.

A Hilfsklasse (self-contained classroom for students with learning difficulties) was established in the ordinary school system in Halle, Saxony, in 1859 (Ellger-Rüttgardt, 1995). Stötzner, a former teacher of students who were deaf, founded the first school for children with deficits in learning (Schule für schwachbefähigte Kinder, later called Hilfsschule) (Opp, 1992). These schools for children who failed in regular schools multiplied at the end of the nineteenth century coinciding with Germany's development into a major industrial nation (Ellger-Rüttgardt, 1995). Referring to the social factors contributing to learning disabilities, Ellger-Rüttgardt concluded that "the establishment of special schools for learning disabled students reflected very much the social attitudes and values of the German Kaiserreich (emphasis in original), established in 1872. The Wilhelminian era had created a school system

that, like the social system, was strictly selective." (p. 83)

Although the German term Lernbehinderung is a literal translation from the English term learning disability, the German concept of Lernbehinderung has little in common with its American counterpart (Opp, 1992). The concept of Lernbehinderung covers four special education populations: (a) students with very low academic performance, which may have different causes including poor teaching [sic], (b) students with intellectual disabilities (low IQ), (c) specific learning disabilities, and (d) sociocultural or socioeconomic deprivation. However, these factors are very difficult to isolate in practice. Although "the integrative criterion for learning disabilities is an IQ between 65 and 85, in practice, the criterion for classification is school failure in the widest possible sense" (Opp, 1992, p. 353)

A brief description of the main components of the educational system in Germany at the elementary, secondary, and university level is necessary to develop the background for the comparison of approaches to integration in Germany and the USA.

Elementary Education

In Berlin, the elementary school (Grundschule) covers the first 6 years of schooling. Children usually enter first grade when they are 6 years old. Subjects taught in the

elementary school include German, one foreign language, mathematics, social studies, history, geography, science, art, music, crafts, religion, and physical education. Students in the elementary school are grouped by age, not by ability. Adams (1993) describes German elementary education as stressing enjoyable experience and at the same time meeting high standards in the cognitive, affective, and practical domains. While Adams sees little evidence of competition and performance orientation, one function of the elementary school is to prepare students for secondary education. Students who, even with additional support in small learning groups (Förderunterricht and Teilungsstunden), cannot perform up to the standards of the elementary school are referred to various special education options that are outlined in the section on special education in Berlin.

The Rahmenplan der Berliner Schule für das Fach Sport is the curriculum for physical education and equivalent to the Texas Essential Elements, which recently has been replaced by the Texas Essential Knowledge and Skills (TEKS). The curriculum is divided into five categories and contains goals, content, and instructional pointers for the grade brackets one and two, three and four, and five and six. The five categories are sequential gymnastics/tumbling, track and field, apparatus gymnastics, games, and swimming. These general areas are further divided into subcategories such as

running, jumping, and throwing in track and field. Goals, content, and instructional pointers are rather specific. For example, one goal in the games category for first and second graders is to pass the ball so that a partner can catch it. Content includes throwing the ball up in the air and catching it; bouncing and catching; alone, with a partner, in a group; throwing the ball against a wall; passing the ball back and forth between two rows of students and in a circle. Pointers suggest to use only soft balls at the beginning and to make sure students catch the ball in front of the body.

Secondary Education

Secondary education consists of two levels and, in Berlin, begins with the seventh grade. Secondary level I (Sekundarstufe I), which consists of Grades 6 through 10, completes the compulsory education. The upper secondary level, or secondary level II (Sekundarstufe II), begins with Grade 11 and includes many different forms of full-time postcompulsory secondary education (Porter, 1986).

Secondary level I. Four types of schools comprise secondary level I: Hauptschule, Realschule, Gymnasium, and Gesamtschule. The first three types of schools constitute the traditional vertical tripartite system. The Gesamtschule represents a movement toward a more horizontal structure of secondary education by combining the academic programs of the

other three types of schools. The school career decision for one of four types of secondary schools (Hauptschule, Realschule, Gymnasium, and Gesamtschule) is made by the parents, usually following teacher recommendations, at the end of the sixth grade.

1. The Hauptschule (Main School). The name Main School is somewhat misleading because this school type is not the first preference of most parents for their children. "The Hauptschule is compulsory for all those student who, on completion of Grundschule, do not go to another type of secondary school" (Bildung & Wissenschaft, 1991, p. 15). About 30% of students at the secondary level attend the Hauptschule (Kappler & Grevel, 1994). The Hauptschule provides full-time compulsory education from Grades 7 to 10 at a basic level. The goals of the Hauptschule are to introduce students to social, political, and cultural life and to prepare them for further vocational training (Porter, 1986). After graduating at about age 16, students usually enter a 3-year vocational training in the dual system consisting of employment in the private or public sector and attendance of a vocational school (Berufsschule) 1 or 2 whole days a week. A second option is entrance into a fulltime vocational school (Berufsfachschule) with possible progression to higher technical schools. Academically

successful students can transfer to the Realschule, the next higher level of secondary education. In reality, however, the Hauptschule serves as an educational safety net for those students who do not qualify for special education but are not successful, or have no prospect for success, in the Realschule or Gesamtschule (cf. Hübner, 1996).

2. The Realschule (Intermediate School). As suggested by its former name, Mittelschule, the Realschule is the intermediate school placed between the Hauptschule and the Gymnasium in terms of academic demands (Porter, 1986). The Realschule also provides compulsory secondary education through Grade 10 but is academically more demanding than the Hauptschule. A second foreign language is offered at the Realschule in addition to the one that is compulsory in both schools (Ellger-Rüttgardt, 1995). Realschulen prepare their students primarily for middle-level, nonprofessional careers (Adams, 1993; Ellger-Rüttgardt, 1995; Kappler & Grevel, 1994; Porter, 1986). About one third of all students acquire the Realschulabschluß (Realschul diploma) (Kappler & Grevel, 1994). The Realschul diploma qualifies students for vocational training in the dual system, at the Berufsfachschule, or at the Fachoberschule, another fulltime vocational school that prepares students for postsecondary education at higher technical schools (Senatsverwaltung für

Schule, Berufsbildung und Sport, 1995a). For academically successful students who take a second foreign language, the Realschule provides access to upper secondary education where a higher education entrance qualification (i.e., qualification to attend a university) may be obtained.

3. The Gymnasium (Grammar school). The Gymnasium provides compulsory secondary education at the highest academic level of the three types of secondary schools. The Gymnasium contains secondary levels I and II. The primary function of the Gymnasium is to prepare students for entering universities and other institutes of higher education (Ellger-Rüttgardt, 1995). The curriculum of the Gymnasium consists of 12 compulsory academic subjects, including at least two foreign languages until Grade 10 as well as music, art, and physical education. According to Porter (1986, p. 15), "at each level of the Gymnasium, the academic demands placed on the students are substantial; consequently, it is not uncommon for students to repeat a year's work or even to leave the Gymnasium if their work is not up to required standards." Students leaving the Gymnasium before completing the compulsory 10 school years transfer to one of the other forms of secondary school. If students have completed Grade 10, they may also choose to leave school. In this case they receive the Realschul diploma or leaving certificate.

4. The Gesamtschule (Comprehensive School). There are two types of Gesamtschulen: (a) coordinated comprehensive schools and integrated comprehensive schools (Adams, 1993; Ellger-Rüttgardt, 1995). Coordinated comprehensive schools contain the three school types (Hauptschule, Realschule, Gymnasium) of the tripartite system under one roof, with one administration and coordinated curricula to facilitate student transition between school types. Integrated comprehensive schools contain a course system that is differentiated according to ability levels. The formal tripartite system is no longer visible in the integrated comprehensive school because students can attend courses of different levels in different subject areas. However, the traditional school leaving or graduation certificates continue to be used. The system of differentiation according to ability in the integrated comprehensive school (but not in the coordinated comprehensive school) is very similar to the tracking system in high schools in the USA (Adams, 1993). The role of the Gesamtschule differs greatly between the states as a function of differing educational philosophies of state governments (Porter, 1986).

5. Variations. Governments in some of the new Länder (former German Democratic Republic) established new types of secondary schools such as the Regelschule (Regular School in Thuringia), the Mittelschule (Intermediate School in Saxony),

and the Sekundarschule (Secondary School in Saxony-Anhalt). These new school types combine the programs of the Hauptschule and Realschule into one school. The diplomas, however, are similar to those in the old Länder (former West Germany) (Kappler & Grevel, 1994).

Secondary Level II. Secondary level II (Sekundarstufe II) consists of fulltime postcompulsory education and includes Grades 11 to 13 (Porter, 1986). It includes various forms of vocational training such as the Fachoberschule, the Berufsschule, and the Berufsfachschule (Senatsverwaltung für Schule, Berufsbildung und Sport, 1995a) as well as upper level or preuniversity training. However, only the upper level or preuniversity training that prospective teachers undergo is described here.

Future teachers attend the upper level of the Gymnasium or the Gesamtschule (Gymnasiale Oberstufe) and pass comprehensive written and oral final exams to attain the general higher education entrance qualification (Allgemeine Hochschulreife or Abitur). The Abitur is the minimum requirement to attend an university or equivalent institution. The Abitur is a composite numerical grade comprised of grades in selected courses in Grades 12 and 13 and the grades of the final comprehensive exams (Porter, 1986). The upper level of the Gymnasium is comparable to the

core curriculum part or the first two years of 4-year colleges in the USA (Adams, 1993).

Abendgymnasien (evening grammar schools) provide opportunities for returning students who did not graduate from a Gymnasium or Gesamtschule when completing their compulsory education. This so-called second route to education (Zweiter Bildungsweg) allows working adults to complete academic programs leading to the Abitur if they want to attend a university (Porter, 1986).

Higher education

Higher education is described here only as far as it is relevant to teacher training. In Berlin, successful completion of university-based teacher training programs is required for everyone who wants to teach in one of the schools mentioned previously or in special schools. Teacher training in Berlin consists of two phases (Adams, 1993).

The first phase consists of a 4- to 5-year university program that includes 8 to 12 weeks of student teaching. After completion of the course work and thesis, prospective teachers take the First State Examination (Erstes Staatsexamen), which is comprised of comprehensive written and oral examinations given by university professors and state representatives. Completion of this course of study is

recognized in the USA as equivalent to a combined Bachelor's and Master's degree.

The second 2-year phase of teacher training focuses on teaching competence. During this time teacher candidates are employed by the state at a school type depending on their course of study. They teach independently up to 12 hr a week. At the same time they attend two to three weekly seminars taught by experienced teachers that focus on practical and theoretical aspects of teaching competence. As part of these seminars, teacher candidates have to teach several demonstration lessons observed by their instructor, their school mentor, and the school's principal. These demonstration lessons are graded, and the grades are part of the final grade for the Second State Examination (Zweites Staatsexamen). In addition to these grades, the Second State Examination consists of a second more practically oriented thesis, one or two additional demonstration lessons, and comprehensive oral examinations. Grades on the Second State Examination influence the prospect of obtaining employment in a system with a high rate of unemployed teachers. As a consequence of this demanding and extensive teacher training process, many teachers are 28 to 30 years old before they obtain their first teaching position (Adams, 1993).

Special education

To date, most students with disabilities in Germany are still being educated in special schools (Ellger-Rüttgardt, 1995). One reason is Germany's tradition of a highly developed segregated special education system. This tradition goes back to the early decades of the 20th century when a highly specialized system of special schools with high standards was developed (Ellger-Rüttgardt, 1995; Opp, 1992; Sengstock, Magerhans-Hurley & Sprotte, 1990). Segregation of special and general education was continued after World War II when the four Allies removed the central control of education that existed under the government of the National Socialists (Sengstock & Ellger-Rüttgardt, 1994). The first principle of the Allies' determination to democratize education in Germany, proclaiming equal educational opportunity for all (Sengstock & Ellger-Rüttgardt, 1994), was not interpreted like the mandate of Public Law 101-476, The Individuals with Disabilities Education Act, which in the USA provides free and appropriate education for all.

The principle separate but equal that was used to justify the separate schooling for African-Americans in the USA prior to 1954 and ruled unconstitutional by the USA Supreme Court in the 1954 case of Brown vs. Board of Education of Topeka has been used in Germany to justify the separate education of students with disabilities. A strictly segregated system of special schools for students with

disabilities continued well into the 1960s and 1970s based on the philosophy that children with disabilities could be served best in special schools designed exclusively to meet their special, disability related, needs (Sengstock & Ellger-Rüttgardt, 1994).

However, during the past 20 years, the tradition of strong segregation has been weakened and special education is in a period of transition. A system of seven components now guides the education of students with disabilities in Germany. In addition to the traditional special school system, there are now five other "Säulen" (pillars) of special education services in Berlin (Safadi, 1994, p. 83; Senatsverwaltung für Schule, Berufsbildung und Sport, 1995b). These five pillars are Kooperationsschulen (cooperative schools), Integrationsklassen an Grund- und Sonderschulen (integrated classes with three or more students with disabilities in elementary schools and in some special schools), the Ambulanzlehrersystem (itinerant teachers), sonderpädagogische Kleinklassen (small self-contained classes at regular schools), and Sonderpädagogische Förderklassen (special educational support classes at regular schools). A seventh component is Einzelintegration (individual integration) of individual students.

The goal of these seven components is to shift special education service delivery from the traditional segregated dual system of special education and general education to a model that focuses on individual needs of students (Richter, 1987; Safadi, 1994). This focus on individual needs through the provision of placement options closely resembles the least restrictive environment (LRE) concept that emerged in the USA in the 1960s (Reynolds, 1962). The similarity between Berlin's seven placement options and the concept of LRE becomes apparent if one examines the functions of the seven components of special education service delivery in Berlin.

1. Special schools. Nine types of special public schools in Germany serve students with disabilities: blindness, visual impairments, deafness, hard of hearing, mental retardation, learning disabilities, emotional disturbances, speech and language disorders, and physical disabilities (Ellger-Rüttgardt, 1995). All of these school types, except for the school for students with emotional disturbances, exist in Berlin (Der Schulsenator für Schulwesen, Berufsbildung und Sport, 1987). Special schools offer both elementary and secondary education. The tripartite system of Hauptschule, Realschule, and Gymnasium is incorporated in the special school system. Depending on academic achievements, students may acquire graduation

certificates corresponding to (a) these three school types, (b) schools specifically for students with learning disabilities, or (c) schools specifically for students with mental retardation. Class sizes are smaller in special schools than in regular schools, and the teachers are state certified special education teachers who are specialized in two disability categories (e.g., physical disabilities and speech and language impairments) and one subject area.

Instruction in special schools follows either (a) the curricula of the Hauptschule, Realschule, or Gymnasium or (b) curricula designed for schools for students with intellectual disabilities (i.e., schools for students with learning disabilities and schools for students with mental retardation). Special schools provide preparatory vocational training and cooperate closely with institutions in the vocational training system to prepare their students for secondary vocational training (Ellger-Rüttgardt, 1995).

Increasingly, special schools in Berlin are being converted to sonderpädagogische Förderzentren (special education service centers). These service centers are "organizational centers" (Safadi, 1994, p. 84) that coordinate special education services for students who attend various types of schools. Lehrer als Begleiter und Übergangshelfer (LBÜ) (teachers as transition facilitators) and Ambulanzlehrer (itinerant teachers) are based at special

schools but may travel to regular schools also. Some special schools also house integrative classrooms.

2. Cooperative schools. Cooperative schools have been established since 1974 (Der Senator für Schulwesen, Berufsausbildung und Sport, 1987). Cooperative schools consist of a regular elementary school and a special school located in the same building or in close proximity. Close cooperation of the two schools in curricular and extra curricular matters focuses on the following goals: (a) social integration of students with disabilities, (b) avoidance of referrals to special schools, (c) providing as many joint learning opportunities as possible, and (d) providing many opportunities for contact between students, parents, and teachers of both schools. Currently, nine cooperative schools in Berlin serve 999 students with and 2275 students without disabilities (Senatsverwaltung für Schule, Berufsbildung und Sport, 1995a).

3. Integrative classes. Students with disabilities may attend regular schools if the necessary special educational support is available (Ellger-Rüttgardt, 1995). Preconditions considered important for successful integration are (a) teachers with competence in special education, (b) individualized educational programs, (c) collaboration among teachers, and (d) consensus between teachers and parents

regarding the pedagogical mission of the school (Ellger-Rüttgardt, 1995).

All integrative classes are team taught by two or three pedagogical professionals with different qualifications (Ellger-Rüttgardt, 1995). Regular elementary schools with integrative classes receive additional teacher hours (Lehrerstunden). These are hours during which a second or third certified teacher is in the classroom based on number of students with disabilities (Arbeitskreis Neue Erziehung e.V., 1996). This additional support is considered essential for integration to be successful. The importance that is attributed to this personnel support is expressed in the paragraph of the school code that addresses integration. Education in integrative classes is made available to children with disabilities only if this support is available (i.e., if the required financial means for having additional personnel are available to the school administration of Berlin).

The additional teacher hours to meet special educational needs is based on a formula. A school receives 10 additional teacher hours for each student with mental retardation, 7 hr for each student with blindness or deafness, and 5.5 hr for each student with visual or hard-of-hearing impairments, and speech and language impairments, physical disabilities, learning disabilities, and behavioral disorders (Arbeitskreis

Neue Erziehung e.V., 1996). Technically, 1.5 of these additional teacher hours (independent of type of disability) go into a pool of Teilungsstunden for that class.

Teilungsstunden are a certain number of class periods that all classes have. During these periods two teachers are teaching the class in smaller groups to better address specific academic needs of certain students in order to help these students to keep up with the curriculum. For example, in an integrative class with three students with disabilities, these hours would add up to 4.5 extra hours for the class pool of Teilungsstunden. Both students with and without disabilities benefit from these extra hours for the class pool of Teilungsstunden. One of these 4.5 hr is used to lower the number of students in an integrative class to 23 (Arbeitskreis Neue Erziehung e.V., 1996).

A maximum enrollment of 23 students is a second requirement in integrative classes. In order to receive extra teacher hours for students with disabilities, a minimum of two to three students with disabilities must be in a class. While the formula 20+3 (i.e., 20 students without disabilities and three students with disabilities) is the most common formula for integrative classes in Berlin, some schools use the formula 15+5, and some schools use both formulas.

In the 1993/94 school year, integrative classes existed at 285 regular schools (Safadi, 1994). This means that more than half of all elementary schools in Berlin are integrating students with disabilities. Students most frequently integrated have learning disabilities followed by students with speech and language impairments, students with behavior disorders, and students with physical disabilities.

Increasingly, integrative classes are established also in special schools. Three schools for students with learning disabilities and two schools for students with sensory impairments offer this type of reverse mainstreaming (Safadi, 1994).

Because of the selective nature of the educational system in Germany, integrative classes are, with few exceptions, limited to elementary education. In Berlin, integrative classes exist only at five secondary schools (Safadi, 1994). However, as a consequence of the increasing number of students with disabilities attending regular schools, transitions of these students into secondary education are expected to increase.

4. Einzelintegration. Einzelintegration is a special case of integrative classes. If only one student with a disability is in a regular class, the Förderausschuß (IEP committee) decides the maximum number of students in that class and the additional teacher hours. This one student

with a disability, however, does not get additional teacher hours from the Berlin school administration. In such cases, the hours come from the individual school's pool of Teilungsstunden.

5. Itinerant teacher system. Itinerant teachers (Ambulanzlehrer) in Berlin are special education teachers teaching part-time at their special school and providing part-time, special education services in regular schools (Safadi, 1994). Services provided by itinerant teachers include diagnosis, consulting, counseling, and accompanying students with disabilities. Students supported by itinerant teachers are instructed, together with their peers, following the curriculum of the respective regular school (zielgleiche Integration). No itinerant teachers are available to students with learning disabilities or mental retardation "because these children cannot be supported adequately by itinerant services." (Safadi, 1994, p. 87) Eighty-three itinerant teachers were employed in Berlin during the 1993/94 school year.

6. Small self-contained classes. These classes are for students with behavior disorders or speech and language impairments whose special needs cannot be appropriately met in regular classes. Self-contained classes are located at certain regular elementary schools of a district. Children with speech and language impairments can be referred to these

classes in kindergarten (Vorklasse), and students with behavior disorders can be referred after the first grade.

The goal of this system is to transfer the students back to regular classes within a period of 3 years. These classes follow the curriculum for the regular elementary school and are complemented by individualized special educational services.

7. Special educational support classes. Students in special educational support classes are given more time to learn. They have 3 years to learn content in regular elementary schools that students in regular classes cover in 2 years (Safadi, 1994). Therapeutic services supplement instruction. Special educational support classes are designed to prepare students for integration in regular classes.

Integration in Berlin Schools

The integration debate has become the most divisive issue in German special education (Sengstock & Ellger-Rüttgardt, 1994). This debate about integration started later in Germany than in other Western countries (Ellger-Rüttgardt, 1995; Murray-Seegert, 1992). The fact that special education was not addressed in an important blueprint for the future of education in Germany, published 1970 by the Deutscher Bildungsrat (German Education Council), indicates that special education was seen as a quite separate system.

(Ellger-Rüttgardt, 1995). In the 1960s, this special education system was developed as a complex system of services (Opp, 1992). Until the early 1980s, children with disabilities had to attend special schools (Sengstock & Ellger-Rüttgardt, 1994).

Public criticism of this dual system of general and special education began, however, in the 1970s. Schools for students with learning disabilities, for example, were criticised, among others, because their efficiency in terms of student achievement could not be demonstrated and because of negative effects of labeling students as disabled (Opp, 1992). Other factors that were instrumental in initiating the integration debate were parent advocacy groups (Sengstock & Ellger-Rüttgardt, 1994) and the establishment of comprehensive schools (Scheid, 1995).

Nevertheless, in 1972, the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK) recommended in their Empfehlung zur Ordnung des Sonderschulwesens (recommendation on the structure of the special education system) that students with disabilities should be educated in special schools and that the system of special schools should be expanded (Hübner, 1996; Sengstock & Rüttgardt, 1994).

In 1973, 3 years after ignoring special education in their paper outlining the future of German education, the

German Education Council published a recommendation concerning special education. The position taken by the German Education Council marked a turning-point in German special education. Pointing mainly to developments in Scandinavia, the Council recommended the education of students with disabilities together with their peers without disabilities whenever possible (Ellger-Rüttgardt, 1995). The plan further demanded the provision of a variety of means and placement options, comparable to the LRE concept, directed toward maximizing social contact between students with and without disabilities. Finally, the Council emphasized the prerequisite of appropriate curricula and well-trained teachers for successful integration of students with disabilities.

Also in 1973, another commission charged with the planning of education, the Bund-Länder-Kommission für Bildungsplanung (Federation-Länder Commission of Educational Planning), a joint Federal government/Federal states commission of educational planning and research promotion (BLK), to which all ministers concerned belong, published the Overall Education Plan. Their plan called for the development of teaching materials, instructional methods, and organizational arrangements to accommodate students with disabilities in general education. One outcome of this plan was the establishment of Schulversuchen (laboratory or model

schools) to develop and test teaching materials, instructional methods, and organizational arrangements designed to facilitate integration.

Pressure applied by parents on administrators and politicians (Ellger-Rüttgardt, 1995) also promoted integration. As a result of advocacy by parents, a regular elementary school, the Fläming Grundschule, became the first integrative laboratory or model school in Berlin in 1975. This model has been very successful, and the initiative to educate students with disabilities in regular schools has spread to all 16 states.

A long time was required for the concept of educating children with disabilities in regular educational settings, whenever possible, to be adopted by all representatives of the states in the KMK who must reach consensus in their recommendations. In 1988 the KMK replaced the notion of Sonderschulbedürftigkeit (the need to attend a special school) with the concept of sonderpädagogischer Förderbedarf (special educational needs) (Ellger-Rüttgardt, 1995). In 1994, twenty years after their support of a segregated special education system, the KMK changed their official policy from only one placement option for children with disabilities (i.e., special schools) to a continuum of placement options ranging from special schools to regular classes (Hübner, 1996).

Today's special education service delivery system is lernortunabhängig (independent of certain educational institutions and placements). In some states this movement has resulted in the change of the Schulgesetz (school code) that traditionally required students with disabilities to attend special schools in all states (Doll-Tepper, von Selzam, & Lienert, 1992). In Berlin the amended school code now states: "Der Unterrichts- und Erziehungsauftrag der allgemeinen Schule (Grund- und Oberschule) umfaßt auch Schülerinnen und Schüler mit sonderpädagogischem Förderbedarf" (the teaching and educational responsibilities of regular schools also include students with special educational needs) (Senatsverwaltung für Schule, Berufsbildung und Sport, 1995a, p. 5).

Today the sonderpädagogischer Förderbedarf (special educational needs) of children are determined by a Förderausschuß (IEP committee), which is convened for each child (Senatsverwaltung für Schule, Berufsbildung und Sport, 1995a). This committee consists of the school's principal, classroom teacher, school psychologist, special educator, and parents (Senator für Justiz, 1990). Using a Kind-Umfeld-Analyse (child-environment-analysis), the committee determines the special educational needs and recommends individualized educational services for that child. It is

then up to the local representative of the Department of Schooling, Vocational Education, and Sport to decide if the child can attend a regular school (Doll-Tepper et al., 1992).

The fact that the final placement decision is tied to the availability of financial and personnel resources and remains at the discretion of the local representative of the state's school administration agency is criticized by Hübner (1996). He points out that, although the school code provides parents of children with disabilities with the right to choose between special and regular schools, parents do not have the means to reinforce their right, which is tied to the availability of resources.

Until 1996, the responsibilities of regular schools did not include students with mental retardation or severe disabilities. Neither did the responsibilities include secondary education (Senatsverwaltung für Schule, Berufsbildung und Sport, 1995a). The only integrative educational placement options given by the law to parents of children with mental retardation and parents of adolescents too old for elementary school were a few laboratory or model schools.

However, the Berlin government changed the school code in 1996. According to paragraph 10a of the new school code, parents of all children with disabilities have the right to choose between regular or special school placement for their

children for elementary and secondary schooling (Senator für Justiz, 1996). This means that students with mental retardation and severe disabilities may attend regular elementary schools and that integration is not limited to elementary schools any longer. The exception to this rule are students with mental retardation and severe disabilities whose secondary school options are still limited to laboratory and model schools. Paragraph 10a contains another qualification of the parents' choice of school: The school agency may not comply with this choice only if, following thorough consultation with the IEP committee, it arrives at the conclusion that the student cannot be educated adequately in a regular school (Senator für Justiz, 1996). This qualification includes the availability of financial, personnel, and material resources.

Clearly, the parents' choice between the regular school or special school for their children with disabilities remains tied to the availability of adequate resources. Parents and students have no legal right to these resources but depend on school authorities (administration) for the provision of these resources. The availability of resources is decided in each individual case (Hübner, 1996).

In October 1997, the Bundesverfassungsgericht (Federal Constitutional Court or Federal Supreme Court) heard a case in which parents of a child with spina bifida sued the state

education agency, which had said that it did not have the resources to educate the child in a regular comprehensive high school (Bundesverfassungsgericht, 1997). Although the child had successfully attended a regular elementary school and had entered a regular comprehensive high school, the child was transferred to a special school, instead. The parents stated that this decision violated Article 3 of the Grundgesetz (Basic Law or German constitution), the antidiscrimination ban of individuals with disabilities. Sentence 2, in paragraph 3, article 3, which was added to the Grundgesetz in October 1994 (Bundesverfassungsgericht, 1997, p. 1), states: "Niemand darf wegen seiner Behinderung benachteiligt werden." (Nobody must be discriminated against because of his disability).

The Bundesverfassungsgericht, however, rejected the constitutional appeal as unfounded (Bundesverfassungsgericht, 1997). In its decision, the court stated that education should be integrative, if necessary by providing special assistance, (a) if the individual needs of students with special needs can be met in a regular class and (b) if the organizational, personnel, and material conditions allow placement in regular classes. The court noted that the state can fulfill its responsibility of providing a talent-oriented (begabungsgerechtes) school system only within the framework of its financial and organizational possibilities. This

limitation was based on the fact that the state has to take into consideration other public needs as well and must be prepared to use its limited resources for these matters, if considered necessary.

However, the court also stated that, based on current educational knowledge, general exclusion of integrative education is constitutionally not justifiable (Bundesverfassungsgericht, 1997). The educational agency, which is ultimately responsible for decisions about educational placement, is subject to an increased justification (gesteigerte Begründungspflicht) why placement in a separate setting may be considered most appropriate in individual cases.

The Supreme Court's decision received mixed reactions. While some criticized that the court confirmed financial conditions as a factor in placement decisions (Preuss-Lausitz, 1997; "Behinderte," 1997), others applauded the increased justification, which the court required to explain separate placement, as a milestone in the education of students with disabilities ("Behinderte," 1997).

How does this movement toward integration express itself in actual numbers? Whereas 11 regular elementary schools in Berlin integrated 105 students with disabilities during the 1988/89 school year, 285 elementary schools, out of a total of 453 elementary schools in Berlin (Landesschulamt Berlin,

1997), integrated 1,947 students with disabilities in 1993/94 (Safadi, 1994). The numbers are much smaller for the secondary level. In 1993/94, about 55 students with disabilities were being educated in regular secondary schools. For 1995/96 Safadi (1994) projected that about 120 students with disabilities would be placed in regular secondary schools. As a response to the increasing demand for integrative measures at the secondary level, three secondary schools became laboratory schools for integration in addition to the two schools that already served as laboratory schools.

About 22% of all students eligible for special educational services were integrated in regular schools during 1994/95 (Hübner, 1996). This percentage is higher at the elementary level (30.1%) and significantly lower at the secondary level (3.8%).

The main reason for this discrepancy between the elementary and secondary levels is the selectivity of German secondary education and its emphasis on rigorous standards in academic subject areas. In order to increase integration at the secondary level, Berlin's vertically structured school system would have to be changed to a horizontally structured system that allows all students to advance to the one type of secondary school available to all students. This option is, as Hübner (1996) explains, unlikely. At the same time,

however, Berlin's secondary schools are confronted with the pressure to accommodate increasing numbers of students with disabilities who have been attending integrated elementary schools.

The literature about integration in Germany/Berlin could not be more diverse. Some authors examine the problems that come with integration (e.g., Hübner, 1996); others emphasize the positive developments that have taken place in regard to integration (e.g., Safadi, 1994); still others investigate why integration in Germany is delayed compared to other western countries (e.g., Murray-Seegert, 1992). Clearly, special education in Germany is in a state of transition (Ellger-Rüttgardt, 1995). Special education service delivery models have transcended the rigid dual system of special and general education and are becoming more differentiated and diverse (Der Senator für Schulwesen, Berufsausbildung und Sport, 1987; Safadi, 1994). The October 1997 decision of the Bundesverfassungsgericht (Federal Supreme Court) reflects a trend toward a more individualized system. Consequently, the professional roles of special educators are changing (Preuß & Hofsäß, 1991). Because the issue of integration necessarily involves regular education, this system is facing important changes too (Hübner, 1996). These changes affect the core of a school system that was built on the belief of homogeneous grouping of its students.

Teacher education has begun to address the new demands facing teachers working in integrative settings. In Berlin, in-service workshops on integration in physical education are being offered regularly. Preservice teacher training in Berlin is also changing to accomodate the special needs of teachers working in integrated schools and classrooms. In 1994, the Free University of Berlin established the Institut für Grundschul- und Integrationspädagogik (Institute of Elementary and Integration Pedagogy), an innovation that may change teacher education (Eberwein, 1996).

Physical Education for Students With Disabilities

Students with disabilities participate in physical education in classes at their schools. Unless reasons justify an exemption from physical education (e.g., medical reasons), all students are required to attend physical education, which is treated like all other subjects, during compulsory elementary and secondary education and, depending on the type of school, beyond. Students who attend an integrative class at a regular school receive integrative physical education. If students attend a special school, they receive physical education at the special school.

Physical education service providers are regular physical educators and special educators, respectively. Regular physical educators who have students with disabilities in their classes usually have not received

preservice special education training. Rather, they have acquired hands-on working knowledge of adapted physical education by attending in-service workshops and just working with the students in their classes.

Although several master's and doctoral degree programs in adapted physical education in Germany are comparable to those in the USA, there are no adapted physical education specialists in public schools comparable to those in the USA. While several universities offer courses in adapted physical education, these courses are generally not compulsory. Special education teacher training programs are designed to prepare teachers for special schools. Formally, these teachers who major in special education and one other subject area (e.g., physical education) are trained for the Lehramt an Sonderschulen (teacher at special schools).

Schooling in the USA

The description of schooling in the USA is limited to facts pertinent to public school education and to the school integration of children with and without disabilities.

General Political Aspects and History

Federal, state, and local functions in the educational system of the USA are described in this section as a basis for the following comparison of the schooling systems in the USA and Germany.

The Federal Role in Education. The reserved powers clause of the Tenth Amendment of the USA Constitution gives power over education to the states (Guttek, 1992; McAdams, 1993). Despite this limitation, the federal role is significant, especially with regard to the education of students with disabilities, and has been growing over the years.

The federal government's intervention in education was triggered in the 1960s by disparities in educational provisions by rich and poor school districts (Sherrill, 1998). Sherrill (1998) explains that

Local and state governments either could not or would not do anything about the welfare of many disadvantaged students. Therefore, the federal government began to intervene, using legislation as a means of enhancing the education and health of disadvantaged and/or minority group children. (p. 77)

The constitutional basis for federal intervention in education is Article 1, Section 8. This Article, also called the General Welfare Clause, gives the Congress legislative power to provide for the general welfare of citizens (Sherrill, 1998).

Two aspects of the federal role in education need to be distinguished: federal laws and federal court decisions. Federal laws and aid programs have a long history in the USA. Some examples of federal aid programs tied to laws are the National Defense Education Act of 1958, the Elementary and Secondary Education Act of 1965, the Education of the

Handicapped Act of 1970, the Education for All Handicapped Children Act of 1975, and the Individuals with Disabilities Education Act of 1990 (Gutek, 1992; Sherrill, 1998). The latter laws specifically focused on the education of individuals with disabilities. Institutions of public education have to abide by the provisions of federal laws and provide the services mandated by the laws in order to receive federal financial assistance.

The federal courts also influence education in the USA. Since the middle of the 20th century, the influence of the federal judiciary on education has grown to an extent that led some commentators to call the USA Supreme Court 'the national school board' (Gutek, 1992). One of the most important rulings of the Supreme court with regard to education was its decision in Brown v. Board of Education of Topeka. In its decision the court ruled the "separate but equal" doctrine, which served as legal basis for racially segregated schools, unconstitutional because it was in violation with the Fourteenth Amendment of the Constitution.

Civil rights decisions such as in Brown v. Board of Education of Topeka drew attention to other populations that had been denied equal educational opportunities such as individuals with disabilities (Gutek, 1992). Parents subsequently challenged school districts that excluded their children with disabilities and demanded equal educational

opportunities. In the case of Pennsylvania Association for Retarded Children (PARC) against the Commonwealth of Pennsylvania in 1971, a federal district court ruled that children with disabilities had the same constitutional right to free education as did children without disabilities. The decision in Mills v. Board of Education of the District of Columbia in 1972 extended this right to all children with disabilities and included the right to due process protection.

Since the early 1970s, Congress has enacted and reauthorized several important laws with significant implications for the integration of individuals with disabilities into mainstream society including public schools. The most important of these is the Education of All Handicapped Children Act (PL 94-142) of 1975. PL 94-142 changed education by mandating five rights regarding the education of students with disabilities (Sherrill, 1998). These were the rights to a free and appropriate education, nondiscriminatory testing, evaluation, and placement procedures, education in the least restrictive environment, and due process regarding procedures and placement decisions.

By including physical education as a part of the special education definition, PL 94-142 "provided the first legal basis for adapted physical education" (Sherrill, 1993, p. 80). PL 94-142, which was reauthorized as PL 101-476, the

Individuals with Disabilities Education Act (IDEA), in 1990, further mandates that an Individualized Education Program (IEP) must be developed for each student with a disability. This IEP must be based on multidisciplinary assessment and decision making and be approved by parents. Students with disabilities must be educated with students without disabilities to the maximum extent appropriate and should be educated in separate settings only if the nature of the disability is such that education in the regular classroom cannot be achieved satisfactorily with the use of supplementary aids and services (Federal Register, September 29, 1992).

Parts of IDEA that pertain to specific programs and funding are reauthorized every 4 or 5 years. IDEA is administered by the U.S. Department of Education, which was created by Congress in 1979 (Gutek, 1992). Within the USA Department of Education, special education programs are administered by the Assistant Secretary for Special Education and Rehabilitative Services. Most of the tax money authorized by IDEA is sent directly to state education agencies, which in turn distribute money to local education agencies. The federal role thus primarily is limited to monitoring states to assure that they use federal money in accordance with federal law.

Although federal involvement in education has increased significantly since the 1950s, it remains controversial, particularly in such areas as local initiative and states' rights (Gutek, 1992). Gutek concludes that the federal role in education is unpredictable because it depends on political circumstances.

The State Role in Education. The state government plays a central role in education: "The state legislature enacts the laws that govern the establishment, organization, administration, and financing of schools, minimum standards, minimum curriculum requirements, and other matters affecting public schools" (Gutek, 1992, p. 195). The state's control over education is directed by a state board of education. Members of this board are appointed, elected, or determined by a combination of election and appointment. The board formulates policies regulating the implementation, control, and supervision of education throughout the state. In 24 states, the state board of education also appoints the chief state school officer (Gutek, 1992). In 5 states this official is appointed by the governor, and in 21 states this official is elected by the electorate. The chief state school officer, together with her/his staff, constitutes the state education agency (SEA). Three main functions of the SEA are: (a) enforcing the school codes, (b) distributing state

and federal funds to local school districts, and (c) managing teacher certification.

States differ greatly in how much control they reserve for themselves and the control they delegate to local school districts (Gutek, 1992). Many states give decision power in curricular and instructional matters to local boards of education. Some states require minimal competency tests as part of the graduation requirements for students.

The Local Role in Education. Historically, states delegated power over educational matters to local education agencies (LEAs) in three ways. First, state legislatures passed legislation that allowed residents in different areas of the state to organize school districts. Second, the legislature encouraged districts to levy taxes to help finance public schools. Third, state legislatures made public education compulsory and required the organization of a public education system in the state on a local level. LEAs play the central role in this organization:

The local school district is the basic unit of educational governance, administration, organization, and support for elementary and secondary schools in the United States. A school district can be defined as an entity, created by the state, to provide public education for the children residing in its service area. Its typical governing body is an elected board of citizens that usually hires a professional educator, a superintendent, to administer the public school system under its jurisdiction. School districts have their own taxing power to generate revenue to support the local schools (Gutek, 1992, p. 206).

The functions of the local school board are diverse (Gutek, 1992). General functions include establishing a district philosophy, educational goals, and general policies. More specific functions include creating and managing the school district budget and hiring personnel. The fact that education is mainly funded through local property taxes results in large discrepancies between school districts. McAdams (1993) reports that some school districts spend more than five times as much per student as other districts.

Within the framework set by the state legislature, the local school board approves educational programs or curricula to be followed in the school districts based on the recommendations of the professional staff (Gutek, 1992). The school board also functions as a mediating agency between the public and the professional staff. Its regular meetings are open to the public who have the opportunity to voice their opinions at these meetings. Local school boards exercise grass-roots level control of public education (McAdams, 1993).

Basic Structure of the Educational System

The educational system of the USA is by and large a comprehensive and integrative system. Elementary education and the comprehensive high school comprise the educational ladder (Gutek, 1992), which is, ideally, completed by all students.

Elementary Education. One major characteristic of education in the USA is its diversity with regard to racial and ethnic background, socioeconomic differences within and between school districts, and funding available to school districts. This diversity makes generalizations difficult (McAdams, 1993).

Elementary schools include Grades 1 through 6 (ages 6 to 12), 7, or 8, depending upon differences in school organization (Gutek, 1992). The main purpose of elementary schools is to provide a comprehensive education in fundamental skills and primary areas of knowledge, extend the students' horizons of space and time and prepare them for a larger world, recognize the health and physical development of children, develop democratic values, and foster creativity (Gutek, 1992). Elementary schools prepare their students for secondary education. Consequently, the program is more general in the early grades and becomes more specialized in the upper grades. Elementary school curricular areas are language arts, social studies, mathematics, science, health and physical education, music, and art. Two class periods per day are reserved for lunch and recess.

Generally, little homework is assigned to students in elementary schools (McAdams, 1993). There seems to be little pressure on students to study hard in order to perform to high standards.

The Essential Elements for Physical Education, which recently have been replaced by the Texas Essential Knowledge and Skills (TEKS), is the curriculum that guides physical education (Texas Education Agency, 1992) in the state of Texas. The Essential Elements for Grades one through six distinguish five learning areas for each Grade. These areas are physical and health-related fitness, motor skills, rhythmic activities, skills related to games and sport, and sequential gymnastics and tumbling skills. Each area is further divided into subcategories such as fundamental movement skills and perceptual awareness skills. The curricular requirements are kept rather general (e.g., "The student shall be provided opportunities to participate in games [low-organizational, creative, and cooperative"]).

Junior High and Middle School. Junior high schools developed at the beginning of the 20th century out of criticism of the traditional concept of 8 years of elementary education and, only for some, 4 years of secondary education (Gutek, 1992). Junior high schools usually consist of Grades 7, 8, and 9, less frequently only of Grades 7 and 8. The goals of junior high schools focus on (a) the demands of the business and industry sector for qualified workers, (b) the developmental characteristics of young adolescents, and (c) the need to provide a transitional period between elementary and secondary education. The elementary curriculum was extended

by such subject areas as industrial arts, home economics, and foreign languages.

The middle school concept appeared in the 1960s (Gutek, 1992). Middle schools consist of Grades 5 through 8 or 6 through 8. Proponents of middle schools argue that the social and educational needs of 10- to 14-year olds can be more adequately met in such a separate institution than in elementary or junior high schools. Consequently, middle schools purport to focus more on the developmental needs of their students. In contrast, junior high schools emphasize the subject matter curriculum although Gutek notes that both types of schools may be more similar than different.

Secondary Education. The comprehensive high school completes the American educational ladder (Gutek, 1992). The concept of the educational ladder refers to a horizontally structured school system that, theoretically, provides upward movement through elementary, secondary, and university education. In reality, however, as is pointed out by Gutek (1992), this upward mobility is often limited by social and economic variables such as family background, income, degree of tax support, and community attitudes.

The comprehensive high school is a multifunctional institution serving a racially, ethnically, religious, and socioeconomically diverse student population (Gutek, 1992; McAdams, 1993). The functions of the comprehensive high

school include (a) providing a general education for all students, (b) preparing some students for college entry, (c) preparing some students for jobs, and (d) fostering personal development and social integration. This multifunctionality requires differentiated curricula to satisfy diverse needs. The high school curriculum includes general education courses required for all students, parallel curricular tracks with very different demands for college preparation and vocational education, and elective courses that students can choose according to their personal interests. The high school is diverse in a social as well as an academic sense as pointed out by Gutek (1992, p. 303) "The important principle regarding the comprehensive high school is to avoid segregating students on either academic or nonacademic grounds into separate, specialized schools."

The comprehensive nature of the high school has been a subject of debate since its inception in the second half of the 19th century. An early emphasis on classical learning and strict academic instruction was followed by a movement, based on John Dewey's educational philosophies, viewing the school as an instrument of social change and life adjustment education during the first half of the 20th century (Gutek, 1992; McAdams, 1993). In the 1950s, critics of progressive education and life adjustment demanded a refocusing on more traditional goals and content. Their cause received an

enormous boost from the Soviet Union's launching of the Sputnik satellite in 1956. The Sputnik shock resulted in a new emphasis on content areas such as mathematics, science, and foreign languages.

The civil rights movement and student protests against the Vietnam War in the 1960s and 70s led to another shift toward social equality and student orientation in education. The same criticisms raised in the 1950s, however, surfaced again and were expressed in the back-to-basics movement. This movement found backing in the publication of reports such as A Nation at Risk (National Commission on Excellence in Education, 1983) or that of international educational achievement data. During the 1980s, the direction of educational reform changed from top-down approaches such as the implementation of higher graduation standards and statewide testing to local initiatives such as teacher empowerment, site-based management of schools, and parental involvement (McAdams, 1992). The basic question, whether the high school can achieve all its diverse goals still remains the subject of debate.

University education/Teacher Training. Although teacher education programs differ between states and between universities within the same state, they generally have several components in common (Gutek, 1992). A typical teacher training program is a 4-year bachelor's degree

program consisting of several components. The general education or core curriculum component covers courses in the liberal arts and sciences such as language and literature, history and social sciences, humanities and fine arts, mathematics, and natural and physical sciences. In addition to the core curriculum, teacher education students may specialize in (a) one major area of study such as special education, or elementary education, or (b) subject areas such as physical education, English, or mathematics. A third component of teacher training programs is professional education in areas specifically related to education such as history, philosophy, sociology, and psychology of education, children with special needs, human growth and development, tests and measurements, educational methodology, or audiovisual media. Included in the professional education courses is early field experience (i.e., opportunities for students to observe actual teaching situations in a school classroom.

A student teaching component, which follows the academic courses, completes the teacher training program. The nature of student teaching varies widely. During the student teaching component, the student is placed in one or more school and teaches under supervision. Some universities require full-time teaching for a semester, whereas others permit half-time teaching over a longer period. To be

eligible for student teaching, students must have a minimum grade point average. In most states, including Texas, teachers have to pass a teacher competency test before they will be employed by school districts. Teacher competency tests are usually written tests of professional skills and content knowledge.

Special education and Integration. Public school education for children with disabilities began in the late 1880s (Sherrill, 1998). By 1899, over 100 large cities had special education. Throughout the first half of the 20th century, public school services for children with disabilities expanded and special education evolved into an area of specialization with university curricula and state teacher certification. The services offered to children with disabilities, however, were uneven because no laws governed policy or assured rights. State-supported residential institutions funded through taxes were the primary means of educating children with disabilities until the 1960s, when attitudes began to shift and parents demanded the right to keep their children at home and send them to neighborhood schools. In the 1960s, many types of local special education programs were established, some private and some public. Quality varied tremendously, depending on attitudes and resources. From 1970 on, federal law addressed inequities in

serving children with disabilities and improvements were gradually made.

The passage of the Education of All Handicapped Children Act (PL 94-142) in 1975, reauthorized as Individuals with Disabilities Education Act (IDEA, PL 101-476) in 1990 and as PL 105-17 in 1997, can be seen as a paradigm change of how children and youth with disabilities should be educated in the USA. The part of the law that supports integration of children with and without disabilities in regular class is the least restrictive environment clause (LRE). This clause reads as follows:

To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (PL 105-17, Section 612(a)(5))

The terms appropriate and least restrictive environment are not operationally defined in the law. Therefore, these concepts have depended upon the courts for operational definitions that can be generalized across individuals and situations (Block, 1996).

By the late 1980s, an increasing number of special and, to a lesser extent, regular educators claimed that a dual system of educating students with and without disabilities

still existed and called for the merger of special education and regular education. (Block, 1994; Craft, 1994; Grineski, 1994; Reynolds, Wang, & Walberg, 1987; Taylor, 1988; Will, 1986).

REI and Inclusive Reform Proposals.

Critics of this de facto dual system of special education and regular education have been calling for a special education reform (Block, 1994; Block & Krebs, 1992; Craft, 1994; Reynolds, Wang, & Walberg, 1987; Will, 1986). Fuchs and Fuchs (1994) describe two distinct reform movements: (a) the regular education initiative (REI) and (b) inclusive education. REI, focusing mostly on students with learning disabilities, behavior disorders, and mild mental retardation, calls for a merger of special education and regular education and a significant increase of children with disabilities in regular classrooms. REI particularly addresses modification of the LRE continuum to reduce pullout programs and move students with disabilities up toward lesser restrictive environments. According to Fuchs and Fuchs (1994, p. 298), REI focuses on "individualized instruction for all students" to "maximize the the outcomes of learning for individual children." It is not the REI's goal to eliminate special education but to include it as an integral part of mainstream education.

The inclusive schools movement evolved in the late 1980s, partly existing parallel to REI, and partly growing out of frustration with REI's lack of success and impact on regular education (Fuchs & Fuchs, 1994). The inclusive schools movement promoted the elimination of the LRE continuum and its replacement by full inclusion (Lipsky & Gartner, 1991; Stainback & Stainback, 1991; Taylor, 1988; Thousand & Villa, 1990; York & Vandercook, 1991). If implemented, the inclusive schools movement would require extensive revision of federal law. Fuchs and Fuchs (1994) discussed several examples of the impact that the inclusive schools movement has had on educational policy in several states and on the media.

Although there are two distinctive movements (i.e., REI and integrative schools movement) toward a more integrative educational system that differ in constituents, focus, and strategies (Fuchs & Fuchs, 1994), it seems that both movements have the same main goal of merging special education and regular education. The differences seem to be more gradual than substantial.

Court Cases. In an increasing number of cases, federal courts have ruled that it is insufficient for school districts to merely go through the IEP process to determine the educational placements of students with disabilities (Huefner, 1994; Lipton, 1994).

Since 1989, several federal courts have employed a three-step test to determine the appropriateness of the educational placement of students with disabilities (Block, 1996). Stated in Daniel R.R. v. El Paso Independent Schools (1989), school districts must, first, show they actually attempted placement in the regular classroom including the provision of supplementary aids and services. Second, the educational benefit from placement in regular education must be considered. Third, the effects on the regular classroom environment and education of children without disabilities must be taken into account.

An example of this approach is the case of Oberti v. Board of Education of Borough of Clementon School District (1993) that was held for the parents who demanded that their child with a disability be educated in a regular classroom. Other examples of this trend toward more integration are the 1992 and 1994 cases of Sacramento Unified School District, Board of Education v. Rachel H. (1994). In the 1994 case, the Ninth Circuit USA Court of Appeals upheld the earlier District Court's decision that granted the parents' request for regular education placement of their child with moderate mental retardation. The decision was based on the rationale that placement decisions must take four factors into consideration: (a) the educational benefits of placing the child in a full-time regular education program as compared to

a segregated setting, (b) the nonacademic benefits of placement with children without disabilities, (c) the effect the child would have on the teacher and other students in the regular classroom, and (d) the costs of supplementary aides and services associated with this placement (Block, 1996). These examples indicate that courts are interpreting the LRE mandate in a way that schools are now required "to do more than merely speculate that a regular education placement will not succeed" (Maloney, 1994, p. 8).

The criterion of success is not limited to academic performance. As was demonstrated by Daniel R.R. v. El Paso Independent Schools (1989), and subsequent court decisions, Oberti v. Board of Education of Borough of Clementon School District (1993) and Sacramento Unified School District, Board of Education v. Rachel H. (1994), the courts do not see academic achievement as the only benefit of mainstreaming. The integration of a child with a disability in a regular education setting is seen as having potential benefits in and of itself (Block, 1996). Some of these inherent benefits are mentioned in the case Greer v. Rome City School District (1991). The nonacademic benefits mentioned are improved language skills and role modeling from association with peers without disabilities (Lipton, 1994). In the case Greer v. Rome City School District (1991), a broad understanding of

educational benefit was considered more important than the concept of appropriate education. Placement in a nonsegregated setting was preferred even when placement in a self-contained class may have been more educationally beneficial (Block, 1996; Lipton, 1994).

This trend toward placement of students with disabilities in regular education is promoted furthermore by the federal government through the announcement of its support of the decision in Oberti v. Board of Education of Borough of Clementon School District (1993) by the Assistant Secretary of Education, Judy Heumann (Heumann, 1994, p. 5). Two reasons for her support of the integration philosophy are the rejection of the separate but equal notion and the lack of evidence supporting the effectiveness of segregated settings.

Further indication of a trend toward more integrative education is evidenced in many scientific and professional journals. Integration is being widely, albeit controversially, discussed, and the topic is frequently addressed in research articles (Block & Vogler, 1994). Putnam, Spiegel, and Bruininks (1995, p. 553) conclude in their study of future directions in special education that "the belief will prevail that people with disabilities have a right to participate in integrative environments" and that this trend toward increasing integration of students with

disabilities will continue. This conclusion was based on a Delphi survey of 37 educators investigating future directions in education and integration of students with disabilities.

The Council for Exceptional Children (CEC) also believes "that the concept of inclusion is a meaningful goal to be pursued in our schools and communities" but, at the same time, maintains its demand for a continuum of services for all children, youth, and adults, (The Council for Exceptional Children, 1993, p.1). The CEC's position statement can be interpreted as endorsing both the inclusive schools and the traditional LRE concept.

What is mandated by law and what is the best educational setting for individual children are two questions that are at the center of the inclusion debate. The answers to these questions differ depending upon the respective educational positions. Positions differ particularly concerning the interpretation of the vague legal concepts of appropriate education and LRE and the availability of resources to support the education of students with severe disabilities in the regular classroom. While proponents of the traditional LRE concept such as Stein (1994a, 1994b) argue that some students with disabilities are not prepared for the regular classroom, the current trend described previously represents the philosophy that it is the regular educational environment that has to and can get ready and adapt to accommodate

students with disabilities. This understanding puts a high responsibility on school districts, schools, and teachers.

Citing a lack of research of instructional variables and outcomes of inclusion as rationale for their study, LaMaster, Gall, Kinchin, and Siedentop (1998) investigated inclusion practices of effective elementary specialists. LaMaster et al. used semistructured interviews, observations, and questionnaires to obtain views of inclusion practices and perceived outcomes from 6 elementary physical education teachers (5 females, 1 male). Participants were experienced physical education teachers who had been identified as effective teachers in a previous study by one of the authors.

LaMaster et al. (1998) identified four main themes: (a) multiple teaching styles, (b) student outcomes, (c) teacher frustrations, and (d) differences in inclusion practices. The interview data indicated that the complexity of the classroom increased as a result of inclusion. This complexity had management implications for the teachers in this study. According to the participants, students with developmental disabilities and severe behavior disabilities were the most difficult to include in classroom activities. The authors concluded that "these teachers were constantly struggling with the instructional and managerial issues that accompanied inclusion." (LaMaster et al., 1998, p. 69) The teaching styles used by these teachers to accommodate

students with disabilities included individualized teaching, peer teaching, direct instruction, and modifications to lesson plan and equipment.

All participants expressed dissatisfaction with their lack of training and lack of assistance from adapted physical education specialists and paraprofessionals (LaMaster et al., 1998). The teachers were frustrated because they could not divide their time evenly between the students without disabilities and those with disabilities who needed constant attention and supervision. Inclusion practices varied widely between and within school districts.

The teachers said that socialization was the most positive outcome for students with and without disabilities (LaMaster et al., 1998). However, the participants also indicated that skill and fitness outcomes for students with disabilities may be limited. Furthermore, they observed a widening physical gap between students with disabilities and their peers as they get older.

LaMaster et al. (1998) draw four conclusions from the data of their study:

1. The participants in their study put forth substantial and consistent effort to include students with disabilities in their classes. Related to this effort was "equally high level of frustration and guilt" that was revealed in the interviews.

2. Few resources and support personnel were available to the teachers in this study.

3. Although all participants in this study were experienced teachers and had been identified as effective teachers in a previous study, they were inadequately prepared for the specific demands of inclusion and were aware of that lack of preparation. The school districts where the teachers worked did not provide in-service training to remediate the lack of professional preparation.

4. The last conclusion pertains to the purposeful nature of the sample in their study and relates directly to the purpose of the present study:

We wanted to study effective teachers, and we believe that the teachers who participated in this study are well above the norm in terms of effective teaching. Yet we found frustration, lack of support, and feelings of inadequacy and guilt. This has given us pause to consider what the data might have looked like had the sample been more distributed across a range of more and less effective teachers. In other words, if this is what is going on in the gymnasiums of effective teachers in good schools with ample resources, what is going on in other places? (p. 79)

Physical Education for Students With Disabilities

Physical education is the only school subject mentioned as part of the special education definition in IDEA. The reauthorization of IDEA, PL 105-17 mandates that all students with disabilities receive physical education. Where, how, and by whom physical education services are delivered, however, varies considerably between school districts even

within the same state. The debate about appropriate education and least restrictive environment in the area of special education is reflected in the area of physical education for students with disabilities.

Like their colleagues in special education, adapted physical educators also began a serious debate about policies and practices with regard to physical education placement and pedagogical philosophy. Craft (1994), who favors full inclusion, edited a special issue of the Journal of Physical Education, Recreation, and Dance (JOPERD) on inclusion. Stein (1994a), who favors integration within the LRE context, initiated a critical discussion of the issue in the spring and summer issues 1994 of Palaestra. This discussion served as a forum for authors to argue for inclusion (Block, 1994; Grineski, 1994) as well as for the LRE concept mandated by the IDEA (Sherrill, 1994).

In physical education a debate on full inclusion versus the LRE concept was initiated by Stein (1994a). Some of the questions raised by Stein concern the impact of integration on students with and without disabilities, the kind and degree of professional preparation required to make integration work, and the compatibility of the inclusion concept and legislation such as IDEA.

Specifically, Stein stated that the inclusion concept ignores individual differences and violates the appropriate

education and the individual placement decision mandated by IDEA (Stein, 1994b). Stein asserted, "Individuals who are not successful in total inclusion settings are the individuals for whom integrated settings are not appropriate, and for whom more restrictive environments are not only necessary, but mandated by law." (p. 25). However, Stein did not define what successful means.

Block (1996) applied the previously described court rulings to physical education. He concluded that these decisions mean that, if the student with a disability receives considerable nonacademic benefit and makes adequate progress toward his or her psychomotor IEP goals, placement in regular physical education may be preferred even if progress could be achieved faster in a segregated setting (Block, 1996).

Professional organizations endorse inclusion within the LRE context. The position on integration of the American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD), as formulated by two of its member associations (the American Association for Active Lifestyles and Fitness and the National Association for Sport and Physical Education, 1995) is that most of the unique needs of students with disabilities can be met within regular physical education. According to AAHPERD, "no student should have to earn his/her way into physical education. In other words,

inclusion in physical education means that all students, including students with disabilities, start in regular physical education." (p. 8)

How adapted physical education services are delivered varies between states and school districts. Some school districts employ adapted physical education specialists and some do not. School districts design their own adapted physical education service delivery systems, formally or informally, and have a lot of freedom creating their programs as long as they do not violate federal or state laws and regulations. Several studies examined how adapted physical education services are provided in the USA.

Survey research in physical education (Decker & Jansma, 1995; Jansma & Decker, 1990) indicated that, 25 years after the 94th Congress passed the Education of all Handicapped Children Act, the concept of alternative placement options (i.e., a continuum of LREs) is not functional in physical education in the general sense intended by its first proponents Reynolds (1962) and Deno (1970). Jansma & Decker (1990) revealed that 26 different physical education LRE continua were used in the USA during the 1988-89 school year. However, Decker and Jansma (1995) pointed out that the most widely used part of the continuum (50.7%) was the full-time regular class in a regular school (i.e., a single placement option rather than a continuum). Only a small minority of

the schools in their study used more than two placement options in their continua. These results indicate that the physical education LRE continua based on the general cascade models originally developed by Reynolds (1962) and Deno (1970) are little used. Based on the observation that "scarce empirical data exist documenting nationwide efforts to comply with the LRE mandate" (p. 124), Decker and Jansma (1995) concluded that "the utility of traditional physical education LRE placement continua may be suspect." (p. 124)

Whereas Decker and Jansma's (1995) results indicated that "in most cases students with disabilities received physical education in a regular class setting with little or no access to adapted physical education" (p. 124), Potter-Chandler and Greene (1995) reported almost half (714 out of 1627) of the students assigned to adapted physical education (APE) in Kansas received services in self-contained settings. No reliable data about other LRE options being used in Kansas could be presented. These findings support the claim that, in many school districts, only two placements are available in the area of physical education.

A survey of the adapted physical education needs in the state of Texas revealed that students with disabilities receive physical education services from a variety of providers (Yilla & Piletic, 1995). These providers include adapted physical educators (at 36% of schools that

participated in the survey), regular physical educators (89%), special educators (33%), classroom teachers (25%), occupational therapists (33%), physical therapists (33%), occupational therapist aides (6%), physical therapist aides (7%), paraprofessionals (38%), and volunteers (4%).

A national survey of adapted physical educators (Kelly & Gansneder, 1998) indicated that the most prevalent physical education placement option for students with disabilities was related services (in more than 80% of the respondents' schools). Fifty five percent of the participating teachers indicated that adapted physical education was the only placement available for students with disabilities at their schools. Almost 30% indicated that regular physical education was the only service option available for students with disabilities at their schools. These results confirm the conclusion by Decker and Jansma (1995) that a continuum of placement options may not exist at many schools.

A Comparison of Schooling in the USA and Germany

The integration of students with disabilities in regular classrooms is a controversial issue of great significance in special education in both the USA and Germany. At the same time, both countries have rather different educational systems, and, consequently, different approaches to integration. The following comparison is based on the assumption that exploring different approaches to the same

issue can create new knowledge and broaden and enrich problem solving in both countries. The comparison of the two systems is based on similarities and differences between the two countries.

Schooling in the USA and Germany: Differences

The most obvious and, with regard to this study, most significant difference between the two educational systems is the selectivity of the German system in contrast to the comprehensiveness of the American system. While elementary education is comprehensive in both countries, secondary education in Germany is selective and vertically divided into four types of schools. In contrast, American secondary education is comprehensive and horizontally structured, with the comprehensive high school being the only type of school for all students. In Germany, a system of exit examination plus entitlement is based on a complex, differentiated system of academic standards and demands. In the USA, exit exams such as a high school diploma or college degree are followed by entry examinations for advancement to the next stage of education (Porter, 1986).

A consequence of this difference in structure is comparatively homogeneous groups of students in German secondary schools as opposed to the rather heterogeneous classes in American high schools. The diversity of students

in American high schools is further increased by the large diversity of the general population.

Different values and expectations drive secondary education in the two countries. The traditional hierarchy of Hauptschule, Realschule, and Gymnasium in Germany is the institutional substrate of a belief in selectivity that highly values academic achievement and respective homogeneous grouping of students. The comprehensive Gesamtschule makes that hierarchy somewhat transparent for students but still incorporates the same hierarchy including the corresponding secondary school diplomas.

The American comprehensive high school, on the other hand, represents the ideals of both a comprehensive education for all students and the socialization of a culturally very diverse student population into one society with a foundation of generally accepted cultural norms. The focus of the comprehensive high school is, according to its purpose, not student selection based on academic achievement but the integration of diverse content areas and student populations into one comprehensive educational system offering equal opportunity to education for all students.

The USA and Germany are different in the scope of special education students' integration into regular education classes. In Berlin, which is one of the more progressive states in Germany in regard to integration,

integration of students with disabilities is limited to a large extent to elementary education. Berlin's school code has only recently been changed to extend parents' choice between a general or special school for their children with disabilities to secondary education. The school code still explicitly excludes students with mental retardation and severe disabilities from the right to choose between regular and special schools at the secondary level granted to parents. Further, the integration of students with mental retardation and severe disabilities is limited to elementary schools and secondary laboratory schools.

The USA and Germany differ with regard to the federal role in education. Federal courts in the USA have had a decisive impact on the education of students with disabilities by confirming these students' civil rights to a nonsegregated appropriate public education. Congress, pushed by advocacy groups and court rulings, has enacted numerous laws requiring agencies of public education to provide equal services to individuals with and without disabilities.

One of the causes leading to the enactment of PL 94-142 in 1975 was that separate but equal was not permissible in the USA but in Germany separate but equal was acceptable. Another reason was the lack of availability of an appropriate education for many individuals with disabilities in the USA (Opp, 1992; U.S. Department of Education, 1996). In

contrast, Germany had in place a comprehensive and differentiated special education system. There was no demand for a free and appropriate education for children and youth with disabilities in Germany because these individuals were being served in a well funded and equipped system of special schools that were free to students with disabilities. In contrast, Germany does not have federal laws mandating the education of individuals with disabilities in the least restrictive environment. However, there have been efforts to coordinate educational policies of the states at the federal level. Position papers such as those by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany endorse the concept of education of students with disabilities together with their peers without disabilities whenever possible (Ellger-Rüttgardt, 1995; Hübner, 1996).

In contrast to the federal laws in the USA, however, these position statements of federal committees are only recommendations (Hübner, 1996). Whereas the USA follows a top-down approach to educational change concerning the education of students with disabilities, Germany tends to favor a bottom-up strategy. Germany recognizes (Ellger-Rüttgardt, 1995; Hübner, 1996), and the previous development shows, that the idea of educating students with and without disabilities together whenever possible, requires a broad

consensus in society. There is agreement that the implementation of integrative education needs to grow and mature gradually at the grassroots level and cannot be mandated by law. Because integration is essentially a change of paradigms, it must be implemented gradually and involves at least three generations (Möckel, 1989).

In Berlin, the law is relatively general compared to the specific requirements of IDEA in the USA. Although the Berlin school code now provides parents of children with disabilities with the right to choose between a special or regular school for their children, the law does not mandate specific requirements such as individualized education programs including specific measurable goals and objectives detailing the educational program for the student. Neither is there a legal mandate to test students with disabilities on a regular basis and design IEPs for students with disabilities based on the test results. The Berlin school code leaves schools and educators with considerable flexibility regarding the education of students with disabilities.

The role of resources in relation to integration is different in the USA and Germany. In the USA, LEAs are required to generate the resources for compliance with law. In contrast, the Berlin school code ties the parents' right of choice between regular and special schools to the

availability of funds and resources necessary for the integration of students with disabilities in regular classes (Hübner, 1996). The availability of resources depends on political decisions of the government. This leaves a lot of influence to political parties. The influence of political parties or majorities becomes also apparent in the greatly differing extent to which integration is being realized in the different Länder (Murray-Seegert, 1992). Länder with a liberal social democratic government tend to support the concept of integration, whereas Länder with a conservative christian democratic or christian socialist government tend to support the dual system of general education and special education (Doll-Tepper et al., 1992; Murray-Seegert, 1992).

Integration tends to be more influenced by partisan politics and different educational philosophies in Germany compared to the USA where it has been more of a civil rights issue.

Integration per se is not an issue of partisan politics in the USA. However, the allocation of federal funds to support integration depends partly on whether Democrats or Republicans are in power. Democrats support federal funding more than Republicans.

Unlike the USA, where litigation concerning integration is frequent, litigation is not a viable option in Germany. The latest decision of the Bundesverfassungsgericht (Federal

Supreme Court) serves as a good example in this case. The role of the judicial branch of government in the USA in defining and regulating integration is inconceivable in Germany where political majorities have to be formed in order to realize certain educational and political concepts.

The role of local school districts is another significant difference between the USA and Germany. In the USA, the responsibilities of local school boards include setting property tax rates and administering the budget generated by the property tax to fund city schools. The financing of public schools largely through property taxes creates great disparities between school districts even within the same state.

Within the framework established by federal and state laws and regulations, school districts in the USA have the freedom to design their own service delivery models. Consequently, services to students with disabilities may vary greatly between districts and can change within districts if there is an agreed upon need to do so.

In contrast, independent local school districts governed by a publicly elected board do not exist in Germany. Educational administration in Germany is centralized to a greater extent at the state level. Issues of essential meaning for the schools in Berlin such as finances, personnel, curricula, and service delivery models are handled

by the Department of Schooling, Vocational Education, and Sport (Senatsverwaltung für Schule, Berufsbildung und Sport) at the state level. This Department makes decisions in collaboration with offices at the lower administrative level (Landesschulamt). As a result, policies, practices, and financial resources within a state in Germany are more homogenous than in the USA.

A comparison of the Texas and Berlin elementary physical education curricula reveals some general differences. The Texas Essential Elements (which will be replaced by the Texas Essential Knowledge and Skills or TEKS in 1998) is more general than the Berlin Rahmenplan (framework) and sometimes repetitious across the grade levels. The Texas curriculum does not distinguish goals, content, and instructional pointers and does not contain specific behavioral goals.

Because of the generality of the curriculum, teachers in Texas have more flexibility in deciding what to teach than teachers in Germany. Moreover, the greater specificity of German curricula increases the demands and expectations on teachers to achieve the goals specified in the curriculum.

Significant differences between the USA and Germany exist with regard to physical education services for students with disabilities. While there is a federal law in the USA, mandating physical education as a direct service for all students with disabilities, there is no such law in Germany.

Physical education is treated as other school subjects are treated, and service delivery is regulated for all schools at the state level.

There are basically only two physical education environments in Germany (a) a special class at a special school and (b) a regular or an integrative class at a regular school. In the USA, despite the legal mandate to identify the LRE for each individual student with a disability and the existence of several LREs in physical education, studies indicate that in reality there seems to be only the choice between special class or regular class placement (Decker & Jansma, 1995; Potter-Chandler & Greene, 1995). However, especially in urban areas in the USA, adapted physical educators provide direct instruction and consulting (Kelly, 1998). While IDEA, by providing federal grants to fund teacher training, has significantly contributed to the increasing numbers of adapted physical educators in the USA, there is no comparable profession in Germany.

Germany and the USA further differ in that direct or consulting services provided by adapted physical educators in the USA are not available to regular physical educators in Germany. Support by paraprofessionals is another area of difference between the two countries. In both countries, some students with disabilities, depending on type and severity of disability, receive support from paraprofessionals. Whereas

in the USA many regular physical education teachers work together with a paraprofessional who provides assistance throughout the school day, these physical education paraprofessionals or teacher assistants do not exist in Germany.

Differences also exist with regard to teacher training in both countries. In Germany, only roughly a third of all high school graduates are eligible for teacher training programs. This is because only graduates from Gymnasien (grammar schools) are eligible to attend universities. This pool of potential teacher candidates is further reduced by high school grade point average (GPA) requirements. Teacher training programs consist of a combined bachelor's and master's degree program completed by written and oral comprehensive exams and a thesis plus a 2-year phase of teaching under supervision with seminars that is completed by a second thesis and comprehensive oral exams.

Teacher training programs in the USA are typically Bachelor's degree programs. The fact that the performance of education students in college entry tests is the lowest among all college students (McAdams, 1993) indicates that the entry requirements of teacher training programs are not very high. The academic demands of Bachelor's teacher training programs in the USA, about a third of which is liberal arts courses that are part of the high school (Grades 11-13) curriculum in

Germany, are lower than the demands for the master's degree teacher training programs in Germany.

Worklife of teachers in Germany and the USA differs widely. Teachers in Germany are well paid and enjoy a high societal status. McAdams (1993) likens the workday of teachers in Germany to workdays of professors in the USA. Teachers in Germany have to be at their schools only for the classes they teach, whereas teachers in the USA are expected to be present all day at their work site. The job market for teachers is highly competitive with a surplus of teachers in most subject areas.

The high work load of teachers in the USA and their low salaries, compared to teachers in other economically advanced countries and to other comparable professions in the USA, indicate a relatively low societal status of teachers in the USA. Unlike in Germany, there is a great demand for teachers in most parts of the USA (Gutek, 1992).

Schooling in the USA and Germany: Similarities

There are many similarities between the USA and Germany ranging from general societal aspects at the macro level to specific issues related to integration on the micro level. Both countries are democratic, economically advanced Western societies with free market economies. Both countries are individualistic as opposed to interdependent societies (Smith & Bond, 1993). Both cultures share general values such as

pluralism, civil rights, and individual freedom. As economically advanced countries with similar values, the USA and Germany face similar problems and challenges. One example of similar challenges is the integration of an ethnically diverse student population, especially in big cities, that has a longer tradition in the USA (Schnur & Hopes, 1995).

The USA and Germany are both federal republics with constitutions that delegate some responsibilities to the federal government and some responsibilities to the states or Länder. Education is a responsibility delegated to the states or Länder by the constitution in the USA and in Germany. The USA and Germany are similar in that both must cope with many individual differences in the ways that state education agencies function. With regard to the integration of students with disabilities, for example, this means that some state governments and educational agencies play a more active and supportive role whereas others are more conservative. Different forms of integration exist in different states or Länder.

A range of placement options for students with disabilities providing for a spectrum of educational options in the least restrictive environment (LRE) exists in both countries. Murray-Seegert (1992) noted that "integration programs in Germany are as conceptually advanced as any in

the world." (p. 38) The focus of the integration debate in the USA and those Länder in Germany that support integration is the individual child with a disability. Both countries are also similar in that the educational needs of a child with a disability are not the only criteria for program selection or development. Other variables taken into consideration are the effects of integration on classmates without disabilities and the costs of integration, especially of additional services and equipment that need to be provided.

Both countries are moving toward more integration. This trend toward increasing integration has sparked controversy among special educators about the desirable degree of integration (Block, 1994; Hübner/Murray-Seegert vs. Ellger-Rüttgardt). Major issues are (a) whether special needs of all children can be met in regular education settings, (b) what services are necessary to meet these needs, (c) what effects does integration have on students with and without disabilities, and (d) how can money and other resources for integration be generated.

The origins of integration are the same in the USA and Germany. At the beginning of the integration movement were the efforts of parents who, with the help of supportive professionals and politicians, demanded that their children be educated together with peers without disabilities.

Parents and other supporters of the idea of integration organized themselves in advocacy groups (Fuchs & Fuchs, 1994; Murray-Seegert, 1992). These advocacy groups have played a critical role in bringing about the integration movement and are very active in the present controversy (Fuchs & Fuchs, 1994; Stein, 1994a). The activities of advocacy groups and state control of education are interrelated variables. As a consequence of this interrelatedness, advocacy groups promoting integration have a strong influence on state educational policies in some states but not in others (Fuchs & Fuchs, 1994).

The influence of parents on what educational services their children will receive is another aspect that is similar in both countries. In general, children of parents who are familiar with the law or school code and the options of integrative educational services and who are not afraid to demand that administrators make those services available are more likely to be educated in integrative settings than children of parents with less knowledge and skills (Hübner, 1996).

Although the specific mechanisms are different, funding plays an important role with regard to diagnosis of disabilities and placement decisions in both countries. One incentive for schools to identify students with special needs is funds earmarked for special support of such students.

Schools sometimes label more students as having special needs in order to receive additional funds and resources (Hübner, 1996). Financial policies were criticized as one of several causes leading to misplacement of students with disabilities in the mainstream (DePaepe, 1984; Loovis, 1986; personal communication with principals and special educators in Berlin).

Several integration-related problems are similar in both countries (Doll-Tepper et al., 1992). Among these are (a) administrative problems such as class size, planning time, and number of personnel; (b) attitude problems of administrators, teachers, peers, and parents; and (c) qualification problems of teachers. In both countries, elementary physical education is frequently taught by teachers not certified in physical education. Certified physical educators often have no training in special education.

Both countries are also similar in that the integration debate is primarily a debate of special educators. Regular educators, whose professional roles are very much affected by the outcomes of this debate, do not assume ownership of this problem. Only very few regular educators participate in this discussion. It seems that regular educators think they are not responsible for students with disabilities because there are special educators who do this job (Giangreco, Dennis,

Cloninger, Edelman, & Schattman, 1993). Regular physical educators in the USA and Germany are similar in that they generally do not have extensive pre-service training in special education or adapted physical education.

Conclusions about Schooling in the USA and Germany

A comparison of the USA and German educational reveals many similarities and differences. The integration of students with disabilities in regular classrooms is a prominent issue in both countries. The topic warrants cross-cultural research to identify similarities and differences that may aid policy development.

The integration movement started in both countries at the grass roots level, with parents demanding equal rights for their children with disabilities. From there, however, because of socio-cultural differences (e.g., the civil rights movement for desegregation did not exist in Germany) and different educational structures and premises, the integration movements took different routes in both countries. The development in the USA, where the education of children with disabilities in regular classes whenever possible, was mandated by federal law requiring schools to change their policies was characterized as a top-down approach (Doll-Tepper et al., 1992). The development in Germany, in contrast, where local and regional demands eventually resulted in recommendations at the federal level,

was described as a bottom-up approach. Using terminology and concepts by Hersey and Blanchard (1993), the two processes of change can be identified also as a directive change cycle (USA) and a participative change cycle (Germany).

Convergence theory suggests that the products of the change processes in the two countries will be very similar (Smith & Bond, 1993). On the other hand, the integration of students with disabilities is a multifaceted phenomenon, which takes different forms in different places depending on the respective socio-cultural circumstances. For example, studies about attitudes of physical educators toward integration revealed generally positive attitudes in the USA (Rizzo, 1984; Rizzo & Vispoel, 1991) and in Germany (Doll-Tepner et al., 1994). However, while attitudes of teachers in the USA tend to be more favorable toward including students with learning disabilities than students with physical disabilities, this relationship is reversed in Germany.

Possible reasons for this difference include (a) differences in the definitions of the term learning disabilities, (b) differences in the societal status of individuals with intellectual disabilities, (c) differences in emphasis of academic and social goals in public schools, (d) differences in the number of students with learning disabilities who are educated in regular classrooms, (e)

differences in teacher training programs, and (f) differences in the structure of the schooling systems (i.e., horizontal vs. vertical structure).

The school systems in the USA and Germany provide two different sets of conditions for the integration of students with disabilities in regular classes. Elementary, secondary, and higher education in the USA are, theoretically, a horizontally structured system. Unlike in Germany, all students attend the comprehensive high school after completing the elementary school. Social development of students and integration of a diverse student population are two main goals of secondary education in the USA. Compared to the selective educational system in Germany, this comprehensive and integrative system was, with regard to its structure, well suited for the integration of another minority, that is, students with disabilities.

German elementary education is comprehensive in nature too and, therefore, capable of including students with disabilities. At the secondary level, however, there is an inherent conflict between the present vertical structure of homogeneous student grouping based on academic achievement and integration. The different high school diplomas determine to a large extent future educational opportunities. For example, only students who graduate from the Gymnasium are eligible to apply to universities. Other postsecondary

vocational education programs require at least the Realschulabschluß (diploma from the Realschule). The fact that high school diplomas qualify students, in hierarchical order, for further educational opportunities requires the schools to enforce specific academic standards. These standards, by their very nature, do not allow the accommodation of different goals and objectives based on individual strengths and weaknesses.

However, this traditional selective system has been facing several challenges and controversies. Criticism of the early selection process and lack of permeability of the hierarchical system led to the establishment of the Gesamtschule (comprehensive school) in most German Länder. An increasingly multicultural student population (Schnur & Hopes, 1995) and growing demands to admit students with disabilities into regular schools (Hübner, 1996) are further developments challenging the concept of homogeneous student grouping. Because of the selective character and structure of the German school system, integration is still largely limited to elementary education. The pressure on secondary education to include students with disabilities will continue to grow with increasing numbers of students with disabilities being included in elementary schools. This development poses a challenge to the fundamental structure of the school system in Germany (Hübner, 1996). Special education in Germany,

therefore, is in a state of transition (Ellger-Rüttgardt, 1995).

Two socio-cultural and educational issues are, on a macro level, similar in the USA and Germany. Schools in both countries are faced with the challenges to integrate student populations that are quite diverse with regard to cultural background, skills, and abilities and, at the same time, to group students to prepare them for higher education or vocational training. In the USA, the question has been raised repeatedly if the comprehensive high school can satisfactorily accomplish this task (Gutek, 1992). Tracking systems based on academic performance exist within the comprehensive high school. The ongoing controversy about school vouchers that parents could apply to private education shows that a significant number of parents and politicians in the USA are supporting free choice between the comprehensive public high school and selective private schools. In Germany, there has been a trend toward more comprehensiveness and permeability in a selective schooling system. Also, recently it has been questioned if integration can work at the secondary level if the Gesamtschule is the only comprehensive school making integration possible within an otherwise selective secondary school system (Hübner, 1996). It seems that both countries are grappling with the same issue from different starting points.

The different approaches taken to integration in the USA and Germany both have advantages and disadvantages (Hersey & Blanchard, 1993; Hord et al., 1987). It can be expected that the bottom-up approach, starting with one teacher or a small group of teachers and spreading out by means of persuading and convincing others, has the advantage of commitment to the innovation and the disadvantage of being a slow process. If an innovation or reform is introduced and decreed by higher administrative levels, change will occur more rapidly, but the change ordered from the top will not be as easily accepted by those who have to implement it in their daily work. These assumptions raise the question about specific consequences of the two approaches, in conjunction with other socio-cultural and structural differences, for the teachers involved.

CHAPTER III

METHOD

The purpose of this study was to investigate concerns of physical educators about integration of students with disabilities in regular physical education classes and to compare the concerns of teachers in two countries. Comparative education is a diverse and complex discipline. Therefore, this study will be located within this discipline at the beginning of the chapter. Following a brief outline of comparative education, the method that guided this investigation is discussed in the following sections: Design of the Study, Participants, Instrument, Pilot Study, Procedure, and Analysis of the Data.

Comparative Education

In this section, the method that was used in this comparative study will be explained and discussed in the context of comparative education.

Comparative Education

The present investigation is, by purpose and design, a study within the area of comparative education. Reflecting the differentiation between regular and special education, it could be argued that this study is, more specifically, a study in the emerging discipline of comparative adapted

physical activity. This is based on the idea that adapted physical activity policies and programs in one's own country can be improved by analyzing, evaluating, and comparing approaches to similar issues in other countries (Klauer & Mitter, 1987). However the integration of students with disabilities in regular education is an issue for regular education just as it is an issue for special education. This issue was treated here as a subject within the area of comparative education.

Purposes of Comparative Education

According to Halls (1990a, pp.12-13), "a fundamental assertion of comparative study is that we can truly comprehend ourselves only in the context of a secure knowledge of other societies." The essential concern of comparative education is the change of behavior within a culture (Robinsohn, 1973). One of a variety of factors that have stimulated comparative studies in education are pedagogical problems that often have societal ramifications or vice versa. The subject of this investigation, the integration of students with disabilities in regular classes, is one such pedagogical and societal problem. It is of special interest to comparative education because it follows a common trend of value orientation of economically advanced Western countries.

Three main tasks of comparative education are (a) to increase knowledge, (b) to inform policy and practice, and (c) to contribute to international understanding (Klauer & Mitter, 1987). The main responsibility of these three tasks is the expansion of the knowledge base although, in reality, it is often difficult to separate these functions.

There are two general approaches to increasing knowledge through comparative education (Halls, 1990a; Klauer & Mitter, 1987).

1. The macro approach (Gesamtanalyse) is used to examine educational systems of a country as a whole including their socio-cultural determinants. This approach has dominated research in the first half of this century.
2. The micro approach (Problemansatz) is more modest in scope. This approach has grown out of the realization that the macro approach cannot be based on empirical analysis. The focus of research needs to be limited in order to utilize detailed empirical methods. The micro approach, because of its limited scope, is also more likely to influence policy and practice than the macro approach. The micro approach has dominated comparative research since the 1960s.

Approaches, Methods, and Theories

Different authors posit different taxonomies to describe presuppositional and empirical approaches being used in comparative education (e.g., Halls, 1990b; Klauer & Mitter,

1987; Thomas, 1990). Klauer and Mitter (1987) distinguish three methodological approaches to comparative education. Of German origin is the integral or holistic approach (ganzheitlicher Ansatz), which investigates a problem in its entirety. This approach is based on Wilhelm Dilthey's hermeneutic method of understanding (Verstehen) of documents through interpretation. Qualitative approaches such as Edmund Husserl's phenomenology and the anthropological/sociological method of ethnography both rely on this approach to identifying and understanding meaning (Verstehen).

The opposite approach is the analytic-empirical method that has evolved in the 1970s, especially in the USA, from the empirical social sciences (Klauer & Mitter, 1987). Proponents of this approach criticize the methodological eclecticism of comparative education. Instead of understanding of meaning (Verstehen), this approach focuses on identifying of facts and trends using quantitative methods. According to Halls (1990), the social sciences approach in comparative education will (a) identify variables, (b) describe relationships between the variables for each country, (c) compare these relationships cross-nationally, and (d) explain the findings and conclude with generalizations.

Other approaches described by Halls (1990) are the historico-philosophical approach, the national character approach, the culturalist approach, the contextual approach, the problem solving approach, and the economic approach. These approaches are not exclusive but rather overlap (Thomas, 1990). No one of these approaches or methods is characteristic of comparative education. Rather, several of these approaches can be and are being combined in comparative studies. The principal criterion for choosing an approach or method is that they must match the purpose of the study. Further, because not all variables can be measured and controlled by quantitative techniques, "qualitative analysis must always accompany the quantitative approach" (Halls, 1990b, p. 58)

The same statement applies to theories in comparative education. Although structural-functionalism has been the dominant theory over the past three decades (Halls, 1990b), interpretive or interactionist theories have recently become increasingly popular among researchers (Broadfoot, 1990; Thomas, 1990). In summary, "comparative education is the product of many disciplines and can lay claim to no single conceptual or methodological tool that distinguishes it clearly from other sub-areas in education or the applied social sciences" (Theisen & Adams, 1990, p. 277).

Problems in Comparative Research

One factor that influences all comparative research is the fact that every researcher belongs to a culture that has an impact on how the researcher perceives (Theisen & Adams, 1990). Consequently, the same phenomenon or issue may be perceived differently depending upon the cultural background of the researcher. The investigator of this study is not completely unaffected by this problem of cultural bias.

However, in addition to his native German cultural perspective, the investigator has, to a certain extent, acquired insight into the culture of his host country USA by having lived, studied, and worked there for several years. This process was described by Schutz (1964, pp. 97-98):

"Jumping from the stalls to the stage, so to speak, the former onlooker becomes a member of the cast, enters as a partner into social relations with his co-actors, and participates henceforth in the action in progress." While the stranger

may be willing and able to share the present and the future with the approached group in vivid and immediate experience; under all circumstances, however, he remains excluded from such experiences of its past. Seen from the point of view of the approached group, he is a man without history (p. 97).

Nevertheless, by living in the new culture,

the approaching stranger, however, becomes aware of the fact that an important element of his 'thinking as usual,' namely, his ideas of the foreign group, its cultural pattern, and its way of life, do not stand the

test of vivid experience and social interaction (pp. 98-99).

Finally, after having lived in the new culture for an extended period of time, the stranger can adopt the new perceptual perspective: "Only after having thus collected a certain knowledge of the interpretive function of the new cultural pattern may the stranger start to adopt it as the scheme of his own expression" (p. 100).

A second problem of comparative analysis is the comparability problem. "The primary task of a comparative researcher is to identify an acceptable level of conceptual equivalence across cases regarding the idea, institution, or process being studied" (Theisen & Adams, 1990, p. 279). Regarding the measurement of the phenomenon, it is important to ensure that the measuring techniques do not distort the meaning of what is being measured. Analyzing differences in how the same concept (e.g., the integration of students with disabilities in regular classrooms) is being perceived and dealt with in two cultural settings has been called emic analysis (Berry, 1969, 1989). When attempting to examine universal trends through an etic analysis (e.g., similarities in how integration is perceived and dealt with in two countries), it is important that this investigation is based on emic analyses (i.e., a derived etic analysis) and not on understanding that is based in culture and being used to

investigate a similar concept in another culture (i.e., an imposed etic analysis).

The comparability problem, difficulties involved in obtaining insight knowledge of a different educational system, and significant material resources required to do comparative research are probably reasons why there are relatively few straight comparisons between countries (Halls, 1990b). Also, little comparative research has been done in individual subject areas. This study addresses these two research needs in comparative education.

Design of the Study

The design of the study can be described as in-depth qualitative cross-country comparison related to a specific issue (Halls, 1990) and using a problem-centered approach (Klauer & Mitter, 1987; Thomas, 1990). The intent was to conduct a comparison of two countries at the micro level. A qualitative social sciences approach was used in that the researcher (a) identified variables, (b) described relationships between the variables for each country, (c) compared these relationships cross-nationally, (d) explained the findings, and (e) concluded with generalizations (Halls, 1990). Data were analyzed using grounded theory procedures (Strauss & Corbin, 1990) and interpreted within the framework of Concerns Based Adoption Model (CBAM) (Hall et al., 1973), and a descriptive analysis of the educational systems of the

USA and Germany. The study followed an interpretive design (Thomas, 1990).

Participants

Participants were 30 physical education teachers who had students with disabilities in their regular physical education elementary school classes. Sixteen participants were selected from Berlin, Germany, and 14 participants were selected from the Dallas-Fort Worth-Denton (DFW) metroplex area, USA.

Purposive sampling (i.e., the use of criteria) guided the selection of participants. Two criteria were set: diversity of personal background and diversity in work environment. Diversity of personal background was sought with regard to the following demographic variables: (a) gender, (b) age, (c) years of teaching physical education, (d) years of teaching integrative physical education, and (e) formal preparation in adapted physical activity. These variables had been identified as important in research on teachers' concerns (Newlove & Hall, 1976) and teacher attitudes toward inclusion (Rizzo & Vispoel, 1991; Doll-Tepner et al., 1994). Diversity of work environment was sought with regard to the following variables: (a) class size, (b) ratio of students with and without disabilities, (c) availability of support by paraprofessionals or a second

teacher, and (d) type of school district (Dallas-Fort Worth-Denton) or borough (Berlin).

The investigator recruited participants until diversity of the sample was achieved with regard to the selected variables. Participants were recruited in different ways: school district administrative offices, principals, adapted physical educators, participants themselves, other teachers, and special education and physical education professors.

Potential participants were approached following personal or third party contacts to schools and teachers. The investigator (a) telephoned possible participants; (b) introduced himself; (c) gave information about the investigation, its purpose, and the participant's involvement; and (d) asked the teachers if they would be willing to participate in the study.

In order to protect the rights of the participants, the investigator adhered to the following procedures:

1. Data were collected only after approval was obtained for the study from the Human Subjects Review Committee of the Texas Woman's University and the individual participant.
2. Respondents were informed of their rights in writing.
3. Respondents were informed that they could withdraw from the study at any point.
4. Participants' identities were kept anonymous.

Instruments

Two instruments were developed: (a) an interview guide and (b) a demographic questionnaire. Copies of these instruments appear in the appendix.

A semistandardized fokussiertes Interview (focused interview) (Lamnek, 1989) was chosen as the major data collection tool. This interview format combines open-ended questions with a guide of questions or probes to ensure that all interviews cover the same areas relevant to the study. This technique allows the exploration of concerns as they are perceived by the interviewees within certain contexts. At the same time, the interview guide permits the interviewer to structure the interview to ensure that certain aspects are covered (e.g., the stages of concerns as described by CBAM and personal and contextual variables of interest to the investigation). The interview technique required both directive and nondirective questioning (Hammersley & Atkinson, 1983). Nondirective questions were used to invite the participant to talk about broad areas (e.g., What do you like about teaching students with disabilities in your classes?). Nondirective questions were used also to probe further into responses of the participant. Directive questions were used to test out hypotheses stemming from literature or arising from analysis of previous interviews

(e.g., What kind of support do you have to teach students with disabilities in your classes?).

The questions were developed by the investigator. Based on a review of literature and knowledge gained during his teacher training and teaching experience in Germany and the USA, the investigator first identified potential concerns, personal variables, and contextual variables, which served as the underlying structure for development of the interview. The investigator next formulated the specific questions. Validity of the instrument was addressed by having selected individuals from the USA and Germany review the interview guide. The reviewers were asked to check that the questions (a) were appropriate to investigate concerns as well as personal and contextual variables and (b) were worded in a way that teachers would understand them.

The interview guide was organized in three parts. The first part consisted of questions exploring contextual variables (e.g., Tell me about a typical work day. What does your schedule look like? How large are your classes? What kind of assistance and support do you have?) Besides exploring the teachers' working conditions, these questions were designed to break the ice between investigator and participant and set the stage for the remaining interview.

The questions in the second part of the interview shifted the focus from the work environment to the

individual. Personal variables were explored by questions such as What physical education goals are most important to you? and How did you have to change your teaching to accommodate the kids with disabilities in your class?

The questions in the third part of the interview were designed to identify the teachers' concerns about integration. First, nondirective questions were used to identify main concerns without directing the teachers' attention in a certain way (Can you remember the first day you had a kid with a disability in your class and how you felt about it? How have these feelings changed over time? What do you like/not like about having kids with disabilities in your classes? When thinking about working with kids with disabilities in your regular physical education class, what [other] concerns come to mind?) After these nondirective questions were answered, directive questions were posed to tap into different stages of concerns as specified by CBAM (e.g., What kind of training do you think is needed to prepare teachers for inclusion? How does mainstreaming affect your students?).

A questionnaire to collect demographic data (e.g., age, education, professional experience) complemented the interview. The questionnaire was developed to obtain data that can be collected easier and faster using a questionnaire rather than an interview. The questionnaire also ensured

that certain demographic data (personal variables) were collected from all participants. Validity of the questionnaire was addressed by asking selected individuals in the USA and Germany to review its contents.

Both instruments were developed in English and German. The investigator spoke both languages fluently but relied on a pilot study to check the suitability of terminology and sentence structure.

Pilot Study

After the instruments were developed, they were tested in a pilot study with 4 participants. All participants were elementary teachers who taught students with disabilities in their physical education classes. Two teachers were interviewed in the Dallas-Fort Worth-Denton metroplex area. These two teachers were recommended to the investigator by an adapted physical educator who worked with them and said they would be willing to volunteer for the pilot study. The investigator contacted them by telephone and subsequently conducted interviews.

Using the opportunity of a visit of his hometown during a Christmas break, the investigator also interviewed 2 German teachers. After receiving their phone numbers from a university professor he knew, the investigator contacted them by telephone and subsequently conducted the interviews. He

had met both teachers before but did not know them personally.

The purpose of these pilot interviews was to provide the investigator with practice using the interview guide in two countries with two different languages and to test the interview questions and the demographic questionnaire. The interviews were recorded, transcribed, and analyzed to determine needed changes.

As a consequence of the pilot study, a few probes were added to the interview guide and a few questions were rephrased. The feedback of the teachers about the questionnaire was used to make the questions clearer and easier to fill out. Neither the interview guide or the questionnaire, however, were changed substantially.

It should be noted that the pilot study was not conducted to finalize the format of the interview guide. Rather, the goal was to keep the interview guide flexible throughout the study to allow the investigator to incorporate emerging themes as the study progressed (Bogdan & Biklen, 1982; Taylor & Bogdan, 1984). This principle of data collection guided by emerging themes was based on the constant comparison technique that is characteristic of qualitative research (Strauss & Corbin, 1990).

Procedure

The interviews were conducted at places of the participants' choice to insure their comfort. In all cases, this was a quiet place where no one would interrupt the interview. The interviews were conducted in teacher rooms adjacent to gyms, classrooms, teachers' lounge, a school yard, an university library, a public library, teachers' homes, and a restaurant.

Before the interview, the participants were asked to sign a consent form and informed that they could terminate the interview at any time. Interviews lasted between 30 and 90 min. A tape recorder was used so that the interview could be transcribed at a later date. Participants were sent a copy of their interview transcript and asked to make corrections or additions if deemed necessary.

After the interview, the investigator took field notes documenting context-specific impressions and information relevant to the analysis that might be forgotten with time and not become evident by listening to the tapes. The field notes also contained observations of the work environment of the participants if the interviews were conducted at schools. In general, the field notes contained observations that seemed important to the investigator. It was noted, for example, if a participant seemed to be nervous or embarrassed during the interview, if the time for the interview was very

limited from the outset, or if a participant gave the impression that he/she wanted to get the interview done as fast as possible.

Analysis of the Data

In the process of the transcribing, coding, and analyzing the interviews, the investigator listened to each interview two or three times and read each transcript at least twice in its entirety. Through this intensive immersion in the data, the investigator developed a high familiarity with each interview.

In order to achieve an analytical reduction of the data (Huberman & Miles, 1994), interviews were analyzed using grounded theory procedures and techniques (Strauss & Corbin, 1990). The coding process involved two steps for each interview. The first step was to identify and code themes chronologically (open coding). The second step was to analyze data for relationships between the themes (axial coding). This process resulted in a grouping of themes using the categories of concerns, personal variables, and contextual variables and subcategories within these categories as well as establishing relationships between these categories. This step also included identifying the conditions that gave rise to themes (e.g., concerns), their contexts, strategies by which they were handled, and the consequences of those strategies. The relationships between

themes and categories were analyzed in two dimensions: intraindividual and interindividual.

The interviews with American teachers were conducted and analyzed first. Because teachers' concerns were the main focus of this study, the analysis started with the concerns that were expressed by the participants. During the analysis of the concerns, it became obvious that concerns could not be adequately analyzed without referring to underlying personal and contextual variables. For analytical purposes, these personal and contextual variables were also described separately after the analysis of the concerns.

The subsequent preliminary analysis of the German interviews during the transcribing process produced many themes that were similar to the themes revealed by the analysis of the American interviews. Therefore, the findings of the analysis of the German interviews were incorporated into the structure of themes that emerged during the analysis of the American interviews. Similarities and differences were pointed out within this structure.

CHAPTER IV

RESULTS

The purpose of this study was to investigate concerns of physical educators about integration of students with disabilities in regular physical education classes and to compare the concerns of teachers in two countries. The results are described in several sections. After a section about the personal involvement of the investigator in the data collection, the demographic information about the USA and German samples is described. Demographic information is followed by three sections. First, the comparison of school systems in Texas and Berlin that was begun in Chapter 2 is completed using information that was gained in the interviews and that was not available in the literature. Because the Concerns Based Adoption Model (CBAM) (Hall et al., 1973) served as the conceptual framework for this study, the concerns of the participants about integration are described next. Last, personal and contextual variables that seemed to influence teachers concerns are presented as they emerged from open and axial coding of the interviews.

Personal Reflections

In qualitative research, the researcher is the data collection tool. In this function, the researcher is

personally involved in the data gathering process. The way that the researcher asks the questions, when he/she uses which probes, thereby leading the conversation, influences the data that will be recorded and analyzed. Because of this own personal involvement in the collecting of data, I will reflect on my experience in the interview process in this section.

One of the things that influenced my interviewing was the fact that I enjoyed meeting and talking with the teachers very much. At the beginning, I was a little nervous before interviewing persons who were complete strangers to me. After the first interviews, however, I felt increasingly comfortable and looked forward to each new interview. As a consequence of this process, my interview style changed also. While I tried to follow the interview guide closely at the beginning, which gave the interviews a somewhat formal and standardized character, the subsequent interviews became increasingly conversational.

Especially in Berlin, where many teachers invited me to their houses or stayed after school to have more time for the interviews, I felt more at ease, and the interviews were more conversational in nature than in the DFW area. The interviews in Berlin also lasted significantly longer than in the DFW area because many teachers did not set a time limit for the interview. In the DFW area, in contrast, most

interviews were done during the teachers' conference period, which limited the time available to 30 to 60 min. As a consequence of these time constraints, I had to stay closer with the interview guide and use fewer probes (e.g., "can you tell me more about this?") than in Berlin.

Through the interview process, I tried to guide the interviews as little as possible, other than asking the nondirective questions of the interview guide; I also tried not to ask more directive questions than necessary. I tried to get the interviewees to tell their story. Even though the main themes were repeated after several interviews, each of the stories was different, made unique by different constellations of contextual and personal variables. Hearing these different stories and perspectives was personally very rewarding. I learned something new from every teacher I interviewed. Although I had my own beliefs and opinion concerning integration, I developed empathy for all the teachers I interviewed. I tried to put myself in the teachers' shoes and understand very different situations and ways of perceiving these situations. During the interviews I felt admiration for some teachers and understanding and sympathy for others.

Each interview increased my understanding of teachers' concerns and consequently influenced the following interviews. In subsequent interviews, I tried to further

explore, clarify, or confirm issues that were mentioned in previous interviews.

After conducting 30 interviews in the USA and Germany, I now have a different understanding of (integrative) physical education than before the interviews. My knowledge of physical education both in Germany and the USA has broadened. Whenever I think about physical education, I think about physical education from two different perspectives.

Demographic Data

Participants were 30 regular elementary physical education teachers who had students with disabilities in their classes. Fourteen participants came from the Dallas/Fort Worth/Denton (DFW) metroplex area, USA, and 16 came from Berlin, Germany. The demographic make up of the two samples is described separately for each country.

DFW Sample

The 14 teachers who participated in the study taught in nine school districts in the DFW metroplex area in North Texas. Twelve of the interviewed elementary physical education teachers were women; 2 were men. The ages of the participants ranged from 27 to 47 years, $M = 36$, $SD = 6.79$. The teachers had taught elementary physical education between 1 and 18 years, $M = 7$, $SD = 4.65$. They had taught children with disabilities in their regular physical education classes between 1 and 13 years, $M = 6.04$, $SD = 3.7$. Their overall

teaching experience ranged from 1 to 22 years, $\bar{M} = 10.36$, $SD = 6.07$. Thirteen participants had studied physical education as a major, one participant as a minor. Nine interviewees held a bachelor's degree, 3 a master's degree, and 2 a doctorate.

Berlin Sample

The 16 teachers who participated in the study taught in eight Berlin city boroughs. Nine of the interviewed elementary physical education teachers were women; 7 were men. The ages of the participants ranged from 30 to 55 years, $\bar{M} = 41.14$, $SD = 7.83$. The teachers had taught elementary physical education between 3 and 35 years, $\bar{M} = 11.68$, $SD = 9.39$. They had taught children with disabilities in their regular physical education classes between 1 and 20 years, $\bar{M} = 6.11$, $SD = 4.76$. Their overall teaching experience ranged from 3 to 35 years, $\bar{M} = 14.54$, $SD = 9.88$. Eleven participants had studied physical education. All participants had the 2. Staatsexamen (equivalent of a Master's degree and teacher certification). The demographics of the two samples are compared in Table 1.

Table 1

Participant Demographics

Demographics	<u>Sample</u>	
	Berlin	DFW
Gender		
Female (n)	9	12
Male (n)	7	2
Age		
Range	30-55	27-47
<u>M</u>	41.14	36.00
<u>SD</u>	7.83	6.79
Years Teaching Elementary PE		
Range	3-35	1-18
<u>M</u>	11.68	7.00
<u>SD</u>	9.39	4.65
Years Teaching Intergrative Classes		
Range	1-20	1-13
<u>M</u>	6.11	6.04
<u>SD</u>	4.76	3.70
Total years teaching		
Range	3-35	1-22
<u>M</u>	14.54	10.36

Integrative Physical Education in the USA and Germany

The school systems of the USA and Germany were described as part of the review of literature in Chapter 2. However, much basic information about general and specific working conditions affecting teachers who have students with disabilities in their physical education classes was not available in the literature. This section of the chapter is based therefore on data gained from interviews with teachers, from conversations with principals, and from observations of physical education classes.

The purpose of this chapter is to extend and complete the framework for comparing concerns that was established in Chapter 2. Within this framework, concerns, personal variables, and contextual variables are analyzed and compared across the two countries under the following headings: General Conditions; Conditions Specific to Physical Education; and Physical Education Goals, Content, and Teaching Methods.

General Conditions

Several general conditions affect concerns. These conditions are not specific to physical education and affect teachers in each country in a similar way.

Input of Teachers Concerning Schedules and Teaching Assignments

An important difference between teachers in the DFW metroplex area and Berlin is the amount of input teachers have on the subject areas they teach, the grade levels and classes assigned to them, and the hours they work. While all participants in the USA taught full-time physical education only, the German sample was more diverse.

German teachers have more input regarding their work than teachers in the USA. In Berlin schools, teachers determine, within certain limits, how many hours they work per week. While all teachers in the USA sample worked full-time, only 9 out of 16 teachers in the Berlin sample worked full-time.

Teachers in Berlin also indicate their teaching preferences for the next school year regarding which grade level they want to teach, which subject area, if they want to teach an integrative class and, if yes, with whom. This is done as a wish list at the end of the school year. Before writing their preferences on the wish list, teachers coordinate their interests with those of colleagues as much as possible. The principals who are responsible for making the schedules are usually able to accommodate the preferences of the teachers in "more than 90% of the requests" according to several interviewees.

A second factor contributes to the more diverse picture of the German sample. Because classes are not combined for physical education in Germany, this subject is usually taught by several teachers at the same school. In most cases, these teachers are trained physical educators. They teach either full-time physical education, or they are a homeroom teacher and teach physical education in their class. Sometimes they also teach swimming, which is mandatory in the third grade, and physical education in another class where they are not the homeroom teacher. In some cases, physical education is taught by homeroom teachers who did not receive preservice training in physical education.

As a consequence of this greater flexibility in Berlin schools, only 2 interviewees taught full-time physical education. The other 14 teachers in the sample taught other subjects in addition to physical education, which means that the teachers taught between 1 and 27 hr (45 min each, with 26.5 hr being full-time) physical education per week as compared to about 30 hr (50 min each) taught by teachers in the USA.

The greater flexibility of German teachers regarding their general working conditions is also reflected in the organization of their daily workdays. In Germany, teachers have to be at the campus only for the classes they teach, the times when they are scheduled to supervise students in the

school yard during breaks between classes, and for faculty conferences. Teachers are allowed to make their own decisions about when to do planning, have lunch, etc. They do not have to come in at a certain time in the morning (usually between 7:30 and 7:45) and stay until a certain time in the afternoon (around 3 o'clock) as do their colleagues in the DFW sample. As a consequence of the varying teaching assignments and the different number of hours teachers work per week (the numbers ranged from 12 to 27 hr in this sample), the workdays of a week vary a lot for each teacher as well as between teachers.

The workdays of physical education teachers in the USA are much more uniform than those of their German colleagues. The American teacher has to report to school between 7:30 and 8:00 a.m. and teaches physical education until his or her workday is over between 2:30 and 3:30 p.m. During that time the teacher instructs between 6 and 12 classes depending on the length of the periods (25 or 50 min). Included in this time is one conference period of between 40 and 60 min during which the teacher may plan lessons and a lunch break of usually 30 to 40 min. After the last period, the teachers usually have to stay in the building until the school day officially ends.

The most important difference regarding the input of teachers is the question whether they will have students with

disabilities in their classes or not. The situation for the teachers in the DFW sample is rather simple. Because they teach all the students of their school in physical education, they also teach all the students with disabilities who are included in regular classes. Moreover, several American teachers also instruct students with more severe disabilities who are in self-contained classrooms except for physical education. Although some teachers said that they are asked before an IEP meeting about their opinion regarding placement for a certain student, the teachers interviewed in the USA generally said that they did not have any choice whether they want to teach students with disabilities or not.

Although the school code in Berlin, as in the USA, does not give teachers the choice to teach students with disabilities in their regular classes or not, the actual situation in Berlin is quite different from that in the DFW metroplex area. As was pointed out to the investigator by several principals, assistant principals, and teachers in Berlin, the decision whether to integrate students with disabilities in regular classes is actually made by the principal, who is always part of the faculty with a part-time teaching load. The integration decision is usually made after discussing the issue at faculty meetings. While faculty and principals of some schools favor the concept of integration, others do not. Consequently, almost half of the

elementary schools in Berlin do not have students with disabilities (see Chapter 2). However, as was pointed out in Chapter 2, the number of schools that integrate students with disabilities has been steadily growing.

Only very few integrative elementary schools in Berlin have students with disabilities in all their classes (one out of nine schools in the Berlin sample). Most schools have some integrative classes and some regular classes at each grade level. The procedures that allows German teachers to indicate their teaching preferences also provides teachers with the opportunity to choose if they want to teach an integrative class. As a consequence of these factors, it can be said that, in reality, teaching an integrative class is voluntary at Berlin schools. With the exception of one teacher who suggested that "soft pressure" ought to be applied to make hesitant teachers try to teach integrative classes, the Berlin teachers agreed on the importance of the voluntary character of integration. One teacher explained her philosophy, which is representative of the other teachers:

Something that I'm not convinced of won't work in the first place. That's for sure. I wouldn't do anything either of which I'm not convinced. And if I had to do it because someone is forcing it on me and I have no choice, I would do it in a way consistent with my own beliefs. So that would be condemned to fail from the beginning.

Referring to the same reasoning, another teacher called the voluntary character of integration "the intelligent solution."

Class Size and Scheduling

One variable with major ramifications for teachers' concerns in the USA is class size. In most of the schools in the DFW area where interviews were conducted, classes were combined for physical education. Depending on how many classes were combined, the class sizes varied between 50 and 100 students. Not surprisingly, class size was one of the major concerns mentioned by American teachers. Interviewees stated that the reason why classes are combined for physical education is to give classroom teachers time for their conference period. Only one teacher in the USA sample had small class sizes between 11 and 22 students. She teaches at an elementary school, and her small gym, which used to be part of the cafeteria but is now separated by a wall, cannot accommodate many more students. The two teachers who volunteered for the pilot interviews also had small class sizes of about 25 students with a gym of only about half the size of an average elementary school gym.

The fact that classes are often combined for physical education, based on the criterion of the gym size, indicates a rather low status of physical education within the canon of subject areas taught at elementary schools. One teacher

described the situation this way: "See, most PE people are the conference periods. And that's unfortunate, because a lot of time we become a dumping off ground, we're considered 'oh, they're going to PE.' But PE to me is one of the most important things." The problem of large class sizes is exacerbated in some schools. In several schools physical education, art, and music were the only subject areas where otherwise self-contained students were included in a regular class.

However, this scheduling practice of combining classes for physical education is not inevitable. The elementary school teacher who had small class sizes was the only teacher at whose school all teachers had their conference period at the same time, after school at 2:30. While this teacher can participate in ARDs and has done so in the past, many physical education teachers cannot attend ARDs for a reason explained by one teacher: "You know why I can't be there? Because they do them during their classroom teachers' conference time. Who is their conference time? Me. Yeah, and I'm teaching while they're having ARDs."

The nonparticipation of physical educators in ARDs is a feature that is shared by the American and the German samples. Unless the German physical education teacher is also the classroom teacher of the student, he or she does not participate in the IEP (Förderausschuß). However, one

difference between an IEP and a Förderausschuß is that the Individual Education Programs (IEP) developed by the Förderausschuß do not contain specific individualized goals and objectives for the subject areas.

Classes are not combined for physical education in Germany. Therefore, class sizes in physical education in Berlin are generally much smaller than those in the DFW area. Integrative classes in Berlin have only between 20 and 23 students. Physical education is not treated differently than other subject areas. If, for scheduling reasons, two classes have to share a gym without mobile separators they may be combined but will be taught by their respective teachers.

Elementary school students in Berlin have 3 hr of physical education per week, which is usually taught two times per week, 1 period of 45 min on one day and two consecutive class periods of physical education (90 min) on another day. The total physical education instruction time is therefore comparable between Berlin and Texas where teachers typically see a class three times a week for 50 min or every day for 25 min.

However, the number of students the teachers see in the gym on one day, differs significantly. Elementary physical education in Germany is frequently taught by the classroom teacher. Therefore, a German teacher may teach only his or her class of 25 to 30 students (23 if it is an integrative

class) in the gym on one day. Even if the teacher is not a classroom teacher and teaches five or six classes of physical education a day, he or she does not teach more than 150 to 180 students per day. Some physical educators in the Texas sample, on the other hand, if they teach 25-min periods, see all the students of the school every day, as many as 940, which was the highest case load in this sample. These high case loads caused concerns for some of the American teachers.

The number of students with disabilities that are included in one class varies in the Texas sample between one and nine. The number depends on how many students with disabilities are included in the different classes, how many classes are combined for physical education, and whether a group of students from a self-contained classroom is included or not. The combination of large class sizes and many students with disabilities in these large classes caused concerns for several teachers who were interviewed in the DFW area.

The number of students with disabilities who can be included in regular classes in Berlin is regulated by certain formulas (see Chapter 2). The formulas 20+3 and 15+5 specify the number of students with disabilities who can be integrated in one class. These formulas are the same for all subject areas. Therefore, an integrative class cannot have

more than three or five students with disabilities depending on the formula used.

Although classes are not combined for physical education in Berlin, other scheduling problems cause concerns for teachers. Because classes are not combined, it is difficult to schedule gym times especially if there is only one gym available as in most schools. Some gyms are equipped with dividers that are folded up in the ceiling and can be lowered, functioning as a wall dividing the gym into two or three separate gyms. Older gyms, however, do not have these dividers. In these cases, classes sometimes have to share a gym, and the teachers teach them together if they are in the gym for the same periods.

Type and Severity of Disabilities

Berlin and the DFW metropolitan area are comparable in that there are schools at both sites that have students with disabilities ranging from mild to severe and other schools with only students with mild disabilities. The students taught by the teachers interviewed represented almost all major disability categories in both the DFW and Berlin sites with the exception of blind and deaf students who were not taught by teachers in the Berlin sample.

Berlin and the DFW area are similar again in that it is the IEP committee (Förderausschuß), that decides about the placement of students with disabilities. In Berlin, however,

a placement in a regular class depends on the availability of financial and human resources.

The two areas are different in that schools in the DFW area are much more likely to have students with moderate and severe disabilities. While many schools in the DFW area have self-contained classrooms for students with severe disabilities, very few regular schools in Berlin have self-contained classrooms because most students with severe disabilities attend separate schools. Only one school in the Berlin sample integrated students with severe and profound disabilities.

Teachers and Personnel Support

Physical education in Berlin is taught either by a physical education teacher who is a Fachlehrer (certified in physical education) or by a classroom teacher (Klassenlehrer) who may or may not have studied physical education. While a survey revealed that 75% of elementary physical education teachers in Berlin have a degree in physical education (Doll-Tepner et al., 1994), only 67% of the teachers interviewed in Berlin had studied physical education. Principals try to have certified physical educators teach physical education in Grades 5 and 6 because the subject areas are getting more specialized in these higher grades. However, scheduling problems do not always make that possible.

All teachers in the DFW sample were certified physical educators. Moreover, all but one teacher had completed at least one adapted physical education class as part of their preservice teacher training program. These classes varied widely and prepared teachers for integration in differing degrees.

While adapted physical education classes are mandatory in most physical education teacher training programs in the USA, they are not required in most teacher training programs in Germany. Only one Berlin teacher had taken the equivalent of an adapted physical education class in her teacher training program.

In the 10 school districts represented in the DFW sample, physical education is not taught by classroom teachers. The teachers who teach physical education teach full-time physical education. Of the 14 teachers interviewed in the DFW area, 11 are the only physical teachers at their school who teach all physical education classes. Only three teachers have one colleague each who also teaches physical education. One of the three teachers team teaches with her colleague; the other two teach half the classes at their schools while their colleagues teach the other half. That means that many of the DFW teachers do not have other physical educators at their schools with whom they can share experiences, ideas, or problems. This was one reason why one

of the participants organized regular meetings of all elementary physical education teachers in her district.

In Berlin schools, physical education is taught not only by certified physical educators but also by classroom teachers who may or may not be certified. Therefore, teachers have several colleagues with whom they can talk about integrative physical education and other issues concerning physical education. The schools further have regular Fachkonferenzen, that is, meetings of all the teachers at one school who teach a certain subject, such as physical education, at which issues or problems in that subject area are discussed.

It was explained in Chapter 2 that integrative classes in Berlin receive additional teacher hours for each student with a disability. These additional teacher hours, together with the extra teacher hours all classes get for Teilungs- und Förderunterricht (team teaching in small groups), make it possible for an integrative class to be taught by two teachers for most of the time. It is up to these two, and sometimes three teachers, referred to as team by the teachers, to decide how they want to use the additional teacher hours, which periods and subject areas they want to team teach, and which subject areas can be taught by only one teacher. This decision usually depends on the type of disabilities in a particular class. Consequently, some of

the teachers interviewed teach physical education by themselves, whereas others teach in a team.

Only one teacher in the Texas sample team taught with her colleague. Most of the other teachers had a physical education paraprofessional who assisted them throughout the day. Depending on the type and severity of the disability, some students with disabilities also had a paraprofessional who accompanied them to physical education.

There are no physical education paraprofessionals in Germany, but, as in the USA, some students with disabilities have their individual paraprofessionals. Depending on the type and severity of the disability, the Förderausschuß (IEP) may determine that a student is eligible to receive support from a Schulhelfer (paraprofessional). This paraprofessional accompanies the child at school and assists the child and teacher or other children when needed. Whether a student who is eligible to receive support from a paraprofessional will actually receive that assistance depends on availability of funds and people who are willing to do this job for little salary (Arbeitskreis Neue Erziehung e.V., 1996).

All the school districts that were represented in the Texas sample employed adapted physical education itinerant teachers. However, the service they could provide to the regular physical educators varied greatly. The teachers who participated in the pilot interviews had adapted physical

educators present almost always when they had students with disabilities in their classes. They expressed few concerns because the adapted physical education specialists made sure that no problems arose. At the other end of the spectrum were three teachers from two school districts whose adapted physical educators could not serve all the schools appropriately. These regular physical educators reported that they saw their adapted physical education teachers once or twice during the whole school year only for a very brief time. The other teachers fell in between these two ends of the spectrum.

Educational policies concerning integration in Berlin did not differ to the extent reported by the American teachers because all Berlin schools are governed by one central educational administration (State Education Agency). In Germany, the job of itinerant adapted physical education specialist does not exist. Itinerant teachers do exist, but they are specialized in certain disabilities such as visual impairments and work only with students with this type of disability. However, as was pointed out by one teacher, the special educators who work in regular schools are a big help to teachers in the classroom. However, they are usually of little help in physical education, because they did not receive training in that area.

While the teachers in the DFW sample can, to varying extent, use adapted physical education specialists as a resource for information on how to integrate students with disabilities, teachers in Berlin have to rely on in-service training offered by the State Education Agency. Attending these inservices is voluntary and, often, has to be on the teachers' own time. While some in-service about integration in physical education is offered in Berlin, the teachers in the DFW sample reported that such specific in-service training is not offered in their school districts. Some American teachers mentioned, however, that the annual conventions of state, and national Alliance for Health, Physical Education, Recreation, and Dance offer a wide variety of workshops and presentations on integration in physical education. Furthermore, a large selection of books on that topic is available in both countries.

The situation in regard to the availability of in-service training about integration in physical education is similar in both countries. With the opportunities for in-service training offered by local and state education agencies being limited, it is left to the teachers' initiative to get in-service training. The opportunities are available in both countries and are used to different degrees by individual teachers.

Campus Orientation

A spectrum can be used to describe a school's orientation toward integration and physical education. Both in DFW and in Berlin there are schools (i.e., the principal and most of the faculty) that endorse and implement the concept of integration and schools that are less favorable toward the concept. In Berlin, some elementary schools have students with disabilities in all their classes and some schools have no students with disabilities. Most schools in the school districts represented in the DFW sample probably have students with disabilities. However, there are schools that favor the education of students with disabilities in regular classes more than others. Two teachers in the DFW sample stated, in effect, that some of their students with disabilities are in regular classes because the parents wanted it and not necessarily because the school supported the idea. One teacher explained that "in our school district a lot depends on what the parents say. Parents have a lot of power." When the interview touched on additional personnel who were hired to facilitate integration, the teacher described resentments against this hiring of additional personnel (although it did not become clear if she shared these sentiments):

Yeah, you have one party over here saying we want them in there and another party saying, hey stop, what's best

for them, it's too much money, our tax dollars are going to pay teachers to go out there just to watch them.

In another statement, this teacher indicated what other teachers think about that practice: "But one might argue 'hey we don't want, you know, monies to go for that one teacher to be hired. Give it to the teachers. Give them pay raises.'"

These sentiments are echoed by another teacher.

Speaking about one student in her class she said:

...and his parents were gonna sue [the school district] if they didn't, if he didn't, if he could not attend his home school, and if he did not have his one self-contained teacher. So they came to our school, they had a room all to themselves, it's one teacher one kid at the school, and of course it made a lot of teachers mad...

On the other hand, there are schools that favor integration. This teacher's school is an example:

...our school is growing very rapidly cause we're one of the top rated schools in this state and because we have an integration program, not only in PE, but we've got an integration program in the classrooms that is used as a model statewide. And so a lot of people are moving, not only for the academics, cause we are one of the top academics, but because of the integration program itself. So that makes a big plus for anybody wanting to come into the school system.

The principal of this school is a former special educator, which explains part of the school's favoring integration.

Two schools represented in the Berlin sample were so called Integration Schools long before the school code was changed to integrate students with disabilities in regular schools. As model schools, their integrative classes were

not only monitored by the state education agency but also received extra funds to support integration. That money could be used to buy materials suited for integrative classes, for example in physical education (e.g., so called psychomotor materials).

Statements by teachers in Berlin and in DFW also indicate that, at least at some schools, a campus philosophy favoring integration attracts like minded teachers and repulses teachers who do not support that concept. This process was drastically formulated by one teacher: "And if you don't want it [integration], you get out. And we have 5% turnover, which is unreal. I mean this staff has been together for a long time cause everybody is helping each other." The same process was described by a principal of one of the schools represented in the Berlin sample.

However, there are also schools who have supporters and skeptics of the integration concept within their faculty who respect each other and teach both integrative and regular classes. One teacher in the Berlin sample described this constellation at his school and reported that it worked very well.

Another campus orientation is that toward physical education. On one end of the spectrum are schools that put a high emphasis on physical education. One teacher in the Berlin sample, for instance, teaches at a school where some

classes receive more instruction in physical education than the normal 3 hr per week. This school is in the process of changing their program where some classes with emphasis in physical education have more hours of physical education than the regular 3 hr, whereas other classes do not. In the new program, each class has one movement period in addition to their weekly 3 hr of physical education. These movement education lessons emphasize perceptual motor activities, relaxation activities, concentration activities, fantasy journeys, etc. As a campus with an emphasis on physical education, this school was also able to buy psychomotor materials that can be used especially for the integration of students with disabilities.

At the other end of the spectrum are schools where physical education receives very little recognition and support by the building administration. One such school is described by this teacher:

If your principal thinks of the PE class as the dump off place for the academic teachers to go get their planning period, which I feel mine is basically, then you won't get a whole heck of a lot support. Now if you have principal who is just gun ho on PE then of course you get more support.

According to the interviews, most teachers in the two samples seemed to be content with the support they received from their principals.

Conditions Specific to Physical Education

In the previous section, general conditions at the district and the school level that have a direct impact on physical education were described and compared. In this section, conditions specific to physical education will be described and compared.

Facilities and Equipment

The physical education facilities differ greatly between schools. The differences between the countries do not seem to be bigger than the differences within each country. The gym sizes varied in DFW between a little bigger than a regular classroom to about basketball court size. Gyms in newer schools differed significantly from gyms in older schools. Most of the gyms in the DFW area did not have air conditioning. The lack of air conditioning, the rather small gym size for large groups between 50 and 100 students, and the hard concrete floor were major concerns voiced by one Texas teacher.

Many of the newer gyms in Berlin are large and can be separated into two or three parts by moving down dividers that are folded up in the ceiling. These dividers make it possible for two or three classes to use the gym at the same time. Sharing an older gym without dividers creates problems, especially if classes cannot be combined in one big group, a reality with which some Berlin teachers were faced.

The gyms in Texas usually have an equipment room for small equipment such as balls, cones, scooter boards, parachute, hockey sticks, etc. The lack of equipment was a concern to several teachers. Some of them took the initiative and either made their own equipment or raised funds on their own to purchase more equipment.

The concern about poor equipment or facilities was shared by the German teachers. One teacher, who used to be an instructor in a physical education teacher training program, called physical education the Stiefkind (step child) among the subject areas. Several German teachers were concerned about a lack of small equipment, although the situation varied greatly between schools. While a few schools were equipped with so called psychomotor materials (i.e., materials specifically designed to develop basic input systems and perceptual-motor skills), other schools did not have such equipment.

In addition to the small equipment, German gyms are equipped with large pieces of equipment that cannot be found in American gyms. This is an important difference between the two countries that affects the content of physical education, the pedagogy (i.e., teaching styles), and the integration of students with disabilities. This large equipment indicates the prominent role the German Turnen (apparatus gymnastics) plays in German schools. The large

equipment includes competitive apparatus gymnastics equipment such as parallel bars, uneven bars, horizontal bars, vault equipment, swinging rings, balance beams, and tumbling mats. However, the large equipment is not limited to apparatus gymnastics equipment. Gyms contain equipment such as climbing ropes that are hanging down from the ceiling, stationary climbing poles reaching from the ceiling down to the floor, trampolines, high jump mats, wooden boxes on casters (2 by 5 feet) with leather padded tops whose height can be changed by putting in or taking out middle parts, wide climbing ladders attached to the walls, wooden benches (15 feet long) that can be used for multiple purposes such as balance beams (they have a wide top part and a narrow bottom part) or as slides in combination with the climbing ladders, and various other pieces of large equipment. These pieces of equipment can be combined in many different ways offering possibilities ranging from formal and normed apparatus gymnastics (using parallel bars for formal apparatus gymnastics exercises) to exploratory movement education and learning in a physical education playground (e.g., using parallel bars to climb on it and to balance on it).

Physical Education Goals, Content, and Teaching Methods

How different is physical education in the DFW metroplex area and Berlin? Differences in the curriculum as well as organizational differences (e.g., class size, number of

physical educators at a school) were described previously. A comparison of the teachers' goals, content, and teaching methods completes the framework for the comparison of teachers' concerns about integration of students with disabilities in physical education.

Goals. The general goals mentioned by the teachers were very similar in both countries. The goal stated most often was to make physical education fun for the students and to motivate them to continue to stay physically active and to play sports in their adolescent and adult lives. This goal included teaching a wide variety of activities and sports so that the students learn the skills necessary to be able to choose activities that they would like to continue to engage in later in life. Also very important to teachers in both countries was that their students experience success in physical education to enhance their self-esteem and that they and are maximally active during physical education. The perception of an increasingly sedentary life style and of many overweight students was a concern to teachers in both countries. Another important goal for teachers in both countries was the teaching of social skills. Especially teachers in Berlin were concerned about increasing behavioral disturbances in their gyms and classrooms. Teachers in both countries also agreed in that the goals for students with and without disabilities ought to be the same as much as

possible. Especially social goals were often mentioned in this context. The teachers pointed out that they expected the children with disabilities to adhere to rules in physical education just as their peers without disabilities.

The responses in both countries were similar in another regard. Most teachers said that they taught within the framework of the state curriculum (i.e., the Texas Essential Elements and the Rahmenplan für die Berliner Schule). However, most teachers also agreed they did not plan each lesson by strictly following the curriculum. Rather, the general goals were more important to them than teaching each single item of the curriculum. This was more of an issue to teachers in Berlin because the Berlin curriculum is much more specific than the Texas curriculum (see Chapter 2). Some teachers in Berlin, however, pointed out that the curriculum was not made for integration. If followed literally, the curriculum was even detrimental to integration because some of the content required did not allow the integration of a wide variety of individual skills.

Differences between the two countries in goals seemed to relate to content. One goal that was mentioned more often by teachers in Berlin was experiencing and exploring one's own body and one's motor capabilities. Several German teachers mentioned the goal to overcome fear and to experience the feeling of testing out one's limits. This need relates to

content that utilizes the large pieces of gymnastics equipment (Turnen).

Content. The interviews indicated that the physical education content is very similar in several areas but there are significant differences in other areas. The content depends to a large extent on contextual variables (e.g., class size, grade level, facilities, equipment) and on the goals and personal preferences of the teachers.

Both in DFW and in Berlin, content in lower grades emphasizes general motor development (e.g., running, jumping throwing), whereas content in higher grades reflects more specific skills such as dribbling and passing a ball or long jump as well as rules and strategies of games. Often content is similar. The basic motor skills taught in early grades are the same in both countries. Teachers in DFW and in Berlin use a variety of games to motivate their students, to make them move, and teach them motor and social skills. When the weather permits it, teachers in both countries take their students outside to practice track and field activities depending on the facilities available. In higher grades, teachers in the DFW area and in Berlin teach more structured games such as basketball and volleyball.

While content in many areas is the same in both countries, there are differences too. All third graders have swimming once a week in Berlin, whereas swimming is not

offered in DFW. While students in higher grades in DFW mostly learn to play softball and football, students in Germany learn soccer and team handball. The most important difference, however, is the use of the large equipment by German teachers. Because this apparatus is so versatile, it is used widely and often by physical education teachers in Germany. The apparatus is used to teach traditional apparatus gymnastics skills that require balance, strength, coordination, and flexibility. However, many teachers also use this apparatus in unconventional ways to provide opportunities for explorative learning and movement experiences to their students.

The unconventional use of the large equipment was cited by several teachers as one example of how integration has changed their physical education. While the teachers in the DFW area said that integration has not really changed their content and teaching styles much, many German teachers pointed out that they made many changes as a consequence of integration. Several teachers described how they changed their content. Besides using the apparatus in nontraditional ways, several teachers used psychomotor content, which is not typical for regular physical education. Psychomotor content stresses perceptual-motor experiences as opposed to skill oriented competitive physical education. Several teachers described how they changed the competitive character of games

from individual competition to group competition to emphasize cooperation. All Berlin teachers reported great difficulties with sport games such as soccer or basketball whose competitive character was detrimental to integration. Consequently, the teachers reduced the amount of time spent on these games or used only modified lead-up games of less competitive character.

Teaching Methods. Information about teaching methods or teaching styles was partly gained through interviews and partly through observations. The investigator had the opportunity to observe most interviewees teach. However, no generalizations can be made because (a) the interviews did not center around teaching styles, (b) the number of participants observed was limited, (c) more American than German teachers were observed, and (d) the participants were observed only once or twice. The variety of teaching methods seemed to be greater in the German sample than in the DFW sample. In the lessons that were observed by the investigator, most teachers used a teacher-centered teaching style with all students engaging in the same activities (Mosston & Ashworth, 1994). This style was used in large classes as well as in small classes.

When asked about changes in teaching as a consequence of the integration of students with disabilities, the American teachers said that integration did not change their teaching

method very much. They adapted activities to accommodate the students with disabilities and, if an activity could not be modified enough to accommodate students with more severe disabilities, teachers sometimes had the students with disabilities do a separate activity. However, these adaptations were done without changing the teaching style that engaged all students in the same activity.

By contrast, many German teachers pointed out that a direct teacher-centered teaching style engaging all students in the same activity was not possible in integrative classes. Many teachers in Berlin described how they used a more student-oriented, participatory teaching style. Illustrations of this style are offering alternative movement tasks for the students to choose from (e.g., jumping off from different heights), giving open assignments such as "show me different ways to hop" versus "hop on your left foot in one place," and asking students for suggestions what they would like to do and how certain activities can be modified to accommodate their peers with disabilities. Many teachers reported using student-centered explorative or inductive learning instead of teacher-centered deductive or normative approaches. Bringing students together at the beginning or at the end of the period or during a lesson, if needed, to discuss certain situations and problems was a way of involving students that was reported by many German teachers.

Several teachers in Berlin said that, as a consequence of a more open and inductive approach to teaching, the course of their physical education lessons was not always predictable.

One teacher explained how, as a consequence of having students with disabilities in her class, she had to spend significantly more time on each activity. For example, it would take a student with mental retardation much more time to understand the rules of a game than his or her peers. Consequently, she spent more time on the game than she used to in regular classes. However, several Berlin teachers also said that it was not always possible to integrate students with disabilities in the same activities and that these limitations had to be accepted. Only one teacher in the DFW sample described how it was not always possible to integrate a student in a wheelchair in the same activities as everybody else. While this was a concern to him, this was not the case for the Berlin teachers.

One teacher in Berlin, who taught physical education in several integrative and regular classes at his school, described differences between students in integrative and regular classes. He attributed the greater independence of students in integrative classes to the more open and student-centered teaching methods used in these classes. Like several other teachers, he saw these teaching methods as essential for integration in physical education. Differences

between students in integrative and regular classes were also observed by other teachers. One teacher noted that students in integrative classes are more creative in choosing game activities during recess periods, which he attributed to the exploratory teaching style in these classes. Two other teachers described their impressions that students in integrative classes have better social skills such as conflict resolution skills or discussion skills. Two teachers at a school that uses the 10+5 model for their integrative classes (i.e., 10 students without disabilities and up to 5 students with disabilities depending on the type and severity of the disabilities per classroom) pointed to a potential disadvantage of the small class sizes and the greater amount of adult attention the students in these classes receive. These teachers described how sometimes students become self-centered and spoiled because they get used to so much attention from teachers and paraprofessionals.

Teaching methods depend on several other variables such as goals and content as well as contextual variables such as class size, facilities, and equipment available. It is much easier, for example, for German teachers to use more open teaching methods in their integrative classes of maximal 23 students than for their American counterparts in classes of 50 to 100 students. Several Berlin teachers pointed out that

just the smaller class size changed their teaching. They said they noticed a big difference between a class size of up to 30 students and a small integrative class of 20 or 23 students.

Summary of Section

The teachers' general understanding of physical education, their goals, and content are similar in both metropolitan areas. Differences exist with regard to working conditions and the availability of large pieces of equipment and apparatus to the German teachers.

The most important differences exist in the organization of physical education. Class sizes are significantly smaller in Berlin and class compositions do not change for physical education. Another important difference is the largely voluntary character of integration in Berlin. In practice teachers generally have a choice if they want to teach an integrative class, whereas DFW teachers have to teach all children at their schools.

Concerns

The concerns of teachers about integration are described using the stages of concerns provided by the Concerns Based Adoption Model (CBAM) (Hall et al., 1973; Hall, 1979). Table 2 summarizes these concerns.

Table 2

Stages of Concern About the Innovation

Stages of Concern	Description
0. Awareness	Little concern about or involvement with the innovation is indicated.
1. Informational	A general awareness of the innovation and interest in learning more detail about it is indicated. The person seems to be unworried about himself/herself in relation to the innovation. She/he is interested in substantive aspects of the innovation in a selfless manner such as general characteristics, effects, and requirements for use.
2. Personal	Individual is uncertain about the demands of the innovation, his/her inadequacy to meet those demands, and his/her role with the innovation. This includes analysis of his/her role in relation to the reward structure of the organization, decision making, and consideration of the potential conflicts with existing

structures or personal commitment.

Financial or status implications of the program for self and colleagues may also be reflected.

3. Management Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are utmost.
4. Consequence Attention focuses on impact of the innovation on students in his/her immediate sphere of influence. The focus is on relevance of the innovation for students, evaluation of student outcomes, including performance and competencies, and changes needed to increase student outcomes.
5. Collaboration The focus is on coordination and cooperation with others regarding use of the innovation.
6. Refocusing The focus is on exploration of more universal benefits from the innovation, including the possibility of major

changes or replacement with a more powerful alternative. Individual has definite ideas about alternatives to the proposed or existing form of the innovation.

Note. From Hall et al. (1973)

No teachers in this study expressed concerns at the awareness and informational levels, as defined by Hall (1973). This was because one criterion for the selection of participants was that they must have had students with disabilities in their classes. That means that all participants, by definition, had been involved with integration. A basic assumption of the study, therefore, was that all participants had passed through the awareness and informational stage.

The interviews revealed that the concerns of the some teachers seemed to change over time. For example, concerns changed from personal, where the teachers were not sure if and how they could handle the new situation, to concerns about better management of integration or about outcomes with regard to student learning. However, not all teachers' concerns seemed to change over time, and it was also apparent that concerns usually existed simultaneously on several levels. Further, some complex concerns, such as safety and

information needs, affected several stages of the CBAM. Concerns, as they appeared in the interviews, are analyzed on the following pages, using the CBAM. The concerns of the American and German teachers are compared at each stage. In describing the concerns that were expressed by the teachers, the concerns mentioned most often by teachers are described before concerns that were mentioned less often.

Personal Stage

The biggest difference in CBAM responses between American and German teachers occurred at the personal stage. More American teachers expressed concerns at this level than German teachers. The responses of the American teachers are described first.

American Teachers

Despite completion of adapted physical education courses (with one exception), 8 out of 14 interviewees reported original concerns at the personal stage that faded and disappeared over time with increasing experience. This teacher's uncertainty about the demands of the situation and her adequacy to meet demands was similar to that of the other 7 teachers:

...when I first came here I was really scared of them. I thought, you know, some of the kids I thought I'm not gonna know what to tell them to do. I'm not gonna know how to talk to them if they can't do this. Or what about the rest of the class. And it was hard at the beginning because some they would just send them in here with me. I was nervous as it was plus I'm worried about the other

55, trying to get them all in place and trying to get this one in there also.

Increased experience through trial and error, usually without much expert assistance, helped teachers to overcome concerns at the personal stage on their own as described by one teacher:

...and I'm going "how am I in 40 min gonna be able to get this kid out of the wheelchair and take care of 42 other kids?" So it was real frustrating but you just kind of have to do what you can do.... And just slowly as the year went on it got better, you know, learning how to work with them and work with the other kids. And I think there were probably times that I wish I could have done more, but I did what I can do.

Several teachers indicated that an open mind and/or positive attitude helped them to overcome their personal concerns. One teacher pointed out, "So I think it's my attitude towards the integration that will make it positive or negative." Another teacher described her development this way: "But after about a year, you know you learn to love all of these kids. And they're just, they're kids. But I guess my first year was an eye-opening experience. Cause we didn't have the aides."

Other factors identified that helped teachers to overcome initial concerns at the personal level were paraprofessionals, independent initiative, and availability of adapted physical education specialists. Some teachers independently searched actively for information, as this teacher did: "I learned, I guess, on my own, I researched

their IEP plans to see what their needs were, what they could and could not do..."

Other teachers sought advice of adapted physical educators when confronted with the challenge to make their classroom integrative. This was especially important to teachers who had not received prior preparation or training as illustrated by this statement:

I hated it. I was like: Why are they dumping on PE? Why are they doing this to me? I'll be real honest. That was my exact feelings, and it took a while to get over that. Because I didn't have a regular adapted PE teacher all the time and so therefore I was having to pull my aide. I thought I had to have that aide with them all the time, and I found out I don't have to have somebody next to them all the time. I can rotate kids.

The same teacher further indicated how novel situations with unknown demands can cause fear:

It was scary to think "oh gosh here I've got that boy that's blurting out all the time. I better get somebody over there to keep my thumb on him at all time." When, in reality after I worked through it and everything, I don't have to have somebody there 100% of the time. It's better to step back a little bit so that the kid is allowed to grow. Just like when I have my adapted PE teacher in here now. She's not with them, holding their hand the whole way.

Teachers cope with their concerns in different ways. The previous teacher learned to cope with the new situation by "working through it." Another teacher described how he was also uncertain about what to do in the novel situation:

And I really didn't know how I felt about it. I knew we weren't going to be able to give them our personal attention because of the number of kids we had.... I have 80 other kids sitting down here wanting to do

something. So, you know, that was kind of a touchy thing and I wasn't sure how we're gonna deal with that. So it's probably kind of scary, you know, you don't know what to do with them.

Giving difficult working conditions as a reason, this teacher, who had a student in a wheelchair in one class, said he taught the class as if this student was not there. He "knew we weren't going to be able to give him our personal attention because of the number of kids we had." The student got involved only if his peers spontaneously decided to involve him in games by pushing him around or, on rare occasions, the student's aide decided to do something with him. The teacher was not involved with the participation or nonparticipation of the student who most of the time was sitting on the sideline watching. Although the student was officially assigned to the class, he was not included in the activities. The teacher said: "The situation as it is now, socially, I don't think it's good for them; they're not getting anything out of it. I mean they're not able to do anything and no one's making them do anything."

The teacher said he was not against integration philosophically but, because of how he perceived the situation in his classes, refused to become involved. Unlike other teachers who decided to be assertive in taking action to cope with the new situation, this teacher seemed to be largely ignoring the situation. These examples illustrate

interactions between personal (e.g., attitude, initiative to find information) and contextual variables (e.g., paraprofessionals) in the development of concerns and how teachers cope with them.

Six of the 14 teachers did not express concerns at the personal level and described positive initial attitude. These individuals indicated they were prepared for integration by college classes in adapted physical education and expected to have children with disabilities in their classes. One teacher described how he looked forward to integration as a challenge:

... since I did take a class that kind of touched on how you could adapt certain activities, I was excited about the challenge. I wasn't like nervous to the point where I didn't want it. It was something I was just looking forward to add.

These 6 teachers, through prior preparation and anticipation, seemed to have skipped the personal stage of concerns.

German Teachers

Despite the fact that only 1 teacher had completed adapted physical education courses, most of the German teachers did not express concerns at the personal level. Other reasons therefore are responsible for the lack of concerns at the personal level demonstrated by the German teachers.

While the American teachers do not have a choice whether they want to teach students with disabilities in their

classes, teachers in the Berlin sample, in general, had that choice. The fact that teaching integrative classes is basically voluntary, explains why teachers who teach these classes did not express personal concerns. Moreover, the fact that several teachers emphasized the importance of having that choice indicates that lack of that choice may result in personal concerns. As in the DFW area, several participants pointed out that many other teachers do not like integration.

Unlike the teachers in the DFW area, most of the teachers in Berlin taught physical education as classroom teachers. Therefore, integration was not a totally new challenge to them, because they were used to teaching the same students with disabilities in the classroom. Two teachers without formal preservice training in physical education illustrated this point. These teachers explained that, when they started teaching as first-year teachers, it was physical education that was new to them and the cause of uncertainties rather than integration, which they had been prepared for when they chose to teach an integrative class.

Another variable that contributes to the lack of personal concerns of the Berlin teachers is class size. Many of the teachers in the DFW sample who expressed personal concerns when they first taught students with disabilities described concerns that were twofold: They said they did not

know what to do with the students with disabilities and how to teach the rest of the class (i.e., up to 80 students) while they were working with the students with disabilities. The teachers in Berlin did not have that problem because their integrative classes had between 15 and 23 students and were significantly smaller than regular physical education classes. Many of the teachers pointed out that teaching in a small class was very different from teaching in a bigger class of up to 30 students.

As in the DFW sample, prior experience with individuals with disabilities probably contributed to the lack of personal concerns of Berlin teachers, too. Nine of the 16 teachers interviewed in Berlin mentioned prior experience with individuals with disabilities. These experiences varied widely and included working as a paraprofessional in integrative classes, teaching at a special school for students with learning disabilities, experience as an instructor in a disability sports club, working in a summer camp for children with disabilities, and having studied special education.

Two teachers stated that they felt uncertain when they first taught integrative physical education because they did not know the students with disabilities, what they could do with them, and whether they would be able to meet their needs. However, these concerns were different from the

personal concerns expressed by most of the DFW sample in that the concerns were less personal and more outcome related. A third teacher, when asked about concerns and how these concerns have changed over time, said she had spent much more time at the beginning planning in detail how each student with a disability could be included in the activities, whereas now she relied much more on her experience and the creativity of the children.

Finally, a cultural difference may be the reason for the differences in the responses between the DFW sample and the Berlin sample. German teachers may be more reluctant than American teachers to talk openly about their feelings to a stranger. The meaning of feelings or emotions and how they are expressed may differ between Germany and the USA (cf. Smith & Bond, 1993; Stewart & Bennett, 1991).

In summary, The interviews in both countries reveal that being faced with integration does not inevitably cause personal concerns in teachers. Whether teachers have concerns at the personal level depends on personal and contextual variables. Illustrative personal variables are prior hands-on experience, positive beliefs and attitudes toward integration, and perceived competence in one's teaching abilities and skills.

Illustrative contextual variables are freedom within the school system to choose not to teach children with

disabilities, class size, and the availability of additional personnel.

Management Stage

Both samples were similar in that most of the concerns expressed were management in nature. While the concerns at the personal stage were mainly related to personal variables, concerns at the management stage were mostly related to contextual variables at the district level, the school level, and at the class level.

German Teachers

Many Berlin teachers stated that their concerns were not necessarily specific to physical education but rather were related to integration in general. This difference can be explained by the fact that most teachers in the Berlin sample are classroom teachers (most of them certified in physical education) rather than physical education specialists.

One concern shared by all Berlin teachers was the lack of funding provided by the Berlin government (i.e., the state education agency). Struggling with economic recession and continuing financial burdens resulting from the reunification of East and West Berlin into one federal state, the state government has drastically limited educational spending. Some results of these spending cuts are minimized hiring of new teachers, increase in class sizes, lack of money for

equipment, and great reductions in paid leaves of absence for attending in-service training.

Several individuals expressed concerns about teaching an integrative class by themselves, without the assistance of another teacher or paraprofessional. This situation may occur if the pool of teacher hours at a school is not large enough to schedule two teachers for an integrative class at all times (see Chapter 2). One teacher, for instance, explained that, because of budget cuts, she had assistance of a special education teacher in her integrative class only for 8 hr a week instead of the 12 hr a week she is supposed to get according to government policies.

Integrative classes in Berlin are taught by two teachers most of the time. However, if one of the teachers is ill, the other one has to teach the class alone. This fact was a concern to several teachers who indicated that, when alone in the classroom, they did not have the time to address individual needs. One teacher said that, in this situation, students with disabilities are the first who do not get their needs met and are marginalized. Depending on the types of disabilities and the class, it may be impossible to teach without assistance. One teacher described the problem:

It happened to me very often this year, that I was alone with these 24 children of whom three were integration children. And in this case nothing is possible. It is not only that less is possible but somehow nothing is

possible at all. In this situation a lot breaks totally down, at least in this class.

Teachers described such situations when all their attention was needed to control a particular student's behavior, for example, or to change diapers of a student.

Although the rules through which the school code is implemented include the right to Schulhelfer (paraprofessionals) for integrated students with more severe disabilities, paraprofessionals are often not provided because of lack of funding. This lack of personnel was a concern to several teachers.

Another concern at the management level was related to information. Several teachers said they wished they had more contact with school psychologists and other experts on disabilities. One teacher explained the management problem: "We work closely together with school psychologists but there are much too few of them and much too little time and much too few opportunities."

Several teachers criticized that it is difficult for them to attend in-service training. One teacher who had studied physical education and volunteered to teach an integrative class and who worked part-time said:

Berlin has written integration on its banners, and I think they should see to it that it actually takes place. It is difficult for teachers to actually integrate students with disabilities because we are forced to gather the information we need on our own

time. When we go to in-services we have to go on our own time, it is all extra. Very rarely can we go to in-services during working hours, and when we do it is limited. So I would wish that teachers in general who teach integrative classes that their teaching load is reduced by 2 hr and that they have to attend in-services during these 2 hr.

Two teachers, who taught other subjects in addition to physical education, said that they voluntarily reduced their teaching load and thus their salary because teaching integrative classes was so time consuming.

Several teachers expressed concerns that frequently integrative classes are taken advantage of. Because integrative classes have smaller sizes and are taught by two teachers most of the time, these classes are often used to accommodate students who are difficult to teach but have no integration status (i.e., the class does not receive additional teacher hours to accommodate special needs). One teacher, for example, whose school was in a neighborhood of lower socioeconomic status, was very concerned about this practice because the accumulation of students with behavioral problems makes teaching difficult. Teachers who were affected by such practice said that, despite the smaller class size and two teachers instructing the class, the quantity and quality of their teaching were limited. That this concern is closely related to concerns at the consequence level is illustrated by one teacher who said that

she would not put her own children in one of those integrative classes at her school.

A similar concern was described by teachers who had more than 2 or 3 students with an identified disability in their classes. A teacher who taught at a school using the 10 plus 5 model (i.e., up to 5 students with disabilities are integrated in a class of 15 students) and a teacher who had taught integrative physical education at a cooperation school (i.e., a regular elementary school and a school for students with learning disabilities on one campus with one administration) expressed concerns about an unnaturally high proportion of students with disabilities in an integrative class.

One concern that was expressed by almost all teachers was about unsatisfactory facilities and equipment. Several teachers described situations such as the following:

We have three gyms, which we share with the Hauptschule. This year, the gym schedule is such that I teach 3 hr physical education and each hour in a different gym, sometimes upstairs, sometimes downstairs, sometimes in the little gym. There is equipment in each gym but it is not always the equipment that I need at that time.

Frequently, two classes need to share a gym. While this is a difficult situation in general, the teachers pointed out that it is especially difficult for integrative classes. Many students with disabilities have difficulties adjusting in a crowded gym and in a group twice as large as the one they are

used to. One teacher explained that "those children [with disabilities] are much less capable to create and maintain their own space than everybody else."

Many teachers described how conversations with the class at the beginning, during, and end of a class period are an important part of teaching an integrative class. The purpose of these conversations with the whole group, parts of the group, or certain students is to explain content, maintain a positive social climate, solve problems and conflicts, give the students an opportunity to contribute their ideas, and to receive feedback from the students. These student-teacher interactions are very important to most of the teachers. To have these conversations in a crowded gym is very difficult if not impossible as was pointed out by this teacher:

If it is necessary to have a conversation, let's say because somebody was treated unfairly, which, I think, happens easier if integration children are in the class, if it then becomes necessary to have a conversation over this, I don't think that's possible.

One teacher, however, had an opposite concern.

Sometimes, she said, she wished her class of 15 students was bigger, which would make it easier to play certain games or to set up large pieces of equipment. Using these aspects as arguments, she tried to convince her students of the benefits of combining them with another class that uses another part of the gym, separated by dividers, at the same time at some days. Her students, however, used to being in a small group,

can only rarely be convinced to have physical education together with another class.

A second teacher said he wished he could combine his class with that of a colleague who is in the gym at the same time, too, because their gym cannot be separated by a divider. Combining the two classes is not possible, however, because the colleague's class is in the gym for two class periods, whereas this teacher is in the gym only for the second of those two periods. Therefore, the other class is a big distraction to his students, particularly two students with visual impairments who need a quiet environment.

One teacher, who was also an assistant principal and, at the time of the interview, acting principal, said that it would be good if he saw the class where he teaches physical education more often than just in physical education. He said:

You realize that it is important to know more about them than what you see in physical education, just these 3 hr in which I'm on my own, which means that some things fall under the table, too. And there I think it would be good if, in addition to that, I taught them in the classroom for at least 3 hr to see them in a different context. The social relations are often different in the classroom than in the gym.

This teacher's concern confirms an aspect that was emphasized by many of the classroom teachers, who also taught physical education, that it is important to know the students in the

classroom environment in order to better understand them in physical education.

One teacher was concerned about the great fluctuation of students in his class. His school received some of its students from a neighboring home for asylum seekers whose tenants live there, by definition, only for a limited period of time. The teacher said that incoming and leaving students would often upset the social structure in his integrative class. He was, therefore, concerned with a lack of social cohesiveness in his class, which seems to be especially important in integrative classes.

American Teachers

All concerns expressed at the management stage related to contextual variables of the working environment. The concerns varied in intensity. Illustrative of very strong concerns about how integration is managed is the following statement:

...if you want to ask a question how I feel about integration, with that kid coming to school, I hate it if he's there. And it's really not his fault. I mean I put a lot of blame on the teacher who comes with him because she doesn't do anything but sit there

Several factors contributed to this teacher's concerns. She had large class sizes with 80 to 100 students per class. The behavior of the student she referred to was difficult to manage in a class of that size: "He doesn't talk.... And he whines around. Maybe this is part of his disability. I don't

know but he runs around, he has no control whatsoever.... He doesn't sit still." Neither the paraprofessional who came with the child or the physical education teacher's assistant assisted her. The teacher described her assistant as follows: "She comes late to school. She comes late to my classes. She's either sleeping or on the phone. When she's not sleeping or on the phone [during class using a cellular phone] she sits there and she doesn't do anything."

The physical educator reported trying to train her assistant, kept a daily log on her assistant's behavior, and reported it to the principal, all to no avail. Moreover, the physical educator did not perceive the principal to be very interested and supportive. When asked about the principal's involvement, she responded:

I don't think she has any idea of what's going on in my gym class. Of course, she knows the things that have gone on because I have talked to her on numerous occasions. As far as what do I do in gym class, my principal probably has no earthly idea what I do; when I do it, how I do it.... I think the only reason why she's interested is because I can hold so many kids in the gym class. I don't have any major problems.

The support that this physical education teacher received from the school district's adapted physical education teachers was not much better. Her large school district had employed relatively few adapted physical education teachers. She had seen her adapted physical education specialist twice during the whole school year for

about 5 min each time. This experience was reported by other participants also.

Another teacher who praised the support she got from her administration, classroom teachers, paraprofessionals, and the adapted physical education itinerant teacher also shared the concern about large class sizes when she said:

Every once in a while I think..."I don't need these kids in here with 70 other kids. I need them in a smaller group." They would get more attention, and they might learn more. But I feel that way about all those classes. They're too big.... I have to pay so much attention to that huge group even with an aide in there and even with a teaching assistant. Three of us with 74 kids is still not equitable. I mean it's just not fair when a kid needs some extra help.

Although this teacher had very cooperative aides and worked well with them, she pointed out why aides were not the perfect solution:

But sometimes those aides are going "what should I do here?" Because they're not teachers. And even though they do real well and they do their best they'll say "what do you think I should do?"

Other management concerns were time and equipment limitations. Many teachers had class periods of only 25 min, which was too short a time to give individual attention, especially with large class sizes. Also related to working conditions was a concern about a lack of equipment. One teacher said: "I don't have any modified equipment. I don't have any beeping balls, or blinking lights, or lower baskets. I don't have any of those kind of things." One teacher took the initiative and made her own equipment together with her

students. Another teacher developed a fund raising scheme and used the money she raised to buy equipment for her physical education classes. The last two examples demonstrate how personal variables (e.g., personality, personal goals) influence how teachers cope with their management concerns.

One teacher worked at a school that was considered a model school with regard to integration in the state of Texas. She herself had been instrumental in developing the effective integrative physical education program but expressed several concerns about time and resource management:

And another hard thing is the continuation of ARDs. They take a lot of time. I know that they're very important but the adapted PE teacher is gone days and days because she's doing all these different ARDs at different schools. Can't there just be a 10-min time, "here's what they need for adapted PE," and then discuss it and move on versus having to keep that person in there for the entire gamut.

Among the many suggestions this teacher had for improving the situation is the following:

Why can't we talk about this child in January? Let's look at staggering of some of the ARDs. Instead of putting them in April and May, some can be in January every year, some can be in February every year to try to help that. Cause that is a concern that has been brought up district wide.

Two teachers had concerns at the management stage regarding the regular physical education classes in which the students with disabilities were placed. At some schools, a

whole group of students from a self-contained classroom is mainstreamed into physical education in just one regular class, whereas the other classes remain nonintegrative. The resulting ratio of students with and without disabilities in the former classes far exceeds the statistically expected ratio of about 10% of students with disabilities in a regular class. One teacher would like to change her set up as follows:

...if I had my preference, I would like to take that class and just ability group them, maybe take two or three with the first grade that they would function well with. And there is one kid that I think would be maybe okay with third grade. But due to our schedule we can't do that.

Teachers believed that the overrepresentation of students with disabilities in a regular class, even if the class size was small, made managing integration more difficult: "It is easier, I mean honestly, it is easier with a double regular class than a single class included. You know what I'm saying. It is easier with 42 regular students than 32 with some included students."

Another statement reveals the relationship of concerns at the management stage with consequence stage:

I would like to ability-group the kids. So they could be more successful and I think it would be even easier on the teacher because you're doing skills and selecting things for that age group, instead of having a kid with kindergarten and first-grade skills in a third-grade class.

In some instances, integration was described as dependent upon organizational constraints rather than the needs and abilities of the students. One teacher stated that the teacher of the self-contained class "tries to put them with the age where they belong with but, if their bus schedule doesn't work out, she goes with the highest grade she can put them in."

Concerns at the management stage appear to be interrelated with the consequence and the collaboration stage. The management concerns voiced by these teachers were related to various personal and contextual variables. As was discussed earlier, teachers differ in how they perceive certain situations and in their tolerance levels concerning perceived problems. One teacher, for example, explained why she did not have management concerns at the moment:

It doesn't bother me as long as there is someone else to watch them and work with them. It's no problem at all. But if I had to be, if I had to watch them and watch the students, that would be a lot of extra stress. I feel like it would take my time away from the other students.

Her statement illustrates how closely related her concerns are with contextual variables (e.g., physical support in her classroom) and personal variables (other teachers with a different background and personality might fear the imagined scenario more or less).

Although these concerns were expressed repeatedly in the interviews, they were, with one exception, not major

concerns. Integration did not change the daily routines of the teachers interviewed very much. One teacher said that planning took a little longer for her integrative class, and another one explained that he made little footnotes on the lesson plans on how to adapt activities for the children with disabilities. Most teachers, however, said that their teaching did not change much as a consequence of integration. Instead of significantly changing their teaching, as was reported by one teacher in the German sample, they modified activities in an ad hoc way as required by the situation in order to integrate the students with disabilities as much as possible.

In summary, both samples were similar in that most of the concerns expressed were management in nature. The sample differed because concerns at the management level were greatly influenced by contextual variables.

Large class sizes and limited support by adapted physical educators were important concerns of teachers in the DFW area but not in Berlin. Scheduling gym times was a concern for teachers in Berlin but not in the DFW area.

Teachers in both samples were concerned about the unavailability of a second teacher or paraprofessional, the ratio of students with and without disabilities, and insufficient equipment.

Concerns at the management level were related to the consequence and the collaboration stages. Many concerns in all three stages were linked to contextual variables. Several teachers illustrated the importance of personal variables in coping with these concerns.

Consequence Stage

The many positive effects of integration mentioned by teachers both in the DFW area and in Berlin by far outweighed negative effects. This generally positive response may have been partly a result of the fact that the participation in the study was voluntary and not anonymous. However, although the samples may have been positively skewed in this regard, teachers in both samples expressed concerns at the consequence level.

American Teachers

The teachers expressed concerns about the consequences of integration for both students with and without disabilities. This stage is described by Hall (1979, p. 206) as "the user is concerned about how the innovation is affecting learners and how to increase its impact."

Most teachers viewed integration in their physical education classes as having positive effects on the social learning of students without disabilities. Modeling effects of the students without disabilities for those with disabilities was also mentioned often. Therefore, most

teachers were not much concerned about negative consequences of integration for their students.

Some teachers, however, did have concerns. Speaking about students with disabilities, one teacher explained:

And they are pretty much able to do the programs that I have for first and second graders, but as they become older and the activities become more complex, like a basketball game, they get lost and start reclusing themselves. They are not as active because they feel uncomfortable.

When asked about possible reasons for this tendency to withdraw, the teacher explained her observation this way:

The older that a person gets, the more they feel separated from the rest of the group because they're noticing how different they are as they get older. Because they can't keep up. This is my assumption. So therefore I think they have a tendency to withdraw themselves more.

A similar process was observed by a teacher who has a whole group of students from a self-contained classroom integrated into a regular class. Because the students with disabilities felt uncomfortable when by themselves with nondisabled peers, the teacher made sure that at least two students from the self-contained classroom were always together in a group.

One teacher observed a regression of physical skills of two students in wheelchairs that was caused by a different reason. Although both students previously could walk, the teacher attributed their loss of this skill to the lack of intervention of their aides, who did not make the attempt to

work with these students outside of the chair. Even though the teacher did not like what he saw, he said it did not concern him much because he was too occupied teaching the large number of students without disabilities in his class.

Some teachers mentioned small concerns about the effects on students without disabilities. One teacher said she had "to slow down the activities. Sometimes it's frustrating because the other kids are wanting to move quicker, and you've got to slow it down or adapt it just for safety. But with a single class like they're in it's not so hard." This teacher accepted this side effect, which seemed to be inevitable, considering the relatively large number of students with disabilities she had in her class.

Another teacher expressed concern about negative social learning effects when students without disabilities "babied" the students with disabilities, a behavior she frequently observed when integration was introduced at her school:

When they baby them, then they end up with problems. And there was, when these kids started mainstreaming 4 years ago, a lot of babying. You know, put your arm around my shoulder type of stuff...

However, this teacher and her aide did not reinforce this behavior and believed they significantly reduced the undesired behaviors.

While too much attention of this kind is certainly not conducive to appropriate social learning, the opposite

behavior can be reason for concern too. Speaking about one student with Down Syndrome, a teacher said "Over the years the kids have backed away from her some. And I'm not sure why. They're not hateful about it, but they're not, they don't volunteer as much as they used to when they were younger." Asked about a possible reason, the teacher was unsure: "I don't know unless it's because they get older. As you get older, you don't interact as much with the kids who are disabled. I guess."

In another case where students without disabilities avoided one of their classmates with a disability, the teacher described the situation as follows:

They're just great. Now M. [the student with a disability], if he's not bugging them, they pretty much stay away from M. There are just different types of handicaps that feed right in and the kids do all right with, and then there's other types that are just almost annoying to the other kids in that class.

The type and manifestation of the disability seemed to cause the avoidance behavior. This teacher explained the type of disability she had most problems with:

Behavioral problem is a totally different disorder, and that is much tougher, I think, in an integration situation than the physically or emotionally or the learning. Those three I can adapt with very well.... Those things I feel are just very adaptable. They're written on the ARDs, you know, what to do. It's the behavioral ones that I feel are a real hindrance to the class...

The teacher responded to the problem by reducing the degree to which this student is included with the rest of the class:

I mean he responds to me just great, but he bugs the other kids to death. And he just really bothers them and we just really work, like he has his own special seat. That's his special spot every day. He doesn't line up with the rest of the group. And it has solved a lot of the problems.

While few teachers reported that students were backing away from classmates with a disability, several teachers pointed out that integration became more difficult in upper classes. The teachers believed that the psychosocial development of the students and the curriculum that increasingly emphasizes sport skills were major causative factors. However, while these concerns were mentioned by teachers, their intensity was not very high (except for one teacher who was very concerned about the behavior disorder of one of her students).

Most of the interviewees reported more positive than negative consequences for the students. Interestingly, when asked how integration has affected their students, almost all participants mentioned social benefits for students with and without disabilities. Very few referred to consequences pertaining to the learning of motor skills, which, at least according to the general curricula in Texas (Essential Elements) and Berlin (Rahmenplan), should be the main focus of physical education.

German Teachers

All teachers viewed integration and its effects on the students with and without disabilities positively. This is not surprising because, in reality, teaching in integrative classes is voluntary in Berlin. Therefore, the sample was biased in that teachers who did not have a positive attitude towards integration did not teach integrative classes and were, therefore, not included in the sample. Nevertheless, many teachers in Berlin expressed some specific concerns at the consequence level, in spite of their generally positive attitude.

Several teachers mentioned that integration becomes more difficult in higher grades. When asked about the effects of integration on her students one teacher said:

I would distinguish depending on their age. In the first three or four grades they learn a lot from each other and benefit from each other and do a lot together, play together, and have a lot of contact with each other. And then sometimes this drifts apart. I think that this happens at the beginning of fifth grade that the differences become increasingly bigger and the willingness partly goes down. At least I experience that in physical education.

Several teachers described how, in the higher grades, the students became more competitive and it became more difficult to accommodate such naturally occurring changes in psychosocial development in integrative activities. Several teachers mentioned the increasing influence of the media and the popular sports shown, especially soccer, on students in

higher grades. This concern was compounded by the content of the physical education state curriculum. For Grades 5 and 6, the curriculum prescribes the teaching of competitive team sports such as soccer, team handball, basketball, and volleyball. These sports do not particularly lend itself to the implementation of integration.

The teachers in the Berlin sample coped with this difficulty in different ways. One teacher simply said that she ignored the state curriculum and omitted these competitive sports. To the students, especially boys who do well in these sports, who wanted to play these sports in physical education she responded that they could play these sports in sport clubs after school. Another teacher recognized the normality of this development and did not have a problem with it as long as the students performing at a lower level were not discriminated against. She said that one had to look at what can be done together and where a separation of students with and without disabilities and of activities is necessary. One teacher said that he thought the introduction of competitive team sports in Grades 5 and 6 was too early because of the psychosocial development of the students. If the competitiveness becomes a problem in his classes, he uses only lead-up games where winning does not play the dominant role.

Several teachers expressed concerns about the consequences of disruptive and aggressive behavior of some students. Aggressive students interfere with the learning of the other students in the class. The consequences of aggressive behavior were reported by one teacher:

To somehow continue teaching is much more difficult with these children. And to have three of those in a class is often, well even if you are two you reach the final limits. Yes, and the parents have noticed that quickly of course because that is inevitable. One is not always in there and in between, and these children are often aggressive, ours are very aggressive, and that leads to problems that the children talk about at home. So that constantly results in difficulties that you have to address, and children suffer from this, no question, especially calm, quiet, introverted children suffer and sometimes don't get their rights because the aggressive require a lot of attention. And you have to explain that to the parents time and again that you're working on this.

Although aggressive student behavior is a concern to this teacher, she noted that problem is under control:

So far the parents have approached us in a very open way, reporting these problems immediately, that is to us and not to some superiors as is often the case if there is no good collaboration. And we have always achieved consensus with the parents, we always found understanding.

This statement indicates the importance of contextual variables (e.g., collaboration and support between teachers and the principal and understanding and tolerance of parents). The teacher indicated in her statement that both circumstances cannot be taken for granted.

Another teacher described how disruptive behavior can interfere with teaching and learning in a different way.

So that is a problem, to give the child freedom on the one hand, he always returns to the group for some time and participates, and to keep an eye on the group at the same time to prevent the one or two who would like to act similarly from joining the most difficult one. Then the group drifts apart.

This teacher also mentioned that frequently students without I-status (students with an IEP who are in a regular class) display disruptive or aggressive behavior and cause more of a problem for the teacher than the students with I-status. This phenomenon was also mentioned by several other teachers.

Some teachers reported concerns about withdrawal behavior of some students with disabilities. According to the teachers, these students perceived the discrepancy in performance between them and their peers without disabilities. The realization that they were not as good as their classmates frustrated them, and some students withdrew themselves from the activities. Most of these withdrawal behaviors were of temporary nature. One teacher reported that for one student the problem had become so severe that, after all attempts to alleviate the problem at the elementary school had failed, the student was transferred to a special school where the problem disappeared. However, this was one

extreme case. In general, the cases of withdrawal were few, and it was not one of the major concerns to the teachers.

Some teachers mentioned that some students without disabilities do not develop an understanding for and tolerance of their classmates with disabilities. This lack of understanding and tolerance becomes especially obvious during competitive activities in which winning is important to the students. One teacher described how sometimes students with disabilities are teased and harrassed by students from nonintegrative classes during recess on the school yard. The fact that, despite intensive attempts by the teachers, the positive social learning effects cannot be observed in all students was considered recognized by the teachers as were limitations of the extent to which students with certain disabilities could participate in certain physical education activities.

In general, the concerns at the consequence stage that were expressed by the teachers were fewer and their strength less than the concerns at the management level. One possible explanation for this difference is a relationship between the two stages of concern. Dissatisfaction with the outcomes of teaching depend to a large extent on the management of the teaching process. For example, large class sizes, little personnel support, and large numbers of students with disabilities in a regular class have direct impact on the

outcomes of teaching. Conversely, if these variables are satisfactory, a good basis for teaching is provided and there will probably be less concerns about the consequences of integration. Although management issues do not entirely determine consequence concerns, they influence them to a large extent and play, therefore, probably a greater role in the perception of teachers.

In summary, although the samples may have been positively skewed in their responses, teachers in both samples expressed similar concerns at the consequence level. Interviewees in the DFW area and in Berlin saw difficulties with integration in physical education in higher grades as a consequence of students' psychosocial development physical education content. Consequences such as disruptions, violence, and withdrawal by students with behavioral disorders were another concern to many teachers. In addition to contextual variables such as age and psychosocial development of the students, class size, type and manifestation of the disability, and the personnel support available to the teacher, consequence concerns are influenced by personal variables such as physical education philosophies, differences in training, and experience.

Collaboration Stage

Teachers in both samples stressed the importance of collaboration for successful integration. However, the type

of collaboration and the participants involved were different in the DFW area and in Berlin. As a consequence of different working environments, the collaboration concerns expressed by the teachers were different, too.

German Teachers

Collaboration is the area where, in the responses of the teachers, physical education can hardly be distinguished from other subject areas. Most of the Berlin teachers were dual classroom and physical education teachers. In integrative classes, 11 out of 16 teachers worked in teams of 2 to 3 certified elementary teachers or special educators during most of the school day. Whether physical education is taught by a team instead of one teacher is determined by the teachers themselves. Their decision depends on such factors as schedule constraints and type and severity of disabilities in that class. As a result of this flexibility, some teachers taught physical education as a team, whereas others did not. All of the 16, however, taught most of the classes in a team.

The composition of the teams is usually decided by the teachers themselves at the end of a school year. One looks around among the co-workers and asks those colleagues, with whom one would like to work in a team, if they would like to form a team. Because of this voluntary team building process that is based on personal likes and similarities, most

teachers are very satisfied with their team work. However, sometimes teams are assigned because of scheduling constraints, special needs for more teams, or addition of new teachers at the beginning of a schoolyear.

Two teachers described their bad experiences with team teaching, and one teacher reported that he observed problems with teamwork at his school but had not been affected by these problems himself. Another teacher described his problems in working with a paraprofessional.

One teacher, who was assigned to a team when she started working at a new school, summarized her bad experiences with team teaching this way: "Team teaching can go terribly wrong." As a consequence of her bad initial experience, she took the initiative and attended several in-services on cooperation and supervision, subsequently becoming a certified supervision instructor. Her case exemplifies the importance of contextual and personal variables in the development of concerns. This teacher did not work full-time and was therefore able to attend a number of in-services and workshops to cope with her concerns on her own time. She was also determined to cope with her concerns by further educating herself instead of taking no action or deciding not to work in a team again.

Another teacher described a situation that resulted in problems within a team and her concerns with this situation:

The situation was that the classroom teacher had not found a team partner. Therefore, she was assigned a partner, which means that it was not her choice and wish any longer but organizational necessities required that this second woman had to be assigned. These two don't harmonize very well with each other. They just have very different ways to teach, different teaching philosophies, ways to interact with the children. And I was assigned as the third person to this team...who again was different from the other two, and that didn't work well. There are hardly team conversations. They are planned from time to time, but there is chaos in this class.

The principal at this school has individual meetings with all teams to make sure that they are working well. At one of these meetings, the teacher explained her frustration to the principal and asked to work with a new team next school year. This situation also illustrates the importance of contextual variables, here a supportive principal, for the ability to cope with concerns.

One teacher who did not work in a team expressed a different concern. He said that, because there are always new situations in integrative physical education classes, he always feels left to cope on his own. His concern was that the cooperation with experts such as school psychologists or special educators was not optimal. He said he wished there was easier access to these experts. The concerns of this teacher are similar to concerns expressed by some teachers in the DRW area.

American Teachers

When asked what was necessary to make integration work, collaboration was one of the factors most often mentioned by the participants in the DFW area. At the same time, teachers pointed out that it takes a lot of good will, effort, and communication, as well as organizational skills to achieve successful collaboration. Furthermore, collaboration was not a part of the traditional teacher role. To the contrary, teachers were used to working independently in their classrooms. Integration, however, required a change of the traditional roles of regular and special educators, to make collaboration an essential part of the teaching process.

Considering the complex nature of collaboration, there is no reason to assume that this process will evolve naturally and work smoothly. A drastic example of the absence of collaboration was described previously, in the paragraph on management concerns. This teacher reported that she did not receive important information, even when she asked for it: "I'm really not even sure what's wrong with that kid....I asked one of his teachers what was wrong with him. And they basically told me that I didn't have the right to know." This was an extreme example and certainly not representative of most of the data collected. However, problems regarding collaboration with paraprofessionals who accompany students with disabilities throughout the school day were reported by several other teachers.

Another concern that was mentioned frequently by teachers pertained to the limited or absent collaboration with adapted physical education specialists. In some cases, the workload of the adapted physical education itinerant teacher was so great that the teachers saw them only twice during the school year for a brief period. Sometimes, the teacher reported that the adapted physical educator attended ARDs at her school but, because of her high case load and alleged scheduling problems, could not come to her physical education classes.

One teacher, who had between 45 and 60 students in her classes, described the difference the presence of an adapted physical educator can make:

...you can't always count on having an adapted PE teacher there. I'm in a good situation cause I've got a lot of support. And, when I don't have the support, it's very, very tiring because I have to use my aide, I have to say "okay you gotta keep one eye on these guys." You know, to make sure that everything is going okay cause you gotta have one eye there. And that is exhausting in itself right there.

In summary, teachers in Berlin and in the DFW area agree that good collaboration is essential for integration to work. Differences in concerns are related to different organizational schemes of physical education in both metropolitan areas. A main concern for teachers in the DFW area was the limited collaboration with adapted physical educators. In contrast, only one teacher in Berlin expressed

concerns about a lack of cooperation with experts. One reason why this concern was not mentioned more often may be that most of the teachers that were interviewed in Berlin work in teams of two or three. Even if they do not team teach in physical education their partner or team or other physical education teachers are available to them to talk about problems.

Refocusing Stage

In this stage of concerns, the individual is exploring changes and alternatives to the innovation to make it more powerful. The refocusing stage applies only partly to this investigation because the integration of students with disabilities in physical education is qualitatively different from other innovations (i.e., of curricular or methodological nature). Integration is different because it has a legal basis both in Texas and in Berlin, is based on litigation in Texas, and results from a societal movement in both places. Integration, therefore, cannot be changed or replaced by an alternative as easily as other innovations.

American Teachers

Although almost all teachers viewed integration positively, some tried to and actually did make changes that increased the effectiveness and success of integration. Several teachers talked to their principals and other classroom teachers about their concerns. These concerns

pertained to changing the length of physical education class periods from 25 to 50 min and vice versa, scheduling changes, and ways to place self-contained students with disabilities in regular classes (i.e., ratios to be maintained between students with and without disabilities). One teacher, who is also a physical education coordinator at the district stage, used this job position to address things that she thought could be changed and improved at the district stage.

Most teachers would like to change their working conditions rather than integration per se. One teacher, for example, when asked about her concerns, listed class size, the lack of air conditioning in the gym, and a hard concrete floor in the gym. These concerns and attempts to change working conditions are all related to concerns at the management level. No teacher expressed true refocusing concerns as defined by Hall et al. (1973).

One teacher was very sceptical about the benefits of integration to the students with disabilities in her class. She observed that these students could not keep up with what she teaches and wondered, "like I said earlier, are we doing what's best for the child or are we satisfying the parents' desires?" Although this teacher was sceptical about the benefits, she did not suggest a major change or alternative to integration.

Several of the teachers mentioned colleagues they knew who were opposed to including students with disabilities in their classes and did not want to do it. However, none of the teachers in this study admitted sharing this viewpoint.

German Teachers

The teachers in Berlin did not express true concerns at the refocusing stage, either. Their ideas for change were also directed to the management level. Their suggestions for change seemed less urgent than those of their American counterparts, however, because their working conditions were better than those of the teachers in the DFW sample.

In summary, no true refocusing concerns were expressed by the participants in this study. This finding is related to the nature of the innovation integration, which is different from many other school-related innovations. The teachers in Berlin, moreover, generally taught integrative classes on a voluntary basis. They were supportive of integration and had, in general, satisfactory working conditions, which explains why they expressed no true refocusing concerns.

Other Concerns

Teachers in both samples expressed concerns that did not fit exactly into the Concerns Based Adoption Model. These concerns are distinct from the other concerns to an extent that warrants describing them separately. These concerns

fall into two groups: Safety and lack of information. The concerns were quite similar in Germany and the USA and are therefore not described separately for the two samples.

Informational Concerns

Many teachers in both samples expressed the wish for more information on disabling conditions and on how to integrate students with disabilities in their classes. These wishes for more information did not constitute informational concerns as defined by Hall et al. (1973) because all participants in the study had been teaching integrative classes for at least 1 year and had developed general awareness about the innovation through trial and error experience. The need for more information does not fit into the personal concerns stage either because this need did not constitute an uncertainty about the demands of integration, the teachers' inadequacy to meet those demands, or their role with the innovation (Hall et al., 1973).

The teachers in both samples had, at the time of the interview, either passed through the stage of personal concerns or they had never experienced concerns at this stage. One teacher in Berlin described a case that demonstrated her need for information but this was not related to personal concerns as defined by (Hall et al., 1973). Talking about a student with severe cerebral palsy, she said:

Well I have to say honestly that, because I don't know her, I can't imagine right now how I could adequately integrate this child in physical education, because I realize that I even have difficulties with M. But I would have to experience it. I wouldn't say per se I can do that always and well. But I have become more confident by having gotten to know these two children [who she had in her classes] and think I'm more capable of seeing what can they do and what they cannot do. And they challenge one, too, that one develops together with them, what they can do. But I wouldn't know it right now. From how I know her during recess between classes, I would say 'well this is pretty difficult.' But I think if I'd know her longer that I or the other children would get some ideas.

When asked by the interviewer if she wished she had more information on this or similar situations, she said yes and continued to criticize the in-service system of the state education agency. Many teachers in both samples voiced concerns like this one.

These informational concerns could be described as management concerns because they are related to the provision of preservice and in-service training opportunities provided by the state education agency. Or they could be described as occurring at the consequence level because many teachers said they had the feeling that they could do many things better if they had more information. Informational concerns are described separately because they were expressed by many teachers in both samples and because they center around a perceived lack of information that distinguishes them from other concerns.

A need for more information about specific disabilities was expressed by this teacher:

...and so my concern was he sits in that chair so much he's not ever able to do too much out of that chair. You know, is he actually getting his physical needs met? Well I had another PT lady come over...and she said that we're gonna try and modify even more next year to actually give me some activities I can do with him out of the chair. And that helps me because I wanna know that I'm also helping him physically, the needs that he needs to be met. And so if they're gonna give me some guidelines, some boundaries, and things I can do with him that will help him to achieve a little bit more physically, I would like to be able to do that. And so that would probably be something that I feel I've been disadvantaged cause I don't have that professional experience that I actually feel comfortable of letting him get out of the chair and on a mat.

This example also illustrates that informational, outcome, and consequence concerns are closely related and should be treated separately only for analytical purposes.

The same teacher expressed a concern about appropriateness of activities done by the whole class and difficulty in making adaptations:

And sometimes we hit activities that are very hard to do and very hard to adapt. So it makes it frustrating because then I have to pull out a totally different activity for them to keep them involved in something. They are not able to do the exact same thing as everybody else is doing. Sometimes that gets frustrating.

These concerns for more information often led to a wish for more training:

I think I would like some more training. If it means in-service hours or something. And I think training on how to make your regular kids more aware of physical

disabilities. But also more training on what can I do with kids with physical limitations.

Another teacher would like to know more about students with autism. Her explanation provides another example of how closely related concerns are across several stages:

I wish I knew, sometimes, a little bit more about the autistic ones. Cause we have a few. Some days they're on, like you wouldn't believe. They can remember anything, say anything back to you. And then other days they're not here. They're basically just not here. They're here in body but in mind I don't think they are. And I wish I knew a little bit more about them.

Informational concerns relating to integration can be very specific as illustrated by the previous examples. However, informational concerns can also extend beyond knowledge about disabilities to knowledge about assessment and managing all kinds of individual differences. One teacher gave an example: "The one area I think I don't have enough expertise in is to say what is really wrong with M. You know, they tell me it's Tourette's, but I see many more things happening than Tourette's with him." To another teacher, who had students with attention deficit disorder in her classes, the need for more general information was similar:

Well, I think what would help me is at the beginning of the year to tell me exactly what's expected of these students. Cause I don't find out until after I've given them a lower grade or until something's gone wrong.

Whereas the former teacher thought that further training would help, she also described another aspect of integration that impacts informational concerns:

Maybe some further education in that area. What I'd like to understand more is what their problems are. And I think being included in the ARDs would be important too. I really think that would be an important step to start with. If I'm gonna have that child in class every day, 5 days a week, then I should be in there and know what's wrong with that child and what behavioral things that they, you know the coping skills that the teachers learn from the ARDs I should be able to have access to those teaching skills also. So that would be my biggest thing I think that needs to be changed at this point, that would help me.

Teachers expressed concern about lack of knowledge of types of disabilities as well as what they can do with these students in physical education. Lack of knowledge, in return, seemed related to a perceived lack of competence as was expressed by this teacher: "What I don't like is that I don't feel real competent, even though I've had these two classes, to really say this is what I really need to do with this child." This statement indicates that informational concerns can be related to personal concerns, too.

The wish to be included in the ARDs in order to obtain information about the children, as well as to learn coping strategies, indicates that informational aspects of concerns are not only closely linked with the management stage but also with the consequence and the collaboration stages. ARDs are by law an essential part of managing integration of which

the previous teacher, as almost all other teachers in this sample, was left out.

The last example, furthermore, reveals a dimension of concerns that is as important as the qualitative dimension. When asked why she could not participate in the ARDs, she responded:

I don't know. I guess I really haven't jumped two feet in and said "wait a min." But yet, no one's invited me, no one's said "C., there's an IEP for so and so today." At the middle school I taught at back in I., I was notified of every IEP of every student that I would possibly have. And then I made that choice if that was a student that I needed to know more about.

This statement indicates that concerns also have a quantitative dimension. In this example, the informational concern was not sufficiently high to warrant action. The explanation is given by the teacher herself:

And I guess I just haven't taken that step yet...because I've been successful. Because I really haven't felt like I'm drowning. I think maybe if I got to a point where I felt like I was drowning, then maybe that's when I would have said "Wait a min, guys, I need to be in these ARDs and what is going on!" But I've been able to, between my communication with the classroom teachers and with my help, I've been able to do okay.

In her response, this teacher revealed two things. The critical threshold when to take action was when she "feels she is drowning." She also pointed out two variables that influenced her informational concerns (i.e., communication with colleagues and the support of a paraprofessional in the classroom).

The following case is an example of a similar concern, but of much higher intensity, that resulted in action:

I've had kids show up that are special needs that I haven't gotten a piece of paper on. I mean I've got it now, cause I yelled and hollered. But I had a kid walking in my classroom, and I have no idea that they're coming here, no idea that they're special need, no idea they're prone to seizures, no idea what their IEP is. That's a scary situation, very scary. And that's the time that I take the bull by the horns and stop and take that person back to where they're supposed to go and say "I've gotta have something. I'm not gonna take a kid that's possibly prone to seizures and start having him running laps." And I'll have somebody else, my aide or whatever, run the class. While I'm gone taking care of that.

The previous two examples show that similar situations can result in similar concerns with very different intensities. Here, personal variables determine differences of how a situation is perceived. What seemed to be manageable to one teacher was reason enough for another teacher to immediately stop her teaching and take action to change the situation.

The following statement by a Berlin teacher demonstrates the similarity of informational concerns in both samples:

Well, we're just not trained special educators. We have, if we don't further educate ourselves at our own initiative, very little specialized knowledge....So what can we actually do to help these children [with behavioral disorders], thereby helping ourselves and to help the other children, too? What can we do, what does the disability of the child require so that we make progress? So just to get more help, not to be so alone.

This statement is representative of a common concern that the teachers are not trained specifically for teaching

in integrative classrooms. This concern is related to contextual variables. While employees in other private or public areas receive specific training when a new machine, technique, or software is introduced, for example, the teachers who participated in this study, with few exceptions, did not receive specialized training preparing them for teaching integrative physical education.

The perceived need for more information differed between the Berlin teachers, too. One teacher who had studied special education (i.e., pedagogy for individuals with visual impairments and blindness) and physical education explained that, even with his educational background, he would like to have more information on other disabilities. He also explained the role of contextual variables in this concern:

Yes, but I do think that, given the multitude of disabilities, it would be nice sometimes to know more about the individual types of disabilities. Because it is really very difficult to get the respective information while you're working and outside of in-services that are not always ideal. A classroom teacher has to take care of many things in addition to teaching.

Some teachers were not aware about the existence of specific information (e.g., books, workshops) about integrative physical education or where to get information on certain disabilities. Others did not have that problem. One teacher, who had been a special educator before he taught at

the elementary school, said that he knew where he could get information if he needed it.

Although the interviews revealed that informational concerns can be greatly reduced by specific training and experience, many teachers indicated that they could never have enough information. Therefore, informational concerns can be seen as continuous concerns. However, they may change to an interest in more information as the most urgent need for information on disabilities and how to accommodate them is met.

In summary, the need for more information was one of the main concerns. Informational concerns are related to concerns at the personal, management, and consequence level and are, therefore, multidimensional concerns. Informational concerns also depend on personal variables such as training and experience. Further, a lack of information is perceived differently by different individuals.

Safety Concerns

Safety concerns is another multidimensional concern that does not exactly fit into the Concerns Based Adoption Model and is therefore treated separately. Several teachers in both samples expressed concerns about the safety and medical conditions of their students with disabilities. This concern involves several stages of concerns simultaneously: It involves the informational stage because it is usually based

on a lack of knowledge about certain disability or medical condition. It also involves the personal stage because the teachers know that they are responsible for their students' health and are afraid of the risks, especially in a physical education class, where the risk of injury can be minimized but not eliminated. The management stage is involved because disabilities require planning of how they can best be accommodated in the lesson and how the lesson can be structured to minimize the risk of injury.

How the personal, management, and consequence stages can be affected by safety concerns is indicated by this statement:

When you're playing a game and you have little N., who just takes off through the middle of the class, you've gotta stop what you're doing sometimes and redirect him so he's not caught in the middle of something, or her. One of my main things is safety. Just, you know, so that the kids are not hurt.

Finally, the safety concern is also an issue involving the collaboration stage because it is through collaboration among classroom teachers, nurses, and adapted physical educators that these concerns can be reduced. One way that this process can work was explained by this teacher:

...since we have so many special ed classes here, we have a nurse that comes. She's here every day from 11 on. And because we have several in SPH that are on feeding tubes, and she has to come and take care of them. So let's hope it [an accident or injury] doesn't happen before 11. But I know she would be willing to help. And we get information on if they're not supposed

to do certain things. I get memos saying "this person cannot do..."

A concern expressed by some teachers was that students with more severe disabilities should not be included in all activities. They did not have them participate in some very fast and competitive activities in order to avoid the risk of injury.

In summary, more American teachers than German teachers expressed safety concerns. One reason why safety concerns were expressed less often by teachers in Berlin may be differences in working conditions.

Summary of Section

Using the stages of concern model (Hall, 1979), it was shown that the participants reported concerns at the personal, management, consequence, and collaboration stages of the model. The responses of teachers in the DFW area and Berlin revealed similarities and differences in their concerns.

Significantly less teachers in Berlin expressed personal concerns and to a lesser degree than their colleagues in the DFW area. Contextual variables (e.g., working conditions, freedom to teach children with disabilities) and cultural differences in expressing emotions may account for these differences. However, differences within the DFW sample suggest that personal variables (e.g., amount and type of

professional preparation, prior experience, and perceived competency) also influence concerns at the personal level. Teachers used different strategies to cope with their concerns. Many teachers used a trial-and-error strategy, some teachers gathered information from adapted physical educators, special educators, and/or IEPs. Two teachers in the DFW area left it to paraprofessionals who accompanied students with disabilities to integrate them in the class activities.

Both samples were similar in that most concerns expressed could be described as management concerns. Management concerns were largely affected by contextual variables (e.g., class size, number of students with disabilities, type and severity of disabilities). Personal variables influenced how teachers perceived and coped with their concerns.

Related to management concerns were consequence, collaboration, information, and safety concerns. Although teachers emphasized the positive effects of integration, they were also concerned about some negative effects on students. Collaboration with experts and colleagues was seen as essential by all teachers. Most teachers expressed a need for more information in order to being able to adequately address the needs of all children.

The interviews revealed that not all participants had had concerns at all stages and that concerns did not necessarily emerge in the order of the CBAM model. It became clear also that most participants had concerns at several stages simultaneously (i.e., they demonstrated a profile of concerns). Concerns not only occurred at several stages simultaneously but were also interrelated. For example, concerns at the management stage were related to concerns at the informational, the consequence, and the collaboration stage.

The analysis of interviews further demonstrated how personal variables (e.g., beliefs, attitudes, training, experience) and contextual variables (e.g., class size, duration of class periods, support available, type and severity of disability) influenced concerns. The personal and contextual variables that influenced teachers' concerns are analyzed in following sections.

Personal Variables

Gender, age, years of teaching physical education, years of teaching integrative physical education, and teacher training were hypothesized to affect concerns. Findings on these personal variables are described first, followed by findings on other variables that appeared to be relevant.

Gender

Only two of the American interviewees were male, whereas 12 interviewees were female. This distribution is representative of the ratio of males to females in elementary school physical education positions. However, this distribution does not allow interpretation with regard to the influence of gender on the concerns of teachers.

In contrast, 7 out of 16 participants in Berlin were male. No differences in concerns were found when analyzing males and female responses.

Age

Age of the participants did not seem to have an influence on concerns. The mean age of teachers in the Berlin sample was 5 years higher than that of their American counterparts. However, the interview data did not reveal differences in concerns that can be attributed to this difference in the average age.

Years of Teaching Physical Education

Although it could be assumed that teaching experience in regular physical education would have an influence on concerns, this did not appear to be the case for the teachers interviewed. For example, some teachers in the DFW sample with little, medium, and extensive experience recalled strong personal concerns when they were initially confronted with integration. Other teachers did not experience these

concerns. Half of the American teachers had prior experience but reported discomfort at the beginning because they did not know what to expect. Two first-year teachers, on the other hand, said they did not feel uncomfortable because they anticipated that they would be teaching in integrative classrooms. Furthermore, concerns at other stages were reported by teachers in all three categories.

The teachers in the Berlin sample had taught physical education on average 5 years longer than teachers in the DFW sample. However, the interview data do not suggest differences in concerns that can be attributed to this difference in the average teaching experience in physical education.

Years of Teaching Integrative Physical Education

Of the five personal variables, years of teaching integrative physical education had the most influence on concerns of most of the participants. All American teachers who reported initial concerns at the personal stage overcame these concerns with increasing experience of teaching integrative physical education. In some cases, this trial and error learning experience was supplemented by adapted physical educators who answered questions and provided ideas on how to integrate certain students with disabilities. In most cases, however, the teachers had to learn on their own, by trial and error. The importance of learning by doing was

described by one teacher. When asked how she overcame her initial concerns and got to a point where she felt comfortable integrating students with disabilities in her regular physical education classes, she responded:

Just doing it. Just actually the hands-on doing. And I think if someone came in and said "here's what you're gonna have, you got a year to think about how you're gonna do it," I don't think I would have been farther along.

However, this teacher also described factors that facilitated her hands-on experience. Several contextual variables contributed to making her experience a positive one. First, there was an adapted physical educator available for her questions:

...concerned how I was going to adapt what I was going to do. I immediately, having had J. who was in a wheelchair last year, I immediately went to my adapted PE teacher. And she was, when I had J., she was awesome....So I immediately went to her for help, but I kind of winged it, if you've heard of that saying (laughs). I just kind of winged it. And you learn.

Second, this teacher had very good support from paraprofessionals. She explained why this support was necessary:

the aides are real important. My particular aide and aides that come in with the little ones. Absolutely, I couldn't do it without them at all. Because if you noticed, even when I was doing the relay team, that relay team took my focus. And so, in turn, my aide was able to focus on the rest of the class. Or vice-versa, she takes on that focus and I take on the rest of the class. And the two of us work pretty good in that regard. And the same way with the little ones in the afternoon. I really, I need their aide with them.

Because their skills are even lower. I mean, T.'s arms actually have to be held out to help him catch the ball.

Class sizes and the number of students with disabilities that are included in the class interact with years of teaching integrative physical education also. This teacher stated that her conditions were very good in both aspects: "I have great class sizes compared to like what I'm sure you saw over at S.'s building. I have a small number of handicapped children in my classrooms. I have it pretty great."

Finally, teachers indicated that the type of disability is an important factor regardless of number of years teaching. The same teacher described her situation as follows:

He's almost behaviorally disordered. Behavioral problem is a totally different disorder, and that is much tougher I think in an integration situation than the physically or emotionally or the learning. Those three I can adapt with very well....It's the behavioral ones that I feel that are a real hindrance to the class...

Because this teacher does not have many students with behavioral disorders in her classes, this was not a big concern to her.

Attitude is another factor that interacts with experience with integrative physical education. This teacher described the importance of her attitude toward integration:

So I think it's my attitude towards the integration that will make it positive or negative. And I think that goes, that is my opinion of integration all the way across the board: You've gotta go into it with a more positive attitude. I think a lot of teachers and

administrators are going into with not a, I think they're going into it "that's gonna be more work, that's gonna be more hassle," the negative sides of it, rather than let's go and look at the positive sides of it. That's my opinion (laughs).

This teacher serves as example of how concerns, personal variables, and contextual variables are interrelated with years of teaching integrative physical education. Related to personal concerns are concerns at the management stage. Hands-on experience with integration seemed to lessen concerns of managing integration in the classroom as described by this teacher:

How I was going to adapt, but now it just comes so naturally. It just took me a while to get going but... I don't have to stop and pre plan what I'm going to do. I immediately know "okay, we're doing this lesson and M. is gonna get two misses and M. is gonna get to run from half court." So it came along.

Some teachers did not seem to have gone through that trial and error learning process. Their cases also illustrate interaction between personal and contextual variables. As a consequence, both teachers were very little involved with the students with disabilities in their classes. One of these teachers described her function with regard to integration as follows:

So I'm the PE teacher who doesn't have to be completely responsible for them. I teach the regular class, and then the aide will go with the inclusion person. I just go on and teach the class. Mainly what I do is I give encouragement and say, "Good job," and things like that. But I'm not directly involved.

Later in the interview this teacher summarized her role this way: "So I'm mainly a spectator watching the aide work with them." Another teacher made the decision that, because of the large class sizes, he could not work with the student in a wheelchair and thus he made no effort in this regard.

The teachers in Berlin reported concerns at the personal level to a much lesser degree than their American counterparts. Therefore, the relationship between teaching experience in integrative classes and personal concerns could not be confirmed for the German teachers. The effects of other variables, such as working conditions or the fact that most of the participants volunteered to teach integrative classes, may have influenced the relationship between these concerns and experience with integrative physical education.

That experience in teaching integrative physical education does have an effect on teachers in Berlin as well was illustrated by this teacher:

So either as in-service or during preservice teacher training, for example....I was not allowed to do my Referendariat [extensive 2-year student teaching completing the teacher training program, see Chapter 2] in an integrative class. These things. So an early introduction. Because it does make sense to know very, very much in advance, and not to say after the fourth year "and now I could start teaching an integrative class again, now I know what is going on." Because one makes a lot of mistakes on the way, and the children and one's work would only benefit if those mistakes could be avoided. Sure, one learns from mistakes, but the children don't necessarily benefit from the mistakes at that moment.

Several Berlin teachers pointed out the importance of team teaching with an experienced colleague if one does not have prior experience with integrative physical education.

Teacher Training

Some American teachers did not report initial personal concerns about integration. Training prior to the encounter of integration at their work place and positive beliefs and attitudes toward integration seemed to be the primary reason for no initial personal concerns. Three teachers with no initial personal concerns were first-year teachers when they were confronted with integration.

One teacher described the value of hands-on experience as part of her teacher training: "One thing that helped me is I took adapted PE in college. And they sent us out to different schools and you did intern teaching." She described the function of preservice training in adapted physical education as follows:

There are a lot of teachers who don't like it. I can tell you that. They don't want them in their class because they don't know what to do with them. And I think, probably, had I not ever taken the adapted PE class in college that I probably would have felt that way. Cause I wouldn't have known. You know it's not knowing. It's the same thing I think it causes lots of prejudices: The lack of knowing what that person is all about. And the lack of knowing what they need. And so you are afraid of it and you don't want them in there.

However, all teachers who received preservice training concerning integration reported positive attitudes toward

integration. These attitudes ranged from objective professionalism to genuine regard. This teacher expressed a professional attitude:

I think it's just to recognize that every child of my class, whether they have a disability or whether they're regular child in a regular class, they're part of my class. And I've gotta make them a part of my class, any way I can do it. I mean no matter what activity I'm on, they're part of my class and they deserve the same attention and the same right.

Affection, warmth, and genuine regard were expressed by this teacher:

When I started teaching them in class, I enjoyed them because they are very loving kids and they'll all learn. They'll all learn just like everybody else. And, I liked them. I mean I've always liked them. They've always been my favorite kids. I mean I love the rest of them, but there is something very special about'em.

One purpose of teacher training is to provide prospective teachers with knowledge and information they need to perform their professional responsibilities. All American teachers who participated in the study, except one, took adapted physical education classes as part of their preservice teacher training program. The functions of adapted physical education teacher training classes are mediated by type and content of the classes (e.g., classroom lecture v. practicum or intern teaching experiences), personal variables (e.g., attitudes, individual differences in perceptions of how much information is needed), and

contextual variables (e.g., working conditions, types of disabilities).

The effects of preservice adapted physical education classes were not evaluated as significant by all participants. One teacher, who had been taking classes in a master's degree program in adapted physical education, was faced with difficult working conditions and needed knowledge that might help her change these working conditions. She explained that, with the needed information,

...I could go and I could speak up more. And I could perhaps demand these things. Now I don't know if I'd get them, and I'm sure I'd piss somebody off along the way, but if I knew more, and if I knew exactly what to ask for, and exactly what the laws stated, I mean it could only help. You know at least to get my point across.

However, her specific needs were not addressed by the classes she had taken, which, therefore, were of limited value to her. A lack of realistic preparation for school reality was emphasized by this teacher when she spoke about her preservice preparation for: "In college I had an adapted PE class, just one. And it just wasn't clear how it would be in the public schools. I just didn't know what to expect."

Not everybody needed specific information or hands-on experience in order to be prepared for integration. This teacher remembered from his preservice adapted physical education class that

they strongly encouraged us "they need to be involved any way you can do it." So it made me aware, you know, I

gotta make him feel a part of the class as much as possible because he's a part of the class.

Otherwise, the class was "...just scratching the surface of what I could learn but at least it was little bit of ground work." Although this teacher had students with disabilities in his physical education classes in his first year of teaching, his relative good working conditions and his perceived competence helped to set the framework for successful teaching of integrative physical education despite the lack of intensive preservice training in adapted physical education.

For most participants, preservice training created or increased awareness about the needs of students with disabilities in regular physical education classes. For most of the teachers interviewed, however, these classes did not provide what the teachers said they needed. One teacher stated in this regard: "And so I think the more knowledge and things we can learn of proper activities and proper techniques to do, I think that would make us more confident in the classroom. If that makes sense."

Although preservice training in adapted physical education was more helpful to some teachers than to others, this teacher, the only one who had not received any training in adapted physical education, indicated the consequences of this lack of training:

I was not taught anything like that. Of course, you can come up with things. I mean I could go sit them in the corner and just give them a ball and help them roll it around, but I'm sure there's more they can do than that. And I'm just not educated to know what those things are.

In some cases preservice training can have detrimental effects. One teacher criticized unrealistic presentation of integration:

...it's going to be so much harder if they're just gonna give you the kids and say "okay, they're here" with no help. And that is different from the class where you see "this is what's happening off the North of Boston and they're doing this and integration, they're in here and they're mainstreaming students and et cetera and it's great. And they have this program and the kids are just great."

A second teacher was shown a video as an in-service measure before students with disabilities were placed in her class. She did not like what she saw and was rather more critical of integration after watching the video, as she explained:

I saw a PE teacher without an aide running around trying to help the student to be a part of the class. And I didn't like that scene at all because I thought "oh no, that's too much stress. That's other kids getting their time taken away for one person." We're forcing this too much. Now who is benefitting here? Who is not gonna benefit?"

For this teacher, the video may have created more concerns than it solved.

No teacher in the Berlin sample had taken required adapted physical education classes as part of their preservice teacher training. In Berlin required adapted

physical education classes are not part of teacher training programs in physical education; such classes are available only as electives. One of the teachers had studied Rehabilitationssport (adapted physical education), 5 teachers had participated in in-service training in adapted physical education, and one teacher had preservice and in-service training in adapted physical education. Similar to their American colleagues, many of the teachers in the Berlin sample expressed lack of information and the need for better preservice and in-service training.

Several Berlin teachers expressed a lack of information on different disabilities and how to accommodate disabilities in physical education as did their American colleagues. Furthermore, several teachers in Berlin said that the content and teaching methods of the traditional physical education have to change in order to accommodate students with disabilities and that these changes have to be reflected in teacher training programs.

Several teachers in Berlin emphasized the importance of team work for the integration of students with disabilities. The following quote illustrates the changes thought necessary by the Berlin teachers that also needed to be reflected in teacher training programs.

Specifically inservice training for teachers, very important....About collaboration with colleagues, about content. Especially in physical education, contentwise

something has got to change. Yes, and then openness, I mean openness for supervision, too. That, too, is an issue causing Angst, you know. Communication training, really. All these things like active listening and resolving conflicts as partners, these things. I think one can't do it without those things.

Teachers in Berlin, who had studied physical education, stressed the importance of specific physical education teacher training and teacher certification for successful integration. Especially essential is an extensive knowledge of teaching methods and physical education to accommodate students with disabilities in physical education. These teachers' statements were probably based on their own experience and on observations of or conversations with their colleagues who did not study physical education.

The teachers, who had not received their preservice teacher training in physical education, on the other hand, did not express a strong need for more knowledge in physical education. Only one of those teachers said, when asked how she felt when she first taught children with disabilities, that it was physical education that was newer and less familiar to her than integration. The teachers who had not studied physical education seemed not to be worried by that fact. They had attended in-service training or team taught with experienced colleagues and thereby acquired a working knowledge of physical education content and methods.

Beliefs and Attitudes Toward Integration

How preparation experiences and videos are perceived depends on beliefs and attitudes toward integration. Beliefs and attitudes impact concerns and how teachers cope with them.

Almost all participants expressed a positive attitude toward integration philosophy. Their attitudes were based on different beliefs and emotional responses: (a) belief that all students are part of the class and must be treated according to their individual needs, (b) strong feeling of affection toward students with disabilities expressed by some American teachers, (c) beliefs that individual differences in society must be accepted, and (d) belief in their perceived competence to handle the challenge. This teacher described how personal experiences had shaped her beliefs:

You're gonna have to learn that anyone different is gonna have to be accepted by the big group. That's supposed to be the norm. My husband is black, and my baby is half black. That's something that a lot of people look at and go "we're different." What those kids have to learn is that people who don't understand other people because they are different are gonna be afraid of them, and they're gonna criticize them. And those kids have to let themselves be learned about.

Another American teacher described how religion influenced her beliefs: "I'm a Christian, and God is ultimately wonderful and there's a place for everybody, and those kids are special like everybody else, you know."

Attitudes influence concerns in different ways. Several interviewees mentioned that integration can and does make teaching or the managing of a class and a lesson harder and requires more effort and energy, especially if support services are limited. This American teacher indicated how attitude influences concerns:

You've gotta go into it with a more positive attitude. I think a lot of teachers and administrators are going into it like "that's gonna be more work; that's gonna be more hassle," the negative sides of it, rather than "let's go" and look at the positive sides of it. That's my opinion [laughs].

This sentiment was echoed by several German teachers. When asked what she would like to change at her school, this German teacher said: "...no, I think it is not that important that big changes take place. And I think, maybe something needs to change in the heads of some teachers rather than the external conditions."

Amount of effort exerted on making integration work seemed to relate to attitude, as indicated by this statement: "and I always make a point to make it where they can also do it." In contrast, teachers with less positive attitudes or neutral attitudes tended not to make that effort. In contrast, another teacher said: "I'm mainly a spectator watching the aide work with them."

Attitudes also influence concerns at the consequence stage. Social interaction between students and social learning was perceived as important by these teachers:

A lot of times the integration program is not so much for the physical or for the academic. It's more for the social and getting the kids working. And that's a real different mind set for a lot of people. It took me several years to get through that barrier: that they don't always have to perform at the same level. They're here, they're having a good time, they're still physically active. That's what's important.

Social learning as a consequence was also identified for the students without disabilities. When asked about the benefits of integration, most teachers mentioned positive social learning effects on the students without disabilities first. Although several teachers said that integration slowed down their teaching, they did not perceive this slowing down as a major concern.

On the other hand, an American teacher who was more sceptical about integration was concerned about possible consequences for the students without disabilities:

It doesn't bother me as long as there is someone else to watch them and work with them. It's no problem at all. But if I had to be, if I had to watch them and watch the students that would be a lot of extra stress and I feel like it would take my time away from the other students....you start thinking, like I said earlier, are we doing what's best for the child or are we satisfying the parents' desires."

Although most of the participants had positive attitudes, some American teachers recalled that they had not had positive attitudes when they first started teaching

students with disabilities in their regular classes. One American teacher, who is now an avid supporter of integration, described her feelings when the first students with disabilities were put in her class: "I hated it. I was like: why are they dumping on PE? Why are they doing this to me?!"

Teaching Style

Teaching styles are influenced by and influence concerns. Teachers in the DFW area and Berlin used a variety of teaching styles in their integrative physical education classes. These teaching styles are influenced by contextual variables (e.g., class size, type and severity of disability) and personal variables (e.g., goals, attitude toward integration).

Some teachers did not adapt their teaching style much to accommodate the students with disabilities in their classes. They were concerned about the consequences for the other students (e.g., "taking time away from them") or did not know how to integrate the student with a disability.

Many teachers in the DFW area several described adapting the activities for students with disabilities whenever possible. Frequently, peers or grouping arrangements were used to accommodate students with disabilities. These adaptations were perceived by these teachers to be very conducive to social learning.

Some teachers used teaching style to manage large classes of 55 to 75 students and integration. One teacher taught her students from Grade 1 onward to work independently in small groups. She explained how she and her aide taught her students to work independently:

...we work from day one. Getting them to work individually on their own. Individually, with groups because we do a lot of things with four to six in a group, or six to eight in a group, where you gotta pick people. And if you get in a group that you're having a problem then you've got to work it out. Because usually we say "you have to work it out. What would you do?" And they tell us and we say "okay, go back and do it." So we teach them how to make some really good decisions on their own about how to take care of problems, which will help them later in life.

Taking away time from the rest of the class was no concern to this teacher. Because her students had learned how to work independently, this teacher reported working one-on-one with students with disabilities despite her large class size. In this regard, she stated:

And I've had some really good elementary skills kids come in here and learn how to bump the volleyball. Because I've got in here with them and played one-on-one with them. And J., he actually bumped it back to me. And we worked on it. We worked on it for 3 weeks. I bumped it to him, he bumped it back to me.

In an example of the relationship of teaching style and consequence concerns, one American teacher reported difficulties getting a student with a disability to participate in the lesson: "One is very lazy. I just can't get him to do..." This teacher said she mostly let the aides

work with the students with disabilities. In contrast, another teacher personally addressed lack of motivation using individualized teaching. She explained: "I mean, I involve those kids. They have to if they want to or not. You know, this is like "you're part of this classroom, you're gonna do it." She even taught her aides not to do the activities for the students but to let the students do the activities for themselves:

They were trying to do everything for the kids. Like the one in the wheelchair. I tell him "no, let her take herself." And they wanna push'em instead of making the kid use her arms. And they have to be taught that that's the only way the kids are getting their exercise.

Two American teachers described how they chose their content to accommodate students with disabilities. One of them described her style this way: "Cause a lot of the games that I use are basically what they will call adapted PE games. Cause all the different, everything is adapted PE." The other teacher explained how she selected content:

You have to really learn how to organize. And I think probably by the years of experience and the years of having them, the elementary skills kids in my classes, basically I do things that everybody can do. No matter what.

Not all participants in the DFW area adapted the selection of their class content. Some teachers just adapted their regular content to fit individual needs. Others selected special content on some days of the week and not on others. Some teachers had one day of the week when the

students with more severe disabilities would not come and when they could do more organized and competitive games. The selection of content thus depended on experience and training, individual beliefs and goals, and on contextual variables such as type of disability, age of the students, and equipment.

While teachers in the DFW area reported that they did not alter their teaching styles significantly, several German teachers emphasized that a new, nontraditional understanding of and approach to physical education was necessary to adequately integrate students with and without disabilities. This concept of physical education is characterized by a variety of movement opportunities instead of the same movement tasks for all. The movement opportunities, in form of different stations or open movement tasks and arrangements, for example, are designed to accommodate a wide spectrum of abilities, skills, and interests. Activities that are organized include explorative learning, individualization and social interaction, movement education (experiencing movement, one's own body, space, and different materials and equipment), and psychomotor content rather than traditional one-fits-all content and methods.

The teachers in the Berlin sample used this movement education concept of integrative physical education to different degrees. While some teachers incorporated some

components of the movement education concept into their more traditional physical education, the physical education lessons of other teachers resembled very little traditional normoriented physical education. One teacher described how her physical education in the lower grades had changed:

That is an enormous difference compared to the past. In the past I also did it the way how I hear it from my children now. When we did vaulting, everybody was lined up. They stood in line, very nicely, and did their vaults, maybe three per class period, which was a lot. And back then I didn't think it was bad, and sometimes I enjoyed it very much. And at times I taught a lot of physical education, but it was very different. I wouldn't think of something like that anymore.

...we start very early, not according to what is written in the Rahmenplan [curriculum, equivalent to TEKS] what one should do in first and second grade, but that the children learn how to use the apparatus, that they, in a play like way,...that they just climb over it. So that they see how such a thing feels like and what you can do with it.

...We set up many things, and they just do something with it. Climbing around or climbing up, that they just lose their fear of the apparatus. Because, especially children who are easily afraid or who have disabilities, you can't expect that they do the same. That's why you can't do that, because you have to offer them something, too. And you don't want to keep them busy in a corner, but they should do what everybody else is doing, if possible, in a different way, easier way. And this easier way is preferred by many other children who are not disabled, too.

...And when there was still money, we purchased equipment for the vestibular system, balls, pedalos, or balance boards, or stilts, and parachutes, or these bands to move to music. So these things that don't necessarily have to do with apparatus gymnastics. Or scooter boards, they are very popular, too.

...This development was brought about through the children with disabilities. You just realized that you can't do the traditional anymore. And very soon you didn't enjoy it any longer, either.

And what we noticed more often when we talked, what is not requested as much anymore, what you used to enjoy

very much, especially the children, the competitive games. And since children who simply can't participate, you don't do them. They [the talented, competitive children] can go to sport clubs to run as fast as they want, if they want to, but it is not important, nobody asks who won.

Not all teachers in the Berlin sample described using this nontraditional style to the extent mentioned by this teacher. There are differences between lower and higher grade levels, too. This teacher was talking about lower grades. However, the responses of many teachers in the Berlin sample indicated a growing importance of this open, nontraditional concept of physical education.

Although teachers in the DFW area referred less often to nontraditional teaching styles than their counterparts in Berlin, the design of this study does not allow conclusions about differences in teaching styles between the two samples. A variety of teaching styles was used in both samples, and these teaching styles seemed to be related to concerns and to personal and contextual variables.

Personality

Personality influences teachers' concerns and how they react to their concerns.. This teacher's statement indicates that self-confidence limited his personal concerns when he was first confronted with integration:

It was kind of awkward even just being a first year teacher but since I did take a class that kind of touched on how you could adapt certain activities I was excited to the challenge. I wasn't like nervous to the

point where I didn't want it. It was something I was just looking forward to to add.

Another teacher explained why she was not very concerned on the personal stage when she first encountered integration in her classroom: "...it was all new to me. I don't think at points pulling my hair out, because I'm a people person." In both cases it was personality (i.e., self-confidence, openness and interest for new situations) that limited their personal concerns.

The importance of personal attributes such as self-confidence, assertiveness, flexibility, tolerance, and optimism was revealed by interviews in the DFW area and Berlin. Several teachers described how they saw integration as something new they wanted to try or as a challenge. All German teachers who participated in this study had been at point where they were asked if they wanted to teach an integrative class or if they wanted a teaching position at a school that would involve teaching integrative classes. One teacher, for example, described how she got involved with integrative physical education. She explained that there had not been enough certified physical education teachers at her school to cover physical education in all classes. The teacher described how, although she was not certified in physical education, she volunteered to teach physical education in integrative classes: "...it [physical education]

has to be covered in all classes. Well and so at one time I raised my hand and said I think I can do that. I would do that."

The German and American teachers agreed that flexibility was another very important personal attribute for teaching integrative classes. Many teachers in both samples described situations where lessons did not go as planned and where flexible acting was required. The teachers indicated that teaching in integrative classes is less predictable with regard to difficulties with motor tasks or social behaviors than in regular more homogeneous classes. One teacher in Berlin who had been involved with integration for more than 20 years said that there will always be new situations where teachers have to make spontaneous, unplanned decisions.

Several teachers indicated that being able to establish good rapport and relationships at a personal level with all students is another important personal attribute for the integration of students with and without disabilities. Some teachers said that this was especially important if one teaches students with behavior disorders. However, these personal variables do not exist in a vacuum but are interrelated with other variables such as class size or personnel support.

In the section on informational concerns, examples were given how tolerance levels with regard to certain situations

and concerns varied as well as how teachers reacted to their concerns. One American teacher was very outspoken, interrupted her lesson, and took the "bull by the horns" to change the situation that concerned her. Being outspoken and self-assertive as the teacher in this example, however, is no guarantee that situations will change and concerns be reduced. An example of how contextual variables that caused one teacher big concerns could not be changed by this teacher was given in the section on management concerns.

Collaborative Abilities and Skills

One variable, which could be described as a personality variable, is discussed separately because it was so important to many German teachers; this is the ability and skills to work as a team. This factor was especially important to those teachers in Berlin who taught physical education as classroom teachers (some were certified in physical education some were not) and taught their integrative classes together with one or two other teachers in a team.

All of these teachers emphasized that positive personal cooperation within the team, as well as good relationships, were essential to successful integration. Because the teachers generally establish their teams based on personal preferences, most teachers reported positive experiences. Only two Berlin teachers reported negative experiences with team work. However, all teachers who had worked in a team

agreed that good relationships within the team were a sine qua non for successful integration.

The examples given to illustrate personal variables that influence concerns of teachers demonstrate that these variables are interrelated. Furthermore, the examples have shown that the influence of personal variables is mediated by contextual variables. What these contextual variables are will be described in the following section.

Summary of Section

The variables gender, age, and years of teaching physical education did not seem to influence teachers' concerns. The variable years of teaching integrative physical education had a strong influence on teachers' concerns. Many teachers in the DFW area reported that hands-on experience in their gyms helped them overcome concerns at the personal level. Teachers in Berlin reported less personal concerns but emphasized the importance of teaching experience, too.

Preservice teacher training seemed to have mixed effects on concerns of teachers in the DFW area. The influence of teacher training seemed to be mediated by the type of training, other personal variables such as self-confidence, and contextual variables such as class size, and type and severity of disability. The importance of hands-on

experience as part of teacher training was confirmed by teachers in Berlin who had received such in-service training.

Positive attitude towards integration seems to have strong influence on teachers' concerns. However, the interviews also showed that the influence of attitude is mediated by contextual variables such as working conditions.

The interview data suggest that teaching styles are influenced by and influence concerns. Several teachers in Berlin emphasized that traditional direct teaching styles are inappropriate for integration. However, the design of this study did not allow a closer examination of the role of teaching styles, which remains a task for future research.

The importance of personal attributes for teaching integrative classes was illustrated by many responses. Especially attributes such as self-confidence, flexibility, optimism, assertiveness, and tolerance influenced teachers' concerns and how they handled them.

Finally, German teachers who worked in teams strongly emphasized the importance of collaborative skills and abilities for successful teamwork. This aspect distinguished teachers in Berlin from their colleagues in the DFW area who usually do not work in a team with other teachers.

Contextual Variables

The coding process yielded three categories into which contextual variables that influenced the concerns of the

participants can be grouped: (a) collaboration, (b) program organization, and (c) students. Following, the variables of each of these categories are described.

As a consequence of differences between the educational systems in Texas and Berlin, the contextual variables relevant to the teachers' concerns differed significantly in certain areas. In other areas, the variables were similar or the same for the two samples.

Collaboration

The themes relating to collaboration center around interaction. In this context, collaboration refers to quantity and quality of interaction between the interviewed teachers and paraprofessionals, adapted physical education specialists, principals, classroom teachers, and other professionals.

Paraprofessionals

Two types of paraprofessionals played a major role in relation to the American teachers' concerns about integration. More than half of the participants had a paraprofessional who was their assistant specifically for physical education. These aides were with the teacher in all classes. One teacher defined the function of her paraprofessional as follows: "I have a paraprofessional that is like is a helper that helps with crowd control and helps with the games and everything."

The other type of paraprofessional accompanied students with disabilities to physical education. These paraprofessionals came and left with the students they assisted during the school day. Their function in the gym was defined by one teacher: "So their job is to see what it is I'm doing and help them accomplish that."

Teachers described these two types of paraprofessionals as having different strengths. The physical education paraprofessional was familiar with the content of the lessons but less familiar with the students, whereas the student's paraprofessional knew his or her student(s) well but was less familiar with in physical education content and activities.

Both types of paraprofessionals were very important to the American teachers. One teacher did not have either type of paraprofessional during her first year. She said: "I guess my first year was an eye opening experience. Cause we didn't have aides." After having taught for several years with the paraprofessionals, she said: "I mean I couldn't do without any of them." She described why the paraprofessionals are so important:

I guess you'd have to say that the aides are the number one thing. I know those teachers are doing a good job, but they [the paraprofessionals] are the mediators between. They're the ones bringing the kids and they have to get the kids under control and get them where they're supposed to be. And they work their poor selves to death.... They are the glue that makes the whole thing work.

The same teacher explained what made the paraprofessionals so important to her: "The aides here are wonderful. You know they just jump in, they don't ask me questions, they don't say 'what do you want us to do?' They just see, and they just do."

This initiative was also valued by another teacher:

My aide is, she's my right hand. I mean she's there with me throughout the day. And, if anything, she helps me probably modify the best because she'll always make me aware "okay we gotta do this for V." Then we talk through that together.

Good paraprofessionals can facilitate integration even if the attitude of the teacher is skeptical as indicated by this quotation from a regular physical educator.

It [students with disabilities] doesn't bother me as long as there is someone else to watch them and work with them [students with disabilities]. It's no problem at all. But, if I had to watch the students, that would be a lot of extra stress. I feel like it would take my time away from the other students.

Occasionally, it seemed as if the paraprofessionals were including the students with disabilities rather than the teacher. This teacher's statement indicates a reversal of the roles between teacher and paraprofessional with regard to integration: "and so I have one aide that comes in with six of them. And boy is she busy. And a lot of times I get the kids going, and then I'll go help her."

Because of the importance of the paraprofessionals, consequences are severe if the cooperation between

paraprofessionals and teachers is not good. Several of the American teachers indicated problems with their paraprofessionals. For example, one teacher said, "...you can have aides that come in and cross their arms and lean up against the wall. And I've had to come to them and say 'I need you to do this.' And 'you have to do that.' Pointblank."

The consequences of poor cooperation between teacher and paraprofessionals were described by one teacher:

And they [students with disabilities] normally just sit in their wheelchairs. They try to maybe get them to participate, but we're not able to work with them cause we have the 100 kids in the gym also. And they have aides that are with them all the time, but the aides just sit with them.

When asked if the paraprofessionals made any attempts to involve the two students in wheelchairs, the teacher responded:

Sometimes, very rarely. That's kind of touchy. That's why I'm kind of dancing around this one, cause it's kind of a touchy thing. They don't do as much as they should be doing, no. They should have them up walking cause they can walk on walkers....So, you know, it's something that I think needs to be going on with them and is not.

The school district's adapted physical educator had purchased the walkers for the two students. However, the teacher's attention was occupied by a large class, and the students' paraprofessionals did not make much effort to involve them in physical education. Thus, the walkers were not being used.

In summary, only one of the teachers who had physical education paraprofessionals reported big problems with her paraprofessional (see section on management concerns). The other teachers' working relationships were so good that the paraprofessionals could take over a lesson if the teacher had to leave for some reason.

About 30% of the teachers mentioned difficulties with or lack of cooperation with paraprofessionals in tasks pertaining to students with disabilities. Clearly, not only the number of paraprofessionals was of importance, but also the working relationship between the paraprofessional and the teacher.

Paraprofessionals play a very different role in Berlin. The distinction between the two kinds of paraprofessionals that was made for physical education in Texas does not apply in Berlin. No physical education paraprofessionals are employed in Berlin schools. Two reasons for this difference are that (a) physical education is not taught by only one specialized physical education teacher as at many schools in Texas but in many cases by classroom teachers and (b) the class sizes are usually significantly smaller than in the DFW area.

The regulations of the Berlin school code provide parents with the possibility to apply for a Schulhelfer (paraprofessional) for their child with a disability

(Arbeitskreis Neue Erziehung e.V., 1996). These paraprofessionals accompany the student during the whole school day or for parts of the school day. However, the availability of these paraprofessionals depends on the availability of funds. Given the current financial crisis in Berlin, there is a big shortage of these paraprofessionals.

Only 4 of 16 teachers said they had a paraprofessional come with a student to physical education. They all agreed that, without the assistance of their paraprofessionals, they would not be able to successfully and satisfactorily integrate students with disabilities.

Unlike the paraprofessionals working with teachers in the American sample, paraprofessionals in Berlin usually have postsecondary education; this is often in the health or social science area. The teachers in Berlin reported excellent working relationships with their paraprofessionals. Only one teacher reported one incident in which the cooperation between him and the paraprofessional failed.

Although the organization of paraprofessionals is different in Berlin and the DFW area, and although the class sizes are much smaller in Berlin, the lack of paraprofessionals was a concern to several teachers in Berlin, too. Several teachers described the need for more assistance in the classroom in order to be able to appropriately integrate students with disabilities.

This need is related to other contextual variables such as type and severity of disability or whether the teacher is teaching together with a colleague in a team or not. This variable influences concerns at the management, consequence, and personal levels.

Adapted Physical Education Specialists

The availability of adapted physical education specialists applies only to the DFW sample because Berlin schools do not employ adapted physical education specialists. The interviews revealed that the availability of an adapted physical education specialist made a big difference. One teacher who had the support of an adapted physical education specialist in her gym almost every day emphasized this support when asked what she did not like about integration: "I can't really think of anything. And I think it has to do with the support. If we didn't have the support, then I would have some concerns about my qualifications and the safety of the child..."

Support from the adapted physical education specialist prevented personal, management, and safety concerns for this teacher. Her only concern was that she might lose the support from the adapted physical education specialist:

And as long as we have that support, that's great. I'll do all I can. I worry because I see an increase of mainstreaming. And that's a little bit of a concern because we might get to the point where we have a lot of students with disabilities without the proper support.

I don't see that happening any time in the near future. But I guess it's a possibility. Because in the past there were none here, and now we have four that I know of...

Adapted physical educators were important to regular physical educators, not only for providing direct support in the gym, but also for teaching physical educators how to accommodate students with disabilities in their regular classes. One teacher described how her adapted physical educator helped when she did not know what to do with certain students:

And if I'm stumped, and I don't know what to do, Mrs. G. is wonderful. She always has an answer. It may be "what about this? Or have you thought about this? Or let's problem-solve it." We always come up with a way. And it's neat. It's team work together. She's taught me so much, so much about working with special needs children. And I think she's taught me so much to the point where I don't worry about anything. I'm not apprehensive, I'm not scared anymore. That fear went away many years ago, after the first 6 months or a year when I didn't know what to do.

Cooperation between teachers and specialist varied from consulting to direct assistance. Those who received direct assistance in their gym often expressed concern that the adapted physical educators could not be there many times because they were involved in ARDs:

And another hard thing is the continuation of ARDs. They take a lot of time. And I know that they're very important but...she'll [the specialist] be gone days and days because she's doing all these different ARDs at different schools.

Several teachers saw their adapted physical educator only once or twice during the school year for a brief period of time, too little to make a difference. Why the adapted physical educator in these cases could not come more often was explained by one teacher:

We only have one [adapted physical educator] in the district and he goes to all, well there is 17, 18 grade schools plus junior highs and high schools, so one guy to cover it all.... And he's only here may be once a month if that, I mean very rarely can he get up here, he has all the other schools also.

How the lack of adapted physical education services affects teachers depends on several variables. One teacher criticized that her adapted physical educator did not provide direct assistance in her lessons. However, her working conditions were such that she could accommodate her students with disabilities without that support: "I have great class sizes compared to like what I'm sure you saw over at S.'s building. I have a small number of handicapped children in my classrooms. I have it pretty great." This teacher also had a physical education paraprofessional as well as paraprofessionals who came with the students with more severe disabilities.

Personal variables like university training in adapted physical education also mediated the effects of a lack of adapted physical education specialist services. One teacher described how an adapted physical education class he had

taken in college taught him responsibility to make all students part of his class and give them the opportunity to participate. Together, with his physical education paraprofessional, this teacher accommodated a student in a wheelchair without help from the adapted physical educator.

Another teacher in a similar situation also had a student in a wheelchair in his class. This teacher had received no training in adapted physical education and focused his attention on teaching his large class. Because the student's paraprofessional made no attempt to involve the student either, the student spent most of the time watching the rest of the class.

Collaboration With Principal and Colleagues, School

Atmosphere

When asked what they thought was required to make integration work, many participants mentioned cooperation among all individuals involved in the process, including teachers, paraprofessionals, and principal. One teacher, for example, who could not participate in ARDs because of scheduling conflicts, described why she did not worry about being left out:

But I feel like with that group of people that they're gonna say the way I feel about things. They're not gonna leave it [her opinion] out intentionally. They're really good about asking me how I feel about this or that or what I think. So I don't worry about it.

Another teacher described good collaboration in a different context:

We have what we call integrated planning. The classroom teachers tell me what they are going to be teaching. I can include in my classroom some activities that they're going to be teaching. But also the special class teacher participates in the integrated planning. So we all plan together. That way we're able to see the whole picture of what's been brought up. For instance, when third grade studied Africa for 4 weeks, I did research on African games and music and stuff, and brought that in to our class.

Another teacher explained a critical component of the collaboration process:

One of the reasons that I came over to this school was that the principal is so flexible and so understanding and works cooperatively with a group versus a dictator saying: It's gonna be like this....And ever since we've been together [teachers and principal] our school has had nothing but "exemplary", which is a top rating in the state. And a lot of that has to do with the principal allowing the teachers to make the best decisions...

Several teachers mentioned the pivotal role of the principal for the collaboration process. One teacher explained the impact of communication: "Mr. B. has made it available to me to be able to have them [the students with disabilities from a self-contained classroom] in a regular class but not a very big class."

Other teachers stressed that an important part of collaboration is to be able to tell the principal that something does not work and to know that the principal will help:

I think it starts with the principal. E. has created a real wonderful climate where the teachers feel comfortable going to say "E. this is not working. Can we try something different?" Or "what do you think, I'd like to try this." She's open to anything you wanna do.

Teachers also agreed that this collaborative process had to include the whole school. One teacher said,

For the entire school to work together. I'm sure it's taken years or at least a couple to get all this together. For the teacher, for the functional skill teacher, their individual classroom, to work with the classroom teacher, the music teacher, the PE teacher, the principal, to line up student helpers. It has to be a schoolwide thing for it to work.

One teacher, however, pointed out, that a collaborative atmosphere does not exist at all schools: "What I like is they include me and they ask me my suggestions and opinions, which I've never had at other schools." While several teachers emphasized the good collaborative atmosphere at their schools, some teachers reported problems of communication and cooperation. These seemed to underlie many of the problems described under informational, management, and collaborative phases of the concerns model.

The German teachers also emphasized the importance of a collaborative atmosphere for integration. One teacher's statement is representative for many other teachers in the sample: "I benefit, for example, very much from the experiences not only of the colleague in my class but also those of other colleagues in other classes." Another teacher gave the following specific example why it is beneficial to

have several teachers who teach physical education at one school:

This pool of ideas can never be big enough for me. I think, when you share with colleagues, new things are always added....This Pommeskriegen [a tag game], for example, that was something I had learned just recently, and I'd have regreted it if I hadn't had this opportunity to share with my colleagues who showed me this game. And I think it is easier to get new ideas by sharing with other teachers than by sitting down at home and reading books that describe such ideas. Especially because you have the advantage, if they are teachers at your school, they know how the game worked with our children and how you may have to change it, and they can tell you how the children changed the game.

Only two participants in Berlin mentioned that they wished there was a little more cooperative atmosphere at their school.

Program Organization and Working Conditions

Several American Teachers teachers expressed concerns that physical education served as a tool to fill the gaps related to the organization of classroom teaching. Physical education was seen by those teachers as a place where the students can be sent during the conference periods of the classroom teachers. As a consequence of this scheduling, physical education teachers generally had large class sizes and could not attend ARDs, which were usually scheduled during the conference periods of the classroom teachers.

Although one teacher called physical education the stepchild among all the subject areas, none of the German teachers perceived physical education as a dumping ground or

something to fill a gap in the organization of the school day as several American teachers did. The working conditions of German physical education teacher were generally better than those of their American counterparts. Although many teachers criticized the lack of equipment and/or facilities, physical education is generally treated as any other subject in the schools' schedules.

ARDs. Very few of the teachers in the DFW area attended ARDs for students with disabilities in their classes, and those who did were invited only to a few. How this lack of participation in the ARDs can result in informational concerns was described previously. The opposite experience, how nice it was to be invited to an IEP, was also described by one teacher:

And I was impressed [about how the IEP was conducted] because I hadn't been asked to be in an IEP this year till this one little boy. And I said "well he just doesn't move motorically like the rest of the first graders do. Like he's missing something in his movement education." And it's kind of nice that they included me actually.

The same teacher explained why she could participate in the ARDs: "Everybody has a conference period at the end of the day. So it works real well because the teachers who need to be there can be there." Only one other teacher mentioned that the ARDs at her school were scheduled in the afternoon, which allowed her to participate.

Not being able to participate in the ARDs did not necessarily cause concerns. Teachers differed in their needs for information. The lack of certain information may concern one teacher but not another who, for example, does not consider this information to be critical or has sufficient teaching experience not to need the information.

In addition to personal variables, other contextual variables also influence the consequences of nonparticipation in ARDs. Some teachers do not worry about not being able to attend ARDs because of a good collaborative atmosphere at their school: Their input is sought before the ARDs, they know that their position will be represented in the ARDs, and they are informed about the outcome of the ARDs. On the other hand, some teachers heard about students with disabilities the first time when they were put into their classes.

Teachers in Berlin attended the Förderausschuß (IEP) only if they were also the classroom teacher of the class in which they taught physical education. Although several teachers said they wished they had more information about certain disabilities and activities to accommodate students with disabilities, this need for more information was not linked to the participation in the Förderausschuß.

Class size. Most of the teachers interviewed in the DFW area had class sizes of more than 40 students. The concern,

expressed by several teachers, that large class sizes limited the attention they could give to the students with disabilities was highlighted by this teacher: "in that first grade group with 74 kids and nine with special needs, there's no way I can take care of nine special needs kids, even with a teaching assistant."

These large class sizes made it difficult even for very organized teachers to adapt activities in order to integrate students with disabilities. The same teacher described how sometimes she ran into difficulties and how important the good cooperation with the paraprofessionals was in these instances:

Uhm, every once in a while I do. And I'll go ask the aide that's with the kid or I'll ask my teaching assistant "what do you think we should do? What do I need to do?" I mean sometimes you get stomped, you're thinking there are 70 kids out there and you're thinking about 20 different things and you look over and you think "oh man, what do I need to do here?" You know, you just think, you just ask, and somebody will have something in their heads.

In Berlin, class size in physical education is not different than in the other classroom subjects. Integrative classes in Berlin cannot have more than 23 students. Most of the physical education teachers interviewed in Berlin were also classroom teachers of their classes. They taught physical education in their class just as they taught German, math, or arts.

Other Organizational Factors. At some schools in the DFW area, students had physical education every day, but the periods were only 25 min long. This was a concern to some teachers because it did not leave them enough time to teach skills and to accommodate special needs. One teacher explained why she would prefer an alternative schedule:

And I would much rather have 50-min classes or 45-min classes and see them every other day. It would be more effective I think. I'd be able to teach and instruct much better with the numbers of kids I have to deal with.... in 25 min [laughs], and exercising, and then trying to learn skills with that many kids: not enough time.

Even though the class size and the scheduling limited the extent to which she could individualize her teaching, she mentioned personal variables that optimize teaching under these conditions:

I'm a real structured kind of person but you have to be to have 75 of them at once or 74 of them at once and a 25-min period or they never learn anything. Because it would be mass baby sitting, and I can't do that. My conscience won't let me do it [laughs].

Teachers in Berlin did not have the problem of very short class periods. All class periods at elementary schools in Berlin are 45 min long. At elementary school, students have three periods of physical education a week. These periods are usually organized as two periods back to back on one day and the third period on a different day.

Two teachers in the DFW area described a different scheduling and placement problem. In their schools, groups

of students from self-contained classrooms participated in regular physical education. These students, whose abilities and skills varied widely, were not spread across several physical education classes but placed in only one, smaller class. This placement of a whole group of students from self-contained classrooms in a regular class exceeded the normal prevalence of students with disabilities in the population.

This situation concerned the teachers in two ways: First, it slowed down the teaching and learning process for the students without disabilities, which was described in the section on concerns about consequences of integration. Second, the placement was not appropriate for some of the students with disabilities. Some were functioning at a higher level and would have benefited more from placement in a higher grade, and others could not keep up with the activities because they were functioning at a lower level. Therefore, the teachers were concerned about the consequences for both students with and without disabilities.

In Berlin, in contrast, the number of students with disabilities is regulated by formulas described in Chapter 2. Integrative classes usually have 23 students, three of whom have disabilities, and sometimes 15 students, five of whom have disabilities. The students with disabilities who are in an integrative class are in that class usually for all

subjects. No other students are integrated in a class for certain subjects only such as physical education.

Only two teachers in Berlin expressed concerns about the ratio of students with and without disabilities. One teacher had taught integrative physical education at a cooperative school where classes from the special school for students with learning disabilities were combined with classes from the elementary school, which was housed in the same building, for physical education. This form of integrative physical education resulted in higher proportions of students with disabilities. The other teacher taught at an elementary school that used the 10 + 5 model. Both teachers expressed concerns at the management and the consequence level about the high ratio of students with and without disabilities in their classes. Both teachers suggested to keep the ratio of students with and without disabilities as close to the ratio in the normal population of elementary age children as possible.

Some teachers in the DFW area described their concerns about other scheduling practices that interfered with their teaching and therefore had effects on integration as well. These practices seemed bizarre to a foreign observer and indicated a rather low status of physical education compared to other subject areas. When asked what she would like to change, one teacher mentioned the confusing physical

education scheduling practices at her school. She explained how some students stayed in class throughout the whole period, whereas other students switched in and out during the lesson. This switching practice also changed between days:

What happens is they have them split up, the band students split by the instrument they play. So we have the flute section coming in one day, and that's large, and then you have the tuba section, which is smaller, like five, so they're gonna come in and out. That's how it is. So it's not a set number, and sometimes we'll have like the choir stays an hour...or the art students stay an hour so, it varies.

Another teacher explained how integration in his class unintentionally benefited from complex scheduling changes. First he had to explain these changes to the interviewer twice because he could not quite follow. This was his second explanation:

Okay, so let's say I have three fifth grade classes. On one week all those three fifth grade classes come 4 days....They miss 1 day to music, one of the classes is gone to music. On the other week they go to music and art, so that's two things they're gone for, so they only come 3 days that week....So it really bounces out the numbers there, cause it's a lot lower class level. If one's at art and music, then I only have one class that's in there at a time. So it varies my numbers a little bit. And that's different this year. So I'm kind of new to that too. Usually we had three classes all the time, 5 days a week. So it's a little bit different.

When the interviewer, who still was not sure if he had understood the scheduling, asked how the teacher liked the new practice, he explained how one inadvertent outcome was that he could spend more time with individual students:

At first I was not too satisfied with it for the fact that I'm reteaching almost every day because there's a group that has missed the previous lesson. So I'm always constantly having to reteach stuff as far as the same lesson but, as far as the numbers, it's nicer because of the fact they get more hands-on time and I can work more one-on-one. So that's nice. So it's kind of got its pros and cons.

However, this result of reduced class sizes was an exception in the sample. With few exceptions, class sizes in physical education were much bigger than in the other content areas.

Teachers in Berlin did not have these kind of problems. In general, the working conditions of the teachers in the Berlin sample were better than those of the teachers in the DFW sample. Nevertheless, many participants in Berlin expressed concerns about their working conditions (management concerns). The main concern centered around the current financial cut backs that affect the whole educational system in Berlin and integration in particular. The specific effects of these cut backs on integration that concerned the teachers were reductions in teacher hours, that is the time during which two or three teachers can teach an integrative class as a team; few paid leaves of absences to attend in-services; little money made available to buy and maintain equipment; and no hiring of young teachers who bring with them new ideas.

Especially the increase in class sizes and the cut back in teacher hours for team teaching was a concern to several teachers in Berlin. This teacher explained why it is important not to teach alone:

Like classes with 23 children, at the very beginning when they're all very lively and don't know each other yet, and many don't have simple social skills yet and have to learn them first, to do this by yourself, I think, is very difficult....Because you have more time to observe individual children and to address the needs of individual children. And that applies to physical education, too....To have someone, on the one hand, for certain movement tasks that require spotting and assistance and, on the other hand, to have someone who has a general overview so that nothing happens.

How critical contextual variables are in regard to teachers' concerns about integration was explained by one participant. When asked what she would like to change with regard to integration in physical education she responded:

Well I know only how it is at our school...and here it works very well. Like I have been trained quite well...Then we have excellent facilities, then I have the PM [paraprofessional] who can assist me when needed. Then we have rather good equipment, too. So I think, overall, it is quite an idyll that we're working here [laughs]. We know that increasingly, the more I talk with other teachers [at other schools] I realize that, too, how terrible that is [at other schools] or when I see the gym at my own children's school, that's terrible.

Another factor that was important to the teachers in Berlin was the voluntary nature of teaching in integrative classes. Although the school code does not give teachers the choice (see Chapter 2), de facto teachers generally do have the choice whether they want to teach an integrative class or

not, if their school has integrative classes. Not all elementary schools in Berlin integrate students with disabilities.

To most teachers this choice was very important. This teacher explained why he thought teaching integrative classes should be voluntary:

Not all colleagues are for integration. They are for integration, but they don't want to teach integrative classes themselves. I think that is legitimate if somebody says that. It takes several other things besides physical education. That you have to take the children to the restroom and to wipe their bottom. You have to ask yourself 'can I do that or is my feeling of disgust so strong that I don't think I can do that.' Then I should stay away from it. I think it's simply legitimate to say 'I can do it, I do it' or someone says 'I couldn't do it, I can't do it,' I think that's okay. And, if somebody teaches an integrative class or is to teach an integrative class, then he should be asked in advance if he is willing to do this work or if he thinks he can do this work....I also think doing it on a voluntary basis is a much more intelligent solution.

This choice or sense of ownership may be one reason why the teachers in the Berlin sample expressed less concerns at the personal level than their American counterparts.

Only one teacher in Berlin supported "soft pressure" to encourage teachers to teach integrative classes. This teacher's argument illustrates the role personality plays in the decision whether to teach integrative classes or not:

I would also push people who wouldn't do this by themselves with more or less soft pressure to teach an integrative class even if they say 'I have to take 27 in-services so that I'm qualified enough to do it' and that being the reason why they eventually wouldn't do it. I believe one should be much more courageous and

self-confident. And even old people can still learn a lot.

Teachers in the DFW sample do not have a choice if they want to teach integrative classes. Because the physical education teachers in Texas teach all the students at their school, they do not have the choice of teaching certain classes and not others as their German colleagues do.

Students

The interviews revealed that the students were one of the critical variables affecting teachers' concerns about integration both in the DFW area and Berlin. Important factors within this variable are type and severity of the disability, the student's age, ratio of students with and without disabilities, and the interaction of students with and without disabilities. These factors are treated separately in this section.

Type and Severity of Disability

Type and severity had a major influence on the concerns of teachers. Disabilities that were perceived to be difficult to accommodate were physical disabilities, autism, moderate to severe mental retardation, and behavioral disorders. Different schools decided differently when, in the words of one American teacher, "they're [the students with disabilities] ready to come in for integration" and "ready for regular ed PE." Despite these differences in whom

was considered to be ready for integration, some concerns about specific disabilities were shared by several teachers.

One teacher who did not feel uncomfortable at having a child in a wheelchair in his class indicated he would like to have more training:

As far as someone using some kind of braces or even using a wheelchair, if I could have more resources of what I could do with those specific disabilities it would be more helpful. Because those are the areas I probably struggle the most to try to meet the needs.

Another American teacher, when first confronted with a student in a wheelchair in her class, also had informational concerns and described what she did about it: "I immediately, having had J. who was in a wheelchair last year, I immediately went to my adapted PE teacher."

The former teacher also indicated the importance of severity of the disability:

I'm fortunate enough that V. is the kind of guy that tries everything, whether he can do it or not. And so a lot of the things that we'll try for him. It'll gear down basically some of the physical aspects of what the other kids are doing but he'll still concentrate on the skill part of it. And he's always real willing to comply, so it's not like I'm having to pull teeth with him, which makes it a good situation.

Another example that disabilities do not necessarily cause concerns was as follows:

And every once in a while I say to the kid "what do we need to do here?" I mean, like with the sixth grader I'd say "do you want me to move you up to this line or," and this one usually says: "No, I will serve from where everybody else is serving from."

When disability was both physically and mentally more severe, this made it more difficult for teachers to adapt activities: "He's in a wheelchair and cannot speak... He needs to be pushed. I can move it around, but he couldn't go somewhere if he needed to. He always needs to have somebody with him." The severity of the disability of this student was one of several reasons why he was mostly sitting by the sideline watching the rest of the class.

Several American teachers reported how initial support to students with disabilities was faded out the more the students learned the rules and procedures as well as to interact with their peers without disabilities. Such a fading out of assistance was not possible in the case of students with a multiple disability.

Autism was another disability that was a concern to some American teachers. One teacher described her safety concerns:

...and just safety concerns. And well it's just when you're playing a game and you have little N. that just takes off through the middle of the class, you've gotta stop what you're doing sometimes and redirect him so he's not caught in the middle of something, or her.

Another teacher did not have safety concerns but wished she knew more about them to facilitate participation:

I wish I knew, sometimes, a little bit more about the autistic ones.... Some days they're on, like you wouldn't believe. They can remember anything, say anything back to you. And then other days they're not here. They're basically just not here. They're here in

body but in mind I don't think they are. And I wish I knew a little bit more about them.

A similar concern about students with mental disabilities was expressed. The severity caused the teacher to have difficulties including them in activities:

I feel better working with the CP kids than I do with some other kids with, uhm, the guys that drool and have to have somebody that really walk them down to the gym. And sometimes they go off, only they just click and run off and run around and scream and make noises. I really wish I knew more about those guys and what I should do.

One teacher explained the interaction of type and severity of disability, support by a specialist teacher, and class size as they impact concerns:

...we had the boy in fourth grade that's autistic. When she's not here [the adapted physical educator] it's very hard to get him to do things. A lot of times the boy will kind of blend in. When we've got 50 kids or 60 kids or 70 kids, it's real hard to justify taking the paraprofessional and having her work one-on-one cause then it's just me against 70. It's hard to do unless you've got that special help.

The same interaction of type and severity of disability and working conditions was illustrated by another teacher talking about a student who probably had Attention Deficit and Hyperactivity Disorder (ADHD):

Because he can't sit still. He'll just lay there, he might just get up and start wandering around and go lay on the mats....As far as the best thing for him [pauses], there's not really anything that he will be good at, that will keep him occupied. I mean it takes a very short amount of time before he will just wander off.

This teacher also said that he had not received any training in special education or adapted physical training. It can be assumed that personal variables such as experience and training are also interacting with the contextual variables of type of disability and class size. However, because of the strong influence of class size, the extent to which personal variables impacted the interaction could not be determined. The teacher, who said that she could not integrate the student with autism without the assistance of the adapted physical educator, was a very experienced teacher with extensive training in adapted physical education and with a positive attitude toward integration. However, these combined positive personal variables could not counter the effects of class size.

Behavioral disorders was most often mentioned as causing concerns. The teachers either had big problems with students with behavioral disorders in their classroom as was described in the section on management concerns, or they said that they could not imagine having disruptive students in their usually very large classes.

One teacher explained why students with behavioral disorders were difficult to integrate in large regular classes:

And the way they're made up they can just erupt at any time, just be bent out of shape, and you can't calm them down. And the teacher we had before, they went

everywhere. She never had them in her room. And it was just, I had the hardest time with her students. They had no control whatsoever.

She partly attributed difficulties related to behavior problems to the teacher of the self-contained classroom:

And then she [the former special educator] left, and we got this new BAC teacher. He's just so good. Those kids, they're good. They know how to control themselves. I'm not saying they don't erupt every now and then, but they know, the majority of the time, how to walk in the hall, how to handle themselves in the room and how to come in here.

In this case participation in physical education was part of a behavior modification program designed by the special educator. The teacher explained as follows,

Previously, I would try to remove the child from the situation until help got there. But it's not that way anymore with this new teacher. Because they don't get to that point, cause if they are at that point, then they don't get to come.

A German teacher explained that students with behavioral disorders were more difficult to integrate for teacher and students. When asked how the students with and without disabilities in her class interact with each other, she said they got along very well. Then she said this about the students with behavioral disorders:

It is much more difficult with behavioral disorders, I mean with aggressive behavior. The children can't handle this very well. And that really is more difficult to integrate....with an aggressive child, that is still a puzzle to me. Because I don't know how to deal with it, how to better deal with it. I do think that if there are open movement tasks and opportunities that aggressive children will rather find their area, too. But, if aggression consists of harassing other

children, then they're going to continue to do this. So in this area I haven't come very far yet.

That students who display disruptive and aggressive behavior, not only disturb other students, but can also cause a snowball effect was described by this German teacher:

That is a problem, to give the child freedom on the one hand, he always comes back to the group for some time and participates, and at the same time to keep an eye on the group that not one or two, who would like to behave similarly go along with the most difficult one. Then the group drifts apart. But rather try to stabilize the group, that the group accepts that he has more freedom and accepts him back when he's willing to participate. It is difficult. And sometimes those children fall through the cracks or totally withdraw themselves from the class, take their things, and disappear.

This teacher also indicated the limits of integration. The fact that all students with disabilities cannot be integrated all the time, even under relatively good working conditions such as those in Berlin, was pointed out by many teachers in the Berlin sample.

Another German teacher described a concern related to difficult behavior that was expressed by several teachers in Berlin:

I often talk with colleagues about this, that the actual integration children are not the children who cause the big problems. You know them and you're prepared for them. But meanwhile you have in each class five, seven students with difficult behavior to an extent that it takes enormous energy, that you have constantly some behavioral disturbances during class, that you have to intervene constantly.

This problem was described by several teachers in Berlin but not by American teachers. One teacher attributed this

phenomenon to the fact that more students with difficult behavior are retained in regular classes now than in the past when they were referred to a special school for students with behavioral disorders or a school for students with learning disabilities.

The socioeconomic status (SES) of the neighborhood surrounding the school also seems to play a role in the context of behavioral disorders. Behavioral disorders seemed to be a more important or urgent issue to teachers from schools in neighborhoods with lower SES than to their colleagues at school in neighborhoods with a higher SES. Teachers' descriptions of general SES were used to make this judgment rather than validated reliable sociological measures.

Type and severity of disability, as well as the number of integrated students, not only affect concerns of teachers but, consequently, also impact their attitude toward integration. Illustrative of this, one teacher said:

I think a lot of it is because our mainstreaming involves only a handful of kids. And so I don't have the wide range of experience having multiple kids with disadvantages in my classes at one time. You know, if my experiences were different I might have a different attitude, maybe a different view, if it was difficult to get to a lesson, if you had a lot of interruptions and things like that.

Age of Students and Psychosocial Development

The positive interaction of students with and without disabilities and the social learning on both sides were things most of the teachers liked about integration. Although most of the teachers reported positive interactions between students with and without disabilities, some teachers reported that age influenced the interaction. One American teacher said, "No one harasses anybody; I think it's because it's K, 1, and 2. If we had fourth, fifth, and sixth graders in here, it'd be a totally different story." Another teacher, who worked with the fifth and sixth grades, described a different social climate when asked about her goals in physical education:

Right now, teaching them to work together and sportsmanship would be my biggest goal. Getting them to do that, just to learn that you have to work together. It's hard for them, it's more of a win effort: win, win, win. They think, "this person is not good, we don't want them on the team." That kind of stuff. So we work hard in all the games, you know, working together.

The students with disabilities whom this teacher had in her class were diagnosed ADHD but were not significantly lagging behind their peers motorically. Therefore, the competitiveness of her students' was not an obstacle to the integration of students with disabilities. It is easy to imagine, though, how it could become a problem if these students had to accommodate peers with limited motorical abilities and skills.

School environment also influences social-emotional climate in a class. One teacher attributed the positive and supportive climate among her students partly to the, mostly Caucasian, middle class environment of her school. Another teacher, in turn, pointed out that her school was a majority-minority school, in a less affluent environment.

The teacher was mentioned as another factor mediating the social climate in a class. One American teacher described this as follows:

There is this teacher and for 2 years now I've taught her classes. The students walk in the hallway as quiet as a mouse. They walk in the gym as quiet as a mouse. If someone gets hurt, they always offer to help them. They never tattle, they never talk when I'm talking: It's the teacher. It's the teacher 90%, it's 10% the children. I think the teacher sets the climate for what's expected in the classroom.

Class atmosphere was mentioned by several German teachers, too. One teacher described how the tolerant climate that he observed in the classroom carried over to physical education. A teacher in Berlin, who taught only physical education at his school, said that one has to know integrative classes very well. Because of the great diversity and social dynamics in integrative classes, several teachers pointed out the benefits of teaching physical education in an integrative class as the classroom teacher of that class. Several teachers described how it helped them to

know the class in different contexts such as the classroom or field trips.

The school's atmosphere, a factor that is closely related to the teacher factor, was mentioned by several teachers to be a main influence on the students' social behavior. One teacher said: "It's the whole attitude or atmosphere in the school.... it's expected in the school that you behave a certain way. It's not been said; it's just nonverbal: This is how we treat people."

The effects of such an atmosphere on the students was described by another teacher:

I guess because we all get out here and work with them [the students with disabilities]. Not only Mr. C. [the adapted physical educator], myself, my aide, the aides from the elementary skills, their parents, but the kids. I think the kids are probably the biggest help. They never make fun of them, they never laugh at them, they are always willing to take them as a partner and help them out. Even if they had to turn the rope for them so that they could jump, the kids will go do it. And I think probably that's the biggest compliment of the whole thing that the kids are willing to get out there, and the school is very good about doing it.

Another teacher described how these effects are a product of a long process, how growing up in a school atmosphere promoting integration of students with disabilities as appreciation of individual differences formed the students' social development. Her statement also indicates that schools differ in this regard:

And they've grown up with him [a student with a disability]. The new kids who move in from another

school or something, those kids have tendency to criticize or to put'em down or laugh at him. And the other kids have never ever done that, so they look at those other guys and go "hey man!" Every once in a while I have somebody follow one of those nuts and say "hahahaha" but somebody who's liked the kid all of his life. But that's kids, you know, dumb stuff. But most of the kids that have grown up with them accept them just fine because they know and they're not afraid of them and they don't have this curiosity thing: "oh well they're different," you know.

The cases of negative interaction between students with and without disabilities that were described in the section on concerns at the consequence stage, together with the reports of positive interaction in this section, indicate that integration needs to be planned carefully, taking into consideration the variables described in this chapter. One concrete example of how the environment can be set up to stimulate positive social interaction was given by this teacher:

And a lot of times it's amazing to me that they'll want some of the special needs kids on their teams, knowing that they're gonna do better because of the situation that I have set up for scoring, which is a really neat thing like "Come on J., be on my team, be on my team." And I mean just the smiles of those kids, that's worth it right there.

However, the interviews in both countries revealed that, although the environment and the teacher can make a big difference with regard to the success of integration, the psychosocial development of the students remains an important factor. Several teachers mentioned that integration becomes more difficult in higher grades. Competition, the comparing

of performance, becomes more important in late childhood.

This development increases the demands on teachers. Several teachers said that they saw more benefits of integration in lower grades and that they observed that students with and without disabilities were growing apart in higher grades. That a disability becomes more obvious and becomes more of a barrier was noted by several teachers.

Some teachers in Berlin referred to the influence of the media, especially television, and how competitive sport and the importance of winning is portrayed there, on the psychosocial development of the students. In Berlin, the influence of sport clubs was another factor mentioned in this context by some teachers. Especially motorically talented students often join sports clubs. These sport clubs are competitively oriented, and their members usually compete in leagues. Several teachers pointed out how it is very difficult, and often not possible, for students who are a member of a sport club to distinguish between the competitiveness that characterizes their activities in the sport club and the more holistic nature of physical education.

Another factor that was mentioned by teachers in Berlin is the curriculum. Although less influential than the factors described previously, the Rahmenplan (equivalent to the Texas Essential Elements) was described as not very

helpful in fostering integration of students with and without disabilities in physical education. The emphasis on formal sports such as soccer, volleyball, track and field, or gymnastics, as well as narrower and more detailed goal specifications, were seen as barriers to integration by several teachers in Berlin.

Parents

A few American teachers mentioned the parents as a variable influencing integration. One teacher perceived a direct influence by the parents on her teaching of their children with disabilities:

I'd like to modify it as a PE teacher but the parents, they more or less say how we're gonna treat the children. If they say "modify," we modify. If they say, "we don't want you to modify; treat them just like everybody else," then we can't modify the activity.

However, this case is also a good example of the interacting influence of personal variables. When the teacher was asked by the interviewer how she communicated with the parents, she responded: "I don't have direct contact with the parents. It's the aides they talk to. I can if I want to, but at my school the people who work directly with that student all day long communicate with the parents."

One teacher told the investigator that some parents of students with disabilities volunteered as paraprofessionals at her school. The same teacher also gave an example of how

parents can indirectly influence teachers' concerns, in this case at the consequence stage:

We worked with these two little kids, and they were walking, and they were going to the potty by themselves. And on the weekend they'd go home, and mom carried them around and did everything for them, didn't have them do anything by themselves. Came back, couldn't walk. On Monday they could not walk. It made me so mad.

In general, however, parents seemed to play a less important role regarding teachers' concerns about integration compared to the other variables described in this section.

Summary of Section

Three clusters of contextual variables had a strong impact on teachers' concerns about integrative physical education: collaboration, program organization, and students. Several variables were considered within each of these clusters. Collaboration was an important variable for teachers in both samples. While the focus of collaboration for the teachers in the DFW area are the paraprofessionals, the adapted physical education teacher, and the principal, the main focus of collaboration for the teachers in the Berlin sample is their colleague with whom they team teach. Besides the collaboration with colleagues, a general supportive and collaborative school atmosphere was considered very important. Class size was another concern to most of the American teachers. Besides collaboration and class size, type and severity of disability and the age of students were

seen as a third critical contextual variable by teachers in the DFW area and Berlin. Working conditions (e.g., class size, support by paraprofessionals or other teachers, facilities) were a critical variable for teachers in both samples. This is not surprising because the working conditions are closely related to the management concerns, which was the biggest area of concerns to teachers in both samples.

The interrelationships between contextual variables (as well as between contextual variables and personal variables) is also similar in both places. For example, the effects of having a student with behavior disorder in a class is mediated by factors such as class size, number of other students with disabilities in that class, age of the students, the support of paraprofessionals or other teachers, or the availability of specific in-services addressing this situation.

Summary of Results

The comparison of physical education between the DFW area and Berlin revealed differences and similarities. Differences exist with regard to working conditions and some culture specific physical education content.

Elementary teachers in Berlin have more input regarding which classes they teach and generally more flexibility regarding the organization of their work than teachers in the

DFW area. In practice, teachers in Berlin generally have the choice to teach integrative classes if there are any at their school. Class sizes are significantly larger in the DFW area than in Berlin. While adapted physical education specialists assist teachers in the DFW area with the integration of students with disabilities, no such experts are employed by the Berlin education agency.

In spite of these differences in working conditions, physical education itself is similar in the DFW area and Berlin. Physical education goals that were reported by teachers in both locations were similar and physical education content was similar, too, with the exception of some culture-specific differences.

Analysis of the interviews revealed complex relationships between teachers' concerns, personal and contextual variables. Many concerns are multidimensional (i.e., they affect more than one of the CBAM stages of concern). Several but not all teachers described a change of concerns. However, this change was not linear and did not affect all CBAM stages of concern.

The biggest differences between the two samples appeared to be at the personal level of concerns. Significantly more teachers in the DFW area expressed concerns at this level than their colleagues in Berlin. Personal concerns seemed to be influenced especially by personal variables (experience

and training, personal attributes such as attitude toward integration, self-confidence, initiative) but also by contextual variables (class size, number of students with disabilities, types of disabilities, availability of choice to teach integrative classes).

Both samples were similar in that the biggest area of concern was management concerns. Management concerns were mainly influenced by contextual variables (class size, ratio of students with and without disabilities, types of disabilities, personnel support, equipment and facilities, scheduling practices). However, the influence of these contextual variables was mediated by personal variables (attitude, training and experience, perceived competency). Further, there seems to be a relationship between management and consequence concerns.

Teachers in the DFW area and Berlin saw mainly positive effects of integration, especially with regard to social learning. However, some concerns about consequences of integration were voiced by teachers in both samples, too. Consequence concerns were mainly affected by contextual variables (class size, scheduling practices, type of disability, psychosocial development of students, available support, curriculum). These contextual variables were mediated by personal variables (physical education goals and philosophy, training and experience).

Collaboration was often mentioned as prerequisite for successful integration and constituted a change from the traditional teacher role. Collaboration concerns of teachers in Berlin were not specific to physical education but focused on team work in general. Teachers in the DFW area had concerns about collaboration with adapted physical educators, paraprofessionals, and principals. A supportive school atmosphere was considered important as were personal attributes such as philosophy, commitment, and personality.

Because of the nature of the innovation (i.e., integration) that has a legal basis in the DFW area and Berlin, few refocusing concerns were expressed. The main concern at this level was about working conditions such as class size, personnel support, and scheduling practices.

Other concerns that were mentioned by teachers included informational and safety concerns. Both concerns are examples of multidimensional concerns because they affect personal, management, and consequence concerns. Need for more information was one of the main concerns expressed in the interviews. Teachers said they need more information on disabilities, how to integrate students with certain disabilities in physical education, and, mentioned by some teachers in Berlin, training in collaborative skills. Both informational and safety concerns are affected by personal and contextual variables.

The following personal and contextual variables were identified to influence teachers concerns about integration. Personal variables: (a) Years teaching integrative physical education, (b) type and amount of training, (c) attitudes towards integration, (d) teaching styles, (e) personality, and (f) collaborative skills and abilities. Contextual variables: (a) Collaboration (with paraprofessionals, adapted physical education specialists, principals, and colleagues), (b) program organization and working conditions (class size, ratio of students with and without disabilities, choice to teach integrative classes, scheduling practices, participation in IEPs), and (c) students (type and severity of disabilities, psychosocial development)

Personal and contextual variables did not only influence teachers' concerns, they are also interrelated with each other. For example, the influence of the contextual variables class size, number of students with disability per class, type and severity of disabilities, and support from adapted physical education specialists, paraprofessionals, and colleagues mediate each other. Similar interrelations exist between personal variables. For example, type and amount of training, personal attributes such as self-confidence, attitudes, and previous experience influence each other. Finally, the interviews revealed relationships between personal and contextual variables. The influences of

type and severity of disability (contextual variable) and
type and amount of training (personal variable) are
interrelated in how they affect teachers' concerns.

CHAPTER V

DISCUSSION

The purpose of this study was to investigate concerns of physical educators about integration of students with disabilities in regular physical education classes and to compare the concerns of teachers in two countries. This chapter is comprised of a summary of the study, discussion, conclusions, and recommendations for future research.

Summary of the Study

In many Western countries, students with disabilities have been educated increasingly in regular classes. The educational placement of and services for students with disabilities within a spectrum ranging from special schools to regular classrooms have been controversial in several Western countries such as the USA and Germany. The educational reform of integration (i.e., educating students with disabilities together with their peers in regular classes) changes the roles and responsibilities of teachers. The success of integration, as with all other educational reforms, depends to a large extent on the teachers who are the critical link within the educational system because they implement the reform. Teacher's concerns about integration are, therefore, an important subject for research.

As a response to frequently observed failure of educational innovations, Hall et al. (1973) developed the Concerns-Based Adoption Model (CBAM) which serves as the theoretical framework for the present study. According to this model, concerns of teachers who are faced with an innovation can be categorized into stages: (a) awareness, (b) informational, (c) personal, (d) management, (e) consequence, (f) collaboration, and (g) refocusing. CBAM addresses the question how change affects individuals, both their attitudes and behavior. The analysis of concerns, in turn, serves as a diagnostic basis for actions facilitating change.

In the USA, physical education has been particularly affected by the debate about integration. However, only one researcher used concerns theory to investigate teachers' concerns about individualized physical education instruction, a central component of integration (Knowles, 1981). Understanding of educational reform as a complex process involving multiple variables indicates a need to study these variables if integrative physical education is to become regular practice accepted by and benefiting everyone involved. However, research on physical educators' concerns about integration has been sparse.

Purpose

The present investigation was planned to explore the concerns of physical education teachers about integrating

students with disabilities in regular physical education classes and how teachers cope with their concerns. A second purpose of the study was to expand concerns theory by identifying personal and contextual variables that affect physical educators' concerns about integration. The study was designed as comparative research because a better understanding of teachers' concerns about integrative physical education can be gained if a comparison is made between teachers in two countries who are facing a similar problem under different circumstances.

Method

A qualitative social sciences approach was used. In order to fully understand teachers' concerns from the teachers' perspective, a qualitative design is necessary because it does not press the teachers' responses into a preformulated schema.

The design of the study can be described as an in-depth comparison (Halls, 1990b) of a specific issue (i.e., concerns of physical educators about integration). The investigation was a comparative study at the micro level. Using in-depth interviews (Taylor & Bogdan, 1984), concerns and the variables influencing them were examined in an inductive way. Data were analyzed using grounded theory procedures (Strauss & Corbin, 1990).

Participants. Purposive sampling was used to select 30

physical education teachers who had students with disabilities in their regular physical education elementary school classes. Sixteen participants were selected from Berlin, Germany, and 14 participants were selected from the Dallas-Fort Worth-Denton (DFW) metroplex area, USA. Criteria followed in the purposive sampling design were diversity in personal background and work environment. Diversity of participants' personal background was sought with regard to the following demographic variables: (a) gender, (b) age, (c) years of teaching physical education, (d) years of teaching integrative physical education, and (e) formal preparation in adapted physical activity. Diversity of participants' work environment was sought with regard to the following variables: (a) class size, (b) ratio of students with and without disabilities, (c) availability of support by paraprofessionals or a second teacher, and (d) type of school district (DFW) or borough (Berlin).

Instrument. A semistandardized interview was chosen as the major data collection tool. This interview format combines open-ended questions with direct questions or probes. The interview technique required both directive and nondirective questioning. The questions were developed by the investigator based on a review of literature and knowledge gained during his teacher training and teaching

experience in Germany and the USA. Validity of the instrument was addressed by having selected individuals from the USA and Germany to review the structure and the questions of the interview guide. The reviewers were asked to check that the questions (a) were appropriate to investigate concerns as well as personal and contextual variables and (b) were worded in a way that teachers would understand them. A questionnaire collecting demographic data complemented the interview. Validity of the questionnaire was addressed by asking selected individuals in the USA and Germany to review its contents.

The instruments were pilot tested with 4 participants, two teachers in the DFW metroplex area and two teachers in Berlin. The four interviews were transcribed and analyzed before the remaining interviews were conducted.

Interviews lasted between 30 and 90 min, were tape recorded, and later were transcribed. Participants were sent a copy of their interview transcript and asked to make corrections or additions if deemed necessary.

In order to achieve an analytical reduction of the data (Huberman & Miles, 1994), interviews were analyzed using grounded theory procedures and techniques (Strauss & Corbin, 1990). The coding process involved two steps for each interview: (a) open coding and (b) axial coding. This process resulted in a grouping of themes using the categories

of concerns, personal variables, and contextual variables and subcategories within these categories as well as establishing relationships between these categories.

Findings With Respect to Concerns

The findings are summarized using the stages of concerns of the CBAM. No teachers in this study expressed concerns at the awareness and informational levels, as defined by Hall et al. (1973). This was expected because a basic assumption of the study was that all participants had passed through the awareness and informational stage.

Personal Stage. The interviews in both countries revealed that being faced with integration does not inevitably cause personal concerns in teachers. The main variables influencing personal concerns are prior experience with integration, positive beliefs and attitudes toward integration, and self-confidence in one's teaching abilities and skills. Contextual variables that influence concerns at the personal level include whether teaching integrative classes is voluntary or not, class size, and the availability of additional personnel such as a second teacher, a paraprofessional, or an adapted physical education specialist.

Management Stage. Concerns at the management level were greatly influenced by contextual variables. Large class sizes and short class periods were important concerns of

teachers in the DFW sample but not of teachers in the Berlin sample. The limited availability of adapted physical educators, which was a concern to several teachers in the DFW area, was not a concern to teachers in Berlin because no adapted physical education specialists are employed in Berlin.

Having to share the gymnasium with another class was a concern to several teachers in Berlin. Because most of the teachers interviewed in Berlin did not teach physical education only, their concerns often were not specific to physical education.

Many teachers both in the DFW area and in Berlin were concerned about the unavailability of a second teacher or paraprofessional. Depending on the type and severity of the disability to be served, teachers in both countries considered additional personnel absolutely necessary. Those teachers in the DFW area and in Berlin who had more than the statistical proportion of students with disabilities in their classes expressed concerns about abnormally high ratios of students with and without disabilities in their classes.

Lack of equipment and materials was a cause of concern to many teachers. However, one teacher in Berlin, while acknowledging the importance of special equipment such as psychomotor materials, emphasized that the attitude of the

teachers and the willingness to integrate students with disabilities were more important than the equipment.

Consequence Stage. The many positive effects of integration mentioned by teachers both in the DFW area and in Berlin by far outweighed negative effects. The consequence concerns mentioned in both samples were very similar.

Interviewees in the DFW area and in Berlin saw difficulties with integration in physical education in higher grades. Related to the concerns about the psychosocial development of the students were concerns about the suitability of more skill oriented and competitive physical education content in higher grades for the integration of students with disabilities.

The type of disability that caused most concerns was behavioral disorders. The consequences of the integration of students displaying disruptive and/or aggressive behavior in regular classes were a concern to many teachers. Particular concerns were the emotional and physical withdrawal of students with disabilities or the slowing of teaching pace as a consequence of integration.

In general, the concerns at the consequence stage that were expressed by the teachers were fewer and their strength less than the concerns at the management level. The concerns indicated the influence of personal and contextual variables. Different philosophies of physical education and differences

in training and experience affected concerns at the consequence stage as do the age and psychosocial development of the students, class size, type and manifestation of the disability, and the personnel support available to the teacher.

Collaboration Stage. The concerns at the collaboration stage were different in the DFW area and in Berlin. These differences were caused largely by different organizational schemes of integrative physical education in the two metropolitan areas. The responses were very similar, however, in that both identified good collaboration between individuals involved in the integration process as essential for success.

The concerns at the collaboration stage were also very closely related to management concerns. The concerns or lack of concerns at the collaboration stage illustrates the exceptional character of integration as an innovation. All teachers indicated in one way or another that collaboration is essential for integration to work. Therefore, collaboration or the lack thereof becomes not only a concern after a teacher has moved through the previous stages of concerns but is an issue of concern from the very beginning.

The focus of teachers in Berlin was their team. Good team work and team teaching was considered a conditio sine qua non for integration to work. Because teachers in Berlin

have a lot of input concerning whom they want to work with in a team, only a few teachers expressed concerns about team teaching.

The interviews in the DFW area, where teaching integrative classes was not voluntary and where the interviewees were almost always the only teacher in the gym, revealed the importance of adapted physical education specialists. The lack of access to adapted physical educators was a concern to several teachers.

Refocusing Stage. No true refocusing concerns were expressed by the participants in this study. This finding is related to the nature of the innovation integration, which is required by law and thus different from most other school-related innovations. The teachers in Berlin, moreover, generally taught integrative classes on a voluntary basis. They were supportive of integration and had, in general, satisfactory working conditions, which may be one reason why they expressed no true refocusing concerns.

Other Concerns. Concern about lack of information was one of the main concerns that surfaced at each stage. This is not surprising because, in general, regular physical education teachers are not specifically prepared to teach integrative classes.

Informational concerns were particularly related to concerns at the personal, management, and consequence stages

and are, therefore, multistage concerns. Informational concerns also depended on personal variables such as training and experience. Further, lack of information was perceived differently by different individuals. Although the interviews revealed that informational concerns can be greatly reduced by specific training and experience, many teachers indicated that they could never have enough information. Therefore, informational concerns can be seen as continuous concerns.

Several teachers expressed concerns about the safety of their students. Teachers in Berlin were concerned about safety if they were teaching an integrative class alone without assistance of a second teacher or a paraprofessional. The reason why safety concerns were expressed less often by teachers in Berlin probably related to differences in working conditions. It is easier to monitor individual student behavior in smaller classes than in large classes, and integrative classes in Berlin do not have more than 24 students. However, safety concerns were also expressed by teachers who had relatively small class sizes. These concerns mainly focused on students with behavior that was difficult to control and monitor and thus constituted safety risks.

Findings With Respect to Personal Variables

Gender, age, years of teaching physical education, years of teaching integrative physical education, and extensiveness of teacher training were analyzed and indicated a diverse sample in both the DFW area and Berlin. Additionally, analysis of the interviews identified the following variables as influencing teachers' concerns: (a) beliefs and attitudes toward integration, (b) teaching approach, (c) personality, and (d) collaborative skills and abilities.

Of the five variables used in the sampling process to obtain a diversified sample, years of teaching integrative physical education, was the only variable that seemed to have a clear influence on concerns of most of the participants. All American teachers who reported initial concerns at the personal stage overcame these concerns with increasing experience in teaching integrative physical education. The variable, years of experience of teaching integrative physical education, was mediated by the following contextual and personal variables: (a) support by adapted physical educator and paraprofessionals, (b) class size, (c) type and severity of disabilities, and (d) attitude toward integration.

The variable, teacher training in adapted physical education, had mixed effects on teachers' concerns. The effects of preservice training depended on the type of

training, working conditions, and the personality of the teacher. Almost all teachers expressed the need for more information. However, very few teachers had attended inservice training specifically on the integration of students with disabilities. Many teachers from the DFW area said that integration in physical education was not covered by the inservice training in their districts.

Only 2 Berlin teachers had had preservice training in adapted physical education. Several teachers in Berlin, who had attended inservice training in adapted physical education, emphasized how beneficial this type of training was for them. However, most of the teachers in Berlin (and in the DFW area) expressed the need for more such training.

Attitudes toward integration was mentioned by many participants as essential for integration to be successful. Several responses indicated that teacher training can have positive effects on attitudes. Working conditions is another important variable that influences attitudes.

Teaching approaches differed between the two samples. Teachers in the DFW area frequently used a teacher centered direct instruction approach in combination with individualization to accommodate special needs of students with disabilities (LaMaster et al., 1998). Teachers in Berlin frequently used a nontraditional student centered approach. Several teachers in Berlin said that integrating

students with disabilities (i.e., with a wide range of abilities and skills) was not possible using a traditional teaching approach. Contextual variables such as large classes, little personnel support, and lack of equipment would make it very difficult, if not impossible, for most teachers in the DFW area, to use similar nontraditional teaching approaches that give more input to students.

The interviews revealed that personal attributes such as self-confidence, flexibility, optimism, and good social skills were believed to play an important role by teachers in both samples. Especially participants in Berlin, where teachers of integrative classes often work in teams, stressed the importance of collaboration. Getting along professionally and personally with the other team member(s) was considered essential for integration to work.

Findings With Respect to Contextual Variables

The interviews revealed three clusters of contextual variables that had a strong impact on teachers' concerns about integrative physical education: collaboration, program organization, and students. Several variables were considered within each of these clusters.

Collaboration was considered to be essential for integration by many teachers. One of the most important variables for the American teachers was collaboration with paraprofessionals and with adapted physical education

specialists. The presence and direct assistance in the gym by the adapted physical educator was also considered valuable by those American teachers who received this assistance. Most teachers in the American sample, however, did not receive that type of assistance. Besides the collaboration with the paraprofessionals, a general supportive and collaborative school atmosphere was considered very important by the teachers.

A second important variable for most of the American teachers was class size, which generally ranged between 35 and 80 students. At the same time, physical education is the subject area in which, in the DFW area, students with disabilities are often taught in regular classes first.

Type and severity of disability was seen as a third critical contextual variable by the American teachers. Students with behavioral disorders, autism, or severe physical disabilities (e.g., students in wheelchairs) were considered to be more difficult to integrate into activities than other students. The contextual variables were not only interrelated with each other but also with personal variables such as training, experience, and personality.

The contextual variables that influenced the concerns of the teachers in Berlin were similar but differed in degree. For example, collaboration was an important variable for teachers in both samples. While the focus of collaboration

for the teachers in the DFW area multiple (paraprofessionals, adapted physical education teacher, and principal), the main focus of collaboration for the teachers in the Berlin sample was their colleague with whom they taught.

The student variable played almost the same role in both DFW area and Berlin. Type and severity of disability, age of the students, and their psychosocial development impact the concerns of teachers in the DFW area and in Berlin in similar ways. In general, more students with mental retardation and severe disabilities seemed to be integrated in the DFW area than in Berlin.

The interrelationships between contextual variables (as well as between contextual variables and personal variables) was also similar in both places. For example, the effects of having a student with severe behavior disorder in a class were mediated by factors such as class size, number of other students with disabilities in that class, age of the students, the support of paraprofessionals or other teachers, and the availability of specific inservice activities addressing this situation.

Working conditions (e.g., class size, support by paraprofessionals or other teachers, facilities) were a critical variable for teachers in both samples. Although teachers in Berlin had smaller classes and more input in regard to their working conditions, working conditions were

as important to them as to their colleagues in the DFW area. This is not surprising because the working conditions are closely related to the management concerns, which was the biggest area of concerns to teachers in both samples.

Discussion

The discussion is divided into six parts: (a) answers to research questions, (b) implications for general sociological theory, (c) implications for concerns theory, (d) alternatives to concerns theory, (e) implications of cross-cultural comparison, and (f) comparison with related literature.

Answers to Research Questions

The study was guided by five research questions. In this section, results will be interpreted in terms of how they provide answers to the reserch questions.

1. What are physical educators' concerns about integration? Data analysis identified teachers' concerns at four stages: (a) personal, (b) management, (c) consequence and collaboration. These concerns were shown to be interrelated and influenced by personal and contextual variables.

2. What are the contextual and personal variables that influence teachers' concerns about integration in physical education, and what are the relationships between these variables and teachers' concerns? Personal variables that

seemed to influence teachers' concerns were (a) years of teaching integrative physical education, (b) teacher training, (c) beliefs and attitudes toward integration, (d) teaching style, and (e) personality, and (f) collaborative abilities and skills. Contextual variables that seemed to influence teachers' concerns were grouped into three categories: (a) collaboration, (b) program organization and working conditions, and (c) student. These variables were interrelated in their influence of teachers' concerns.

4. How do cultural factors influence teachers' concerns about integrative physical education, and what aspects of concerns are not influenced by culture? Analysis of the interviews revealed that working conditions especially seemed to be linked to differences in concerns between teachers in the DFW area and Berlin. Cultural differences seemed to influence concerns at the personal, management, and collaboration stages. At the personal stage, the choice that teachers in Berlin generally have to decide if they want to teach students with disabilities, smaller class sizes in Berlin, and perhaps cultural differences in regard to the expression of personal matters seem to have contributed to the fact that teachers in Berlin expressed less concerns than their colleagues in the DFW area. At the management and collaboration stages, cultural differences seemed to have influenced specific subjects of concerns (e.g., collaboration

with adapted physical educator in the DFW area versus collaboration with a teaching team member in Berlin), rather than the quantity and importance of concerns at these stages. The two samples were similar in that concerns at the management and collaboration stage were important to all teachers. Differences in the schooling systems and general training of teachers did not seem to influence teachers concerns. This suggests a subject-specific similarity across two very different educational systems.

5. How do teachers in two cultures cope with their concerns? Both samples were very similar in that both personal and contextual variables influenced how teachers coped with their concerns. Personality, such as taking initiative or teaching philosophy, influenced coping strategies as did contextual variables such as support by other teachers and administrators. Depending on individual constellations of the cause of concern, personal, and contextual variables, teachers were able to change the situation and eliminate the cause of concern or had to accept and live with a certain situation.

Implications for General Sociological Theory

This study was based on two general paradigms. The individualistic paradigm suggests that teachers, as individuals, influence and form their working environment, professional role, and actual work accomplishment (Alexander,

1987; Broadfoot, 1990). They do so, for example, by interacting with their administrators, colleagues, students, and parents, and by choosing class content and teaching methods. Each teacher brings with him or her a unique constellation of personal variables such as teaching philosophy, personality, training, and experience that influence his or her work.

The collectivist paradigm suggests that the individual's perceptions and actions are, to a certain extent, determined by the social environment (Alexander, 1987; Broadfoot, 1990). In the context of teaching, this paradigm suggests that external variables such as class size, age of students, type of disabilities, district and building policies determine the work of teachers.

The interviews conducted in this study illustrated the influence of factors that were suggested by these two general paradigms. However, and more important, the experiences described by the teachers revealed an interaction of the individualistic and collectivist paradigms. Two examples illustrate this point. One teacher whose frustrating experiences with the lack of support were described in the section on management concerns did not seem to be able to shape her working environment very much. The large class sizes and the lack of support also limited her choice of what and how to teach, as well as goals that could be achieved

realistically under those circumstances. She tried several times to address her concerns but to no avail. After the failure of her attempts to initiate communication with everyone concerned, this teacher became frustrated and eventually gave up:

The principal didn't care. I mean if she did she would have done something about it. She has yet to do anything about it. I don't talk, very very seldom do I talk to my teacher's assistant anymore. Isn't that horrible?!...It's horrible. I mean I feel guilty....One of my new year's resolutions was to really, really try hard to get along with my teacher's assistant and to keep talking to her and to keep showing her things to do; well I failed it. I can't do it. It pisses me off.

This teacher attempted but failed to change her working environment; as a result, (unfavorable) external factors determine her work to a large extent. (However, a different teacher may have been able to change the situation, indicating an interaction between contextual and personal variables).

Another teacher, on the other end of the spectrum, had excellent working relationships with her principal, her paraprofessional, the classroom teachers, and the adapted physical education teacher. In her function as a coordinator, this teacher also had influence at the district stage. She gave many examples of how problems were addressed and resolved at her school through cooperation. She also demonstrated that if an immediate problem arose, she took "the bull by the horns" and changed things. Her role at the

district level may have contributed to her ability to change situations at her school. This example illustrates the great influence individual teachers can have on their work environment.

The two examples show how an interaction of personal and contextual variables influences the conditions under which teachers serve students with disabilities in their classes and the extent to which they are able to change these conditions. The other teachers of the sample fall somewhere between these two examples.

Implications for Concerns Theory

The influence of personal and contextual variables on teachers' concerns about integration in physical education has implications for the applicability of the Concerns Based Adoption Model to diagnose and understand concerns and to facilitate change. The results of this study confirm one of CBAMS's assumptions, that change is largely individual. In order to facilitate change, personal variables influencing an individual's concerns need to be taken into consideration. The results further suggest that concerns largely depend on constellations of the work environment (i.e., contextual variables). These constellations differ among schools, school districts, and countries. Consequently, results of this study illustrate that the Concerns Based Adoption Model needs to be supplemented by an analysis of personal and

contextual variables. For example, if a teacher has concerns at the management stage because the classes are too big, class periods are too short, or paraprofessionals are not willing to cooperate, a workshop on teaching methods may only be of limited success. A change of contextual variables such as bringing in another paraprofessional, on the other hand, might reduce the concerns at this stage. This example illustrates that identifying concerns on one of the CBAM levels is not sufficient to facilitate change if personal and contextual variables are not considered within a differentiated analysis, too. The analysis of the interview data also suggests that, in most cases, several variables are influencing teachers' concerns. Personal and contextual variables interact within and between these two categories. For example, little training and experience with integration, together with large class sizes, may result in concerns at the personal, management, consequence, and/or collaboration level. While change of one of these variables might lessen the concerns at one or more levels, it is likely that only a consideration of all three variables can reduce the concerns in a satisfactory way.

Besides the consideration of personal and contextual variables, the results suggest another extension of the Concerns Based Adoption Model. Hall (1979) suggested the existence of a profile of concerns involving several stages

of concerns in people faced with an innovation as well as a linear development of concerns along the proposed stages. The results of this study support the notion of a profile of concerns but raise doubts about a linear development of concerns about integration. The results cannot be used to reject the notion of a linear development for two reasons. First, a quantitative instrument such as the Stages of Concerns Questionnaire (Hall et al. 1977) is needed to accurately measure concerns and changes of concerns (Newlove & Hall, 1976). Second, a longitudinal study is needed to observe the development of concerns, which could not be done by this cross-sectional study. However, the results of the present study indicate that some stages may be skipped or concerns may occur equally at two stages at the same time. For example, some participants did not have strong personal concerns at all because they had been well prepared for integration. Other teachers expressed strong concerns at the personal, management, and informational levels when they were confronted with integration without prior notice or preparation.

The interviews further indicated that another proposition of CBAM may not necessarily be true. Hall (1979) stated that concerns at one level must have been reduced to a certain degree before concerns at the next level will fully develop. Data of this study suggest that concerns may not

only be related in inverse proportion but also proportionally. For example, many teachers linked concerns at the management level to concerns at the consequence level. Consequently, a reduction of the management concerns would also result in a reduction of consequence concerns. One example for such a relationship is the complaint about large class sizes that made individualized instruction very difficult resulting in limited learning outcomes especially for students with disabilities. However, only a longitudinal study using concerns questionnaires can verify this interpretation of the data.

The results also show that many questions about teachers' concerns can only be answered by actually measuring concerns. Quantitative tools such as the Stages of Concerns Questionnaire (Hall et al., 1977) are needed to measure concerns. Because of the differences with regard to the integration of students with disabilities in physical education between the DFW area and Berlin, different questionnaires may have to be developed to account for these differences. In order to fully understand teachers' concerns, qualitative analysis has to precede and to accompany quantitative measuring.

The implications for concerns theory from the results of this study can be visualized in a model that illustrates the

interrelationships between concerns, personal variables, and contextual variables (Figure 1):

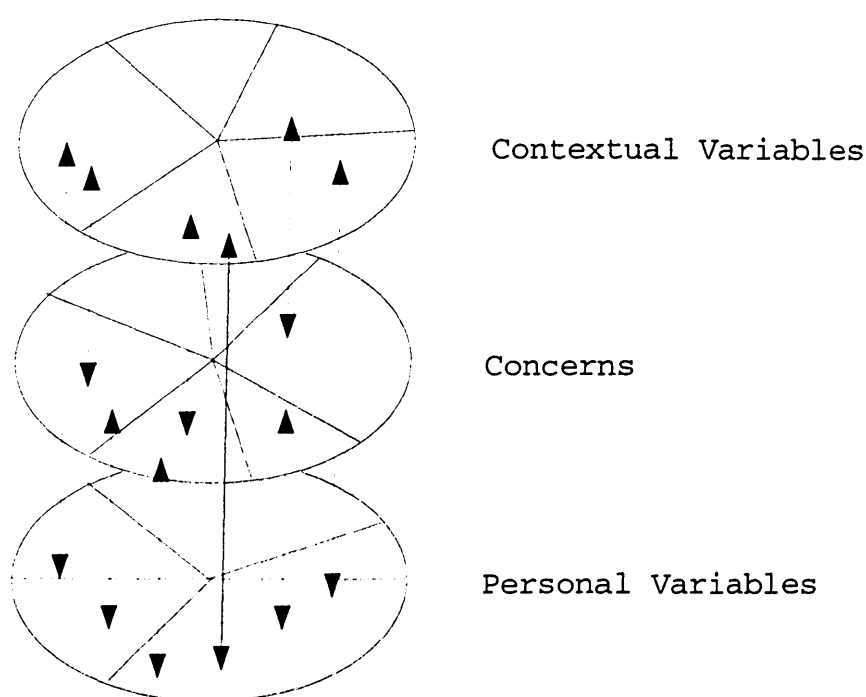


Figure 1. A paradigm to describe influences on teachers' concerns about integration

The representation of concerns, personal variables, and contextual variables as circles indicates the relationships within each component of the model. The fact that all parts of the circles touch each other in the center indicates that the parts of each circle are all potentially interrelated. The visualization of concerns in a circle, in contrast to a hierarchical listing numbered 0 to 7 by Hall et al. (1973), indicates that concerns do not necessarily develop in a linear fashion. The different sizes of the circle parts

symbolize differing influence or prominence of some concerns, personal variables, and contextual variables compared to others. The sizes of the parts of the circle change over time and differ for each person.

The arrows indicate interrelationships between concerns, contextual variables, and personal variables. These relationships exist among all three levels of the model and are reciprocal: Both contextual variables and personal variables influence teachers' concerns. However, concerns in turn influence contextual variables and personal variables. Contextual variables and personal variables also influence each other. These relationships between the three levels are subject to change and differ between individuals.

Alternatives to Concerns Theory

The results of the present study suggest that a holistic perspective is required to understand teachers' concerns about integration. Two theories that could be used as alternatives to the Concerns Based Adoption Model by Hall et al. (1973) are systems theory and field theory. Both theories are based on the assumption of complex entities and emphasize the interactions and connectedness of the different components of an entity as well as relationships with its environment.

Systems Theory is

the transdisciplinary study of the abstract organization of phenomena, independent of their substance, type, or spatial or temporal scale of existence. It investigates both the principles common to all complex entities, and the...models which can be used to describe them (Heylighen & Joslyn, 1992, p. 1).

Systems theory was proposed in the 1940s by the biologist Ludwig von Bertalanffy (1968). Von Bertalanffy was both reacting against reductionism and attempting to revive the unity of science (Heylighen & Joslyn, 1992). Rather than reducing an entity (e.g., teachers' concerns about integration) to the properties of its parts or elements (e.g., personal concerns, management concerns), systems theory focuses on the arrangement of relations among the parts that connect them into a whole. The same concepts and principles of organization underlie different disciplines (e.g., physics, biology, technology, sociology). Some systems concepts are system-environment boundary, input, output, process, state, hierarchy, goal-directedness, and information (Heylighen & Joslyn, 1992).

The model presented in Figure 1 to examine and describe teachers' concerns can be explained using concepts and terminology from dynamic systems theory. Dynamic systems theory, a recent development within systems theory, views developing organisms (here: teachers and their concerns about integration) as dynamic, open, and contingent systems (Smith & Thelen, 1993). Key concepts in dynamic systems theory are complexity, nonlinearity, and context-dependency. According

to Smith and Thelen (1993, p. xiii), "complexity means that many, often heterogeneous, components cooperate or compete to produce behavioral outcome." Because of these complex interactions, "causality, as a linear chain of precedent and antecedent events, cannot be singularly assigned to any agency within or surrounding the organism" (Smith & Thelen, 1993, p. xiii). Dynamic systems theory views individuals within and as part of their total context. Consequently, this approach does not make a distinction between individual and environment, especially with regard to linear cause-and-effect chains. Rather than viewing individual and environment as dichotomous categories, dynamic systems theory takes a holistic perspective trying to describe complex interactions among individual and environment.

Variability also plays an important part in dynamic systems theory (Smith & Thelen, 1993). This means that "understanding process must involve the use of individual developmental data, collected longitudinally (Smith & Thelen, 1993, p. xiv). All these principles of dynamic systems theory were identified in the data analysis of the present study.

A second theoretical approach that could be used to analyze teachers' concerns and to facilitate change is Kurt Lewin's field theory, now often referred to as ecological theory. Almost all theorists who employ the field concept

rely on the physical field or on Lewin's field-psychology (Mey, 1972). According to Lewin, "a totality of coexisting facts which are conceived of as mutually interdependent is called a field" (Lewin, 1951, p. 240). Although Lewin takes this concept of field from Einstein, his focus on tension and conflict sets the field theories of social psychology apart from their models in physics (Mey, 1972).

Field theory postulates that, in any situation, there are both driving and restraining forces that influence any change that may occur (Hershey & Blanchard, 1993). Hershey and Blanchard (1993) note that "equilibrium is reached when the sum of the driving forces equals the sum of the restraining forces....This equilibrium...can be raised or lowered by changes in the relationship between the driving and the restraining forces" (pp. 150-151).

Lewin distinguishes several fields including intrapersonal fields of conflict and interpersonal fields of tension and conflict (Mey, 1972). Within these interrelated fields, activity of dynamic forces results in a "flow of events" (Mey, 1972, p. 91). This emphasis on instability and change is what, according to Mey (1972), distinguishes field theory from theories of system and structure, which are "classifactory and tend to overemphasize orders as against the flow of events" (Mey, 1972, p. 91). Mey (1972) identifies Parsons' Structure of Social Action as one example

of classificatory theories of structure. The danger of any of these structure or order models is that, if used as the only model, they tend to confirm themselves, and a researcher may be "concocting reality out of one's favourite system in order to make it fit, by explaining away the smaller deviations as inessential" (Mey, 1972, p. 91).

Implications of Cross-Cultural Comparison

The comparison of concerns of teachers in two countries (DFW area, USA, and Berlin, Germany) revealed that some aspects of concerns were influenced by culture and others were not. The comparative description of teacher training, school systems, physical education, and the integration of students with disabilities in the DFW area and Berlin revealed great differences. Some of these differences affected teachers' concerns, whereas others did not. The lack of expressed concerns at the personal level that characterized the Berlin sample seemed to be influenced by the fact that most German teachers have a choice of whether they want to teach an integrative class or not.

Cultural differences were also reflected in concerns at the management level that were expressed by teachers in both countries. Differences in how physical education and the integration of students with disabilities was organized led to different concerns about these conditions.

Differences between the schooling systems found their expression also in concerns at the collaboration level. Most interviewed teachers in Berlin stressed the importance of cooperation with their team members or other teachers at their school who teach physical education. Teachers in the DFW area, on the other hand, generally emphasized collaboration with their paraprofessionals and adapted physical education teachers.

However, with exception of concerns at the personal level, these differences seem to be to a large extent differences in details. The fact that teaching integrative classes is still voluntary for many teachers in Berlin seemed to be a major reason for the lack of concerns at the personal level, which clearly distinguished the two samples. Many other concerns were different in degree but similar in nature. For example, one teacher in the DFW area said that she wished she had only 40 students in her class instead of 75. Many teachers in Berlin, in contrast, were concerned about the increase of the numbers of students in integrative classes from 20 (18+2) to 23 (20+3). Although the working conditions are very different and important, the concern is essentially the same.

Equally important to the differences in concerns between teachers in the DFW area and in Berlin are the similarities in concerns. Despite great differences between the two

schooling systems, the concerns expressed by the two samples are very similar to a large extent. Many differences exist in detail rather than in substance. The similarities in concerns exist despite differences in the schooling systems (integrative versus selective), teacher training, working conditions, physical education content, and teaching styles. Data analysis revealed similarities at the management level, consequence level, and collaboration level.

Because the management concerns are to a large extent influenced by contextual variables, these concerns are different between the two samples. However, many of the variables that influence the concerns are the same in both metropolitan areas. Furthermore, both samples were similar in that most of the teachers' concerns were management concerns. Management issues seemed to be most important to most of the teachers in both metropolitan areas.

Despite differences in detail and degree, teachers in both urban areas were also similar in regard to other areas of concern. Teachers in both areas of investigation generally expressed little concern at the consequence level. Those concerns that were expressed were strongly related to contextual variables, especially the student variable.

Another similarity was the agreement of teachers on the importance of collaboration. Although the types of collaboration differed between the two schooling systems,

most teachers emphasized that collaboration was essential for successful integration.

These similarities suggest that, despite the great differences between the samples, several generalizations can be made across cultural contexts. The interviews in both countries indicate that teachers' concerns about integration depend on personal and contextual variables. Although the variables differ in details, they affect teachers' concerns in both the DFW area and in Berlin in a very similar manner. The theoretical implications for the relationships between concerns, personal variables, and contextual variables seem to be valid in both countries and not culture specific.

Discussion of Results in Relation to Literature

Most of the researchers who investigated teachers' concerns used the Stages of Concerns questionnaire and a longitudinal or pre-post study design. Except for one study (Knowles, 1981), these studies did not examine concerns of physical education teachers with regard to the integration of students with disabilities. Knowles (1981) administered the Stages of Concerns questionnaire to physical education teachers but also supplemented this instrument with qualitative interviews. Her results showed that inservice training can significantly change concerns at the awareness and informational level as defined by Hall (1973). More interesting in the context of the present study, however, is

her finding that "during these interviews, teachers expressed an urgent need for increased interaction with colleagues about program planning and implementation for handicapped students" (Knowles, 1981, p. 52). This statement confirms the assumption of the present study that qualitative analysis must accompany quantitative analysis. The statement also confirms the results of this study, that teachers concerns are complex and do not necessarily develop in a linear way.

A second study that is closely related to the present study is the investigation of inclusion practices of effective elementary specialists by LaMaster, Gall, Kinchin, and Siedentop (1998). The notion by LaMaster et al. that an increase of classroom complexity that is caused by integration leads to an increase in management concerns was confirmed by the present study. Most of the concerns expressed by the participants of both countries in this study were management concerns. Another finding of both studies is the lack of training of teachers in regard to integration in physical education. Teachers do not seem to be sufficiently trained for the integration of students with disabilities. These findings are in support of results of other studies (Kearney & Durand, 1992; Potter-Chandler & Greene, 1995; Stoler, 1992). The two studies also agree in their finding that, in general, physical educators do not have enough personnel and resources to meet the needs of all students,

with and without disabilities, in their classes. This seems to affect American teachers to a greater extent than their German colleagues, but lack of personnel and resources was a concern of teachers in Berlin, too. The findings of the two studies differed in one point. While all the participants in the study by LaMaster et al. expressed feelings of guilt because they could not meet the needs of all children, only one participant in this study expressed guilt. This teacher, who held an advanced degree and who took more than the one required class in adapted physical education, said that she thought she was not doing a very good job and felt somewhat guilty. One explanation of these feelings of guilt may be cognitive discrepancies. Through their training and personal philosophies, these teachers are aware of and perhaps expect certain possible physical education outcomes for all students. On the other hand, however, these outcomes are not and/or cannot be achieved under given conditions.

Integration has resulted in a role change for the participants in this study. The role change for the teachers in the DFW area differs from role change that could be implied from the requirements of the Individuals With Disabilities Education Act. The roles of most teachers in the DFW area changed in that they provided more individualized instruction, content adaptations, special grouping considerations, and peer tutors to accommodate

students with disabilities. Most teachers in the DFW area also described cooperation or consultation with adapted physical education teachers, special education teachers, and other colleagues. This cooperation is not necessary in more homogenous classrooms without students with disabilities.

At the same time, teachers in the DFW area said that their teaching did not change very much as a consequence of integration. Working conditions such as large class sizes and little equipment limited the instructional changes. Also, most teachers in the DFW area were not involved in ARD committees or the writing of IEPs. Conducting of student assessments and evaluation of IEP physical education goals was done by adapted physical education specialists. Therefore, these legal requirements did not affect the roles of regular physical education teachers.

The results showed that the role of adapted physical education specialists is critical for successful integration in physical education in the DFW area. Although the roles of regular physical educators did not change depending on whether they received assistance from an adapted physical educator (i.e., regular physical educators did not assume responsibilities such as writing IEP goals and evaluating them if they did not receive support from an adapted physical educator), teachers who had the support of adapted physical educators generally expressed less concerns about how to

include students with disabilities than teachers who did not have that support.

Some teachers in Berlin described how their teaching styles and teaching approaches, and consequently their roles, changed as a result of integration. Several teachers said that it was impossible to use traditional teaching styles in integrative classes. Further role changes depended on whether the teachers were classroom teacher or not. Those teachers who were also classroom teachers attended meetings of the Förderausschuß (ARD meetings) and were involved in writing Fördergutachten (IEPs). One teacher said that, while special educators were an important and helpful resource in the classroom, the assistance they could provide in the gym was often limited because they had not been trained in physical education.

Many teachers in the DFW area and in Berlin indicated that they were not sufficiently prepared for the new role requirements in integrative classrooms. The interviews indicate that, in many cases, a discrepancy exists between the role changes for regular physical educators and special educators (including adapted physical educators) that can be theoretically implied from the introduction of integration in physical education and everyday practice in the gyms.

Finally, most participants in this study agreed with the assumption that integration of students with disabilities can

be accomplished easier in physical education than in academic subject areas. However, the concerns expressed in the interviews also revealed that, especially in the DFW area, in many cases important organizational prerequisites for successful integration are not met.

Conclusions

Findings of the present study support one of CBAMS's assumptions, that change is largely individual. In order to be an effective tool for diagnosing teachers' concerns and facilitating change, CBAM needs to be extended to include the influence of personal and contextual variables on teachers' concerns. While this influence of personal and contextual variables seems to be affected by cultural differences (e.g., working conditions), the theoretical implications for the relationships between concerns, personal variables, and contextual variables seem to be valid in both countries and not culture specific.

Recommendations for Future Research

This study was an exploratory study. Its results suggest a variety of further research avenues. Further research questions can be grouped in two categories: Research related to the development of concerns theory and research related to integrative physical education practice.

While this study identified variables that influence teachers' concerns about integrative physical education, it

did not isolate and measure the effects of these variables. For example, using quantitative research instruments such as the Stages of Concerns questionnaire and demographic data, future research could further investigate the relationships between certain personal variables (e.g., number of years teaching integrative physical education) and contextual variables (e.g., ratio of students with and without disabilities, type and severity of disabilities) on the one hand and teachers' concerns on the other hand.

The development of teachers' concerns about integrative physical education is another area that needs to be addressed by future research. Although this study suggests that concerns do not necessarily develop through stages in a linear fashion as posited by the Concerns Based Adoption Model, more research is needed to further investigate this topic. Longitudinal studies or studies employing pre- and post-tests are needed to examine the development of concerns. These kinds of studies should also examine the relationship between concerns. For example, does a reduction in management concerns lead to an increase in concerns at the consequence level, as suggested by CBAM, or does it result in a decrease of consequence concerns? This proposed research should lead to a further refinement of concerns theory.

Integrative physical education practice is another area that needs to be addressed by further research. How

effective is inservice training that is specifically geared toward concerns of individual teachers? This line of research should not only use the Stages of Concerns questionnaire to identify teachers' concerns, but also interviews or open ended questions to identify personal and contextual variables before designing the inservice training.

Another question that might be addressed by practice oriented research is how reorganizing of scheduling practices, resulting in smaller class sizes, affects teachers' concerns as well as student outcomes.

REFERENCES

- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting behavior. Englewood Cliffs, NJ: Prentice Hall.
- Alexander, J. C. (1987). Lecture one: What is theory? In J. C. Alexander (Ed.), Twenty lectures. Sociological theory since World War II (pp. 1-21). New York, NY: Columbia University Press.
- Arbeitskreis Neue Erziehung e.V. (1996). Orientierung zur Integration (Orienting about integration). Berlin: Arbeitskreis Neue Erziehung.
- American Association for Active Lifestyles and Fitness, & National Association for Sport and Physical Education, Associations of the American Alliance of Health, Physical Education, Recreation, and Dance (1995). Including students with disabilities in physical education. Reston, VA: Author.
- Bateman, B. (1995). Who, how, and where: Special education's issues in perpetuity. In J. M. Kauffman, & D. P. Hallahan (Eds.), The illusion of full inclusion. A comprehensive critique of a current special education bandwagon (pp. 75-90). Austin, TX: PRO-ED.
- Behinderte. Spiegel der Gesellschaft (The disabled. Mirror of society). (1997). Der Spiegel, 45, pp. 37-38.

Berry, J. (1969). On cross-cultural comparability. International Journal of Psychology, 4, 119-128.

Berry, J. (1989). Imposed etics - emics - derived etics: The operationalization of a compelling idea. International Journal of Psychology, 24, 721-35.

Bertalanffy, L. von (1968). General System Theory. New York: George Braziller.

Bildung und Wissenschaft (3/4) (Education and Science) (1991). The school system in the Federal Republic of Germany. Bonn: Inter Nations.

Block, M. E. (1992). What is appropriate physical education for students with profound disabilities? Adapted Physical Activity Quarterly, 9(3), 197-213.

Block, M. E. (1994). Why all students with disabilities should be included in regular physical education. Palaestra, 10(3), 17-24.

Block, M. E. (1996). Implications of U.S. federal law and court cases for physical education placement of students with disabilities. Adapted Physical Activity Quarterly, 13(2), 127-152.

Block, M. E., & Krebs, P. L. (1992). An alternative to the continuum of the least restrictive environment: A continuum of support to regular physical education. Adapted Physical Activity Quarterly, 9, 97-113.

Block, M. E., & Vogler, E. W. (1994). Inclusion in regular physical education: The research base. JOPERD, 65(1), 40-44.

Block, M. E., & Garcia, C. (Eds.). (1995). Including students with disabilities in physical education. Reston, VA: American Alliance for Health, Physical Education, Recreation and Dance.

Bogdan, R. C., & Biklen, S. K. (1982). Qualitative research for education: An introduction to theory and methods. Boston, MA: Allyn and Bacon.

Broadfoot, P. (1990). Research on teachers: Towards a comparative methodology. Comparative Education, 26(2/3), 165-169.

Brophy, J., & Good, T. (1985). Teacher behavior and student achievement. In M. Wittrock (Ed.), Handbook of research on teaching (pp. 328-375). New York, NY: McMillan.

Bundesverfassungsgericht (1997). Grundsatzentscheidung zum Benachteiligungsverbot für Behinderte. Hier: Erfolglose Verfassungsbeschwerde einer körperbehinderten Schülerin (Az.: 1 BvR 9/97) (Principle decision on antidiscrimination ban of the disabled. Here: Unsuccessful constitutional appeal of a physically disabled student). Pressemitteilung Nr. 93/94 vom 29. Oktober 1997 (Press release No. 93/94 of October 29, 1997). Karlsruhe: Author.

Bund-Länder-Kommission für Bildungsplanung (Federation-Länder Commission of Educational Planning) (1973).

Bildungsgesamtplan. Band 1 (Overall Education Plan. Volume 1). Stuttgart: Author.

Bundshuh, E. L. (1976). Preparation of undergraduate physical education majors for mainstreaming. Briefings, 4, 46-55.

Lewin K. (1951). Field theory in social science: Selected theoretical papers by Kurt Lewin (ed by D. Cartwright). Westport, Conn.: Greenwood Press.

Chapman, D. (1983). Career satisfaction of teachers. Educational Research Journal, 7, 40-50.

Craft, D. H. (1994). Inclusion: Physical education for all. JOPERD, 65(1), 22-23.

Cross, K. P. (1987). The adventures of education in wonderland: Implementing education reform. Phi Delta Kappan, 69, 496-502.

Daniel R. R. v. State Board of Education, 874 F.2d 1036, 53 Ed.Law Rep. 824 (5th Cir. 1989).

Decker, J., & Jansma, P. (1995). Physical education least restrictive environment continua used in the United States. Adapted Physical Activity Quarterly, 12(2), 124-138.

Deno, E. (1970). Special education as developmental capital. Exceptional Children, 37, 229-237.

DePaepe, J. (1984). Mainstreaming malpractice. Physical Educator, 41, 51-56.

Der Senator für Schulwesen, Berufsausbildung und Sport (Ed.) (1987). Sonderpädagogik in Berlin (Special education in Berlin) (2nd ed.). Berlin: Verwaltungsdruckerei Berlin.

Doll-Tepper, G., von Selzam, H., & Lienert, C. (1992). Teach the teachers: Including individuals with disabilities in physical education. Journal of the International Council for Health, Physical Education and Recreation, 28(2), 23-27.

Doll-Tepper, G., Schmidt-Gotz, E., Lienert, C., Döen, U., & Hecker, R. (1994). Einstellungen von Sportlehrkräften zur Integration von Menschen mit Behinderungen in Schule und Verein (Attitudes of physical educators towards integration of individuals with disabilities in schools and sport clubs). Köln: Bundesinstitut für Sportwissenschaft.

Downs, P., & Williams, T. (1994). Student attitudes toward integration of people with disabilities in activity settings. Adapted Physical Activity Quarterly, 11, 32-43.

Duke, D. (1984). Teaching: The imperiled profession. Albany, NY: State University of New York Press.

Eberwein, H. (Ed.) (1996). Einführung in die Integrationspädagogik. Interdisziplinäre Zugangsweisen sowie Aspekte universitärer Ausbildung von Lehrern und Diplompädagogen (Introduction to integration pedagogy).

Interdisciplinary approaches and aspects of the university based training of teachers and pedagogues). Weinheim: Deutscher Studien Verlag.

Ellson, D. G. (1986). Improving productivity in teaching. Phi Delta Kappan, 68, 111-124.

Ellger-Rüttgardt, S. (1995). Special education in Germany. European Journal of Special Needs Education, 10(1), 75-91.

Federal Register, May 4, 1977, PL 93-112, the Rehabilitation Act of 1973, Section 504.

Federal Register, September 29, 1992, PL 101-476, Individuals with Disabilities Education Act.

Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention, and behavior: An introduction to theory and research. Menlo Park, CA: Addison-Wesley.

Fuchs, D., & Fuchs, L.S. (1994). Inclusive schools movement and the radicalization of special education reform. Exceptional Children, 60(4), 294-309.

Fuller, F. (1969). Concerns of teachers: A developmental conceptualization. American Educational Research Journal, 6(2), 207-226.

Gallagher, J. J. (1995). The pull of social forces on special education. In J. M. Kauffman, & D. P. Hallahan (Eds.), The illusion of full inclusion. A comprehensive

critique of a current special education bandwagon (pp. 91-103). Austin, TX: PRO-ED.

Giangreco, M. F., & Putnam, J. W. (1991). Supporting the education of students with severe disabilities in regular education environments. In M. H. Meyer, C. A. Peck, & L. Brown (Eds.), Critical issues in the lives of people with severe disabilities (pp. 245-270). Baltimore: Paul Brookes.

Giangreco, M. F., Dennis, R., Cloninger, C., Edelman, S., & Schattman, R. (1993). "I've counted Jon": Transformational experiences of teachers educating students with disabilities. Exceptional Children, 59(4), 359-372.

Greer v. Rome City School District, 950 F.2d 688, Ed.Law Rep. 647 (11th Cir. 1991).

Grineski, S. (1994). Dilemma of educational placement for students with severe disabilities. PALAESTRA, 10(4), 21-22.

Gutek, G. L. (1992). Education and schooling in Amerika (3rd ed.). Needham Heights, MA: Allyn and Bacon.

Hall, G. E. (1979). The concerns-based approach to facilitating change. Educational Horizons, 57(4), 202-208.

Hall, G. E., Wallace, R. C., & Dossett, W. (1973). A developmental conceptualization of the adoption process within educational institutions. Austin, TX: Research and Development Center for Teacher Education. The University of

Texas at Austin. ERIC Document Reproduction Service No. ED095126.

Hall, G. E., George, A. A., & Rutherford, W. L. (1977). Measuring stages of concern about the innovation: A manual for use of the SoC questionnaire. Austin, TX: The Research and Development Center for Teacher Education. The University of Texas at Austin.

Halls, W. D. (Ed.) (1990a). Comparative education. Contemporary issues and trends. London: Jessica Kingsley Publishers.

Halls, W. D. (1990b). Trends and issues in comparative education. In W. D. Halls (Ed.), Comparative education. Contemporary issues and trends (pp. 21-68). London: Jessica Kingsley Publishers.

Hammersley, M., & Atkinson, P. (1983). Ethnographic principles in practice. London: Tavistock Publications.

Heikinaro-Johansson, P., & Sherrill, C. (1994). Integrating children with special needs in physical education: A school district assessment model from Finland. Adapted Physical Activity Quarterly, 11, 44-56.

Hersey, P., & Blanchard K. H. (1993). Management of organizational behavior: Utilizing human resources (6th ed.). Englewood Cliffs, NJ: 1993.

Herskovits, M. J. (1948). Man and his works. The science of cultural anthropology. New York: Alfred A. Knopf.

Heumann, J. (1994). Oberti decision is core of the ED's inclusion position. In LRP Publications, Full inclusion: Educating students with disabilities in the regular classroom (p. 5). Horsham, PA: LRP Publications.

Heylighen, F., & Joslyn, C., (1992). What is systems theory? [On-line]. Available:
<http://pespmc1.vub.ac.be/SYSTHEOR.html>.

Hope, W. C. (1995). Microcomputer Technology: Its impact on Teachers in an Elementary School (Doctoral Dissertation, Florida State University, 1995). (ERIC Document Reproduction Service No. ED 384 336)

Hord, S. M., Rutherford, W. L., Huling-Austin, L., & Hall, G. E. (1987). Taking charge of change. Alexandria, VA: Association for Supervision and Curriculum Development.

Huberman, A. M., & Miles, M. B. (1994). Data management and analysis methods. In N. K. Denzin, & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 428-444). Thousand Oaks, CA: Sage

Hübner, P. (1996). Schulpolitische und gesellschaftliche Probleme der Integration von Kindern und Jugendlichen mit Behinderungen (Schoolpolitical and societal problems regarding the integration of children and youth with

disabilities). In H. Eberwein (Ed.), Einführung in die Integrationspädagogik. Interdisziplinäre Zugangsweisen sowie Aspekte universitärer Ausbildung von Lehrern und Diplompädagogen (Introduction to integration pedagogy. Interdisciplinary approaches and aspects of the university based training of teachers and pedagogues) (pp. 38-57). Weinheim: Deutscher Studien Verlag.

Huefner, D. S. (1994). The mainstreaming cases: Tensions and trends for school administrators. Educational Administration Quarterly, 30, 27-55.

Jansma, P., & Decker, J. (1990). Least restrictive environment usage in physical education (Final report of Project LRE/PE, United States Department of Education, Office of Special Education and Rehabilitative Services Special Projects Grant No. G008730022). Columbus, OH: The Ohio State University Research Foundation.

Kappler, A., & Grevel, A. (1994). Tatsachen über Deutschland (Facts about Germany). Frankfurt/Main: Societäts-Verlag.

Kauffman, J. M., & Hallahan, D. P. (Eds.) (1995a). The illusion of full inclusion. A comprehensive critique of a current special education bandwagon. Austin, TX: PRO-ED.

Kauffman, J. M., & Hallahan, D. P. (1995b). From mainstreaming to collaborative consultation. In J. M.

Kauffman, & D. P. Hallahan (Eds.), The illusion of full inclusion. A comprehensive critique of a current special education bandwagon (pp. 5-17). Austin, TX: PRO-ED.

Kearney, C. A., & Durand, V. M. (1992). How prepared are our teachers for mainstreamed classroom settings? A survey of postsecondary schools of education in New York state. Exceptional Children, 59(1), 6-11.

Kelly, L. E., & Gansneder, B. (in press). Preparation and job demographics of adapted physical educators in the United States. Adapted Physical Activity Quarterly.

Klauer, K. J., & Mitter, W. (1987). Grundfragen einer vergleichenden Sonderpädagogik (Basic questions in comparative special education).). In K. J. Klauer, & W. Mitter (Eds.), Handbuch der Sonderpädagogik: Band 11. Vergleichende Sonderpädagogik (Handbook of special education: Vol. 11. Comparative special education) (pp. 3-22). Berlin: Carl Marhold Verlag.

Knowles, C. J. (1981). Concerns of teachers about implementing individualized instruction in the physical education setting. Research Quarterly for Exercise and Sport, 52(1), 48-57.

LaMaster, K., Gall, K., Kinchin, G., & Siedentop, D. (1998). Inclusion practices of effective elementary

specialists. Adapted Physical Activity Quarterly, 15(1), 64-81.

Lamnek, S. (1989). Qualitative Sozialforschung. Band 2: Methoden und Techniken (Qualitative research in social sciences. Part 2: Methods and techniques). Munich: 1989.

Landesschulamt Berlin. (1997). Das Schuljahr 1996/97 in Zahlen. Allgemeinbildende Schulen (The school year 1996/97 in numbers. General education schools). Berlin: Landes Schulamt.

LaPiere, R.T. (1934). Attitudes vs. action. Social Forces, 13, 230-237.

Lincoln, Y. S., & Guba, E. G. (1995). Naturalistic Inquiry. Beverly Hills, CA: Sage.

Lipsky, D. K., & Gartner, A. (1991). Restructuring for quality. In J. W. Lloyd, A. C. Repp, & N. N. Singh (Eds.), The regular education initiative: Alternative perspectives on concepts, issues, and models (pp. 43-56). Sycamore, IL: Sycamore.

Lipton, D. (1994, April). The full inclusion court cases: 1989-1994. Paper presented at the Wingspread Conference, Racine, WI. (ERIC Document Reproduction Service No. ED 383135).

Loovis, E. M. (1986). Placement of handicapped students: The perpetual dilemma. Adapted Physical Activity Quarterly, 3, 193-198.

Maloney, M. (1994). Courts are redefining LRE requirements under the IDEA. In LRP Publications, Full inclusion: Educating students with disabilities in the regular classroom (p. 8). Horsham, PA: LRP Publications.

Matthews, R. J. (1993). Using concerns data to design a staff development program. Journal of Staff Development, 14(3), 52-55.

McAdams, R. P. (1993). Lessons from abroad - how other countries educate their children. Lancaster, PA: Technomic Publishing Co.

Menlo, A., & Popleton, P. (1990). A five-country study of the work perceptions of secondary school teachers in England, the United States, Japan, Singapore and West Germany (1986-88). Comparative Education, 26(2/3), 173-182.

Mey, H. (1972). Field-theory: A study of its application in the social sciences. New York: St. Martin's Press.

Möckel, A. (1989). Integration, Unterrichtskompetenz und Schulaufsicht (Integration, teaching competence, and supervision of schools). Zeitschrift für Heilpädagogik, 40(11), 745-755.

Mosston, M., & Ashworth, A. (1994). Teaching physical education. New York: Macmillan

Murray-Seegert, C. (1992). Integration in Germany: Mainstreaming or swimming upstream? Remedial and Special Education, 13(1), 34-43.

National Commission on Excellence in Education (1983). A nation at risk: The imperative for educational reform. Washington, D.C.: U.S. Government Printing Office.

Newlove, B. W., & Hall, G. E. (1976). A manual for assessing open-ended statements of concern about an innovation. Austin, TX: The Research and Development Center for Teacher Education. The University of Texas at Austin.

Nirje, B. (1980). The normalization principle. In R. Flynn, & K. Nitsch (Eds.), Normalisation, social integration and community services (pp. 31-49). Baltimore: University Park Press.

Noad, B. (1995). Using a concerns based adoption model to bring about change in adult corrections education. Australian Journal of Adult and Community Education, 35(1), 43-49.

Oberti v. Board of Education of the Borough of Clementon School District, 995 F.2d 1204 83 Ed.Law Rep 1009 (3rd Cir. 1993)

Opp, G. (1992). A German perspective on learning disabilities. Journal of Learning Disabilities, 25(6), 351-360.

Parsons, T. (1968). The structure of social action (Vols. 1,2). New York: The Free Press.

Phillips, D. G. (1987). Lessons from Germany? The case of German secondary schools. British Journal of Educational Studies, 35, 211-232.

Poppleton, P. (1990). The survey data. Comparative Education, 26(2/3), 183-210.

Poppleton, P. (1992). The significance of being alike: The implications of similarities and differences in work-perceptions of teachers in an international five-country study [1]. Comparative Education, 28(2), 215-223.

Porter, G. B. (1986). Federal Republic of Germany. A study of the educational system of the Federal Republic of Germany and a guide to the academic placement of students in educational institutions of the United States. Washington, D.C.: American Association of Collegiate Registrars and Admissions Officers.

Potter-Chandler, J., & Greene, J. L. (1995). A statewide survey of adapted physical education service delivery and teacher in-service training. Adapted Physical Activity Quarterly, 12(3), 262-274.

Preuß, E., & Hofsaß, T. (1991). Integration in the Federal Republic of Germany: Experiences related to professional identity and strategies of teacher training in

Berlin. European Journal of Teacher Education, 14(2), 131-137.

Preuss-Lausitz, U. (1997). Furchtbare Juristen? (Terrible judges?). Deutsche Lehrerzeitung, 45/46, p. 1.

Putnam, J. W., Spiegel, A. N., & Bruininks, R. H. (1995). Future directions in education and inclusion of students with disabilities: A Delphi investigation. Exceptional Children, 61(6), 553-576.

Reynolds, M. (1962). A framework for considering some issues in special education. Exceptional Children, 28, 367-370.

Reynolds, M. C., Wang, M. C., & Walberg, H. J. (1987). The necessary restructuring of special and regular education. Exceptional Children, 53, 391-398.

Richter, H. (1987). Sonderpädagogik in Berlin (Special education in Berlin). In Der Senator für Schulwesen, Berufsausbildung und Sport (Ed.) (1987). Sonderpädagogik in Berlin (Special education in Berlin) (2nd ed.). Berlin: Verwaltungsdruckerei Berlin.

Rizzo, T. L. (1984). Attitudes of physical educators toward teaching handicapped students. Adapted Physical Activity Quarterly, 8, 4-11.

Rizzo, T. L., & Vispoel, W. P. (1991). Physical educators' attributes and attitudes toward teaching students

with handicaps. Adapted Physical Activity Quarterly, 1, 263-274.

Rizzo, T. L., & Vispoel, W. P. (1992). Changing attitudes about teaching students with handicaps. Adapted Physical Activity Quarterly, 9, 54-63.

Rizzo, T. L., & Wright, R. G. (1987). Secondary school physical educators' attitudes toward teaching students with handicaps. American Corrective Therapy Journal, 41, 52-55.

Robinson, S. B. (1973). Discussion of W. D. Halls' "Culture and Education." In R. Edwards, B. Holmes, & J. Van de Graaf (Eds.), Relevant methods in comparative education (pp. 137-142). Hamburg: Unesco Institute for Education.

Sacramento Unified School District, Board of Education v. Rachel H. 14 F.3d 1398 89 Ed.Law Rep. 57 (9th Cir. 1994): 134.

Safadi, B. (1994). Angebotsvielfalt sonderpädagogischer Förderung in Berlin (Variety of special education services in Berlin). In Senatsverwaltung für Schule, Berufsbildung und Sport (Ed.) (1994). Mit Recht Behinderte fördern. 3. Sonderpädagogisches Forum Berlin 26. Januar 1994. Beiträge zur schulrechtlichen Regelung der sonderpädagogischen Förderung in der Berliner Schule (Serving the disabled with the law. 3rd special education forum Berlin January 26, 1994.

Contributions about legal regulations of special education in Berlin schools). Berlin: Verwaltungsdruckerei Berlin.

Scheid, V. (1995). Chancen der Integration durch Sport (Opportunities for integration through sport). Aachen: Meyer & Meyer.

Schnur, J. O., & Hopes, C. (1995). Is German education ready for reunification? Journal of Research and Development in Education, 28(2), 113-121.

Schutz, A. (1964). The stranger. An essay in social psychology. In A. Schutz (Ed.), Collected papers (Vol. 2, pp. 91-105). The Hague: Martinus Nijhoff.

Segall, M. H., Dasen, P. R., Berry, J. W., and Poortinga, Y. H. (1990). Human behavior in global perspective: An introduction to cross-cultural psychology. New York: Pergamon.

Senator für Justiz (1990). Gesetz und Verordnungsblatt für Berlin (Register of laws and rules in Berlin), 46. Jg., Nr. 77. Berlin: Verwaltungsdruckerei Berlin.

Senator für Justiz (1996). Gesetz und Verordnungsblatt für Berlin (Register of laws and rules in Berlin), 52. Jg., Nr. 20. Berlin: Verwaltungsdruckerei Berlin.

Senatsverwaltung für Schule, Berufsbildung und Sport (1995a). Schulgesetz für Berlin (Berlin school law). Berlin: Verwaltungsdruckerei Berlin.

Senatsverwaltung für Schule, Berufsbildung und Sport (1995b). Zum Schulanfang 1996 (About beginning of school 1996). Berlin: Verwaltungsdruckerei Berlin.

Sengstock, W. L., Magerhans-Hurley, H., & Sprotte, A. (1990). Germany, cradle of American special education for persons who are mentally retarded. Education and Training in Mental Retardation and Developmental Disabilities, 25(1), 4-14.

Sengstock, W. L., & Ellger-Rüttgardt, S. (1994). Rebuilding special education in Germany after World War II. Education and Training in Mental Retardation and Developmental Disabilities, 29(1), 69-81.

Sengstock, W. L., & Ellger-Rüttgardt, S. (1995). Special education in East Germany under communist domination. Education and Training in Mental Retardation and Developmental Disabilities, 30(?), 130-140.

Sherrill, C. (1993). Adapted physical activity, recreation, and sport: Crossdisciplinary and lifespan (4th ed.). Dubuque, IA: Brown & Benchmark.

Sherrill, C. (1994). Least restrictive environment and total inclusion philosophies: Critical Analysis. PALAESTRA, 10(3), 25-35, 52-53.

Sherrill, C. (1998). Adapted physical activity, recreation, and sport: Crossdisciplinary and lifespan (5th ed.). Dubuque, IA: Brown & Benchmark.

Smith, L. B., & Thelen, E. (Eds.). (1993). A dynamic systems approach to development. Cambridge, MASS.: MIT Press.

Smith, P. B., & Bond, M. H. (1993). Social psychology across cultures: Analysis and perspectives. Needham Heights, MA: Allyn & Bacon.

Spindler, G., & Spindler, L. (1987). Cultural dialogue and schooling in Schoenhausen and Roseville: A comparative analysis. Anthropology and Education Quarterly, 18(1), 3-16.

Stainback, W., & Stainback, S. (1991). A rationale for integration and restructuring: A synopsis. In J. W. Lloyd, A. C. Repp, & N. N. Singh (Eds.), The regular education initiative: Alternative perspectives on concepts, issues, and models (pp. 225-239). Sycamore, IL: Sycamore.

Stein, J. U. (1987). The myth of the adapted physical education program. PALAESTRA, 4, 34-37.

Stein, J. U. (1994a). The total inclusion-least restrictive environment controversy. PALAESTRA, 10(3), 16.

Stein, J. U. (1994b). Total inclusion or least restrictive environment? JOPERD, 65(9), 21-25.

Stewart, E. C., & Bennett, M. J. (1991). American cultural patterns: A cross-cultural perspective. Yarmouth, ME: Intercultural Press.

Stoler, R. D. (1992). Perceptions of regular education teachers toward inclusion of all handicapped students in their classrooms. The Clearing House, 66(1), 60-62.

Strauss, A. L., & Corbin, J. M. (1990). Basics of qualitative research. Grounded theory procedures and techniques. Newbury Park, CA: Sage Publications.

Taylor, S. J., & Bogdan, R. (1984). Introduction to qualitative research methods : the search for meanings. New York, NY: Wiley.

Taylor, S. J. (1988). Caught in the continuum: A critical analysis of the principle of least restrictive environment. Journal of the Association of Persons with Severe Handicaps, 13, 41-53.

Texas Education Agency (1992). State Board of Education rules for curriculum. Essential elements. Austin, TX: Author.

Texas Education Agency (1995). Policy research: Teacher Supply, demand, and quality. Texas teacher retention, mobility, and attrition. Report number 6. (TEA Publication No. GE560114). Austin, TX: Author.

The Council for Exceptional Children (1993). CEC policy on inclusive schools and community settings. Reston, VA: Author.

Theisen, G., & Adams, D. (1990). Comparative education research. In R. M. Thomas (Ed.), International comparative education. Practices, issues, and prospects (pp. 277-302). New York: Pergamon Press.

Thomas, R. M. (Ed.) (1990). The nature of comparative education. In R. M. Thomas (Ed.), International comparative education. Practices, issues, and prospects (pp. 1-22). New York: Pergamon Press.

Thomas, J. R., & Nelson, J. K. (1996). Research methods in physical activity (3rd. ed.). Champaign, ILL: Human Kinetics.

Thousand, J. S., & Villa, R. A. (1990). Strategies for educating learners with severe disabilities within their local home schools and communities. Focus on Exceptional Children, 23(3), 1-24.

U.S. Department of Education (1994). Sixteenth annual report to Congress: On the implementation of the Individuals with Disabilities Education Act. Washington, DC: Author.

U.S. Department of Education (1996). Eighteenth annual report to Congress: On the implementation of the Individuals with Disabilities Education Act. Washington, DC: Author.

Wicker, A. W. (1969). Attitudes versus action: The relationship of verbal and overt behavioral responses to attitude objects. Journal of Social Issues, 25, 41-78.

Will, M. (1986). Educating children with learning problems: A shared responsibility. Exceptional Children, 52, 411-415.

Yilla, A. B., & Piletic, C. (1995). Identification of the adapted physical education needs for the state of Texas by means of a survey. Paper presented at the meeting of the California Alliance of Health Physical Education, Recreation, and Dance, San Jose, CA.

York, J., & Vandercook, T. (1991). Designing an integrated program for learners with severe disabilities. Teaching Exceptional Children, 23(2), 22-28.

APPENDICES

APPENDIX A
English Interview Questions

Contextual Variables

Working conditions

schedule

class size

of students w/ disabili

support/collaboration

Tell me about a typical work day.

- What does your schedule look like?
- How large are your classes?
- How many students with disabilities do you have in your classes?
- Tell me about these students

Do you work with others? How would you des? What kind of assistance and support do you have?

Responsibilities

w/in and outside PE

How would you describe your responsibilities as a PE teacher at ____?

Input

schedule, responsib

kids w/ disabilities

When you begin planning for next year, what kind of input will you have regarding your schedule and responsibilities?

Do you see all the kids w/ dis. in your school in PE? How much input do you have on which kids go to PE and which ones don't? Are you invited to part. in ARDs and can you contribute to IEPs?

Personal Variables

goals, beliefs, values

What PE goals are most important to you?

How should the goals be the same or different for kids w/ disabilities?

What role do the Texas Essential Elements play in your teaching?

Every kid w/ a dis. who has an IEP... Who writes the IEP PE goal and objectives?

contents

I'm very interested in what you teach. It's probably asking too much for you to describe what you do in each grade, so would you mind telling me about your favorite class

	...and what about your least favorite class?
	What are the things you do in these classes that you most like? And why do you most like them?
change of teaching modifications, accomod	How did you have to change your teaching to accomodate the kids w/ dis. in your class?
Concerns	What else do you do to accomodate kids w/ dis. in your classes? (Examples)
Affective	How long have you been teaching kids with disabilities in your classes?
“first day”	Can you remember the first day you had a kid w/ a dis. in your class and how you felt about it? How have these feelings changed over time? How do you feel (now) about teaching kids w/ dis. in your classes?
	What would you recommend a first year teacher to do to best accomodate kids w/ dis in reg. class?
	<ul style="list-style-type: none"> • What do you like about having kids w/ dis. in your classes? • What do you dislike about having kids w/ dis. in your classes?
	When thinking about working w/ kids w/ dis. in your regular PE class, what (other) concerns come to mind?
Informational	Which disabilities do you feel most comfortable working w/ and are there any which you wish you knew more about? What kind of training do you think is needed to prep PE teachers for...?
Management	How has mainstreaming affected your daily wok routines such as planning of lessons, working with others, time demands?
	What things do you think would make mainstreaming more efficient?
	Are there any ways in which further change could be brought about?
	How does mainstreaming affect your students? How does it affect you?

Consequences

How do kids w/ and w/o dis interact? How does this interaction change as they get older?

In your opinion, what is necessary for mainstreaming to work?

If you're granted 3 wishes w/ regard to teaching kids w/ dis. in your reg. PE classes, what would these wishes be?

Are there other things you would like to share?

Do you know someone else who might be interested in talking with me about her/his concerns about inclusion?

APPENDIX B
German Interview Questions

Umfeldvariablen

Arbeitsbedingungen

Beschreibung des Arbeitsalltags einer Woche

- Stundenplan
- Klassengröße, Turnhalle

Beginn d Integration

Wissen Sie wie es dazu kam, daß an ihrer Schule I-Klassen eingerichtet wurden?

Schüler m. Behind.

- Können Sie mir etwas über die Kinder mit Behin. in Ihren Sportklassen sagen?

I-Klasse, -Schule, Einzelintegration

- Welche Ki m Beh werden aufgenommen? Wie wird das entschieden? Wie weit sind Sie beteiligt?

Unterst./Kooperation

Haben Sie Unterstützung für die Arbeit in einer integrativen Klasse?

- Können Sie mir beschreiben wie die Zusammenarbeit aussieht?

Aufgaben

Welche anderen schulischen Aufgaben gibt es für Sie außerhalb des Unterrichtens?
(Veranstalt.)

Input

Inwieweit sind Sie an Entscheidungen beteiligt, die Ihre Arbeit an der Schule betreffen?

- Stundenplan, welche Fächer und Klassen
- Stundeninhalte (Rahmenplan)
- Förderausschuß; erfahren Sie Ergebnisse bzgl. eines best. Kindes?
- Außerunterrichtliche Aufgaben

Personale Variablen

Ziele, Einstellungen

Welche Aufgaben/Ziele sollte Ihrer Meinung nach der Sportunterricht allg. verfolgen?

Inwieweit unterscheiden sich in dieser Hinsicht integrativer und nicht integrativer Sportunterricht?

Inwieweit unterscheiden sich die Ziele für Kinder mit und ohne Behinderungen?

Inhalte

Können Sie mir beschreiben, wie eine Sportstunde bei Ihnen abläuft?

Welche Inhalte unterrichten Sie am liebsten und am wenigsten gern und warum? -

Anpassung des Sportunterrichts

Was unterscheidet Ihren Sportunterricht jetzt von dem Sportunterricht, den Sie erteilt haben, bevor Sie Kinder m Beh in Ihren Klassen hatten?

Was würden Sie anders machen, wenn Sie keine Kinder m Beh in ihrer Klasse hätten?

Adaptationen

Können Sie mir beschreiben, wie Sie Kinder m Beh in ihren Sportunterricht mit einbeziehen? Bsp

Modifikationen (Rahmenplan, Ziele)

Bewertung

Wie bewerten Sie Ihre Schüler im Sportunterricht?

Concerns

Affektiv

“Das erste Mal”

Wie hat Integration für Sie begonnen?

Können Sie sich erinnern an das erste Mal als Sie ein behindertes Kind im Sportunterricht hatten? Wie war es und wie haben Sie sich gefühlt dabei? Wie lange ist das her und wie hat sich das bis heute geändert?

Tips für Anfänger	Was würden Sie einem Anfänger raten, wie sie/er Ki m Beh im Sportunterricht integrieren kann?
Positives	Was finden Sie persönlich gut an der Integration im Sportunterricht?
Negatives	Was finden Sie persönlich nicht gut an der Integration im Sportunterricht?
Kognitiv	Wenn Sie an Ihre Arbeit in Integrationsklassen denken, welche anderen Gedanken kommen Ihnen in den Sinn? Welche Probleme oder Möglichkeiten sehen Sie?
Informationen	Welche zusätzlichen Informationen würden Sie sich wünschen, um Ihre Arbeit zu erleichtern oder zu verbessern? (Fortbildung)
Management	Wie hat sich die Integration auf Ihren Arbeitsalltag ausgewirkt? Z.B. Stundenplanung und -durchführung, Zusammenarbeit mit Kollegen, Zeitaufwand. Welche Veränderungen würden Sie sich wünschen, um Integration effektiver zu machen?
Auswirkungen	Wie hat sich die Integration auf die Schüler mit/ohne Beh im Sportunterricht ausgewirkt? Pro/Con Wie gehen Schüler mit und ohne Behinderung miteinander um? (mit zunehmendem Alter?) Welche neuen Erfahrungen haben Sie durch die Integration gemacht, was hat sich für Sie geändert?
Voraussetzungen	Was ist Ihrer Meinung nach erforderlich für eine erfolgreiche Integration im Sportunterricht?
Veränderungen	Allgemein gesehen, was würden Sie gerne verändern, wenn Sie könnten, im Blick auf integrativen Sportunterricht? Was wurde bisher nicht angesprochen? Andere Interviewpartner

APPENDIX C

English Participant Questionnaire

Demographic Questionnaire

Please complete the following:

1. Female ____ Male ____
2. Your age: _____
3. Do you work: full time ____ part time ____
4. What grade levels are you presently teaching? _____
5. How many students are in your classes? ____
6. How many classes do you teach a day? ____
7. How often do you see each student a week? ____ times
8. How many students with disabilities do you teach each week in your regular physical education classes and what disabilities do they have?

Disability		Number	Mild	Mod.	Sev.
Orthopedic Impairments	wheelchair				
	ambulatory				
Mental Retardation					
Visual Impairments					
Deaf					
Multiple Disabilities	wheelchair				
	ambulatory				

Other (please specify): _____

9. Highest degree earned:

Associate ____ Bachelor ____ Master's ____ Doctorate ____

10. Was your major ____ minor ____ physical education? yes ____ no ____

11. Have you received formal training in adapted physical education

	Number
College course	
Inservice	

Other (please specify):

12. Have you received formal training concerning accomodation of children with disabilities in regular physical education

	Number
College course	
Inservice	

Other (please specify):

13. Have you received formal training in special education ?

	Number
College course	
Inservice	

Other (please specify):

14. How comfortable do you feel teaching students with disabilities?

Very 5 4 3 2 1 Not at all

15. Total years teaching ____

16. How long have you taught elementary physical education? ____ yrs

17. How long have you taught children with disabilities in your regular physical education classes? ____ yrs

18. How competent do you feel teaching students with disabilities?

Very 5 4 3 2 1 Not at all

19. What other experiences with individuals with disabilities do you have?

APPENDIX D
German Participant Questionnaire

Fragebogen zur Person

1. Ihr Geschlecht: Weiblich ____ Männlich ____
2. Ihr Alter: ____
3. Arbeiten Sie: vollzeit ____ teilzeit ____
4. Welche Klassenstufen unterrichten Sie? _____
5. Wieviele Schüler/innen sind in Ihren Sportklassen? _____
6. Wieviele Sportstunden unterrichten Sie pro Woche, in wievielen Klassen?

7. Wie oft haben die Schüler/innen in ihren Klassen Sport pro Woche? ____
8. Wieviele Schüler/innen mit Behinderungen haben Sie in Ihren Klassen und welche Behinderungen haben sie?

Behinderung		Leicht	Mittel	Schwer
Körperbehinderung	mit Rollstuhl			
	ohne Rollstuhl			
Geistige Behinderung				
Sehbehinderung				
Hörbehinderung				
Mehrfachbehinderung	mit Rollstuhl			
	ohne Rollstuhl			

Andere:

9. Welche Ausbildung haben Sie? (Mehrere Antworten möglich)

Lehramt für die Primarstufe (Grundschule) ____

Lehramt für die Sekundarstufe I (bis zur 10. Klasse) ____

Lehramt für die Sekundarstufe II (bis zum Abitur) ____

Lehramt für die Sonderschulen ____

Andere:

10. Haben Sie Sport studiert? Ja ____ Nein ____

11. Haben Sie eine Aus- und/oder Fortbildung im Bereich *Behindertensport*?

	Anzahl
Seminare während der Ausbildung	
Fortbildungsseminare	

Andere:

12. Haben Sie eine Aus- und/oder Fortbildung im Bereich *Integrationssport*?

	Anzahl
Seminare während der Ausbildung	
Fortbildungsseminare	

Andere:

13. Haben Sie eine Aus- und/oder Fortbildung im Bereich *Sonderpädagogik*?

	Anzahl
Seminare während der Ausbildung	
Fortbildungsseminare	

Andere:

14. Wie fühlen Sie sich, wenn Sie Schüler/innen mit Behinderungen in Ihren Klassen unterrichten?

Sehr wohl 5 4 3 2 1 Sehr unwohl

15. Seit wievielen Jahren sind Sie als Lehrer/in tätig? ____

16. Seit wievielen Jahren unterrichten Sie Sport an der Grundschule? ____

17. Seit wievielen Jahren unterrichten Sie Schüler/innen mit Behinderungen?

18. Wie gut fühlen Sie sich durch Ihre Ausbildung/Erfahrung auf die Arbeit in integrativen Klassen vorbereitet?

Sehr gut 5 4 3 2 1 Gar nicht

19. Welche *anderen* Erfahrungen haben Sie mit Personen mit Behinderungen?