

## AN ABSTRACT OF THE THESIS OF

Gay L. Timken for the degree of Doctor of Philosophy in Human Performance  
presented on April 14, 2000. Title: The Effects of Case Methods on Preservice  
Physical Education Teachers' Value Orientations.

# Redacted for Privacy

Abstract approved: \_\_\_\_\_

Hans van der Mars

Preservice teachers' beliefs and values develop due to their long "apprenticeship of observation" (Lortie, 1975) and often filter their teacher education experiences (Feiman-Nemser & Buchman, 1986; Pajares, 1992). Case methods may be one curricular tool by which to instill change in preservice teachers' beliefs and values. This study investigated the effects of case methods on preservice physical education (PETE) teachers' value orientations. Ten PETE students were interviewed and completed the Value Orientation Inventory-2 (VOI-2) four times over one academic year. Following a baseline phase students were grouped (n=5 per group) according to orientation priority. Intervention consisted of reading and discussing eight cases in physical education focused in one value orientation (disciplinary mastery or social responsibility). Results indicated that case methods have differential effects on PETE students' value orientations. VOI-2 and interview group data suggested an orientation priority shift toward the case theme; individual data gives a clearer picture as to the effects of case methods. PETE students' value orientations changed in the direction of the case focus at differing rates and not all students completely shifted their value orientation toward the

case theme. Inconsistencies existed between VOI-2 and interview data for some PETE students. Student interview statements were focused more on concepts of disciplinary mastery which is likely due to prior experiences in sport and physical education.

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The Effects of Case Methods on  
Preservice Physical Education Teachers' Value Orientations

by

Gay L. Timken

A THESIS

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Dean of Graduate School

I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

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\_\_\_\_\_  
Gay L. Timken, Author

## ACKNOWLEDGMENTS

The time, effort and dedication required to complete a doctoral degree necessitates a vast amount of support and encouragement from those individuals significant in one's life. Luckily I have had the wonderful fortune of being surrounded by many people who have provided a great deal of support, encouragement, motivation and guidance while on this long and winding journey. From the heart I must acknowledge those individuals who have been present in my life the past four years while I attained this long awaited goal.

If I hadn't landed in Corvallis, Oregon it is quite likely I would have never met my best friend and husband Craig. While Craig stepped into this relationship and marriage with full knowledge of my encounters and future plans, he nevertheless stood beside me, picked me up, kept me well fed and gave me numerous shoulder rubs as I poured over the computer and several drafts of this thesis. Though I may have made it this far without Craig his presence has made the process all the more pleasant, enduring and memorable. Thanks for coming into my life!

When it comes to major professors luck was in my corner. Had it not been for Dr. Hans van der Mars' continual and most exceptional support, guidance and never ending patience I would not have been able to pursue a topic that has consumed me for such a long period of time. While most major professors would more than strongly encourage their doctoral students to follow the research path laid in front of them, Hans willingly put aside his own interests and mustered the energy necessary to help me forge my own path. I cannot thank him enough for that gesture! Besides being a wonderful and endearing mentor in the professional sense, Hans, his wife Joanne and

daughter Katelyn have opened their personal lives and home allowing me to become a surrogate family member. Our relationship has been most rewarding and close to my heart. You truly are and will always be my favorite major professor!

Developing a committee is one of the most important strategies of a doctoral student's career and I have had the good fortune to have several committee members who have counseled me and asked me the most thought-provoking questions of my life while encouraging me every step of the way. The guidance and willingness to assist me on this journey all the while gently and continuously pushing my limits has been more than appreciated. Committee members include; Dr. Hans van der Mars, Major Professor, Dr. Mark Merickel, Minor Professor, Dr. William Uzgalis, Graduate School Representative, Dr. Barbara Cusimano and Dr. Jodi Engel. I most sincerely appreciate your willingness to work together as a committee with the very intention of seeing me through to the final chapter and applaud your efforts in doing so. One other invisible but important member of my committee has been Dr. Don Fuertges, whose foresight, wisdom and guidance from the day I stepped foot on the campus of FHSU has been with me every step of the way at OSU. If leadership truly is the guiding forces that make the means possible then I have been blessed with many guiding forces and your guidance has been most appreciated and inspirational!

As a natural consequence research in the field of physical education teacher education includes human participants and in this case I owe a debt of gratitude to 10 wonderful physical education majors. While they may not have realized the scope of this project from the outset they hung with me to the end, tirelessly completing the VOI-2 four times ("not this again Gay?") and allowing me to encroach on their thoughts time

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To all my friends who have been or are currently engaged in this process, it truly is an amazing (and mindboggling) journey. To Dr. Joel Schuldheisz - I can't thank you enough for showing me the ropes. To Kayoko Ogimoto - thanks for the wonderful memories, long runs and sushi! To Debra Patterson and Mike Wright – sport pedagogy at OSU will never be the same! And to the “dumb girls” (Brenda, Lynn and Kathy) - you may not have known it but you were with me every step of the way!

And finally to my parents, Roy and Lavon, I cannot express how much your support, encouragement and belief in me has meant, over my life and over the last four years. From the moment I said, “I think I'll get a doctorate” you were on this liberal's bandwagon (much preferred to the George W. Bush wagon). Thank you for encouraging my every step, taking care of Apollo and being wonderful parents! I truly have been blessed!



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## PREFACE

This dissertation has been written in manuscript format. Manuscript format enables the graduate student to write a thesis/dissertation in a format ready for publication, unlike the chapter format.

This dissertation has one general introduction section followed by two separate chapters and a general conclusion. The first chapter includes the quantitative (VOI-2) data from this investigation. The second chapter houses the qualitative (interview) data from this study. The data represented in each separate chapter can stand alone but the combination and triangulation of data strengthens this study. Both chapters will be submitted separately for publication.

# The Effects of Case Methods on Preservice Physical Education Teachers' Value Orientations

## Introduction

“In learning to teach, neither first hand experience nor university instruction can be left to work themselves out by themselves”  
(Feiman-Nemser and Buchmann, 1986, p. 255).

Beliefs, attitudes, and values are thought to form an individual's belief system which serve as indicators of daily and lifelong decisions (Green, 1971; Mezirow, 1997; Nisbett & Ross, 1980; Pajares, 1992). According to Mezirow (1997) the world is defined by one's frame of reference or assumptions, which in turn guide one's actions (Richardson, 1994). These frames of reference are formed and fostered via enculturation, education, and schooling (Pajares, 1992). Beliefs endure even when they inaccurately represent reality (Nisbett & Ross, 1980) and incompatible ideas tend to be rejected (Mezirow, 1997).

Teachers' beliefs are defined as “tacit, often unconsciously held assumptions about students, classrooms, and the academic material to be taught” (Kagan, 1992, p. 65). Though some teachers may be unaware of or lack the capability to articulate specific beliefs (Kagan, 1992) their beliefs directly and indirectly affect the learning environment, classroom behavior, content and curriculum selection, instructional planning, and goal and objective formation (Eisner & Vallance, 1974; Ennis, 1992; Ennis & Chen, 1993, 1995; Ennis & Hooper, 1988; Kagan, 1992; Nespor, 1987; Pajares, 1992; Richardson, 1996).

Elementary and secondary education experiences have been found to have a direct impact on the belief development of teachers (Pajares, 1992). Personal histories

function as prior knowledge and filter information during preservice teacher preparation (Feiman-Nemser & Buchmann, 1986; Holt-Reynolds; 1992). Goodman (1988) discovered that educational experiences during early childhood had significant influences on the professional perspectives of preservice teachers in which well developed images of what it meant to be a teacher and “intuitive screens” filtered interpretations of professional education. Moreover, new ideas or experiences in contradiction with an “intuitive screen” were usually rejected. Goodman (1988) noted that most preservice teachers’ often held vague and contradictory views of teaching and learning and were unable to defend their ideas of teaching, yet, new experiences and nonthreatening challenges of beliefs increased preservice teachers’ willingness to consider alternatives.

As a result of the lengthy “apprenticeship of observation” (Lortie, 1975) researchers have suggested that preservice teacher education is a critical period for the examination of beliefs about teaching and learning (Doolittle, Dodds, & Placek, 1993; Doyle, 1997; Feiman-Nemser & Buchmann, 1986, 1989; Fenstermacher, 1978; Goodman, 1988; Hollingsworth, 1989; Holt-Reynolds, 1992; Joram & Gabriele, 1998; McDiarmid, 1990; Nespor, 1987; Pajares, 1992, 1993; Placek, Dodds, Doolittle, Portman, Ratliffe, & Pinkham, 1995; Richardson, 1996; Tabachnick & Zeichner, 1984; Weinstein, 1988, 1989, 1990; Wilson, 1990). The departure point of teacher education should be the prior beliefs or preconceptions of prospective teachers (Feiman-Nemser & Buchmann, 1989) with the goal of helping preservice teachers identify and possibly transform tacit and unexamined beliefs into those more reasonable and in line with quality teaching (Fenstermacher, 1979).

Pajares (1992) promoted the inclusion and study of preservice teachers' beliefs into teacher education, "not because we wish...to share similar, appropriate conceptions, but ...[for] any hope of budging mental structures long solidified and deeply rooted" (p. 52). McDiarmid (1990) stated:

Rather than challenging students' initial beliefs, teacher educators tend to focus on issues on which they and their students already agree (Brousseau & Freeman, 1988). As a consequence, most prospective teachers complete their teacher education programs without having examined the bases for their most fundamental beliefs about the teacher's role, pedagogy, diverse learners, learning, subject matter, and the role of context. Teacher education students rarely become aware of the assumptions on which they operate. Instead, they either reconfigure ideas and information they encounter to fit with their initial beliefs or they simply reject or ignore what does not fit (p. 13).

To help preservice teachers shift from common-sense approaches to teaching to more professional views is a formidable but necessary challenge (Feiman-Nemser & Buchmann, 1986). Creating cognitive dissonance has been widely supported as a means of impacting and altering well-established and tenacious beliefs. A critical analysis of preservice teachers' beliefs can serve to guide and direct more meaningful and useful experiences in teacher education (Solmon & Ashy, 1995). Preservice teachers have been found to resist the implications of their experiences while others are able to reexamine their unreflective and possibly damaging beliefs and folkways of teaching (McDiarmid, 1990). Others maintain an unrealistic optimism about teaching and continue to downplay the academic dimension of teaching (Weinstein, 1988, 1989, 1990).

Preservice physical education teachers' beliefs have also been examined and the results are similar to those in general education. Preservice teachers in physical education thought developing skills and fitness, socializing and having fun was the purpose of physical education, not developing cognitive knowledge nor valuing



physical activity (Placek, Dodds, Doolittle, Portman, Ratliffe & Pinkham, 1995). In another study (Goc-Karp, Kim, & Skinner, 1985) the most frequently cited purposes of physical education were to develop body awareness and coordination, fitness, and lifetime sports skills. Hutchinson (1993) found high school students' common assumptions about the purposes of physical education included having fun, just trying and accommodating athletics. Furthermore, the main requirement to be a physical educator was the ability to perform a variety of sports with little planning and preparation necessary to teach. Doolittle, Dodds, and Placek (1993) found preservice teachers used their beliefs as filters while devising methods to make their practice more compatible with their underlying beliefs. Only those practices which complimented their core beliefs were accepted. However, as Doolittle et al. (1993) explained, PETE programs are not typically designed to instill cognitive dissonance or deliberately confront underlying beliefs.

Few researchers and teacher educators have found specific methods by which to instill change in preservice teachers' beliefs. Joram and Gabriele (1998) found that specifically targeting beliefs about teaching and learning during an undergraduate educational psychology class significantly impacted preservice teachers' beliefs. Those involved in specific math and science courses for future teachers focused more on personal teaching strategies and student learning (McDevitt, Heikkinen, Alcorn, Ambrosio & Gardner, 1993). Doyle (1997) found time and experience as essential in helping preservice teachers engaged in field experiences function at higher levels of

understanding teaching and learning. To be influential, teacher education programs require more than just the technical aspects of teaching (Feiman-Nemser & Buchmann, 1986).

Richardson (1996) cautions those who might confront preservice teachers' beliefs in teacher education programs. Their lack of practical knowledge may serve to complicate the change process, as their beliefs have not yet been tested in the classroom. Notwithstanding, Richardson (1996) does recognize the change process in teacher education as important first steps toward the acquisition of practical knowledge. Case methods (Lomax, 1996; Mezirow, 1997) and early field experiences (McDiarmid, 1990) can be part of the change process (Richardson, 1996).

### Value Orientations

Belief systems of teachers have been described as educational value orientations (Eisner & Vallance, 1974; Ennis & Hooper, 1988; Ennis, 1992, 1994a, 1994b; Ennis & Chen, 1993, 1995; Ennis, Chen & Ross, 1992; Ennis, Mueller & Hooper, 1990; Ennis, Ross & Chen, 1992; Ennis & Zhu, 1991; Smith, 1992; Solmon & Ashy, 1995). Both tacit and explicit beliefs about teaching and learning have been integrated into five value orientations; disciplinary mastery, learning process, ecological integration, social responsibility, and self-actualization (Ennis & Chen, 1993). Each orientation represents competing philosophies and are assumed to affect priorities concerning educational decisions (Ennis, 1992).

Ennis and Chen (1993) revised the original Value Orientation Inventory (VOI) creating the VOI-2. To date only one study exists which used the VOI-2. Ennis and Chen (1995) used the VOI-2 to describe physical educators' value orientations in both

rural and urban areas. Teachers in rural school districts placed higher priority on disciplinary mastery and learning process; self-actualization and social responsibility were a priority for teachers in urban school districts. These differences in priority were a result of contextual constraints.

Only two studies, Smith (1992) and Solmon and Ashy (1995) have used the VOI to determine preservice physical education teachers' value orientations. All preservice teachers in Smith (1992) exhibited a priority for one or more of the value orientations but their priority was not necessarily the same between pre-test and post-test. Many preservice teachers had multiple value orientations which indicated uncertainties in their thinking. Solmon and Ashy (1995) used the VOI to assess the value orientations of preservice physical education teachers engaged in their initial early field experience while also enrolled in an elementary methods course. Preservice teachers had clearly defined value orientations, demonstrating a high or low priority in at least one orientation. Even so, the value profiles of preservice teachers were not stable constructs but fluctuated from pre-test to post-test. Value profiles of preservice teachers also tended to gravitate toward those of the course instructor (Solmon & Ashy, 1995).

### Case Methods

Though a relatively new technique in teacher preparation (since the mid-1980s) a variety of researchers support the use of cases and case methods in teacher education (Doyle, 1990; Greenwood & Parkay, 1988; Harrington & Garrison, 1992; Kleinfeld, 1990; Lacey & Merseth, 1993; Merseth, 1990, 1991, 1992, 1996; J. Shulman & Mesa-Bains, 1993; L. Shulman, 1992; Silverman, Welty, & Lyon, 1992, 1994; Wasserman, 1993, 1994). Cases often are real-life events typifying the complexity and

multidimensionality of the classroom and similar to teaching, cases typically present a dilemma for which there are few clear-cut, simple answers (Wasserman, 1993, 1994). Barnett and Tyson (in press) used case methods to develop critical thinking processes about teaching decisions and techniques. “If cases are to have an impact in classrooms, ...they must be designed and used so that teachers grapple with their beliefs, values and goals; critically evaluate their teaching practices; construct new knowledge; and develop the motivation to learn more” (Barnett & Tyson, in press, p. 21-22).

The use of case methods in teacher education signifies a shift from the preoccupation of technical and behavioral skills of teaching to the complex cognitive processes and epistemological orientations of teachers (Doyle, 1990). Practical experience, critical thinking, and reflection are intertwined in the study of cases, as “thinking” like a teacher is not always transferred from observation and imitation alone (Florio-Ruane & Clark, 1990). The lecture format encourages the passive receipt of knowledge whereas case methods serve to increase the active thinking and learning processes. “Students are enabled to assume responsibility for their own learning rather than simply being instructed” (Harrington & Garrison, 1992, p. 721).

Research on the use of cases in teacher education is producing promising results. Barnett (1998) and Barnett and Tyson (in press) found case methods to stimulate the co-generation of ideas through discussion as the discussion process promoted critical inquiry, and revealed holes, blind spots, incongruencies, and mistakes in thinking further opening avenues to alternative ways of thinking. Group deliberation also stimulated creative and pedagogical thinking (Barnett, 1991).

Levin (1995) found social interaction during case discussion served as a catalyst for important changes in teachers' thought processes as well as helping student and beginning teachers clarify and elaborate on their thinking. Personal understandings of elementary music education were revealed as preservice teachers examined their own beliefs and the realities of the context (Barrett & Rasmussen, 1996). Case methods helped sharpen beginning teachers' observational, interpretive and critical skills as they enter field experiences (Florio-Ruane & Clark, 1990; p. 26).

Bolt (1998) found cases to have increased preservice physical education teachers' ability to identify more problems, offer more solutions to those problems, and cite more concepts. Case methods were used by Collier (1995) to promote reflection and analysis of multicultural issues (social class, race, gender) of preservice physical education teachers. These preservice teachers consistently used technical language in their reflections, being less clear and confident on issues of diversity. Collier (1995) asserted that the overriding technical emphasis of the program and the limited exposure to constructivist theory restricted preservice teachers' reflections to the sensitizing issues of multiculturalism.

Preservice teachers should be considered adult learners whereby self-directed learning (Knowles, 1980) and autonomous thinking (Mezirow, 1997) are long-term goals. Mezirow (1997) contends that transformative learning is the "essence of adult education" with the purpose of helping adults "negotiate [their] own values, meanings, and purposes rather than to act uncritically on those of others" (p. 11). The uncritical

acceptance of one's own beliefs and values or those of others concerning teaching and learning disregards the importance and impact of beliefs and values on the teaching and learning-to-teach process.

A constructivist and transformational approach to teacher education allows for a departure point whereby preservice teachers' prior experiences and perceptions of teaching and learning not only are considered important, they are addressed and infused into the teacher preparation program. This investigation was grounded in constructivist and transformational theories and formulated on the assumption that preservice teachers' prior knowledge and beliefs serve to filter professional preparation. Further, time is of critical importance to the transformational process wherein repeated problem-posing and problem-solving serve to stimulate change. Consistent with constructivist and transformational theory learning is considered a social process (Mezirow, 1997; Prawat & Floden, 1994) with discourse essential to the understanding of values and beliefs (Mezirow, 1997). Preservice teachers in this study not only participated in facilitated discussion with peers, they were asked to create multiple solutions to complex educational dilemmas within the context of physical education for an extended period of time.

### Purpose

The following two chapters are part of a larger investigation which determined the effects of case methods on preservice physical education teachers' value orientations. Using both quantitative and qualitative data provided a more in-depth look into preservice teachers' beliefs and values. Teacher educators are often confronted with the difficulties of helping preservice teachers understand and possibly alter belief

systems and values that interfere with learning about teaching. Teacher educators need to continue their search for pedagogically powerful and potent curricula and programs in contexts that are more conducive in learning to teach (Howey, 1996). Case methods may represent a teaching and learning tool whereby preservice teachers may be challenged to think about teaching and learning in new ways, encounter their own tacit assumptions and beliefs about teaching and learning, and where the theory-practice gap may be diminished. The paucity of case method research specifically within the area of physical education teacher education is a limiting factor in that relatively little is known about the methodology or the effects to warrant the use of cases or for case methods to be the curriculum of choice. As with Bolt (1998) and Collier (1995), this research was an initial step in exploring the use of case methods in physical education and further explored how case methods may effect PETE students' value orientations.

## Chapter 2

### Case Methods and Preservice Physical Education Teachers' Value Orientations

Gay L. Timken and Hans van der Mars

To be submitted to *Research Quarterly for Exercise and Sport*



## Introduction

“In learning to teach, neither first hand experience nor university instruction  
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Beliefs, attitudes, and values are thought to form an individual's belief system which serve as indicators of daily and lifelong decisions (Green, 1971; Mezirow, 1997; Nisbett & Ross, 1980; Pajares, 1992). According to Mezirow (1997) the world is defined by one's frame of reference or assumptions, which in turn guide one's actions (Richardson, 1994). These frames of reference are formed and fostered via enculturation, education, and schooling (Pajares, 1992). Beliefs endure even when they inaccurately represent reality (Nisbett & Ross, 1980) and incompatible ideas tend to be rejected (Mezirow, 1997).

Teachers' beliefs are defined as “tacit, often unconsciously held assumptions about students, classrooms, and the academic material to be taught” (Kagan, 1992, p. 65). Though some teachers may be unaware of or lack the capability to articulate specific beliefs (Kagan, 1992) their beliefs directly and indirectly affect the learning environment, classroom behavior, content and curriculum selection, instructional planning, and goal and objective formation (Eisner & Vallance, 1974; Ennis, 1992; Ennis & Chen, 1993, 1995; Ennis & Hooper, 1988; Kagan, 1992; Nespor, 1987; Pajares, 1992; Richardson, 1996).

Elementary and secondary education experiences have been found to have a direct impact on the belief development of teachers (Pajares, 1992). Personal histories function as prior knowledge and filter information during preservice teacher preparation (Feiman-Nemser & Buchmann, 1986; Holt-Reynolds; 1992). Goodman (1988)

discovered that educational experiences during early childhood had significant influences on the professional perspectives of preservice teachers in which well developed images of what it meant to be a teacher and “intuitive screens” filtered interpretations of professional education. Moreover, new ideas or experiences in contradiction with an “intuitive screen” were usually rejected. Goodman (1988) noted that most preservice teachers’ often held vague and contradictory views of teaching and learning and were unable to defend their ideas of teaching, yet, new experiences and nonthreatening challenges of beliefs increased preservice teachers’ willingness to consider alternatives.

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A formidable but necessary challenge is to help preservice teachers shift from common-sense approaches to more professional views of teaching (Feiman-Nemser & Buchmann, 1986). Creating cognitive dissonance has been widely supported as a means of impacting and altering well-established and tenacious beliefs. A critical analysis of preservice teachers’ beliefs can serve to guide and direct more meaningful and useful experiences in teacher education (Solmon & Ashy, 1995). Some preservice teachers have resisted the implications of their experiences while others were able to reexamine their unreflective and possibly damaging beliefs and folkways of teaching (McDiarmid, 1990). Others maintained an unrealistic optimism about teaching and continue to downplay the academic dimension of teaching (Weinstein, 1988, 1989, 1990).

Preservice physical education teachers’ beliefs have also been examined and the results are similar to those in general education. Preservice teachers in physical education thought developing skills and fitness, socializing and having fun was the purpose of physical education, not developing cognitive knowledge nor valuing physical activity (Placek, Dodds, Doolittle, Portman, Ratliffe & Pinkham, 1995). In another study (Goc-Karp, Kim, & Skinner, 1985) the most frequently cited purposes of

physical education were to develop body awareness and coordination, fitness and lifetime sports skills. Hutchinson (1993) found high school students' common assumptions about the purposes of physical education included having fun, just trying and accommodating athletics. Furthermore, these high school students believed that the main requirement to be a physical educator was the ability to perform a variety of sports with little planning and preparation necessary to teach. Doolittle, Dodds, and Placek (1993) found preservice teachers used their beliefs as filters while devising methods to make their practice more compatible with their underlying beliefs. Only those practices which complimented their core beliefs were accepted. However, as Doolittle et al. (1993) explained, PETE programs are not typically designed to instill cognitive dissonance or deliberately confront underlying beliefs.

Few researchers and teacher educators have found specific methods by which to instill change in preservice teachers' beliefs. Joram and Gabriele (1998) found that specifically targeting beliefs about teaching and learning during an undergraduate educational psychology class significantly impacted preservice teachers' beliefs. Those involved in specific math and science courses for future teachers focused more on personal teaching strategies and student learning (McDevitt, Heikkinen, Alcorn, Ambrosio & Gardner, 1993). Doyle (1997) found time and experience as essential in helping preservice teachers engaged in field experiences function at higher levels of understanding teaching and learning. To be influential, teacher education programs require more than just the technical aspects of teaching (Feiman-Nemser & Buchmann, 1986).

Richardson (1996) cautions those who might confront preservice teachers' beliefs in teacher education programs. Their lack of practical knowledge may serve to complicate the change process, as their beliefs have not yet been tested in the classroom. Notwithstanding, Richardson (1996) does recognize the change process in teacher education as important first steps toward the acquisition of practical knowledge. Case methods (Lomax, 1996; Mezirow, 1997) and early field experiences (McDiarmid, 1990) can be part of the change process (Richardson, 1996).

### Value Orientations

Belief systems of teachers have been described as educational value orientations (Eisner & Vallance, 1974; Ennis & Hooper, 1988; Ennis, 1992b, 1994a, 1994b; Ennis & Chen, 1993, 1995; Ennis, Chen & Ross, 1992; Ennis, Mueller & Hooper, 1990; Ennis, Ross & Chen, 1992; Ennis & Zhu, 1991; Smith, 1992; Solmon & Ashy, 1995). Both tacit and explicit beliefs about teaching and learning have been integrated into five value orientations; disciplinary mastery, learning process, ecological integration, social responsibility, and self-actualization (Ennis & Chen, 1993). Each orientation represents a competing philosophy and is assumed to affect priorities concerning educational decisions (Ennis, 1992).

Ennis and Chen (1993) revised the original Value Orientation Inventory (VOI) creating the VOI-2. To date only one study exists which used the VOI-2. Ennis and Chen (1995) used the VOI-2 to describe physical educators' value orientations in both rural and urban areas. Teachers in rural school districts placed higher priority on

disciplinary mastery and learning process; self-actualization and social responsibility were a priority for teachers in urban school districts. These differences in priority were a result of contextual constraints.

Only two studies, Smith (1992) and Solmon and Ashy (1995) have used the VOI to determine preservice physical education teachers' value orientations. All preservice teachers in Smith (1992) exhibited a priority for one or more of the value orientations but their priority was not necessarily the same between pre-test and post-test. Many preservice teachers had multiple value orientations which indicated uncertainties in their thinking. Solmon and Ashy (1995) used the VOI to assess the value orientations of preservice physical education teachers engaged in their initial early field experience while also enrolled in an elementary methods course. Preservice teachers had clearly defined value orientations, demonstrating a high or low priority in at least one orientation. Even so, the value profiles of preservice teachers were not stable constructs but fluctuated from pre-test to post-test. Value profiles of preservice teachers also tended to gravitate toward those of the course instructor (Solmon & Ashy, 1995).

### Case Methods

Though a relatively new technique in teacher preparation (since the mid-1980s), a variety of researchers support the use of cases and case methods in teacher education (Doyle, 1990; Greenwood & Parkay, 1988; Harrington & Garrison, 1992; Kleinfeld, 1990; Lacey & Merseth, 1993; Merseth, 1990, 1991, 1992, 1996; J. Shulman & Mesa-Bains, 1993; L. Shulman, 1992; Silverman, Welty, & Lyon, 1992, 1994; Wasserman, 1993, 1994). Cases often are real-life events typifying the complexity and multidimensionality of the classroom and similar to teaching, cases typically present a

dilemma for which there are few clear-cut, simple answers (Wasserman, 1993, 1994). Barnett and Tyson (in press) used case methods to develop critical thinking processes about teaching decisions and techniques. "If cases are to have an impact in classrooms, ...they must be designed and used so that teachers grapple with their beliefs, values and goals; critically evaluate their teaching practices; construct new knowledge; and develop the motivation to learn more" (Barnett & Tyson, in press, p. 21-22).

The use of case methods in teacher education signifies a shift from the preoccupation of technical and behavioral skills of teaching to the complex cognitive processes and epistemological orientations of teachers (Doyle, 1990). Practical experience, critical thinking, and reflection are intertwined in the study of cases, as "thinking" like a teacher is not always transferred from observation and imitation alone (Florio-Ruane & Clark, 1990). The lecture format encourages the passive receipt of knowledge whereas case methods serve to increase the active thinking and learning processes. "Students are enabled to assume responsibility for their own learning rather than simply being instructed" (Harrington & Garrison, 1992, p. 721).

Research on the use of cases in teacher education is producing promising results. Barnett (1998) and Barnett and Tyson (in press) found case methods to stimulate the co-generation of ideas through discussion as the discussion process promoted critical inquiry, and revealed holes, blind spots, incongruencies and mistakes in thinking further opening avenues to alternative ways of thinking. Group deliberation also stimulated creative and pedagogical thinking (Barnett, 1991).

Levin (1995) found social interaction during case discussion served as a catalyst for important changes in teachers' thought processes as well as helping student and

beginning teachers clarify and elaborate on their thinking. Personal understandings of elementary music education were revealed as preservice teachers examined their own beliefs and the realities of the context (Barrett & Rasmussen, 1996). Case methods helped sharpen beginning teachers' observational, interpretive and critical skills as they entered field experiences (Florio-Ruane & Clark, 1990; p. 26).

Bolt (1998) found cases to have increased preservice physical education teachers' ability to identify more problems, offer more solutions to those problems and cite more concepts. Case methods were used by Collier (1995) to promote reflection and analysis of multicultural issues (social class, race, gender) of preservice physical education teachers. These preservice teachers consistently used technical language in their reflections, being less clear and confident on issues of diversity. Collier (1995) asserted that the overriding technical emphasis of the program and the limited exposure to constructivist theory restricted preservice teachers' reflections to the sensitizing issues of multiculturalism.

Preservice teachers should be considered adult learners whereby self-directed learning (Knowles, 1980) and autonomous thinking (Mezirow, 1997) are long-term goals. Mezirow (1997) contends that transformative learning is the "essence of adult education" with the purpose of helping adults "negotiate [their] own values, meanings, and purposes rather than to act uncritically on those of others" (p. 11). The uncritical acceptance of one's own beliefs and values or those of others concerning teaching and learning disregards the importance and impact of beliefs and values on teaching and the learning-to-teach process.



A constructivist and transformational approach to teacher education allows for a departure point whereby preservice teachers' prior experiences and perceptions of teaching and learning not only are considered important, they are addressed and infused into the teacher preparation program. This investigation was grounded in constructivist and transformational theories and formulated on the assumption that preservice teachers' prior knowledge and beliefs serve to filter professional preparation. Consistent with constructivist and transformational theory learning is considered a social process (Mezirow, 1997; Prawat & Floden, 1994) with discourse essential to the understanding of values and beliefs (Mezirow, 1997). Further, time is of critical importance to the transformational process wherein repeated problem-posing and problem-solving serve to stimulate change. Preservice teachers in this study not only participated in facilitated discussion with peers, they were asked to create multiple solutions to complex educational dilemmas within the context of physical education for an extended period of time.

### Purpose

This study was part of a larger investigation to determine the effects of case methods on preservice physical education teachers' value orientations. Teacher educators are often confronted with the difficulties of helping preservice teachers understand and possibly alter belief systems and values that interfere with learning about teaching. Teacher educators need to continue their search for pedagogically powerful and potent curricula and programs in contexts that are more conducive in learning to teach (Howey, 1996). Case methods may represent a teaching and learning tool whereby preservice teachers may be challenged to think about teaching and

learning in new ways, encounter their own tacit assumptions and beliefs about teaching and learning, and where the theory-practice gap may be diminished. The paucity of case method research specifically within the area of physical education teacher education is a limiting factor in that relatively little is known about the methodology or the effects to warrant the use of cases or for case methods to be a curriculum of choice. As with Bolt (1998) and Collier (1995), this research was an initial step in exploring the use of case methods in physical education and further explored how case methods may effect PETE students' value orientations.

### Methods and Procedures

It is appropriate to remind the reader that the researcher also served as the instructor of the early field experience class during the course of this investigation. Thus, the researcher-instructor was embedded in the process of teaching using case methods while also assessing the effects of case methods on preservice teachers' value orientations.

### Context of the study

This investigation was conducted as part of a university-based early field experience course in an undergraduate physical education teacher education PETE program during the fall term of 1998 and winter and spring terms of 1999. This course was designed to provide preservice PETE students the opportunity to observe and participate in public school teaching experiences under the guidance of a mentor teacher

and a university supervisor. Students complete a series of three practicums, one at each school level (elementary, middle, and high school), and attend four on-campus seminars per term.

Mentor teachers were neither informed of nor involved with this study. As such, their potential influence on PETE students' beliefs was not assessed. Mentor teachers' influence must be acknowledged, and as such, the lack of assessment is considered a limitation of this study. The researcher-instructor served as one of three university supervisors. While the other two supervisors were aware of the course of this investigation, they were never asked to provide feedback specific to any value orientation. Their influence on PETE students was also not assessed.

### Participants

Ten (3 females, 7 males) undergraduate PETE students enrolled in the early field experience practicum for three consecutive terms volunteered to participate. Originally, seventeen students volunteered but over the three terms seven students self-selected out of the study, either choosing not to continue in the investigation or not completing the series of three practicums. Students were ensured course grade would not be affected and equal instruction would be received regardless of participation. Standard human subjects review board procedures were used and consent was received from all participating students. Students were informed that the purpose of the study was to determine the most appropriate methods for early field experience in preservice undergraduate physical education teacher education. PETE students are identified by their pseudonym of choice.

A demographic survey was administered during the first seminar of the fall term to determine relevant background information. This demographic survey was adapted from the Placek, Dodds, Doolittle, Portman, Ratliffe, and Pinkham (1995) survey.

### Research Design

This investigation used an alternate-control treatment group design (Borg, 1984; van der Mars, 1990) which avoided educational and ethical dilemmas whereby all students read cases in physical education and each group served as the other's control. All students received the intervention to reduce any tendency for complaints about extra work and/or demands placed on one group as well as to diminish the possibility for competition between groups (Borg, 1984). A graphic display of the research design is presented in Figure 2.0.

Fall term was considered a baseline phase. At the beginning and end of fall term students completed the Value Orientation Inventory-2 (VOI-2; Ennis & Chen, 1993). These initial VOI-2 data were used to create two groups for the intervention period beginning winter term and continuing through spring term. PETE students completed the third and fourth VOI-2 at the final seminar of both winter and spring terms, respectively.

All PETE students were together in the four on-campus seminars during fall term reading and discussing Games for Understanding articles from *Journal of Health, Physical Education, Recreation and Dance (JOPERD)* and participating in introductory activities and classroom management procedures specific to physical education (K-12). Format for *JOPERD* discussion closely approximated the format outlined for case discussion by Barnett and Friedman (1997).

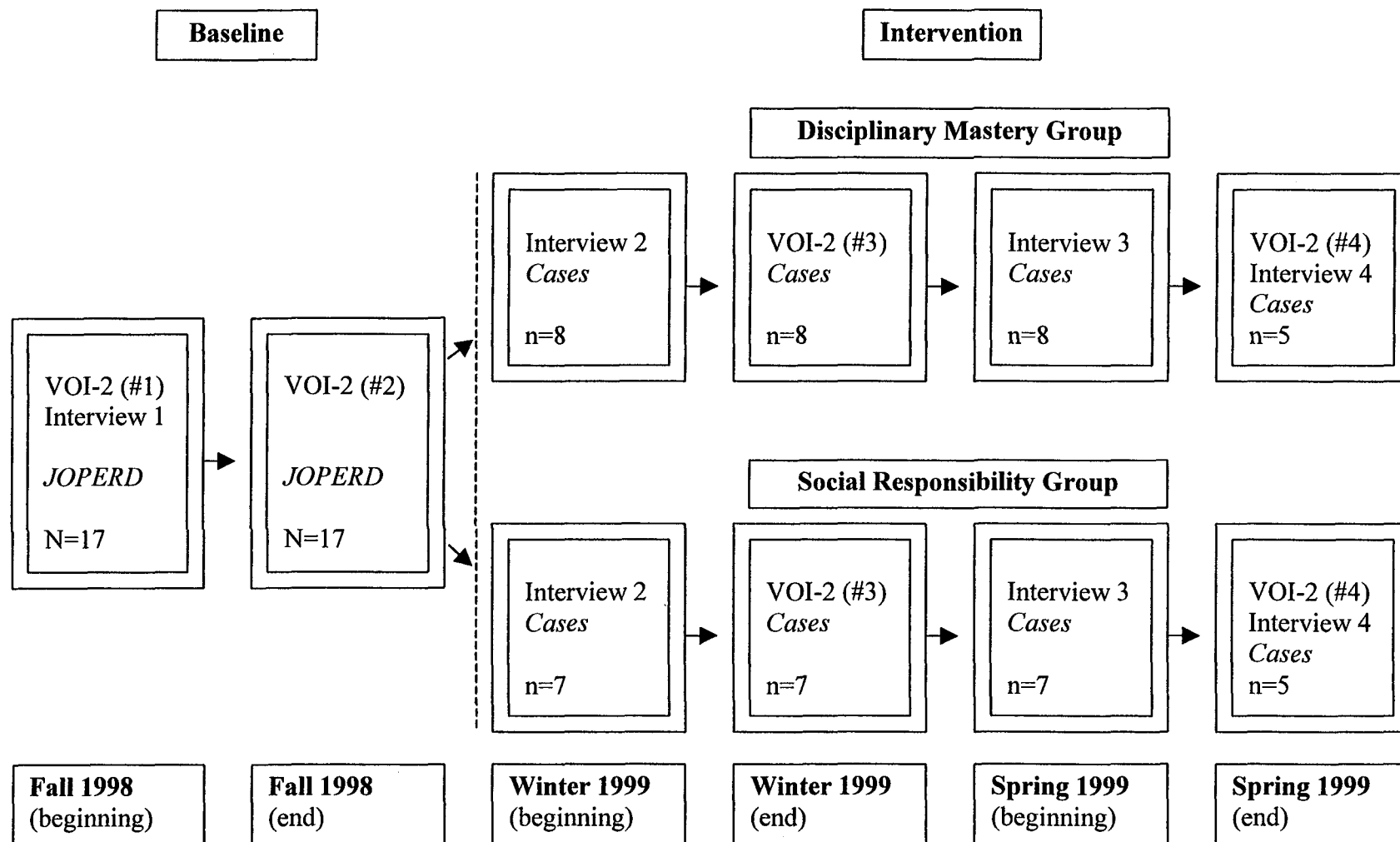


Figure 2.0. Research Design: Alternate Control Treatment Group (Borg, 1984; van der Mars, 1990).

During winter and spring terms both groups had separate on-campus seminars (four per term) at which time case methods were introduced. Students were also exposed to additional introductory activities, fitness routines and classroom management procedures during this time.

Grouping for winter and spring term was based on high and low value orientation priority (VOI-2) within social responsibility and disciplinary mastery orientations. PETE students displaying higher priority toward the social responsibility orientation and lower priority toward the disciplinary mastery orientation on the first and second administration of the VOI-2 were placed in the Disciplinary Mastery (DM) group. Students in the DM group read and discussed cases in physical education with an underlying theme of disciplinary mastery.

The second group consisted of students who showed higher priority toward disciplinary mastery and lower priority toward social responsibility on the first and second administration of the VOI-2. These students were placed in the Social Responsibility (SR) group where they read and discussed cases in physical education oriented toward social responsibility. Students who were more neutral in priority were randomly assigned to either group.

### Cases and Case Discussion

Case methods served as the treatment variable in this investigation. For this investigation cases were written to view physical education in the context of school culture including teachers, students, and other members of the school community (i.e., faculty, administration). Each case had an underlying theme of either social

responsibility or disciplinary mastery; students read eight cases focusing on only one orientation. Barnett and Freidman (1997) have outlined methods for the study of cases which were adapted to fit this investigation.

Ten of 16 cases were written by the researcher-instructor (six in disciplinary mastery; four in social responsibility) and the remaining six (two disciplinary mastery; four social responsibility) were selected from Stroot (2000). The 16 cases were validated by eight university physical education teacher educators. Each teacher educator validated two cases, one from each orientation. Case validation was based on whether the underlying theme of a specific case fell within the definition of either the social responsibility or disciplinary mastery orientation. Two cases from the disciplinary mastery orientation and one from the social responsibility orientation failed to be validated as the underlying theme was not of strong enough quality to be considered specific to one orientation.

### *Preservice students' value orientations*

PETE students' value orientations were measured four times via the Value Orientation Inventory-2 (VOI-2; Ennis & Chen, 1993). The purpose of multiple assessments was to monitor any change in PETE students' value orientations over time. Each time the VOI-2 was administered the order of the 90 teaching statements was rearranged to reduce practice effects.

Content relevance and representativeness of the VOI-2 was evaluated by university pedagogists and public school physical education teachers (Ennis & Chen, 1993). The VOI-2 was intended to be used by inservice teachers and was not developed with the preservice teacher in mind. The VOI-2 is a 90-item instrument (18 sets of five

value orientation teaching statements; Ennis & Chen, 1993); composite scores for each orientation may reach as high as 90 (high priority) or as low as 18 (low priority). There are five orientations and the first two listed were the main focus of this study; 1) disciplinary mastery; 2) social responsibility; 3) learning process; 4) self-actualization; 5) ecological integration. Alpha coefficients for the subscales range from .65 to .82 (Ennis & Chen, 1995). As suggested by Nunnally (1978) a reliability coefficient of .70 is acceptable for the affective domain (Morrow & Jackson, 1993).

Higher composite value orientation scores indicate high priority and consistent ranking of each orientation across statements is necessary to receive a high (or low) priority score. According to Ennis (1992a) the data are ipsative due to the forced choice ranking format, thus violating the independence assumption (Hicks, 1970). Specifically, the highest ranking item places the remaining four value orientations into less valued positions, simulating the more realistic decision making processes of a teacher (Ennis, 1992a).

### Data Analysis

The triangulation of data enhances the credibility and trustworthiness of data (Lincoln & Guba, 1985; Patton, 1990) and may render a deeper and more realistic picture (Berg, 1998). However, as Mathison (1988) cautioned, triangulation does not necessarily lead to the path of clarity as inconsistent and/or contradictory data may emerge requiring the researcher to make the data coherent. In this study the VOI-2 and interview data (Timken & van der Mars, 2000) provided a wide array of data for triangulation.



Raw data from the initial VOI-2 were descriptively analyzed to determine a value profile for each PETE student and then used to group students according to orientation priority. A composite score was calculated for each orientation and a criterion ( $\pm 0.6$  SD above or below the specific mean; Ennis & Chen, 1993) was used to determine orientation priority (low, neutral, high).

Upon completion of this study composite scores for each value orientation were plotted and analyzed graphically for each individual; composite mean scores for each orientation represent group data. Graphical analysis reveals trends within the data and was deemed a more appropriate method of analysis. Orientation priority data for each individual and group were also analyzed to determine shift in priority over time. Analysis was not statistically driven due to the low number of PETE students ( $n=10$ ).

## Results

### *PETE Students' Demographics*

PETE students' demographics are presented in Table 2.0. Each group was comprised of five PETE students and nine of ten were Anglo-American. The SR group had a mean age of 22.6 years and included the three females and one Asian-American in the study. The mean age for the DM group was 23.8 years (one student was 31 at the time), all men. All students had participated in high school sports and held various sport related roles such as volunteer coaching or refereeing. Seven (four from DM group) indicated their first career choice was to teach physical education and coach. None of the preservice teachers in this study initially had declared PETE as their major. Three from each group had majors outside of exercise and sport science and two from

each group had declared athletic training or pre-therapy as their option. Four of the ten students entered student teaching the year following the investigation and one has currently applied to student teach.

<b><u>DM Group</u></b>	<b><u>SR Group</u></b>
n = 5 (male)	n = 5 (3 female; 2 male)
m age = 23.8 yrs.	m age = 22.6 yrs.
5 - Anglo-American	1 - Asian-American; 4 - Anglo-American
1 - senior	1 - senior
4 - 5 <sup>th</sup> yr. seniors	4 - 5 <sup>th</sup> yr. seniors
All played high school sports	All played high school sports
All held sport related roles (volunteer coach, referee)	All held sport related roles (volunteer coach, referee)
PETE was not first choice for major #1 choice of occupation within PE	PETE was not first choice for major #1 choice of occupation within PE
4 - teach secondary PE & coach	2 - teach secondary PE and coach
1 - teach adapted PE	2 - teach only (1 elem., 1 secondary)
	1 - high school athletic director

Table 2.0. Demographic data of PETE students.

### PETE Students Value Orientations

This paper will present the social responsibility (SR) and disciplinary mastery (DM) VOI-2 data from the study. The reader is reminded that the first two VOI-2 measurements were considered baseline and the final two data points represent the period of intervention.

### Group Mean Data

Group mean data are represented in Figure 2.1. For both groups DM scores increased and SR scores decreased during baseline. At the third VOI-2 measurement both SR and DM scores decreased for both groups, and the final scores of SR and DM

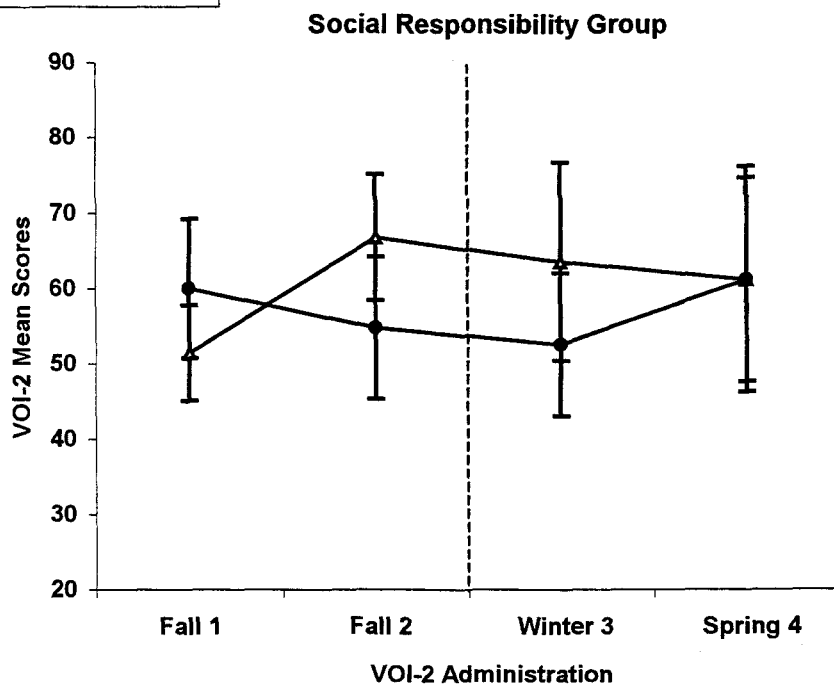
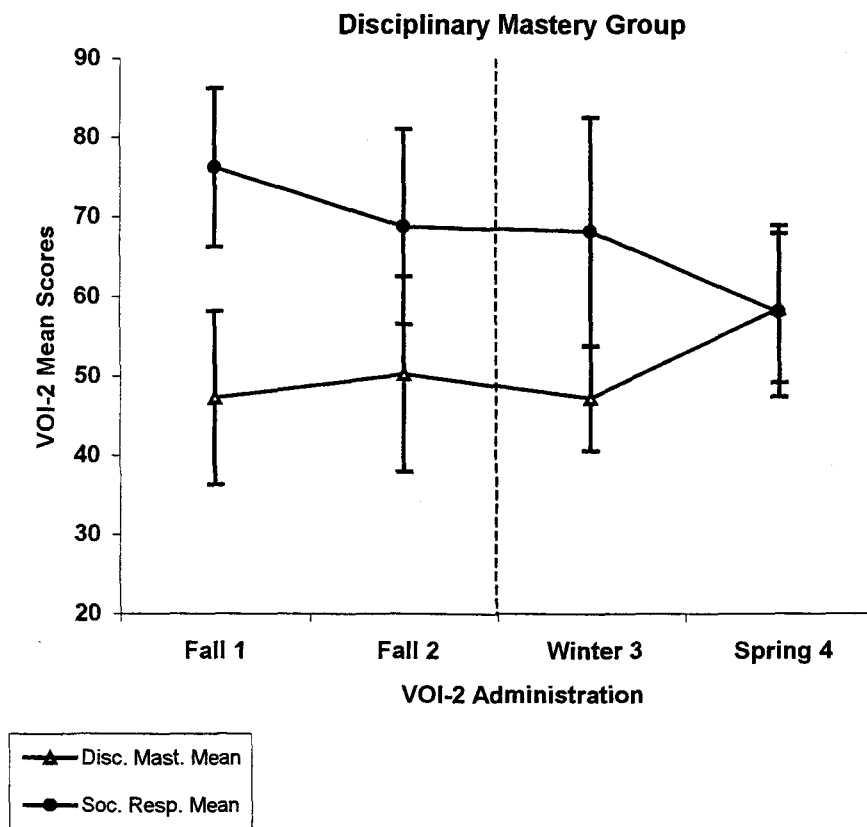


Figure 2.1 Group mean data and standard error for Disciplinary Mastery and Social Responsibility groups.

are identical or nearly identical at the final VOI-2 measurement. In each group one orientation was scored higher at three data points, with a reduced spread of scores over time.

Disciplinary Mastery Group (DM group). Students in the DM group read and discussed eight cases focused in the DM orientation. A decreasing trend in SR and an increasing trend in DM occurred from the initial VOI-2 to the final VOI-2. At the final data point mean scores for both orientations were nearly identical. The variance is shared at all but the first data point for this group due to high standard deviations.

Social Responsibility Group (SR group). Those in the SR group read and discussed eight cases based in the SR orientation. The data show an increase in DM mean score from the first to last VOI-2 measurement. However, after the second VOI-2 (baseline condition) the DM trend declines. A decreasing trend in SR scores is seen from the first to the third data point, with an increase at the final VOI-2 measurement. Similar to the DM group the final mean scores for both DM and SR are nearly identical. From the second baseline measurement the trend for SR increased and DM scores decreased. Variance is shared at all data points due to high standard deviations.

#### Value Orientation Priority Data

Group data for orientation priority (DM and SR only) are presented in Figure 2.2. Orientation priority was based on  $\pm 0.6$  standard deviation from each specific mean for each individual VOI-2 measurement. The predominant priority for both groups was neutral (black in color). Throughout the study SR remained a higher priority (white)

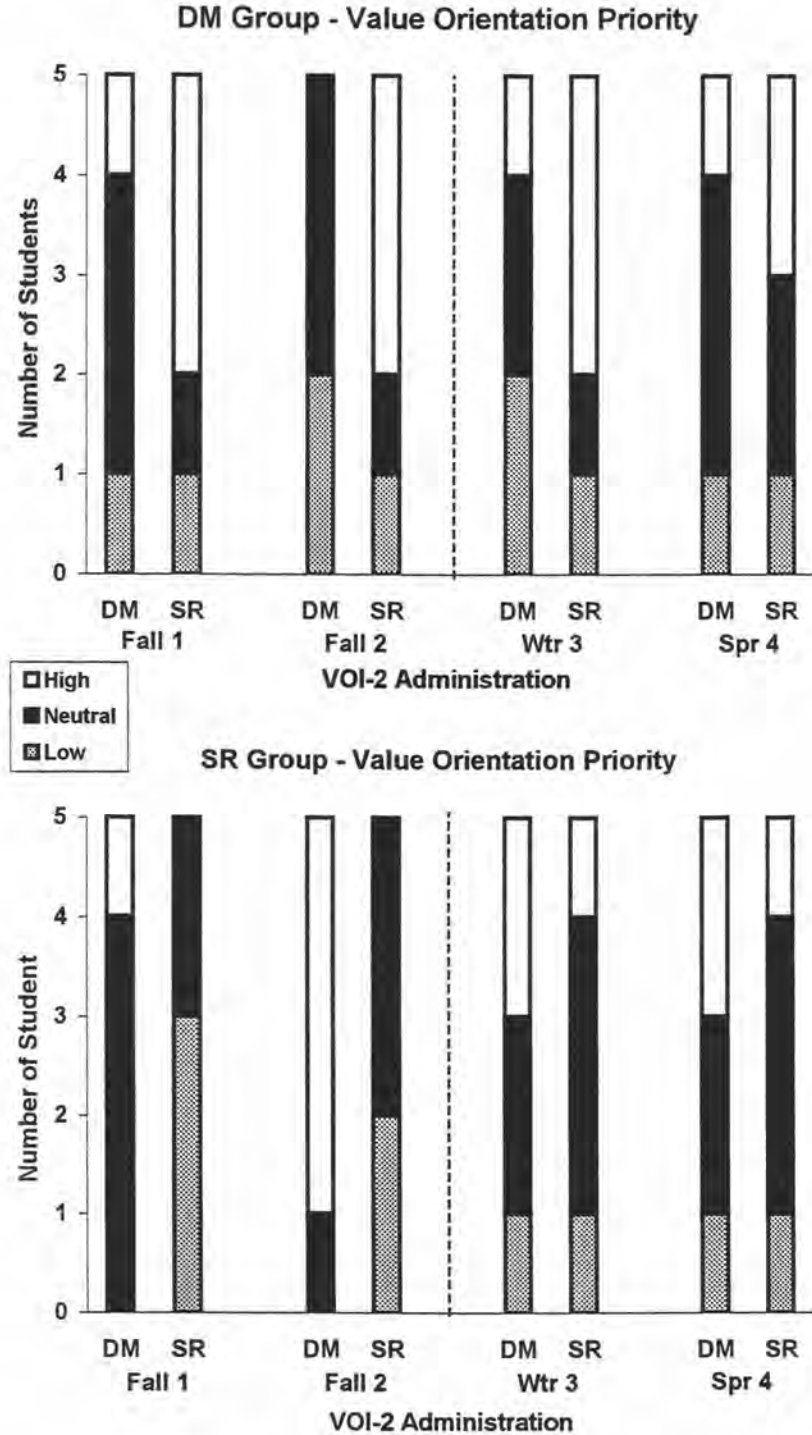


Figure 2.2 Orientation priority data for the Disciplinary Mastery and Social Responsibility groups.

than DM for the DM group and conversely, DM remained a higher priority than SR for the SR group. Alex was the only student whose priority in both DM (low; gray) and SR (high) did not change during the study.

Disciplinary Mastery Group. The pattern of SR priority was identical for each student from the first to the third VOI-2 administration and only Gene changed from high to neutral priority at the final measurement. The pattern of DM priority was identical at the first and last VOI-2 for each student. Throughout the study DM remained a low priority for Alex and neutral for Gene and SR remained a neutral priority for Justin. At all but the second VOI-2 DM remained a high priority for Collin. High priority in SR decreased and low priority in DM decreased over time.

Social Responsibility Group. At the two baseline measurements students scored either neutral and high or neutral and low. DM was highest in priority at the second VOI-2 measurement. For the first two measurements SR was never a high priority. The same three students scored SR as a neutral priority from the second to the fourth VOI-2. Priority patterns for the third and fourth VOI-2 were identical for both DM and SR, however, two students exchanged priority positions in DM. There was an increase in low priority in DM and a decrease in SR low priority over the course of this study.

#### Individual VOI-2 Data

Disciplinary Mastery Group. VOI-2 data for students within the DM group, who read and discussed DM-based cases, are presented in Figure 2.3. A decreasing trend in SR from the initial VOI-2 to the fourth was seen for each student. DM scores increased from the first to the final VOI-2 but not without variability in four of the five students.

## Disciplinary Mastery Group

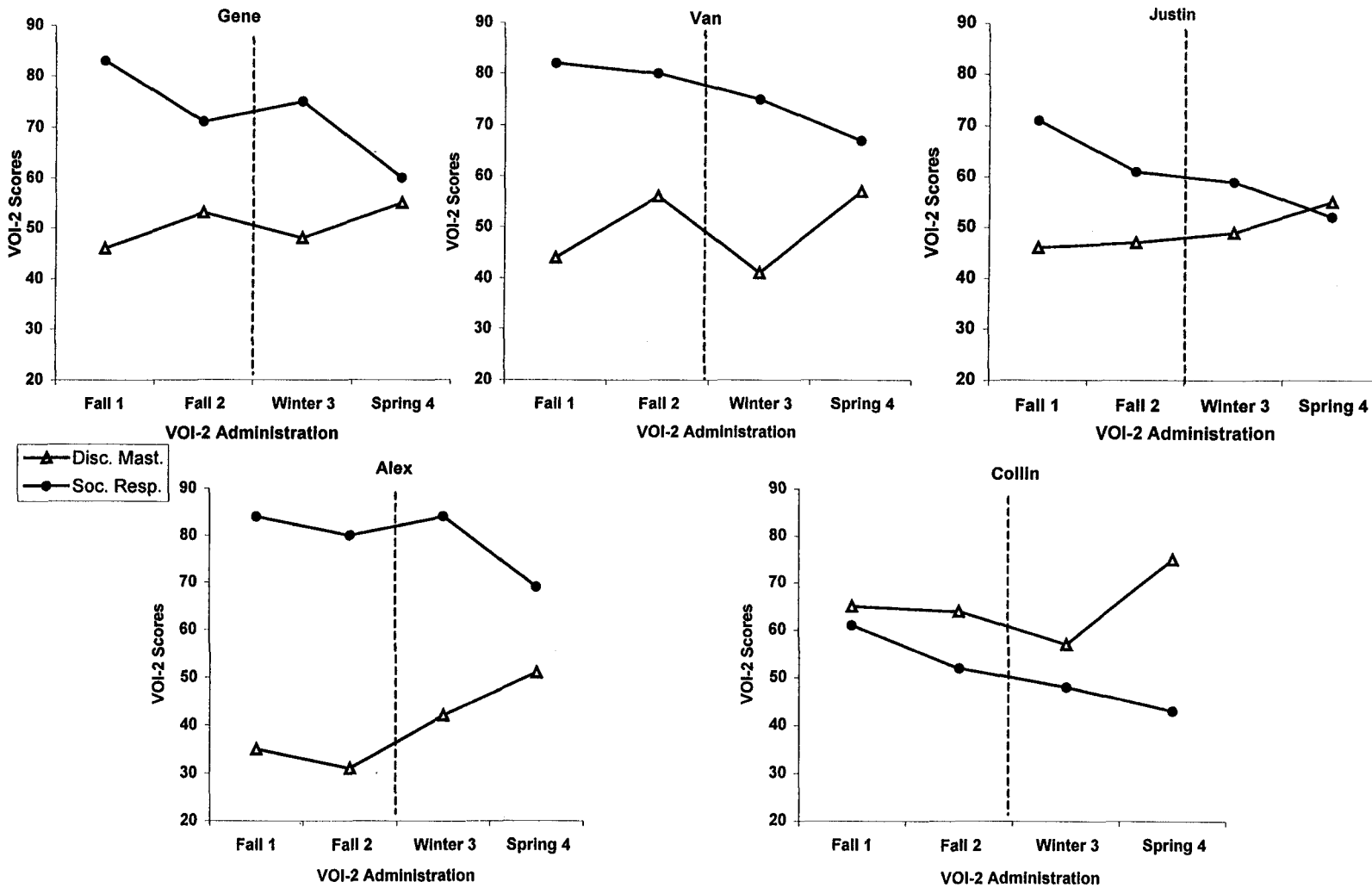


Figure 2.3. Raw value orientation scores (DM & SR) for students in the Disciplinary Mastery group.

Four of five had higher SR than DM initially and SR remained higher for three at the end. All students increased DM and decreased SR scores at the final VOI-2. When considering the trends no difference existed between either baseline data point except for Van whose DM trend was relatively stable over time though his scores were not.

Social Responsibility Group. VOI-2 data for students within the SR group are presented in Figure 2.4. There was greater variability of scores within the SR group as no consistent pattern or trend occurred within the data. Four students increased their DM scores from the first to the final measurement. Three students' SR scores showed decreasing trends from data point one to four; Mercedes' SR scores remained somewhat stable throughout the study.

Trends using the second baseline measurement reveal slightly different results. Three students' DM scores decreased and two students' SR scores increased. Zach's DM score slightly increased from data point two to three, and remained the same from three to four. Mercedes' DM and SR scores also showed some stability from the second to the fourth measurement with a slight increase at the fourth data point. All students' SR scores increased at the fourth VOI-2 measurement and DM scores decreased for three students.

## Discussion

Based on the research questions case methods had differential effects on PETE students' value orientations. Specifically, some students' VOI-2 scores (DM and SR) shifted toward the case theme while others moved away from the case theme.



## Social Responsibility Group

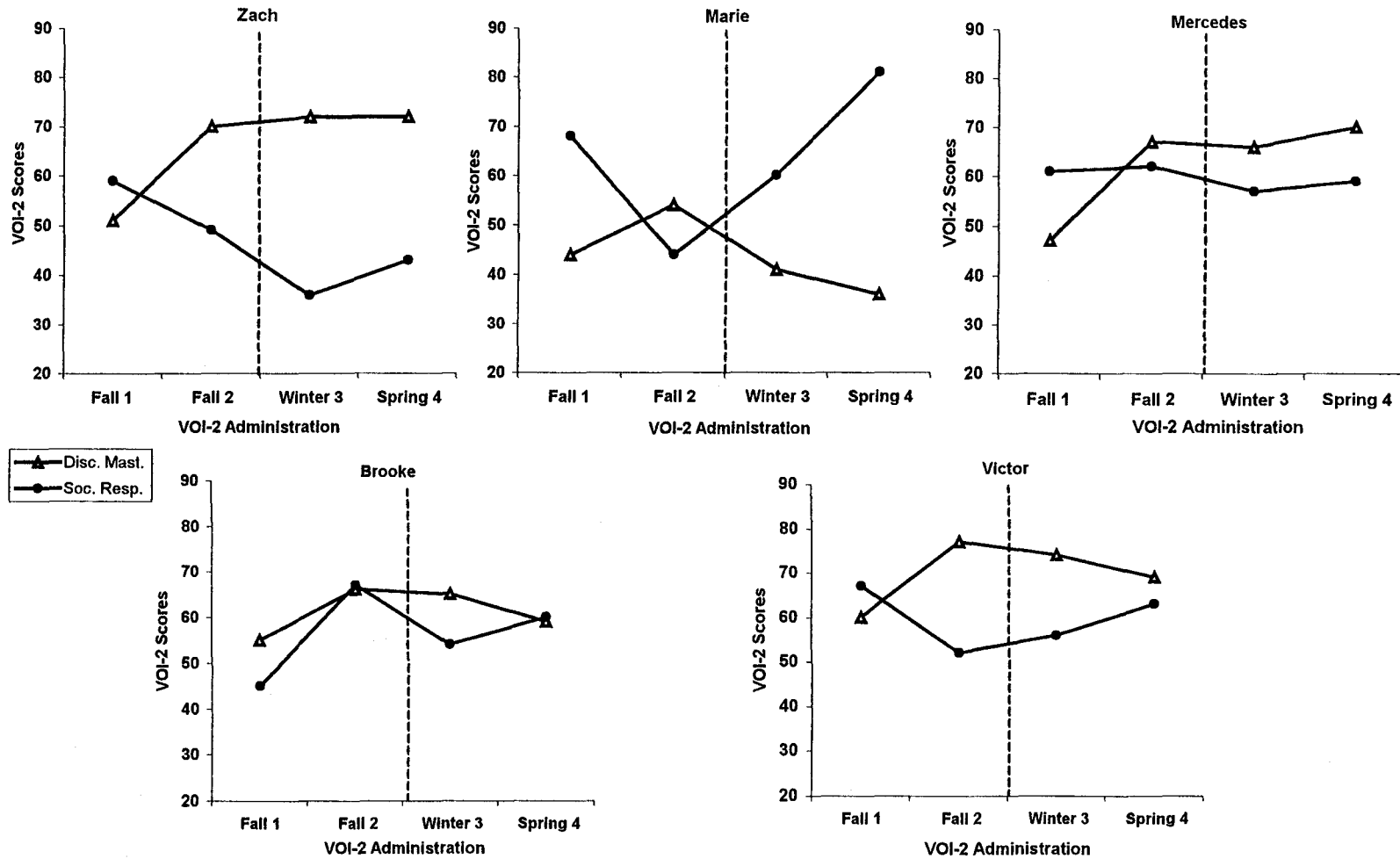


Figure 2.4. Raw value orientation scores (DM & SR) for students in the Social Responsibility group.

Orientation priority data shows that nearly all students shifted in priority though not necessarily in the direction of the case theme. Group mean data suggests movement of value orientations relative to cases.

Group as well as individual data suggests that value orientations were not stable constructs for most PETE students as indicated by the substantial standard deviations. This trend is consistent with Smith (1992) and Solmon and Ashy's (1995) findings in that value orientations fluctuated throughout the course of this study. Some students scores were highly variable (Marie), others less so (Mercedes). Both Alex (DM group) and Zach (SR group) had two identical scores for one orientation though their scores fluctuated at other measurements. Alex, whose orientation priorities did not change may not accurately represent the typical PETE student as his 31 years and military experience likely contributed to more solidly established beliefs and values.

While students' orientation priority may have remained the same in one or both orientations, raw scores changed over time for each student. Alex (DM group) is one example in which priority did not change (low DM; high SR) though raw scores indicate a shift toward the orientation presented within the case. Justin's (DM group) raw scores changed continually though he remained neutral in both orientations with the exception of once indicating low priority in DM. Victor (SR group) is another example of one whose raw scores changed over time but orientation priority in SR did not change (neutral) and DM remained a high priority until the final VOI-2. Not all students exhibited a high priority in DM or SR, and Victor and Gene never scored a low priority. Given the nature of this study reporting orientation priority data may not be as useful as analyzing raw scores.

During baseline students read and discussed *JOPERD* articles on Games for Understanding. The content of these articles fall within the DM category as lessons focus on improving skills and tactics. The increase in mean scores for DM and decrease in SR scores for both groups during baseline may have resulted from reading *JOPERD* articles more closely related to DM. However, when comparing to orientation priority data only the SR group clearly moved toward DM during this baseline condition. This may suggest that DM more closely aligned with the SR group students' prior beliefs and values but contradicted with those in the DM group.

Not until the final data point did the group means move according to intervention. These trends indicate that cases may be an effective teaching and learning tool by which to help PETE students address and reconstruct their value orientations. Initially, those in the DM group showed higher priority toward SR. At the fourth VOI-2 measurement DM mean scores increased and SR decreased for the DM group. These students had read and discussed eight cases based in DM over two quarters. The SR group increased SR and decreased DM mean scores at the final measurement after reading and discussing eight cases in SR. During baseline SR group members prioritized DM higher than SR. That both groups showed declining or stable trends toward the case theme at the third VOI-2 measurement and then increased those mean scores at the final measurement introduces the issue of time and extended exposure to cases. Given that preservice teachers have years of observational experience by which to base their beliefs (Lortie, 1975) it could be assumed that extended time may be required as well to alter such entrenched beliefs.

Individual data within the DM group shows that SR decreased and DM increased over time which lends more certainty with which to suggest cases as a viable curricular choice in changing PETE students' value orientations. The PETE program in which these students study places greater focus on DM than any other orientation and the congruence between DM-based cases and DM-based classes may have contributed to these effects.

Data trends for members of the SR group are less clear. Greater variability in individual scores was seen by students in the SR group and no consistent pattern or trend was evident. Furthermore, the lack of a consistent pattern upon reading SR-oriented cases suggests that cases were not as effective with this group. However, given that students were introduced to SR, some for the first time, and asked to read, think and discuss situations from a new perspective may have caused greater confusion and dissonance for this group. Again, with the PETE program's focus primarily DM based mixed messages concerning curricular choices may have prompted some students to solidify their value stance. For some, clinging to prior beliefs and values may have been a potential and unmeasured source of safety whereas for others, such as Marie, the SR value orientation may have resonated strongly. Moreover, SR cases were written from a movement-based physical education approach, so while SR was the underlying theme, characters in the cases were either teaching or participating in physical education movement experiences. A possibility may exist whereby students in the SR group more closely identified with movement-based physical education even though group discussion and problem-solving centered on issues of SR.

Public school experiences in the surrounding area may have influenced PETE students' VOI-2 scores. As Ennis and Chen (1995) indicated, context and contextual constraints affect teachers' curricular decisions and priorities. Based on observation as well as discussion with the faculty and doctoral students within the PETE program public school physical education classes and content in the majority of schools used for practicum sites were essentially DM based. A few teachers incorporated SR into their classes but their primary curricular focus remained oriented toward DM. That SR students did not see SR implemented extensively may be a contributing factor to higher DM scores for some and/or lower SR scores for others and may have also prompted the shift toward DM for those in the DM group.

These students were more acquainted with direct instruction such that a facilitated seminar, where they were encouraged to be more active and engaged in their learning via discourse, was uncharted territory. Collier (1995) noted a similar phenomenon in that her students lacked sufficient background with facilitated discussion and like these PETE majors, may not have been fully prepared to engage in a new style of learning. To complicate the learning situation further case methods was a new curricular focus. Thus, the inexperience with cases coupled with a constructivist approach to learning may have posed a significant challenge for these PETE students through both the baseline and the first term of intervention. Hence, the delayed shift in value orientations may have been the result.

### Conclusions and Practical Implications for Teacher Education

That all PETE students moved toward the case theme at the final VOI-2 measurement lends credence to the use of cases as influential on preservice teachers

value orientations. One would infer from the highly variable scores that value orientations of preservice teachers were unstable for some, similar to those preservice teachers in Smith (1992) and Solmon and Ashy (1995). Other PETE students showed more stable value orientations which may indicate a clear definition of physical education, appropriate or not.

Preservice teachers enter teacher education programs with well-established belief systems based on the myriad of experiences as a primary and secondary student (Lortie, 1975; Pajares, 1992). PETE students in this study were no exception. In this investigation the change process was gradual and consistent with transformational theory the change process involved risk taking by students (Clark, 1993). Letting go of former and solidified conceptualizations in order to even remotely consider and possibly accept new information as a viable replacement surely was not an easy process.

The VOI-2 data trends in this study also imply that time and recurrent exposure to case methods was a critical factor. If transformation of preservice students' beliefs and value orientations is to occur, time coupled with metacognitive thought processes such as the problem-posing and problem-solving activities (Mezirow, 1997; Prickel, 1997) inherent to case methods is a necessity. Socially engaged dialogue (Mezirow, 1997; Prawatt & Floden, 1994) is also fundamental to transformative learning, in that learning is a social process. The implication that these PETE students were transformed may be a leap, however, that they were engaged in transformational processes via case methods is not.

A shift in value orientation does not necessarily imply that these PETE students possessed a greater awareness of their curricular priorities and value orientations.

Students did not see their VOI-2 scores until the end of the final interview (see Timken, 2000). At no time during this investigation did the researcher-instructor make clear and explicit attempts to help students identify and clarify their values or beliefs. This will be the focus of subsequent research.

It is the assertion of this researcher that the Value Orientation Inventory-2 should be used not merely as an evaluative tool but as a teaching and learning tool whereby PETE students and PETE faculty are guided through a discovery process of their own beliefs and values. Not only can the analysis of values provide more meaningful and useful experiences in teacher education (Solmon & Ashy, 1995), an awareness of one's assumptions and beliefs can be transforming. A transformation of current programs and practices is necessary in a time when physical education continues to be marginalized.

If it is true that prior knowledge and beliefs are used to filter learning-to-teach experiences (Feiman-Nemser & Buchmann, 1986; Goodman, 1988; Holt-Reynolds, 1992) disregarding students' perceptions and interpretations of their past experiences may be as limiting to their professional preparation as no professional preparation at all. Helping preservice students clarify and understand their assumptions and beliefs about teaching and learning as they prepare to function as quality physical educators should be as much a curricular priority of teacher education as is learning the technical skills of teaching. An alternative approach whereby preservice teachers' awareness of their own beliefs and values about teaching and learning in physical education is coupled with the learning of technical skills is quintessential if "intuitive screens" and K-12 filters are not to impede the learning-to-teach process. Within PETE an alternative approach may be

to incorporate the VOI-2 as an assessment tool in combination with video analysis and systematic observation of PETE students' teaching behaviors to introduce the concept of teaching what one believes and believing what one is teaching. Including cases which acquaint preservice teachers with new concepts, theories and curricular models could only enhance this process and actively engage them in professional preparation. There may not be a truly seamless approach to teacher education but this example may provide a starting point by which to continue the refinement process of teacher education.

As teacher educators our beliefs, attitudes and values drive our teacher education programs. Hence, we must evaluate on a regular basis the multiple aspects of PETE programs most essential to teaching and quality physical education. As teacher education programs are becoming a focal point for the analysis and critique of our educational system (Siedentop, 1999), time is of the essence. If public school physical education is to improve, so must physical education teacher education.



## Chapter 3

### Delving Further: Case Methods and PETE Students' Beliefs and Value Orientations

Gay L. Timken and Hans van der Mars

To be submitted to *Teaching & Teacher Education*

## Introduction

Teachers often hold tacit and unconscious assumptions about their content area and material, students and classrooms (Kagan, 1992). These beliefs often directly and indirectly affect the learning environment in that content and curriculum selection, goal and objective formation and planning and teaching are impacted (Eisner & Vallance, 1974; Ennis, 1992; Ennis & Chen, 1993, 1995; Kagan, 1992; Nespor, 1987; Pajares, 1992; Richardson, 1996) regardless of whether or not a teacher is aware of or can articulate those beliefs (Kagan, 1992). Experiences as a K-12 student have been found to directly affect teachers' belief development (Lortie, 1975; Pajares, 1992) and these prior experiences and knowledge often serve to filter preservice teacher preparation (Feiman-Nemser & Buchman, 1986; Hold-Reynolds, 1992). For example, Goodman (1988) found preservice teachers to hold vague and contradictory views of teaching and learning, rejecting new ideas and experiences in conflict with their "intuitive screens." Given the lengthy "apprenticeship of observation" (Lortie, 1975) several researchers have suggested the departure point of teacher education be the prior beliefs or preconceptions of prospective teachers (Doolittle, Dodds, & Placek, 1993; Doyle, 1997; Feiman-Nemser & Buchmann, 1986, 1989; Fenstermacher, 1978; Goodman, 1988; Joram & Gabriele, 1998; McDiarmid, 1990; Nespor, 1987; Pajares, 1992, 1993; Placek, Dodds, Doolittle, Portman, Ratliffe, & Pinkham, 1995; Richardson, 1996; Tabachnick & Zeichner, 1984).

Preservice teachers have been found to resist the implications of their experiences (McDiarmid, 1990), to maintain an unrealistic optimism about teaching and downplay the academic dimension of teaching (Weinstein, 1988, 1989, 1990). Preservice physical education teachers (PETE) in Doolittle, et al. (1993) devised

methods to make their practices more compatible and complimentary with their beliefs. Other PETE students believed the purpose of physical education was to develop skills and fitness as well as to socialize and have fun (Placek, et al. 1995) or to develop body awareness and coordination, fitness and lifetime sport skills (Goc-Karp, Kim & Skinner, 1985). High school students' assumptions about physical education included having fun and accommodating athletics with teacher planning held to a minimum (Hutchinson, 1993). As Doolittle et al. (1993) explained, PETE programs are not typically designed to instill cognitive dissonance or deliberately confront underlying beliefs.

Though some teacher educators have found methods by which to instill change in preservice teachers' beliefs (Doyle, 1997; Feiman-Nemser & Buchman, 1986; Joram & Gabriele, 1998; McDevitt, Heikkinen, Alcorn, Ambrosio & Gardner, 1993; McDiarmid, 1990) Richardson (1996) advises caution in such an endeavor. Even though the change process is a necessary process complications are likely to result due to preservice teachers' lack of practical knowledge and experience. Both case methods (Lomax, 1996; Mezirow, 1997) and early field experiences (McDiarmid, 1990; Zeichner, 1986) have been suggested as potential change agents (Richardson, 1996).

### Value Orientations

Belief systems of teachers have been described as educational value orientations (Eisner & Vallance, 1974; Ennis & Hooper, 1988; Ennis, 1992b, 1994a, 1994b; Ennis & Chen, 1993, 1995; Ennis, Chen & Ross, 1992; Ennis, Mueller & Hooper, 1990; Ennis, Ross & Chen, 1992; Ennis & Zhu, 1991; Smith, 1992; Solmon & Ashy, 1995). Both tacit and explicit beliefs about teaching and learning have been integrated into five

value orientations; disciplinary mastery, learning process, ecological integration, social responsibility, and self-actualization (Ennis & Chen, 1993). Each orientation represents a competing philosophy and is assumed to affect priorities concerning educational decisions (Ennis, 1992).

Value orientations have been assessed via survey methods using the Value Orientation Inventory (VOI; Ennis & Hooper, 1988) and the Value Orientation Inventory -2 (VOI-2; Ennis & Chen, 1993). Ennis and Chen (1995) found value orientations of inservice teachers to be affected by context in that rural and urban teachers had differing priorities. Preservice teachers value orientations have been found to be unstable constructs, fluctuating from pre- to post-test (Smith, 1992; Solmon & Ashy, 1995) with preservice teachers' orientations gravitating toward the value profile of their course instructor (Solmon & Ashy, 1995).

### Case Methods

Case methods in teacher education have grown in popularity with many researchers and teacher educators (Doyle, 1990; Greenwood & Parkay, 1988; Harrington & Garrison, 1992; Kleinfeld, 1990; Lacey & Merseth, 1993; Merseth, 1990, 1991, 1992, 1996; J. Shulman & Mesa-Bains, 1993; L. Shulman, 1992; Silverman, Welty, & Lyon, 1992, 1994; Wasserman, 1993, 1994). Research using case methods has produced promising results (see Barnett, 1991, 1998; Barnett & Tyson, in press; Barrett & Rasmussen, 1996; Bolt, 1998; Collier, 1995; Florio-Ruane & Clark, 1990; Levin, 1995).

The use of case methods in teacher education signifies a shift from the preoccupation of technical and behavioral skills of teaching to the complex cognitive

processes and epistemological orientations of teachers (Doyle, 1990). Often real-life events typifying the complexity and multidimensionality of the classroom, cases present multiple dilemmas with few clear-cut and prescriptive answers (Wasserman, 1993, 1994). Practical experience, critical thinking and reflection are intertwined in the study of cases as “thinking” like a teacher is not always transferred from observation and imitation alone (Florio-Ruane & Clark, 1990). While the lecture format encourages the passive receipt of knowledge case methods serve to increase the active thinking and learning processes. “Students are enabled to assume responsibility for their own learning rather than simply being instructed” (Harrington & Garrison, 1992, p. 721).

One characteristic of an adult learner is the desire to be more self-directed in learning (Knowles, 1980) as well as to become a more autonomous thinker (Mezirow, 1997). The “essence of adult education” is to help adults “negotiate [their] own values, meanings, and purposes rather than to act uncritically on those of others” (Mezirow, 1997, p. 11). Preservice teachers may come into teacher education programs with a long apprenticeship in direct instruction which does little to encourage self-directedness or autonomous thinking. Further, if a teacher education program continues with a prescriptive and direct instruction orientation preservice teachers may perchance continue to blindly accept their beliefs and assumptions or those of others as appropriate with little regard to the consequences on teaching and learning in physical education.

A constructivist and transformational approach to teacher education allows for a departure point whereby preservice teachers’ prior experiences and perceptions of teaching and learning not only are considered important, they are addressed and infused into the teacher preparation program. This investigation was grounded in constructivist

and transformational theories and formulated on the assumption that preservice teachers' prior knowledge and beliefs serve to filter professional preparation. Consistent with constructivist and transformational theory learning is considered a social process (Mezirow, 1997; Prawat & Floden, 1994) with discourse essential to the understanding of values and beliefs (Mezirow, 1997). Further, time is of critical importance to the transformational process wherein repeated problem-posing and problem-solving serve to stimulate change. Preservice teachers in this study not only participated in facilitated discussion with peers, they were asked to create multiple solutions to complex educational dilemmas within the context of physical education over an extended period of time.

### Purpose

This study was part of a larger investigation to determine the effects of case methods on preservice physical education teachers' value orientations. Helping preservice teachers understand and possibly alter their belief and value systems is one dilemma teacher educators must often overcome; another is finding a contextualized curricula more conducive in learning to teach (Howey, 1996). One such potent and powerful curricula may be case methods, a teaching and learning tool whereby preservice teachers may be challenged to think about teaching and learning in new ways, encounter their own tacit assumptions and beliefs about teaching and learning and where the theory-practice gap may be diminished. Though case method research has been extensive in the area of general education, little is known about the use of case methods within physical education teacher education. Thus, this research was an initial step in exploring the use of case methods in physical education teacher education

similar to Bolt (1998) and Collier (1995) but further explored how case methods affect PETE students' value orientations.

### Methods and Procedures

The reader is reminded that the researcher also served as the instructor of the early field experience class during the course of this investigation. Thus, the researcher-instructor was immersed in the process of teaching using case methods while also assessing the usefulness of case methods on preservice teachers' value orientations.

### Context of the study

During the fall term of 1998 and winter and spring terms of 1999 a university-based early field experience course sequence provided the setting for this study. Preservice physical education teacher education (PETE) students observed and participated in public school teaching experiences under the guidance of a mentor teacher and a university supervisor while completing a series of three practicums, one at each level (elementary, middle, and high school). Four on-campus seminars per term were also part of the course requirements.

PETE students are often influenced by their mentor teachers; however, the mentors involved with these students were neither informed of nor involved with this study. Their potential influence on PETE students' beliefs and value orientations was not assessed, therefore, the lack of assessment is considered a limitation of this study. Three doctoral students, the researcher-instructor included served, as the primary

university supervisors. While all supervisors were aware of the course of this investigation none were asked to provide feedback specific to any value orientation; any potential influence the supervisors may have had on PETE students was not assessed.

### Participants

Participants for this study included ten (3 females, 7 males) undergraduate PETE students enrolled in an early field experience practicum for three consecutive terms. Seventeen PETE students initially participated in this study but seven students self-selected out of the study either choosing not to continue in the investigation or not completing the series of three practicums. Students were ensured course grade would not be affected and that equal instruction would be received regardless of participation. Standard human subjects review board policies were used and consent was received from all students prior to the study. Students were informed that the purpose of the study was to determine the most appropriate methods for early field experience in preservice undergraduate physical education teacher education. PETE students are identified by their pseudonym of choice.

A demographic survey was administered during the first seminar of the fall term to determine relevant background information of each PETE student. This survey was adapted from the survey used by Placek, Dodds, Doolittle, Portman, Ratliffe, and Pinkham (1995).

### Research Design

A graphical display of the research design is presented in Figure 3.0. An alternate-control treatment group design (Borg, 1984; van der Mars, 1990) was used in



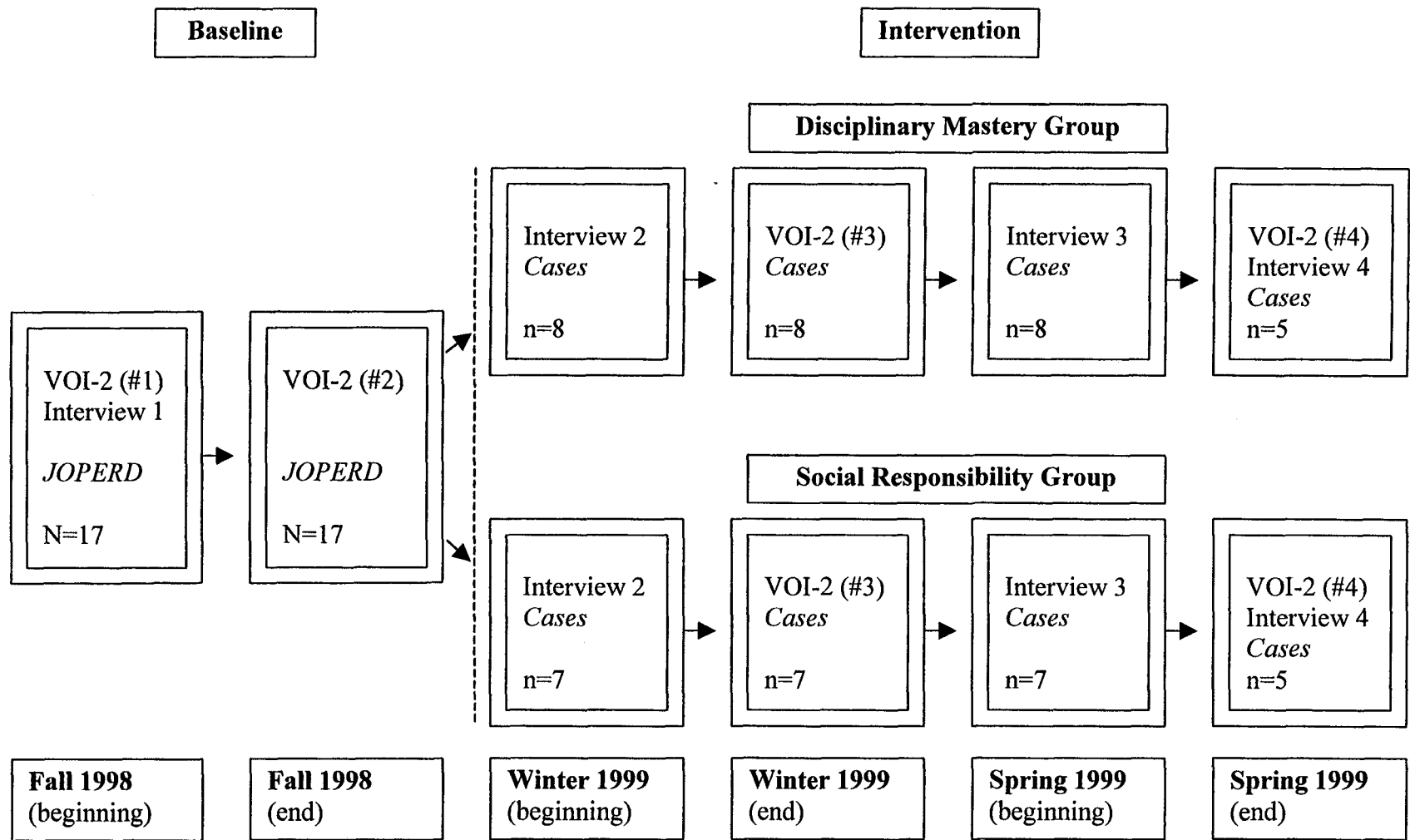


Figure 3.0. Research Design: Alternate Control Treatment Group (Borg, 1984; van der Mars, 1990).

this investigation to avoid both educational and ethical dilemmas. That all students read and discussed cases reduced any tendency for complaints about extra work and/or demands on one group and diminished the possibility for rivalry between groups (Borg, 1984).

Fall term was considered a baseline phase at which time two Value Orientation Inventory-2 (beginning and end of fall; VOI-2; Ennis & Chen, 1993) measurements and two interviews (beginning of fall, beginning of winter) were conducted. The VOI-2 data sets were used to create the two groups for the intervention phase. Those high in priority toward disciplinary mastery (DM) and low in priority toward social responsibility (SR) were placed in the Social Responsibility group (SR group) to read and discuss eight cases focused on SR. Students who placed a higher priority on SR and lower priority on DM were placed in the Disciplinary Mastery group (DM group) to read and discuss eight cases focused on DM.

During fall, all students participated together in four on-campus seminars reading and discussing Games for Understanding articles from *Journal of Health, Physical Education, Recreation and Dance (JOPERD)* as well as participating in introductory activities and classroom management procedures specific to physical education (K-12). Format for *JOPERD* discussion closely approximated that for case discussion (Barnett & Friedman, 1997). During intervention students were interviewed twice (beginning of spring, end of spring) and completed the VOI-2 twice. During both winter and spring terms each group had four separate on-campus seminars per term at which time case methods were introduced.

### Cases and Case Discussion

Case methods was the treatment variable in this investigation. For this investigation cases were written to view physical education in the context of school culture, including teachers, students and other members of the school community (i.e., faculty, administration). Each case had an underlying theme of either disciplinary mastery or social responsibility; students read eight cases based in only one orientation. Barnett and Freidman (1997) have outlined methods for the study of cases which were adapted to fit this investigation.

Ten of 16 cases were written by the researcher-instructor (six in disciplinary mastery; four in social responsibility) and the remaining six (two disciplinary mastery; four social responsibility) were selected from Stroot (2000). The 16 cases were validated by eight university physical education teacher educators, each validating two cases, one from each orientation. Case validation was based on whether the underlying theme of a specific case fell within the definition of either social responsibility or disciplinary mastery. Two cases in disciplinary mastery and one in social responsibility did not meet the criteria for validation as the underlying theme was not strong enough to specifically address the value orientation in question.

### Data Collection

Preservice physical education students' value orientations and beliefs were assessed throughout the course of this study via four personal interviews. Value orientations were also measured at this time using the Value Orientation Inventory-2 (VOI-2; Ennis & Chen, 1993) (see Timken & van der Mars, 2000). The interviews

were used to determine PETE students' beliefs and value orientations about teaching and learning in physical education inasmuch as they were able to articulate their beliefs.

Each student was interviewed on four separate occasions by the researcher-instructor. Multiple interviews provided information on changes in PETE students' beliefs and value orientations over the course of this study. The researcher-instructor was careful not to lead students to a particular value orientation but to ask general questions about teaching physical education. Each interview was audiotaped and transcribed.

The interviews were focused on three central questions which related to the VOI-2: What is the purpose of physical education? (asked at interview one, three and four); What should be emphasized in physical education? (asked at each of the four interviews) and; How would you defend keeping physical education in the public schools? (asked at interview one, three and four). The assumption was made that the three target questions were interrelated in that the purpose of physical education would determine the curricular emphasis which might in turn allow one to defend their physical education program. Therefore, it was assumed that PETE students' answers to each question would be relatively consistent.

At the third and fourth interview students were also asked to identify their likes and dislikes about reading cases as well as speak to their preparation for case discussion during seminar. At the final interview PETE students were asked to choose one or two statements with which they most closely identified from a list of five statements regarding teaching physical education. Each statement was a basic descriptor of one value orientation. Also during the final interview personal VOI-2 data from all four

measurements was graphically presented to each student for their personal information and comments. Students were shown their VOI-2 data and asked to explain what they thought happened to their value orientations over the three terms.

### Data Analysis

A more realistic picture (Berg, 1998) may appear with triangulated data sources. Further, Lincoln and Guba (1985) and Patton (1990) point out that credibility and trustworthiness of data are enhanced via triangulation. However, inconsistent and/or contradictory data may emerge which puts the onus on the researcher to make sense of the data (Mathison, 1988). In this study the interview and VOI-2 data (Timken & van der Mars, 2000) provided a wide array of data for triangulation.

The four-step process of constant comparison (Glaser & Strauss, 1967; Goetz & LeCompte, 1984) was used to analyze all transcribed interview data. This four-step process included; a) classification of common categories of all data; b) identification of properties and common themes; c) comparison of themes across data (i.e., triangulation); and d) development of explanatory theory. Interview data for the three target questions are represented numerically based on the number of references to each specific value orientation (disciplinary mastery and social responsibility). These composite data demonstrate the number of references each individual student made during interviews toward a specific value orientation.

For reliability purposes an independent researcher also analyzed the interview data. The independent researcher's analyses was conducted separate from the principle investigator. Intercoder reliability reached a 94% agreement rate. For the purpose of disagreement resolution ensuing discussion resulted in 100% agreement rate.

## Results and Discussion

### PETE Students' Demographics

PETE students' demographics are presented in Table 3.0. Five PETE students were in each group; nine of 10 were Anglo-American with one Asian-American. The mean age for the DM group was 23.8 years (one student was 31 at the time) and all were Anglo-American men; the SR group had a mean age of 22.6 years and included three females and one Asian-American male. All students had participated in high school sports and held various sport related roles such as volunteer coach or referee. Not one of these PETE students initially declared physical education as their major. Six (three from each group) declared a major outside exercise and sport science and four (two from each group) were athletic training or pre-therapy majors. Seven (four from the DM group) indicated their first career choice within physical education was to teach physical education and coach. Four of 10 entered student teaching the year following the investigation and one has currently applied to student teach.

<u>DM Group</u>	<u>SR Group</u>
n = 5 (males)	n = 5 (3 female; 2 male)
m age = 23.8 yrs.	m age = 22.6 yrs.
5 - Anglo-American	1 - Asian-American; 4 - Anglo-Amer.
1 - senior	1 - senior
4 - 5 <sup>th</sup> yr. seniors	4 - 5 <sup>th</sup> yr. seniors
All played high school sports	All played high school sports
All held sport related roles (volunteer coach, referee)	All held sport related roles (volunteer coach, referee)
PETE was not first choice for major	PETE was not first choice for major
#1 choice of occupation within PE	#1 choice of occupation within PE
4 - teach secondary PE & coach	2 - teach secondary PE and coach
1 - teach adapted PE	2 - teach only (1 elem., 1 secondary)
	1 - high school athletic director

Table 2.0. Demographic data of PETE students.

### *Disciplinary Mastery Group (DM Group)*

Numerical data for the group in terms of number of references to either the disciplinary mastery (DM) and social responsibility (SR) orientations for each individual target question are presented in Figure 3.1. Composite scores for frequency of references to DM and SR orientations for each individual PETE student are presented in Figure 3.2. The reader is reminded that only the “emphasis” question was asked at the second interview. A consistent pattern within the DM group exists in that references to DM were more frequent overall and nearly doubled from baseline to intervention. Students mentioned SR concepts with less frequency over time.

During the baseline phase students showed higher priority on the Value Orientation Inventory-2 for SR (see Timken & van der Mars, 2000). However, during baseline interviews DM concepts were cited with more frequency than SR for everyone except Van and Alex. Alex, who was 31 years old at the time had previous military experience in which respect, team goals and cooperative behaviors were required. Those life experiences coupled with no physical education teaching experience may have resulted in more SR citations. References within DM are not surprising for Alex, however, as he was also a certified personal trainer and worked at a fitness club.

During the intervention phase students in the DM group read and discussed eight cases with an underlying theme of DM. During the third and fourth interviews students cited more DM and fewer SR concepts. This trend suggests that cases were an effective tool by which to expose PETE students to new concepts with the

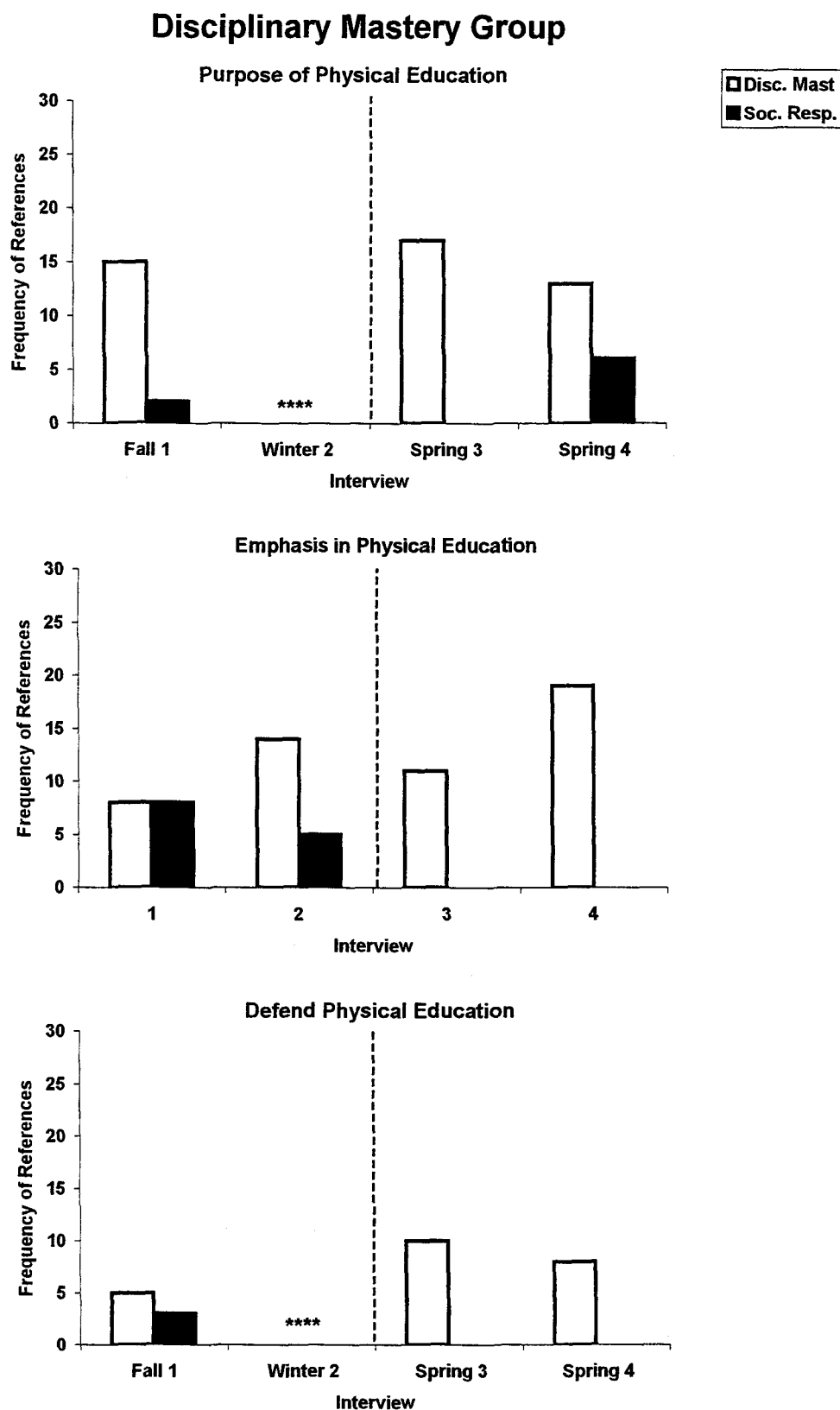


Figure 3.1 Frequency of references for DM and SR for the Disciplinary Mastery Group.  
\*\*\*\* indicates question was not asked in second interview.



## Disciplinary Mastery Group

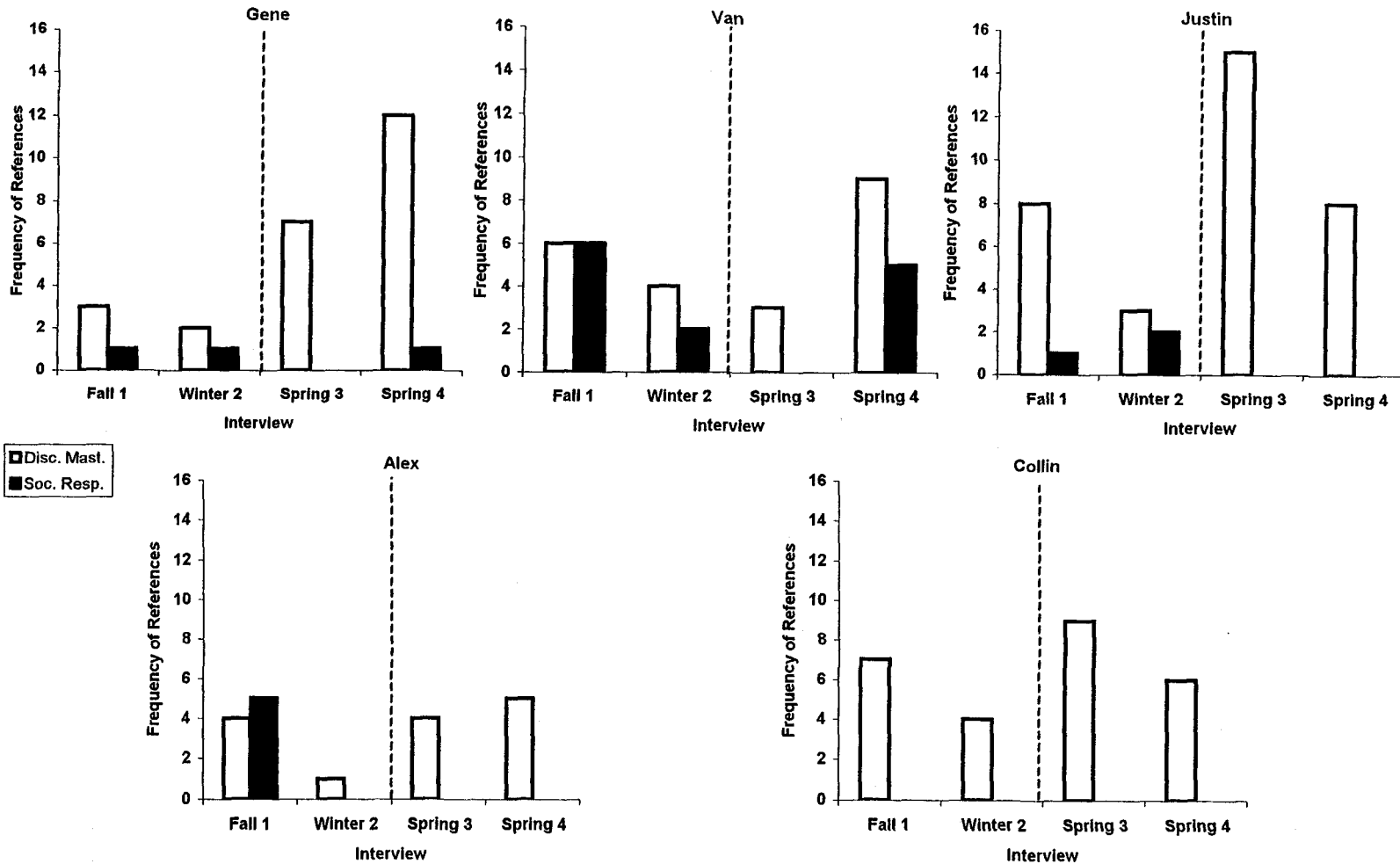


Figure 3.2 Frequency of references to DM and SR orientations in three questions in individual interviews. Only one of three questions was asked at the second interview.

potential of beginning the process of transforming value orientations. As in other studies (Bolt, 1998; Harrington, 1995; Stoiber, 1991) reading and discussing DM-based cases may have also increased PETE students' cognitive growth in the area of DM.

SR was cited at the fourth interview (purpose question) by two students, Van and Gene. These students were the only two from the DM group to take another course taught by the researcher-instructor in which the Social Responsibility model (Hellison, 1995) was introduced with more depth and where students rated and recorded their socially responsible behavior in class daily. This exposure to SR may have resulted in their SR citations but the question remains as to why SR was mentioned in only one of the three target questions.

The inconsistency between VOI-2 (see Timken & van der Mars, 2000) and interview data during baseline and intervention may have resulted from inexperience with issues of social responsibility within physical education and repeated exposure to the development of skills, fitness and strategies consistent with the DM orientation. That these students had participated in sports, physical education, PETE and had previous experience in coaching-related roles may have contributed to their ability to discuss more DM than SR concepts. The question remains as to why SR was a priority on the VOI-2 for most students. Students were never privy to their interview or VOI-2 data at any time during the study, thus, were unaware of the inconsistency between the two data sources. These students may have held SR high in priority but were unable to articulate (Kagan, 1992) those values during the interview process due to lack of exposure and technical language. Collin was the only member of this group whose data was consistent between both data sources.

Based on discussion with faculty and doctoral students the PETE program in which these students studied was primarily DM-based as were the public schools where students were placed for early field experiences. Therefore, consistent messages about DM-based curricula and content from prior athletic experiences, practicum experiences and case methods may have also contributed to the increase in DM and decrease in SR citations over the course of this study.

Four PETE students did not provide answers using DM or SR concepts when asked to defend physical education. A variety of answers were given including personal experiences, comparing physical education to other academic subjects and making general statements that physical education has a “lot to offer.”

#### *Social Responsibility Group (SR Group)*

Group data for the number of citations within the DM and SR orientations for the three target questions are presented in Figures 3.3. Composite scores for frequency of references to DM and SR for each individual PETE student are presented in Figure 3.4. The “purpose” and “defend” questions were not asked at the second interview. In contrast to the DM group a more varied pattern exists within the SR group. What is clear is the increased number of references toward SR over time especially at the fourth interview and fewer DM citations. Overall, statements toward DM did remain higher than SR.

During baseline PETE students’ Value Orientation Inventory-2 scores were higher for DM (see Timken & van der Mars, 2000) and a greater number of DM

## Social Responsibility Group

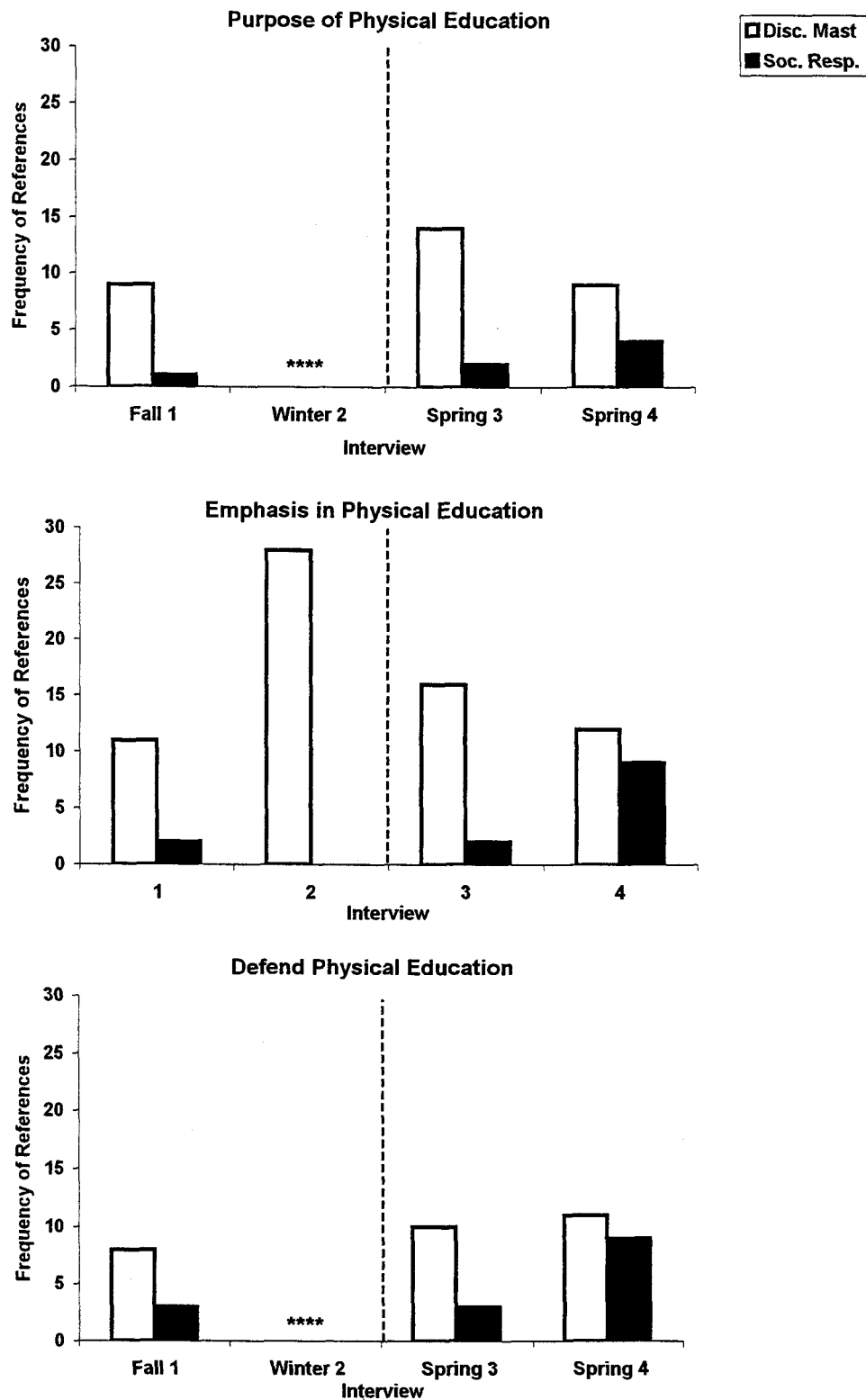


Figure 3.3 Frequency of references for DM and SR for the Social Responsibility Group.  
\*\*\*\* indicates question was not asked in second interview.

## Social Responsibility Group

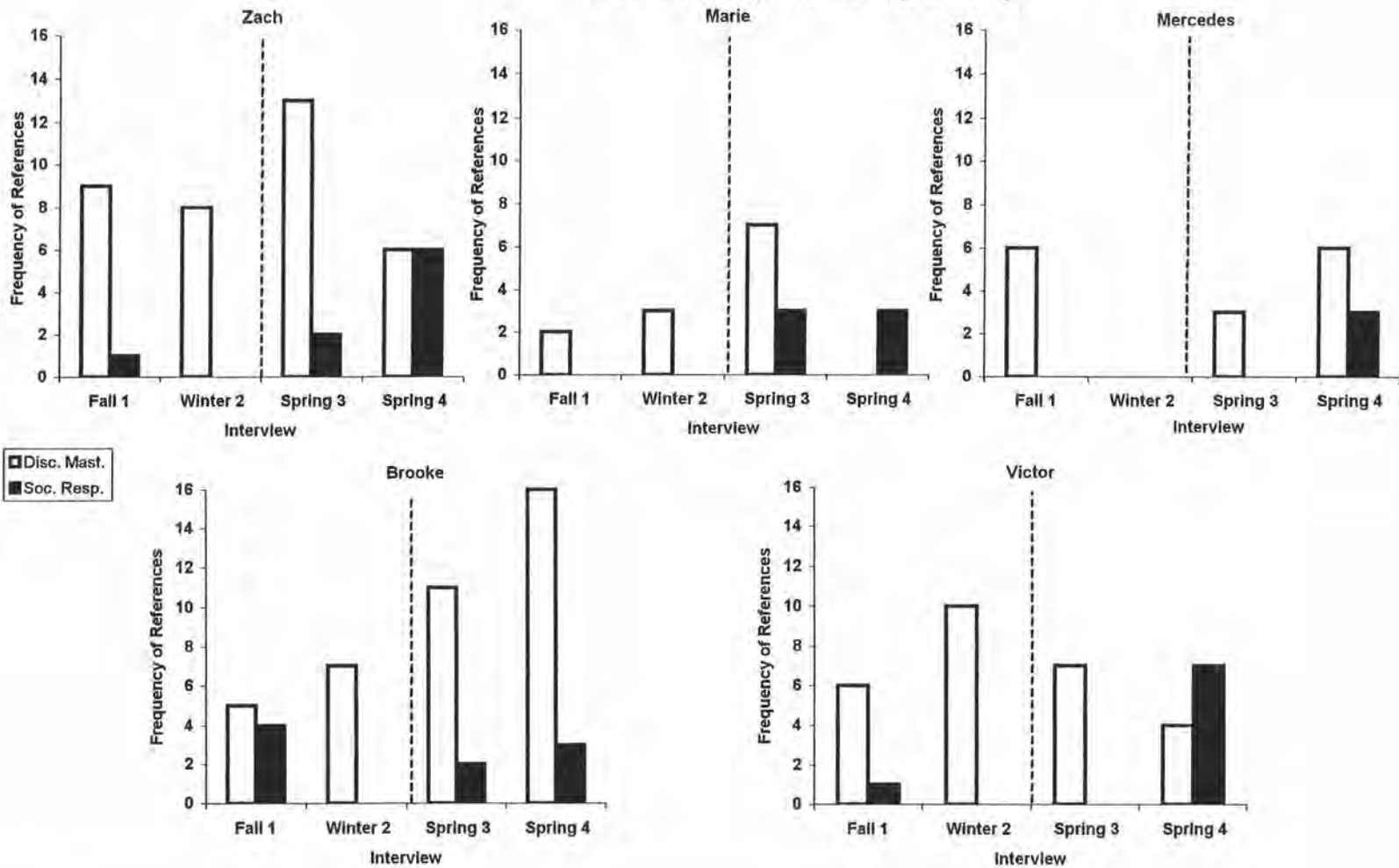


Figure 3.4 Frequency of references to DM and SR orientations in three questions in individual interviews. Only one of three questions was asked at the second interview.

references were seen within the interview data at baseline. Three students did make at least one reference to a SR concept for at least one question during baseline but the majority of references were toward DM.

During intervention students in the SR group read and discussed eight cases with an underlying theme of SR. An increase in SR references was seen during intervention, the most at the fourth interview. At the fourth interview every student made reference to SR at least once in at least two questions and two of five mentioned SR in all three questions. Based on group data citations toward DM decreased for all but the “defend” question. This trend suggests that exposure to SR-based cases with ensuing discussion increased PETE students’ ability to make references toward SR beginning the process of value orientation transformation. Repeated exposure to SR via cases may have increased PETE students’ cognitive growth within the SR orientation, similar to Bolt (1998), Harrington (1995) and Stoiber (1991). As with Van and Alex from the DM group, Marie had the same class with the researcher-instructor in which students received more in-depth instruction of the Social Responsibility Model (Hellison, 1995). It is suspected that both SR-based cases and the other course were influential on Marie’s number of SR references.

The comparison of group data between the VOI-2 and interviews reveals consistent results; SR increased and DM decreased. This pattern is seen within the interview data in that students cited more concepts within SR over time. There was more individual variability within the SR group for both the VOI-2 and interview data. While the variability exists, there seems to be a consistent pattern between the two data sources for each individual but no consistency for the group as a whole. The repeated

exposure to concepts and terminology within the SR orientation may have enabled these students to pick out SR teaching statements on the VOI-2 as well as provide concepts of SR verbally.

Citations within DM did increase for some students from interview one to four but not necessarily for all three questions and overall, there were a greater number of references toward DM. This is not surprising, however, as the majority of messages within the PETE program and in practicum experiences were largely DM-based. Further, that these PETE students had participated in athletics as well as held coaching-related roles may have ingrained a stronger orientation toward DM. It is possible that those within the SR group experienced a greater degree of cognitive dissonance due to the mixed messages they were likely receiving which may have contributed to the high variability within the group. However, this assumption is not as prevalent in the interview data as it is in the VOI-2 data.

As with members of the DM group three students did not make reference to DM and/or SR in at least one interview question. For instance, Marie's comments were directed more toward the self-actualization value orientation and Victor discussed the need of proper physical education programs given the growing overweight and sedentary adult population.

### Interview Data by Question

What is the purpose of physical education? Three of the ten students (two from SR group) recognized the purpose of physical education as dependent on age level, however, skill and/or developmental level was never mentioned. Six of ten made reference to personal and/or practicum experiences while answering this question. In the

third interview one from each group mentioned fun as one purpose of physical education. Self-esteem development, social skills / responsibility, variety of activities, and valuing physical activity were weak themes which emerged from the data. Few students (three from SR group; one from DM group) mentioned the importance of instilling within youth a value of physical activity and physical education. Inasmuch as valuing physical activity is implicitly important to the goals of physical education (National Association for Sport & Physical Education [NASPE], 1995) it may be that these preservice teachers assume an inherent connection between participating in and valuing physical activity with little thought for those who might not even enjoy being active.

Multiple themes emerged from the data as no one student had one specific answer to this question. Collin consistently mentioned the purpose of physical education as helping students maintain a physically active lifestyle and this was the most prevalent theme for this question. One goal of physical education is to help students become involved in physical activity for life (NASPE, 1995). It is likely that this goal had been clearly communicated to all PETE students during their professional preparation.

“The purpose is to initiate and maintain a physically active lifestyle.” (Collin, DM group, Interview 1)

“...the main overall objective is to teach kids fitness for life.” (Van, DM group, Interview 3)

“I think the purpose of physical education is to have taken the things they’ve learned...like physical activities, being fit and being healthy and taking that through their lives and putting it into the rest of their lives.” (Marie, SR group, Interview 3)

“At high school, I think it’s more of a push to get kids interested in continuing to be physically active.” (Brooke, SR group, Interview 4)

Four of five students within each group referred to continual activity as the purpose of physical education. Statements such as “keep them moving”, “...get them



physically active” and “just get kids moving around, not sitting around” were common. However, these comments reveal little, if anything about what it is that young people are to be doing or learning while moving. Thus, this could be interpreted negatively in that activity with little regard for learning was considered a purpose of physical education.

Skill development was another theme which emerged from the data and was strongest within the DM group. Four of five students within the DM group mentioned skill development as important to the purpose of physical education. Only two of five from the SR group verbalized skill development as a purpose and this result is not surprising given that those within the DM group read DM-based cases which included skill development as an outcome of physical education.

“[Physical education] should definitely work on the skill and just like I’ve talked about before with the skill analysis, I think that should be something that you might be able to incorporate into your high school levels.” (Van, Interview 3)  
 “To introduce new skills at the primary level or whatever level, and give a chance to each kid to attain the ability to perform those skills.” (Collin, Interview 3)  
 “Younger is to...give them a basic foundation of everything from basic movement to numerous different skills.” (Victor, Interview 3).

The development of knowledge within the realm of physical education and physical activity was a dominant theme but may be related to how the question was phrased. With a more vague translation seven of ten students (five from DM group) responded to this question with answers concerning the development of some type of cognitive knowledge.

“Educate the students...on lifetime fitness.” (Victor, SR group, Interview 1)  
 “There is the cognitive aspect where they are processing it and then they see it in their resistance program....they are seeing what they learned about being applied to their body.” (Zach, SR group, Interview 3)  
 “Knowledge of movement, exercise...” (Alex, DM group, Interview 4)

“I think it is good to have a knowledge base of activities and games.”  
(Collin, DM group, Interview 1)

That all the students from the DM group included knowledge development as an answer in either the third or fourth interview may indicate an influence from cases in that some DM-based cases did address the development of student knowledge within physical education.

PETE students referred to student learning more often in this question than the other two questions, again, possibly a result of how the question was phrased. The increase in student references does not necessarily imply student learning as a major outcome or objective of physical education in that the term “learning” may have been used loosely.

“learn the benefits of being fit.” (Zach, SR group, Interview 3)  
 “...learning to be socially responsible as far as playing games with people and being on teams that [they] don’t like.” (Brooke, SR group, Interview 4)  
 “...teach them new skills and keep them eager to learn more...” (Gene, DM group, Interview 1)  
 “...learning the skills, but then also learning that physical activity is important...” (Justin, DM group, Interview 1)

What should be emphasized in physical education? Seven of ten (four from DM group) recognized that the emphasis in physical education may be dependent on the age group of students; again, no mention of skill and/or developmental level. In at least one interview each student made reference to either personal or practicum experiences for the purpose of sharing a story or making a point; two students referred to what they considered inappropriate teaching to help explain their answer. Only five students, primarily in the first interview mentioned having fun as an emphasis in physical

education. Not once was student learning stated as the emphasis of physical education. While this type of answer may be reflective of how the question was phrased these PETE students may have assumed student learning a direct result of their teaching.

Skill development was the prevalent theme within this question. Four of five students within the SR group and all five within the DM group provided a skill development answer at least once.

“You still want to work on developing just basic skills.” (Van, DM group, Interview 1)

“In elementary I think it’s more of the basic locomotor with some minimal skill development so they have the basis for when they go into middle school where they get more in-depth activities. In high school you’d get even deeper I would think.” (Justin, DM group, Interview 3)

“...I’m thinking elementary, body awareness, dividing space and using their body how they want to....A lot of it is you are setting the stage for different activities....They learn new sports and they put together all their basic fundamentals.” (Zach, SR group, Interview 2)

“Getting the skills down right. My focus is on mostly motor stuff.” (Mercedes, SR group, Interview 4).

That this theme emerges from the data is not surprising in that skill development has likely been a large part of these students’ experiences in sport, physical education and PETE (Lortie, 1975; Pajares, 1992).

Four of five PETE students within each group referred to continual activity and/or fitness as an emphasis in that activity time and fitness development were important components of physical education.

“I think we need to emphasize more of the fitness aspect...” (Gene, DM group, Interview 3)

“The activity is important and the young kids need the activity more. You’ve got to give them the activity.” (Alex, DM group, Interview 2)

“Fitness. Emphasize activity time as much as possible.” (Victor, SR group, Interview 4)

“...just get them moving.” (Zach, SR group, Interview 1)

Another common theme for three of five PETE students in each group was developing lifetime physical activity habits or patterns or finding activities in which students would participate for life.

“And help them find something they enjoy and that they will do the rest of their lives.” (Brooke, SR group, Interview 1)

“I think when [they’re] younger you got to focus on making sure they’re having fun and then later on, teaching them how to use it in life.” (Justin, DM group, Interview 1)

One cannot determine if these PETE students used the terms fitness and being active synonymously with lifetime fitness or lifetime activity, thus, a clear distinction has been made between the two themes. Just getting kids moving and emphasizing fitness may or may not result in youth pursuing activity for life but some of these students may have made that assumption. This raises the question as to whether or not PETE faculty differentiate between activity and lifetime activity or if there is any need to do so.

While a teacher educator and an experienced teacher may make the logical association between what one believes to be the purpose of physical education and what one would emphasize in physical education it is likely that preservice teachers can not. That lifetime physical activity was most prevalent for the “purpose” question and skill development was prominent in the “emphasis” question emphasizes this point. One may assume a connection between developing a variety of skills in order to participate in more activities for life but it is unknown whether or not these PETE students made such a link.

The most common theme within the SR group was teaching and/or telling students “why”, such as why fitness is important. Alex, Van and Gene (DM group) made reference to teaching “why” but in only one interview each.

“The why of what we are doing. The purposes of what we are doing.” (Victor, SR group, Interview 3)

“My teacher, we didn’t even have warm ups, we just went out and played a game. She never told us why, she never told us where our heart rate needed to be, any of that stuff. So that needs to be included so they know why they are in that class, that it is not just a free recess.” (Mercedes, SR group, Interview 1)

Though it is unknown why the students in the SR group mentioned “why” most often, experiences such as Mercedes may have prompted such thoughts. Further, these PETE students may have assumed an automatic and direct link between telling students “why” exercise and fitness are important and increased physical activity and motivation to exercise. This assumption may be predicated on the belief that direct instruction precipitates student learning and motivation.

The development of social skills / responsibility and self-esteem were present within the data but did not emerge as significant themes. Even though students within each group read and discussed cases based in one orientation answers were not necessarily directly tied to the case theme. Teamwork, treating others with respect and understanding others were comments in interviews one and two only from those in the DM group. Answers from the SR group, mostly during the third and fourth interviews were centered on teamwork and respect. Self-esteem development was not a major theme within this question though three students within the DM group did mention learning about oneself, feeling good or promoting self-esteem within physical education.

What is disconcerting is that cognitive knowledge and valuing physical activity were not major themes. Placek et al. (1995) found similar results with the preservice physical education teachers in their study. Cognitive knowledge development of public school physical education students is an important outcome and should be a major focus

in physical education (NASPE, 1995). The DM orientation does address the development of cognitive knowledge; though a few DM-based cases did address the development of cognitive knowledge within physical education even those within the DM group did not place an emphasis on knowledge development of youth. Students may not have picked up on this specific concept within a case and case discussion may not have been directed toward or centered on that topic. It is possible that PETE students may have thought “why” was interchangeable with cognitive development or fit into the cognitive learning domain. However, knowing why one is participating in an activity may not necessarily lead to an improved cognitive understanding of that activity. Further, the disconnect between the purpose of physical education and what is emphasized is evident; if a purpose of physical education is to improve the cognitive knowledge of youth then there must be an emphasis on knowledge development within the curriculum.

To value physical activity is also an important outcome in physical education (NASPE, 1995). Not one student used the term “value” when answering this question or any other. An assumption based on vernacular could be made where “value” is loosely translated as “enjoy”, “want to”, and/or “find an interest.” However, enjoying physical activity should not be misconstrued as valuing physical activity in that enjoyment may be fleeting whereas valuing implies permanence. More students within the SR group indicated the desire to help youth find an enjoyable activity which would stimulate an interest for continued participation and this theme was largely seen in the first two interviews. That these students failed to emphasize the value of physical activity implies the need for a greater focus on this topic within PETE.

How would you defend keeping physical education in the public schools? This question seemed relatively difficult to answer as PETE students struggled to articulate their thoughts and beliefs in defense of physical education. If teachers have difficulty articulating their beliefs (Kagan, 1992) it is of little surprise that preservice teachers grapple with the same dilemma. Five PETE students stated either the difficulty in answering this question or never having thought about it before. As a consequence, few strong themes emerged from the data. Only Alex reacted in a strong, emotive manner often becoming defensive and contentious at each interview. It is possible that PETE students' difficulties in answering this question resulted from never being asked this question before and/or never giving thought to defending their future profession. Further, as many of these students may have seen physical education programs or classes cut from school curricula and possibly have felt, seen and heard of the reduced status of physical education justification for a program may have been all the more difficult. Moreover, if a PETE student's degree and profession are perceived both externally and internally with lesser status their profession may be more difficult to defend.

Personal experience resonated strongly with seven of the students, whether it was the feeling received from being active, being a former athlete or how activity affected study habits. Self-esteem development was a common theme among six PETE students in that learning about oneself, self-expression and self-confidence were thought to be automatic outcomes of physical education. Given that PETE students were put on the defensive with this question it is not surprising the failure to mention or possibly

even recognize that not all youth walk away from physical education feeling good about themselves or activity. This is the type of assumption which may directly and negatively impact the learning environment and youth.

Van was the only PETE student who made any reference to case methods; “In our classes and the readings we have, the discussions and everything seems to relate back to physical education not being as important as other classes. It deals directly with the administrators and the teachers and the parents and getting them to understand what and why [physical education] is important” (Van, DM group, Interview 3). Five students (four from DM group) compared physical education to other subjects; “...and to me [physical education] is just as important as math and history” (Alex, DM group, Interview 1) or “[Being physically active] is as much a part of life as your math skills or reading skills or writing skills.” (Gene, DM group, Interview 1). Four students referred to physical education as unique in that “...there aren’t many other classes that really cover what PE does” (Brooke, SR group, Interview 1) or “...where else are [students] going to learn how to be physically active...if we don’t teach them, who will” (Justin, DM group, Interview 1).

Developing social skills such as cooperation, teamwork, respecting others and developing integrity were comments in the third and fourth interviews from all members of the SR group; two members from the DM group made similar references during the first and third interviews. Cases based in SR may have familiarized those students in the SR group to SR concepts whereas those in the DM group were not privy to such readings and discussion.



Five students made reference to America's obese and/or sedentary society as a segue into issues of lifetime fitness development, the need for professional physical educators and the need to instill physical activity habits early in youth. Lifetime health / fitness and lifetime physical activity formed the most common theme within this question. Eight of ten PETE students referred to developing lifetime physical activity habits, maintaining a healthy lifestyle and learning new skills to carry into life in order to defend physical education.

"So hopefully the majority of the public schools are going to have PE which will help [students] not only learn how to function but learn activities for their lifetime..." (Zach, SR group, Interview 3)

"To teach lifetime fitness." (Mercedes, SR group, Interview 3)

"I think not only does physical education promote the healthy lifestyle, but you are taking skills that you use in everyday life." (Collin, DM group, Interview 3)

"My goal is to make them fit for the rest of their life and want to keep doing it..." (Justin, DM group, Interview 4)

Throughout all three questions the theme of lifetime physical activity was predominant and in this question few PETE students referred to having children just be active.

Mercedes made the distinction between being active in physical education and being active in life when she said "...you need to keep kids active...that sometimes is their only physical activity." (Mercedes, SR group, Interview 1).

### When PETE students met their data

PETE students' last interview was one to three weeks after their final seminar at which time they completed the fourth VOI-2. Toward the end of the final interview each student was presented a list of five statements, each statement representing one of the five value orientations. PETE students were asked to choose one or two statements which best "fit" them or described how and what they would teach. Of ten, five selected

the same value orientation(s) they had scored highest on the final VOI-2; two were close, just reversing the order and three were completely off. The value orientation(s) selected was not necessarily DM or SR although eight of 10 selected DM and/or SR. That only five of the ten selected the same value orientation as they had on their final VOI-2 indicates the continual process of finding the best “fit” and the instability of preservice teachers’ value orientations (Smith, 1992; Solmon & Ashy, 1995).

At the final interview students were asked if they could identify the underlying theme of the eight cases. Many students commented about teachers’ dilemmas, solving problems, curricular issues and administrative, student and/or parental issues but not one student mentioned issues surrounding skill and/or fitness development or teaching for social responsibility. Seminar discussion centered on problem solving so their responses were not surprising. It is compelling and even slightly disconcerting that they could not identify the underlying case theme yet interview references shifted toward the case orientation. The preservice teachers in Solmon and Ashy (1995) gravitated toward the course instructor’s value profile and in this study preservice teachers gravitated toward the case theme. The researcher-instructor was busy wearing two value orientation hats, teaching all seminars whether DM- or SR-based. Based on interview data PETE students drifted toward the case-based orientation which students may have perceived as the researcher-instructor’s primary value orientation. This could be an example of PETE students blindly accepting information as well as another person’s values (Mezirow, 1997).

Though case methods were new to these PETE students they found cases interesting and relevant reading. A few students disclosed their dislike for reading in

general and several reported cases as easier to associate with or relate to than the *JOPERD* readings on Games for Understanding.

“I like [cases] because they are real life situations.” (Justin, DM group)

“The readings were of interest. They are applicable to what we are doing.”

(Alex, DM group)

“I enjoyed the cases because they were more real in lifelike situations.” (Victor, SR group)

“I think it’s easier to get something out of a scenario, pulling things out of it.”

(Marie, SR group)

Students recounted cases opening their eyes to teaching in that “[cases] makes us see teaching through the eyes of somebody who is doing it.” (Collin, DM group). Victor’s worries were relieved; “...I was reading that [case] and I was thinking that sounds just like me. Other people feel the same way? It’s okay to feel like that or something?” (Victor, SR group). While everyone “liked” reading cases a few identified tactical approaches as an important part of their learning and would have either liked to have continued that portion of seminar or interspersed tactical approaches with case methods. If students truly did enjoy reading cases then it could be argued that cases might be a most viable option to introducing and exposing PETE students to new concepts, theories and ideas within the world of teaching physical education.

Participation in case methods required these students to take a more active and engaged role in their learning processes via dialogue. Facilitated seminars were unfamiliar territory given the predominance of direct instruction experienced by these students. A similar phenomenon was noted by Collier (1995) in that her students lacked sufficient background with facilitated discussion and like these PETE majors, may not have been fully prepared to engage in a new style of learning. However, when asked about seminars students reported enjoying listening to others’ opinions and ideas,

problem-solving and brainstorming concerning the cases; “But it helps to talk about it and voice your opinions and hear others.” (Brooke, SR group). A few students reported case methods as becoming redundant or repetitive; “...sometimes things were pretty redundant. If a case seemed pretty straight forward then we would talk it to death.” (Zach, SR group). Zach’s comment reveals a potentially solidified position or stance with which preservice teachers sometimes regard teaching and learning (Pajares, 1992). Based on the researcher-instructor’s observations it did take time for students to grow more comfortable with seminar facilitation and case methods but with continued support and encouragement they further explored their own ideas and thoughts, working together to create solutions to a variety of problems within physical education. Again, using cases to stimulate thought provoking discussion and creative problem solving may be an effective way to actively engage students in their learning to teach process (Barnett, 1991, 1998; Barnett & Tyson, in press).

At the final interview each students’ VOI-2 data was graphically presented to them across all four measurements. PETE students were asked to determine what they thought happened to their VOI-2 data. Not one student suggested cases as influential but eight pointed to their practicum experiences as instrumental to changes in their VOI-2 scores.

“Yeah, I definitely see [that]social responsibility just was not a factor at my school...if I were at Lincoln the whole time, yeah, social responsibility model. But [in high school and middle school] they didn’t use it and really didn’t think about it.” (Zach, SR group)

“I think it’s because my two practicums weren’t around problem kids. I saw the teachers teaching more skills.” (Gene, DM group)

Van and Justin referred to courses within the PETE program as potentially influencing their VOI-2 scores and Alex talked about his military experiences and how teamwork

and respect were necessary for a military unit to function. That PETE students did not find their professional preparation courses stimulating enough is cause for concern in that maybe as teacher educators we are less affective than we realize or want to acknowledge. This begs the fundamental question of who needs changing - students, teacher education faculty or programs? Mercedes' realization was most revealing;

“The first two times (taking the VOI-2) I was putting down what I was thinking my philosophies were. And then this last time, I thought ‘you know what, that may be what you think but that’s not actually what you do.’ So this time I tried to put down whether I thought that was right or not, what I had been doing. I tried to put down what I had been doing. That was kind of like a self-awareness thing that you’re not following what you think you are trying to accomplish.” (Mercedes, SR group).

That Mercedes recognized and communicated the inconsistency between her values and actions was unexpected and may resemble more mature thought processes similar to more experienced teachers. Since actions are the result of one's beliefs and values (Mezirow, 1997, Richardson, 1994) future research should continue to help preservice teachers explore and uncover belief structures in relation to teaching behaviors.

### Conclusions and Implications for Teacher Education

PETE students' references shifted toward the case-based value orientation from baseline to intervention phases. Individually and as a group the number of interview references within the targeted value orientation may have increased due in part to reading and discussing cases based in that target value orientation. Whether the increase in citations is a true change in value orientations is unknown in that their beliefs and values about teaching physical education were constantly under construction and unstable (Smith, 1992; Solmon & Ashy, 1995).

Inasmuch as case methods were influential the question remains as to when to introduce cases, how long to implement them and what types of cases would be most beneficial. Further, the methods by which to implement cases is of extreme concern (Harrington, 1994). Even though these PETE students were seniors or fifth-year seniors they were in their initial year of teacher education and methodology courses. That these PETE students failed to recognize the case theme raises several issues; the brevity with which they had been exposed to curricular philosophies and teaching models; the limited time spent thinking about teaching physical education; the possibility that cases were implemented too early or too late; the case content was not of high enough quality. Regardless, these students seemed to relate more easily to cases than traditional textbook material lending credence to case methods as a pedagogical tool by which to stimulate their thinking processes, introduce new information and get students actively involved in their own learning. It is unknown whether or not these cases would have been as instrumental in changing value orientations without seminar discussion. However, PETE students' positive responses toward group problem solving is an indication that socially engaged dialogue may be fundamental to the process (Barnett, 1991; Levin, 1995; Mezirow, 1997; Prawatt & Floden, 1994).

As was obvious in this study time and continual exposure to cases was a critical factor in that changes in value orientations were not instantaneous. Recurrent contact seemed to play a critical role in PETE students' development of conceptual knowledge and technical language with subsequent changes in value orientations. Whether hypermedia or written cases the most important element is that preservice teachers can relate to and learn from a case. PETE students in this study found cases to be of interest

and relevant, thus, they saw relevance in their teacher education experiences. To increase the relevance cases need to be contextually rich and complete providing detail similar to that found in a classroom or gymnasium. Further, ambiguity is a necessary and vital component as teaching is anything but unambiguous.

For Harrington (1994) as well as for this researcher the implementation of cases was of utmost importance. Harrington (1994) found teacher educators to be particularly prescriptive in orientation, believing less in ambiguity and more in a “correct way” to approach the case-based situation. While facilitation is not an easy process if preservice teachers are to be encouraged to think like a professional and take a larger role in their learning traditional pedagogical models of direct instruction must be replaced with current andragogical models from adult education (Knowles, 1980). Breaking the tradition of direct instruction is painstaking as well as risky but the payoffs are large for both teacher educator and preservice teacher alike.

That references toward disciplinary mastery were high is of little surprise given that a large emphasis in physical education resides within that orientation. Gaining proficiency in fundamental movements, skills and fitness activities is a primary tenet of quality physical education and for PETE students to not acknowledge such goals would be an inaccurate representation of physical education. Previous experiences directly impact belief development of teachers (Lortie, 1975; Pajares, 1992) and these preservice teachers’ experiences in sport and physical education quite likely influenced the dominance of the disciplinary mastery orientation. It is probable that prior and what were then current PETE experiences coupled with DM-based cases reinforced the predominance of DM citations for those within the DM group.

In all likelihood those within the SR group experienced more cognitive dissonance due to reading and discussing SR-based cases, a new concept, which may explain a portion of the greater variability within that group. The focus within the PETE program is primarily disciplinary mastery with brief attention to social responsibility. Mixed messages as to what is most important when teaching physical education could have conceivably created more conflict or friction for these students. Some teacher educators (Crum, 1993) might argue that teaching philosophies and conceptual orientations of departmental faculty members should be similar so PETE students receive similar messages. On the one hand this notion may be correct as familiarity with a specific teaching philosophy may lead to specific improvements in one's teaching. However, exposure to a variety of philosophies and theories may create the dissonance necessary for PETE students to begin the in-depth exploration of their own belief structures about teaching and learning in physical education.

The transformation into a quality educator takes time, patience and possibly the consideration of different avenues by which to promote and transcend prior beliefs and values. As a teaching profession trouble awaits regardless of whether PETE students blindly accept or filter the information and ideas presented in a teacher education program. Mezirow (1997) reminds us that the uncritical acceptance of beliefs and values, whether one's own or another's, is detrimental to the process of adult education. If educating adults is our business then we must help our preservice teacher think and act critically instead of founding their teaching practices on tacit and unconscious assumptions (Kagan, 1992).



### General Conclusions

Three major conclusions resulted from this investigation. First, case methods played a role in shifting PETE students' value orientations toward the focus of cases. Most students shifted their value orientation toward the case-based theme even though value orientations remained relatively unstable throughout the duration of the study. This instability was similar to the findings by Smith (1992) and Solmon and Ashy (1995). Inherent in case methods lies transformative processes whereby preservice teachers engage in metacognitive thought processes such as problem-posing and problem-solving (Mezirow, 1997; Prickel, 1997) as well as socially engaged dialogue (Mezirow, 1997; Prawatt & Floden, 1994). It is likely that these processes were additional contributors to the changes in PETE students' value orientations.

The inconsistencies between PETE students' Value Orientation Inventory-2 and interview data were rather revealing as well as somewhat surprising. These differences may have resulted from the inability to articulate beliefs given the limited experience with and technical language of certain theoretical models as well as extensive life encounters developing skills and fitness within physical education and sports. These inconsistencies also provide food for thought concerning the use of surveys such as the VOI-2 with preservice teachers. The format of the VOI-2 is set within the context of teaching physical education. PETE students' limited teaching experiences in physical education likely contributed to their initial reflections toward coaching (Victor) or military experiences (Alex). With increased time in schools some students reported being able to rank their responses with more ease. These PETE students became very

familiar with the VOI-2. Of course another explanation is that when a teaching statement “sounded good” that was what a student chose regardless of continuity of choices.

This leads to the second conclusion which revolves around the notion that within teacher education the VOI-2 (Ennis & Chen, 1993) may have potential as a teaching and learning tool. Exposing beliefs and values of preservice teachers is most difficult. However, the structure of the VOI-2 with the multiple teaching statements focused on teaching and learning within physical education may be enough of a potent and powerful curricular tool (Howey, 1996) to both capture and thus, disclose tacit and long-held assumptions. Using the VOI-2 throughout the course of professional preparation could be most beneficial for both PETE students and PETE faculty alike.

The change process in this study was gradual and letting go of long-held conceptualizations in order to even remotely consider and potentially accept new information as a viable replacement surely was not nor will ever be an easy process. This points to a third conclusion in that time and recurrent exposure to cases played a critical role in movement toward a specific value orientation. Belief systems are rather solid structures given the vast amount time spent observing teachers in K-12 experiences (Lortie, 1975; Pajares, 1992). For PETE students' to recognize and understand their belief systems, not to mention commence any transformational process likely will take more time than the two terms of intervention in this study. Moreover, it will likely take more than solely case methods to instill changes in orientation; consequently, the process should run throughout the entire teacher education program.

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## APPENDICES

APPENDIX A

Informed Consent

September 30, 1998

Dear PAD student:

The sport pedagogy faculty in the Department of Exercise and Sport Science is interested in the development of future physical education teachers and coaches. Part of this developmental process in your teacher education preparation includes the series of early field experience courses (EXSS 353, 354, 355) entitled "Physical Activity and Development Practicum." It is imperative that you are trained to become exceptional teachers and coaches of students in physical education in the public schools.

As part of the effort to further improve the teacher education program, a project will be conducted during the 1998-1999 academic year that involves the three practicums (EXSS 353, 354, 355). Your help and support is necessary in order for this project to be completed, and we would appreciate your assistance.

You are invited to participate in this yearlong project which will cover your EXSS 353, 354, and 355 courses. More specifically, those who will continue with the EXSS 354 and EXSS 355 courses in the winter and spring terms, respectively, are being asked to participate in this yearlong project.

You are at absolutely no obligation to participate in this study and your grade will not be affected if you do not volunteer. If you participate and at any time wish to withdraw from the study, you may do so without risk to your grade.

As a participant you will remain anonymous. You will be asked to choose a pseudonym, or an alias, by which you will be referred to in any of the published data. Confidentiality is of the utmost importance in this project and your given name will never be used in any publication. However, given names will be necessary during the data collection process.

If you decide to participate:

- 1) you will be interviewed four times at your convenience. Each interview will last approximately 30 to 60 minutes and will be audiotaped. This audiotaped interview will be transcribed for further data analysis.
- 2) you will permit the use of the "Physical Education Majors' Background Survey" and the "Physical Education Goals Inventory" for further data analysis.
- 3) you agree to be videotaped during all seminars of EXSS 353, 354, and 355.

Your participation is vital if we are to better prepare future physical education teachers at Oregon State University. If you have questions at any time please do not hesitate to ask. We can be reached at 541/747-5932 / 6791 / 4649. If we are not available by phone please leave a message and we will get back with you as soon as possible. Thank you for your cooperation and participation in this project.

Sincerely,

Hans van der Mars  
Principle Investigator

Gay L. Timken  
Doctoral Student

OREGON STATE UNIVERSITY  
Department of Exercise & Sport Science  
Corvallis, OR 97331

### **INFORMED CONSENT FORM**

1. Dr. Hans van der Mars, Associate Professor at Oregon State University (OSU) and Gay Timken, Doctoral Student at OSU have requested my participation in a research project at OSU. The purpose of this study is to examine the influence of practicum experiences on the development of future physical education teachers.
2. I understand this project will be conducted throughout the following sequence of courses; EXSS 353, EXSS 354, and EXSS 355.
3. There are no foreseeable benefits or risks associated with this study. I understand that the "Physical Education Majors' Background Survey" and the "Physical Education Goals Inventory" data will be analyzed. I understand that I will be asked to complete four personal interviews of approximately 30 to 60 minutes in length, and that I will be videotaped at each classroom seminar. The videotapes will not be used for data analysis.
4. I understand that I will not receive tangible benefits (e.g., remuneration) nor be compensated for participation in this project. I do understand that my participation in this study will increase the research knowledge base of physical education teacher education.
5. I understand that participation in this research project is completely voluntary and that I may choose, at any time, to withdraw from this study. I understand that my withdrawal from this study will not in any way affect my course grade.
6. I understand that the results of this study may be published but that my name or identity will not be revealed. In order to maintain confidentiality, the pseudonym or alias that I have chosen will be used in all publication of data. However, I do understand that given names will be necessary to use during the data collection phase of this project. Only Dr. van der Mars and Ms. Timken will have access to any confidential information which will be kept on file in a secure location in the Instructional Analysis Laboratory in the College of Health & Human Performance at Oregon State University.
7. I have informed Dr. van der Mars and/or Ms. Timken that I have no documented medical condition that might pose a risk for participation in this study.
8. I have been advised that the research in which I will be participating does not involve more than the normal risk involved in a physical education teacher education program.
9. I have been informed that any questions I have concerning this research project, before or after my consent, will be answered by Dr. van der Mars (phone 541/737-4649) or Ms. Gay Timken (phone 541/737-5932).
10. I understand if I have questions about my rights as a participant in this research project I can contact Mary Nunn (541/737-0670).

11. I have read the above informed consent. The nature, demands, possible risks, and benefit(s) of this project have been explained to me. I knowingly assume the risks involved, and understand that I may withdraw my consent and discontinue participation at any time without penalty or loss of benefit to me. A copy of this consent form will be given to me.

Preservice Students' Signature \_\_\_\_\_ Date \_\_\_\_\_

Preservice Students' chosen alias  
(only a first name is necessary) \_\_\_\_\_

We, Hans van der Mars and Gay Timken certify that we have explained to the above individual the nature and purpose, the potential benefit(s) and possible risks associated with participation in this research project, have answered any questions that have been raised, and have witnessed the above signature and have provided the participant a copy of this signed consent document.

Signature of On-site Investigator \_\_\_\_\_ Date \_\_\_\_\_  
(Hans van der Mars or Gay Timken)

## APPENDIX B

### Physical Education Majors Background Survey



# OREGON STATE UNIVERSITY

## Physical Education Majors Background Survey

### PART I: PERSONAL BACKGROUND

Instructions: Please check the answer which best fits your situation. Where blanks are provided, fill in the blank with the appropriate answer. Please answer every question that applies to you.

1. Name \_\_\_\_\_
  2. \_\_\_\_\_ Age \_\_\_\_\_ Female \_\_\_\_\_ Male
  3. Race/Ethnic Group
 

<input type="checkbox"/> a. Asian or Asian-American <input type="checkbox"/> b. Black, African-American, Non-Hispanic <input type="checkbox"/> c. White, European American, Non-Hispanic <input type="checkbox"/> d. Mexican-American / Chicano <input type="checkbox"/> e. Hispanic or Latino-American	<input type="checkbox"/> f. Am. Indian or Alaskan Native <input type="checkbox"/> g. Middle Eastern or Middle Eastern American <input type="checkbox"/> h. Pacific Islander <input type="checkbox"/> i. Other _____
---	--
  4. Type of high school attended
 

<input type="checkbox"/> a. Public <input type="checkbox"/> b. Private (religious affiliated) <input type="checkbox"/> c. Private (nonreligious)	
--	--
- Name of school \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_
5. In which high school track or program were you enrolled?
 

<input type="checkbox"/> a. Business <input type="checkbox"/> b. College Prep	<input type="checkbox"/> c. General <input type="checkbox"/> d. Vocational
--	---
  6. High school class rank (if known) \_\_\_\_\_ out of \_\_\_\_\_.
  7. Present university status.
 

<input type="checkbox"/> a. Freshman <input type="checkbox"/> b. Sophomore <input type="checkbox"/> c. Junior	<input type="checkbox"/> d. Senior <input type="checkbox"/> e. Fifth year senior <input type="checkbox"/> f. Other; please specify _____
---	--
  8. Did you enter the physical education (PAD) major at OSU as a freshman or as a transfer student?
 

<input type="checkbox"/> a. Freshman <input type="checkbox"/> b. Transfer student from another college or university <input type="checkbox"/> c. Transfer student from another program within this college or university	
--	--
  9. If you were a transfer,
 

a. What was your previous major? _____ What was your previous college? _____ City/State _____	b. Reason for transfer. _____
---	-------------------------------
  10. Parent(s)' or guardian(s)' occupation and highest educational degree attained
 

a. Person / Relationship _____ Occupation _____	Education (please circle) High School   Associate   Bachelors   Masters   Doctorate Other (please specify) _____
--	---

b. Person / Relationship \_\_\_\_\_  
 Occupation \_\_\_\_\_  
 Education (please circle) High School    Associate    Bachelors    Masters    Doctorate  
 Other (please specify) \_\_\_\_\_

## PART II: SPORT BACKGROUND

### 11. High School Sports

Did you participate in sports sponsored by your high school?

\_\_\_\_\_ No (proceed to the next question)

\_\_\_\_\_ Yes (please provide the information requested below)

Sport	Level = Frosh, JV, Varsity, Intramural, Club	Year(s) in school in which you participated	Awards you or your team received (MVP, captain, most improved, league champs)

### 12. College / University Sports

Have you participated in or are you currently participating in an intercollegiate athletic program?

\_\_\_\_\_ No (proceed to the next question)

\_\_\_\_\_ Yes (please provide the information requested below)

Sport	Starter or Sub	Number of years participated	Awards you or your team received

## 13. Outside of school sports

Did you participate in formal, organized sport or dance activities outside of school at any age (little league, church league, swimming or gymnastics programs, community soccer or hockey, bowling league, sports camps, sports lessons – tennis or skiing)?

☐ No (proceed to the next question).

☐ Yes (please provide the information requested below)

Sport	Organization (i.e., little league)	Age(s) at which you participated	Awards you or your team received

## 13. DANCE

Have you ever taken dance lessons?

☐ No (proceed to the next question)

☐ Yes (Please provide the information requested below)

Kind of dance (modern, ballet, tap)	Age(s) when you participated	Who provided the instruction (PE teacher, private teacher)	Have you performed in public?

## 14. NON FORMAL SPORTS

Have you participated in recreational or leisure activities with friends or family that were not part of a formal program (for example, playing tennis on weekends, playing pick-up games of basketball or softball, aerobics classes, weights, running/jogging)?

\_\_\_\_\_ No (proceed to the next question)

\_\_\_\_\_ Yes (please provide the information requested below)

Sport or Activity	All year or Seasonal (fall, winter, spring summer)	Your age(s)	Check how often you participated in a season or year.			
			More than once a week	Once or week	Once or twice a month	2 times a year or less

## 15. SPORT RELATED ROLES

Have you been involved in sport or physical activity in a role other than as a participant or player (for example, officiating, teaching or coaching either paid or volunteer, assistant coaching, recreation director, scorer, timer, equipment manager)?

\_\_\_\_\_ No (proceed to the next question)

\_\_\_\_\_ Yes (please provide the information requested below)

Sport or Activity	Your role	Age(s) at which you participated	Check if:	
			paid	volunteer

### PART III: PHYSICAL EDUCATION BACKGROUND

We are seeking information on the physical education classes in which you participated in grades K-12. For our purposes, a *physical education class* is defined as a formal class held during the school day and supervised by a teacher. Please check or indicate as many numbers as apply for each question in each grade. Put **DR** in the blank if you don't remember.

	K	1	2	3	4	5	6	7	8	9	10
16. Check each grade in which you took physical education (PE) class.											
17. Check each grade in which PE was required.											
18. Check each grade when a PE specialist taught your class.											
19. Check each grade in which physical fitness tests were required.											
20. Check each grade in which skill tests were used to measure your performance.											
21. Check each grade in which there were more than 30 students in your PE class.											
22. What were the average number of PE classes per week per grade?											
23. Indicate where you usually had PE by writing in the following letters for each grade: G = gym; O = outside C = covered outside area, X = other											

24. Check the activities in which you had instruction in PE class in elementary, middle/junior high, and high school.

Put **DR** for don't remember. Leave blank if the school did not offer or if the school offered but you did not take the activity.

	Elem. School	Middle/Jr. High	High School
a. Basic motor skills; throwing, kicking locomotor skills, (hopping, skipping) etc..			
b. Low organized games			
c. Team sports			
d. Racket sports			
e. Folk/Square/Ballroom dance			

	Elem. School	Middle/Jr. High	High School
f. Modern, Ballet, Jazz dance			
g. Rhythms & creative dance			
h. Movement education (body, space, effort relationships)			
i. Adventure / ropes			
j. Outdoor activities (cycling, skiing, backpacking, cross country ski)			
k. Swimming, (beg., adv., diving, synchro, etc.)			
l. Martial arts (judo, karate, self-defense)			
m. Relaxation (yoga, meditation)			
n. Track & Field			
o. Dance			
p. Other individual sports (golf, archery, bowling, etc.)			
q. New games / cooperative games			
r. Fitness development (aerobics, jogging, wt. training, etc.)			
s. Gymnastics			
t. Other not mentioned above			

25. In your high school, did varsity athletes have to take physical education classes during their competitive seasons?

☐ No  
☐ Yes

26. Were you ever a student leader / helper in physical education classes?

☐ No  
☐ Yes

If yes, what were some of the leadership activities you did in that capacity?

27. Did you ever receive an award for reward in a physical education class?

\_\_\_\_\_ No

\_\_\_\_\_ Yes

If yes, what was it and why did you receive that award?

28. In your opinion, what should be the purpose of;

a. elementary (K-6) physical education?

b. middle / junior high school physical education?

c. high school physical education?

#### PART IV: CAREER CHOICE

29. If you are sure what career you want to enter immediately upon graduation from college, check one main choice below. If you are not sure exactly what career you want to pursue when you graduate, rank up to 5 choices (1 = first choice; 5 = fifth choice). Elementary education includes grades K-6. Secondary education includes both middle / jr. high and high school.

\_\_\_\_\_ a. Teach elementary PE but not coach

\_\_\_\_\_ j. Athletic trainer

\_\_\_\_\_ b. Teach secondary PE but not coach

\_\_\_\_\_ k. Teach PE at a college or university

\_\_\_\_\_ c. Teach secondary PE and coach

\_\_\_\_\_ l. Coach at a college or university

\_\_\_\_\_ d. Teach elementary PE and coach

\_\_\_\_\_ m. Teach PE and coach at a college / university

\_\_\_\_\_ e. Only coach at the secondary level

\_\_\_\_\_ n. Become a professional athlete

\_\_\_\_\_ f. Coach and teach a non-PE subject

\_\_\_\_\_ o. Work in a health or fitness club

\_\_\_\_\_ g. Teach adapted or special PE

\_\_\_\_\_ p. Work as a pro in a private club (tennis, golf)

- \_\_\_\_\_h. College level athletic director                      \_\_\_\_\_q. Sell sports equipment
- \_\_\_\_\_i. High school athletic director                      \_\_\_\_\_r. Physical therapist
- \_\_\_\_\_s. Other (please specify)

30. At what approximate age did you decide on the career or the #1 choice you picked above?

\_\_\_\_\_

31. Briefly describe how you became interested in this career.

32. How important are the following reasons as they apply to your current #1 choice? Circle the number that best applies. 1 is the least important; 5 is the most important.

- |   | Least-----Most |
|---|----------------|
| a. To use my athletic ability   | 1 2 3 4 5      |
| b. The number of available job opportunities                          | 1 2 3 4 5      |
| c. To be helpful to others  | 1 2 3 4 5      |
| d. To work with children  | 1 2 3 4 5      |
| e. To stay associated with sports                                     | 1 2 3 4 5      |
| f. To continue participation in sports                                | 1 2 3 4 5      |
| g. To have fun at work  | 1 2 3 4 5      |
| h. To be paid for having fun  | 1 2 3 4 5      |
| i. Summers off  | 1 2 3 4 5      |
| j. Plenty of vacation time  | 1 2 3 4 5      |
| k. PE is an easier course of study in college                         | 1 2 3 4 5      |
| l. The security associated with employment                            | 1 2 3 4 5      |
| m. To improve the profession  | 1 2 3 4 5      |
| n. To have a job with high status                                     | 1 2 3 4 5      |
| o. To teach sports, games, and physical activities<br>to young people | 1 2 3 4 5      |
| p. To coach sports  | 1 2 3 4 5      |
| q. Other _____  | 1 2 3 4 5      |
-



33. How important were each of the following people in influencing your immediate career choice (1 being the least important; 5 being the most important)? If the person had no influence on your choice or is not relevant (for example, you don't have a legal guardian), please circle **NI** for no influence.

	Least	-----	Most	
a. Father	1	2	3	4 5 NI
b. Mother	1	2	3	4 5 NI
c. Legal guardian	1	2	3	4 5 NI
d. Older brother	1	2	3	4 5 NI
e. Younger brother	1	2	3	4 5 NI
f. Older sister	1	2	3	4 5 NI
g. Younger sister	1	2	3	4 5 NI
h. Other relative	1	2	3	4 5 NI
i. Male friend(s)	1	2	3	4 5 NI
j. Female friend(s)	1	2	3	4 5 NI
k. School coach	1	2	3	4 5 NI
l. PE teacher	1	2	3	4 5 NI
m. PE teacher / coach	1	2	3	4 5 NI
n. Classroom teacher	1	2	3	4 5 NI
o. School counselor	1	2	3	4 5 NI
p. Principal	1	2	3	4 5 NI
q. Other _____	1	2	3	4 5 NI

34. Rank order the individuals from the previous question on the basis of who influenced you the most in your current career choice.

Most influential \_\_\_\_\_

2<sup>nd</sup> most influential \_\_\_\_\_

3<sup>rd</sup> most influential \_\_\_\_\_

35. What career work would you like to be doing immediately after you graduate from college?

36. What career work would you like to be doing 10 years after you graduate from college?
-

## APPENDIX C

### Physical Education Goals Inventory (Value Orientation Inventory-II)

## Physical Education Goals Inventory

Name: \_\_\_\_\_

Below you will find groups or sets of statements that describe goals for students in physical education. Because of limitations in class time, facilities, equipment, and scheduling, etc., we often have to make hard choices about which goals are most important for students in our physical education classes.

Please read the items in each set and rank them from 5 (most important) to 1 (least important). Although some items in the various sets may seem similar, they express different goals that physical educators believe are important. Your rankings will be used by the physical education faculty and graduate students to plan seminars and other support services.

### Directions:

1. Carefully read all of the statements in each set before answering.
2. Consider the importance of each statement to you when thinking about planning and teaching students in your future physical education classes.
3. Assign your priority (5 to 1) by ranking each statement.
4. Place a "5" next to the statement that is **most important** in your planning and teaching, a "4" next to the statement that is second most important, and so on through number "1" which is the statement of **least importance** when compared to the others.

### **MOST IMPORTANT:**

5. PLEASE GIVE EACH STATEMENT IN THE SET A **DIFFERENT** NUMBER (1-5) EVEN WHEN THIS IS DIFFICULT. The inventory cannot be scored if a set has two 1's or three 2's, etc..

### **SET I:**

1. \_\_\_\_\_ I teach students rules and strategies for efficient performance in games and sport.
2. \_\_\_\_\_ I teach students to use ball-handling skills to score by themselves or assist teammates.
3. \_\_\_\_\_ I teach students that disruptive behavior limits others' abilities to learn.
4. \_\_\_\_\_ I teach students to select goals consistent with their unique abilities.
5. \_\_\_\_\_ I teach students to solve problems by modifying movements and skills based on the demands of a given situation.

**PLEASE TURN TO THE BACK OF THIS PAGE**

**BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET**

**SET II:**

6. \_\_\_\_ I encourage students to balance their personal ability to score goals with our class goal of helping more students to be involved in the game.
7. \_\_\_\_ I teach students to work together to solve class problems.
8. \_\_\_\_ I teach students the processes associated with learning new skills.
9. \_\_\_\_ I teach students to select tasks that they value and enjoy.
10. \_\_\_\_ I teach students to move effectively when performing skill and fitness tasks.

**SET III**

11. \_\_\_\_ I teach students to respect the rights of others in team and group activities.
12. \_\_\_\_ I encourage students to take control of themselves.
13. \_\_\_\_ I teach students to share equipment so that each person has a chance to improve their skill or fitness level.
14. \_\_\_\_ I require students to practice the skill, sport, and fitness activities that introduce in class.
15. \_\_\_\_ I plan so that tasks become progressively more difficult.

**SET IV:**

16. \_\_\_\_ I teach students the basic concepts necessary for effective performance in games, sport, or fitness activities.
17. \_\_\_\_ I urge students to be patient with others who are learning new skills or strategies.
18. \_\_\_\_ I teach students to appreciate efficient performance in skill, sport, and fitness activities.
19. \_\_\_\_ I teach students lifetime recreational or dance activities so they can feel comfortable socializing in the future.
20. \_\_\_\_ I teach students to complete tasks so they will learn personal responsibility.

**PLEASE TURN TO THE NEXT PAGE**

**BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET**

**SET V:**

- 21. \_\_\_\_ I allow each student to express personal preferences for class activities.
- 22. \_\_\_\_ I plan carefully when selecting games/sports and making rules to ensure that everyone has a chance to play.
- 23. \_\_\_\_ I plan classes so that students can select from different activities to find those that are meaningful to them.
- 24. \_\_\_\_ I teach students to apply their understanding of basic movement, skill and fitness concepts to the development of their own sport and exercise program.
- 25. \_\_\_\_ I include grade-appropriate information about moving and exercise from such areas as anatomy, kinesiology, and exercise physiology.

**SET VI:**

- 26. \_\_\_\_ I teach students to use skills learned in class to help their team.
- 27. \_\_\_\_ I encourage students to participate in a variety of activities to gain a greater understanding of themselves.
- 28. \_\_\_\_ I teach students skills so they will enjoy playing sports and games.
- 29. \_\_\_\_ I teach students to observe their partners' movements and offer feedback to improve performance.
- 30. \_\_\_\_ I talk with students about problems they sometimes have with their classmates and help them to work out solutions.

**SET VII:**

- 31. \_\_\_\_ I sequence tasks so that students can understand how each physical activity contributes to their fitness or skill performance.
- 32. \_\_\_\_ I teach students to be positive and supportive when speaking with other students.
- 33. \_\_\_\_ I teach students games, sport, and fitness activities so they can participate with others.
- 34. \_\_\_\_ I teach students to select activities that are important to them.
- 35. \_\_\_\_ I encourage students to allow everyone in the group to play their favorite position at least once during the unit.

**PLEASE TURN TO THE BACK OF THIS PAGE**

**BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET****SET VIII:**

36. \_\_\_\_ I teach students that group goals, at times, are more important than their own individual needs.
37. \_\_\_\_ I encourage students to enjoy learning skills, games, and fitness activities.
38. \_\_\_\_ I teach students to look to the future and learn activities to enhance their lives after they finish school.
39. \_\_\_\_ I encourage students to feel good about themselves.
40. \_\_\_\_ I teach students how to correct their own mistakes.

**SET IX:**

41. \_\_\_\_ I plan so that students must combine several movements or skills to solve movement problems.
42. \_\_\_\_ I teach students to work together to make our class a better place to be.
43. \_\_\_\_ I teach students about principles and concepts of exercise and movement that everyone needs to know to lead a healthy life.
44. \_\_\_\_ I teach students to make decisions about activities they would like to learn for the future.
45. \_\_\_\_ I encourage students to be patient with their own physical limits.

**SET X:**

46. \_\_\_\_ I plan so that classes reflect an emphasis on social interaction and skilled performance.
47. \_\_\_\_ I teach students to appreciate the benefits of movement, skills, and fitness in an active, healthy lifestyle.
48. \_\_\_\_ I plan units so that students add new performance skills and knowledge to those that were learned in earlier units.
49. \_\_\_\_ I encourage students to experience new activities that they have never tried before.
50. \_\_\_\_ I teach students to respect differences in ability in our class.

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**BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET****SET XI:**

51. \_\_\_\_ I encourage students to apply fitness knowledge to improve their personal health.
52. \_\_\_\_ I challenge students to learn new things about themselves.
53. \_\_\_\_ I teach students to use many forms of feedback to improve their movement, skill, and fitness performance.
54. \_\_\_\_ I teach students to create a better class environment by talking through problems rather than fighting.
55. \_\_\_\_ I teach students to become skilled and fit.

**SET XII:**

56. \_\_\_\_ I teach students the most effective way to perform specific movements and skills.
57. \_\_\_\_ I teach students to work independently on activities.
58. \_\_\_\_ I teach students that gradually increasing task difficulty will lead to improved performance.
59. \_\_\_\_ I teach students to try new activities to find ones they enjoy.
60. \_\_\_\_ I teach students to use their personal skills to assist their team to be successful.

**SET XIII:**

61. \_\_\_\_ I encourage students to work together to accomplish group and class goals.
62. \_\_\_\_ I teach students to find activities that they enjoy doing or find useful.
63. \_\_\_\_ I point out to students ways in which a new skill is similar to a skill we have already learned.
64. \_\_\_\_ I include activities that represent specific interests and abilities of students in my classes.
65. \_\_\_\_ I teach students to perform exercise skills and movement fundamentals correctly.

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**BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET**

**SET XIV:**

66. \_\_\_\_ I teach students to test themselves to identify their own strengths and weaknesses.
67. \_\_\_\_ I create a class environment where students learn to plan and prepare for a healthy, active future.
68. \_\_\_\_ I teach students to monitor and improve their own performance based on specific criteria.
69. \_\_\_\_ I guide students to assume responsibility within our class community.
70. \_\_\_\_ I teach students why skills are best performed using specific techniques.

**SET XV:**

71. \_\_\_\_ I plan group activities so that students from different backgrounds will learn to respect each other.
72. \_\_\_\_ I require students to spend class time practicing games, skill, and fitness activities emphasized in the daily objectives.
73. \_\_\_\_ I talk with students about their concerns and help them participate in activities they feel are most important.
74. \_\_\_\_ I teach students to explore different ways to perform to discover ones they enjoy.
75. \_\_\_\_ I teach students to apply skills in appropriate game and exercise situations.

**SET XVI:**

76. \_\_\_\_ I teach students to explore many alternatives to discover an effective way to perform.
77. \_\_\_\_ I encourage students to try new activities that they may find useful or enjoyable.
78. \_\_\_\_ I teach students about the positive effects of exercise on their bodies.
79. \_\_\_\_ I encourage students to be personally responsible for their own actions.
80. \_\_\_\_ I plan for student participation by assigning each student a specific task or position.

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**BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET****SET XVII:**

81. \_\_\_\_ I encourage students to be sensitive to other students' problems and work to help them.
82. \_\_\_\_ I teach students to perform complex skills by combining simple movements.
83. \_\_\_\_ I teach students to select the best option or strategy to balance their needs with those of their team.
84. \_\_\_\_ I teach students to be self-directed and keep themselves going in the right direction.
85. \_\_\_\_ I plan so that students exercise at optimal frequency, intensity, and duration levels to improve their fitness.

**SET XVIII:**

86. \_\_\_\_ I plan so that students are practicing skills, games, or fitness tasks.
87. \_\_\_\_ I teach students how to break down movement, skill, and fitness tasks to emphasize the most critical components for learning.
88. \_\_\_\_ I teach students that group goals are sometimes more important than personal needs.
89. \_\_\_\_ I teach students to use the abilities of every member on their team.
90. \_\_\_\_ I plan so that students may select the most challenging and relevant tasks from among several options.

**THANK YOU FOR YOUR TIME, YOUR EFFORT, AND YOUR THOUGHTS!!!**

## APPENDIX D

### List of Reference Articles for Baseline Phase

### List of Reference Articles for Baseline Phase

The following is a reference list for the articles used during the baseline phase. All articles came from the Journal of Physical Education, Recreation and Dance.

Griffin, L.L. (1996). Tactical approaches to teaching games: Improving new/wall game performance. Journal of Physical Education, Recreation and Dance, 67(2), 34-37.

Mitchell, S.A. (1996). Tactical approaches to teaching games: Improving invasion game performance. Journal of Physical Education, Recreation and Dance, 67(2), 30-33.

Oslin, J.L. (1996). Tactical approaches to teaching games. Journal of Physical Education, Recreation and Dance, 67(1), 27-33.

Werner, P., Thorpe, R., & Bunker, D. (1996). Teaching games for understanding: Evolution of a model. Journal of Physical Education, Recreation and Dance, 67(1), 28-33.

## APPENDIX E

### Two Examples of Cases for Intervention Phase

### **Case #5 - Nicole Cordill**

#### **Finding the perfect match!**

Nearing the end of April Nicole started considering her employment options. Teaching positions for public school physical education teachers were beginning to pop up on the Job Bulletin, the web site from her alma mater. Her first year as a teacher had been difficult and though somewhat reluctant to even consider another teaching position, Nicole hoped that maybe, just maybe, she'd find a better match. Several events over the past year prompted feelings of despair, disgust, loneliness, resentment and frustration. Negative feelings did not always penetrate her first-year life as a teacher but those emotions had overwhelmingly occupied the majority of her time. Sitting at her home computer scrolling down the job list, Nicole couldn't quit reflecting on the last year of her life.

Nicole remembered her student teaching experience with the fondest of memories. Her mentor teachers, Jennifer Nowak and Brian Goodheart, had helped shape and mold her teaching into a style she respected. Jennifer taught K-6 and Brian taught 7-10, so Nicole had the opportunity to teach a variety of classes and a variety of skills to a variety of students. Both Jennifer and Brian had similar styles of teaching and Nicole fit nicely into their programs.

Nicole was so pleased that she found mentor teachers with whom she agreed philosophically. Nicole believed that physical education could serve multiple purposes, one of which was to improve society and prompt students to take more responsibility for their part in society. Lessons focused on helping students be more self-directed and self-reliant, collaborate and cooperate to achieve group and class goals, assume responsibility for one's own words and actions, and respect both

differences in ability and ethnicity. Naturally skills, activities and games were important to Nicole and she promoted lifetime participation in physical activity.

During the last month of Nicole's student teaching experience she interviewed for a physical education position with Lakeside View School. Lakeside was a private elementary and middle school serving students pre-kindergarten through grade eight. Nicole felt good about her interview and thought she had asked the right questions in order to find the "perfect" match philosophically. She also toured the school and gazed in wonderment at the architecture and the gym - what a beautiful place for children to attend (and for teachers to work). Truly, the school did offer a lakeside view.

When the headmaster, Mr. Thomas, phoned the end of May to offer Nicole the position, teaching grades K-8, she graciously accepted. Nicole was excited to start her first year of teaching. School would begin after Labor Day so she'd have the summer to relax, spend time with friends and family, develop her unit and lesson plans and move to Centralia.

Summer flew by. Nicole had been in touch with Mr. Thomas a few times over the summer to ask more specific questions about equipment and clarify dates. She learned there were faculty and inservice meetings the end of August for all teachers. However, Mr. Thomas failed to mention the new teacher orientation meetings scheduled for mid-August until the second week of July, thus, Nicole had to cancel her remaining summer plans. "Oh well, small matter," she thought.

Nicole sighed and smirked at herself as she refocused on the job search. That incident was just the first of seemingly small but eventually insurmountable obstacles

she would face. Though she would rather focus on the current job search, Nicole couldn't stop evaluating the past year's events.

By the end of July Nicole had frantically moved into a small house and started her new life as a teacher. She was invited to dinner with a few of the other teachers, which made her feel welcome, and Centralia seemed like an open and progressive community. Nicole could hardly contain her excitement but that excitement would soon fade before school even started.

Mr. Thomas stopped by the gym one mid-August afternoon as Nicole was putting up her bulletin board and posters. As he glanced around the gym walls, Mr. Thomas became alarmingly concerned and asked Nicole to remove the two of the 15 posters that displayed sweaty women athletes working out. Disturbed, Nicole questioned Mr. Thomas' logic. Apparently uncomfortable with this questioning, Mr. Thomas abruptly decided that there should be no posters displayed whatsoever. The gym walls were to remain bare. Nicole tried to explain her goals and philosophy behind using posters to breakdown gender-roll stereotypes and deliver motivational messages but Mr. Thomas was adamant - no posters! One more thing, the bulletin board was to hang basic and informative information, nothing more and nothing less.

Nicole remembered pulling all the posters off the walls and rearranging her bulletin board all the while mulling over the past few months in her head. Had she misunderstood Mr. Thomas and the hiring committee during her interview? Had she not clarified what she believed to be important in the education of children and specifically about physical education? While resigning herself to bare walls and uncertain about Mr. Thomas' control issues, Nicole silently refused to eliminate

certain important lessons from her classes. Students would learn about gender equality, race relations, cooperation, teamwork and mutual respect - she didn't need posters to do this!

Presently, Nicole glanced around her living room walls which were decorated with the posters she had removed from the gym. These posters had inspired her to work hard to achieve personal goals; why couldn't they also inspire the students in her classes? What message did Mr. Thomas really think was being sent?

Nicole remembered the start of school and being busy throughout the day with students from all grades. She had been warned during her undergraduate teacher preparation about elementary teachers bringing students too early or picking them up late and life in a private school was no different. She worked with elementary students for 25 minutes on a rotating schedule, three days one week, two the next. Though short, 25 minute classes still enabled Nicole to teach cooperation, collaboration, self-respect and respect for others, self-responsibility and caring, all the while teaching activities, games, skills and fitness. She implemented fair-play strategies with her elementary students and included daily lessons on being positive and supportive of oneself and one's peers. Physical education with the elementary children, especially the younger ones, brightened Nicole's days. She would occasionally find herself looking around at the bare walls and wincing at the bleakness of the gym but the students had seen nothing else and didn't seem to mind. Furthermore, Nicole felt she was getting through to her students despite the bare walls!



The upper elementary and middle school students presented more problems for Nicole. The social barriers seemed to escalate as did the mounting tension between some students. The younger children, five to eight or nine-year-olds, could work cooperatively and actually responded to Nicole's fair-play system. Students had even developed their own set of consequences for those who used "put-downs". Nicole had used the same tactics with the students in grades four through eight, and while some students responded quite well, there were many (what seemed like more than half) who virtually refused to "play nice."

Nicole's thoughts turned to individual students. Calvin, for instance, was a bright seventh grader who oftentimes asked intriguing questions. When Nicole had introduced a self-monitoring system by which each student evaluated their own personal behavior at the end of each class, Calvin quipped, "Ms. Cordill, it is *my choice* to be caring and respectful, right?" Nicole responded, "Yes Calvin, it is your choice and remember, if you slip up during class, you can still earn partial points if, for the remainder of class, you really work hard to be caring and respectful." "But it is *my choice*, so if I don't want to, I don't have to be respectful, right?" Nicole struggled for a response that seemed intelligent and appropriate but didn't quite have it together. She resigned, "Yes Calvin, it is your choice but it is also your grade!" But would Calvin, or his parents, really care about his physical education grade? She had the feeling they wouldn't.

Well, Calvin did choose, and more often than Nicole cared to remember, he was disrespectful, uncaring, irresponsible and uncooperative. Calvin also enabled several of his peers to act out in similar fashion. In fact, that type of behavior seemed

fashionable for many students in the middle school, both boys and girls. “The girls definitely had their moments,” Nicole mumbled. ‘Was it their “jr. highness” or something beyond that,’ wondered Nicole?

Another difficult student was Angie, a seventh grader who did not fit into any group at Lakeside. Though slightly plump, Angie was not unsightly and did not deserve the names she was called. At first Nicole felt sorry for Angie but as the year progressed, and parent-teacher conferences passed, Nicole began to understand the dynamics of Angie’s personality and background.

Mr. and Mrs. Bowman, Angie’s parents, both attended the first parent-teacher conference and conveyed frustration and anxiety at the behavior displayed toward Angie by students in physical education. They both felt that the other students’ behaviors were unfounded and incomprehensible, and that Nicole should establish more specific boundaries and stiffer consequences for inappropriate behavior. Mistakenly, Nicole told the Bowmans that Angie contributed to the problem by being a bit pushy and bossy, and didn’t always act in the caring and respectful manner required by all her students. Clearly infuriated, Mr. Bowman stood up and declared that he was seeing Mr. Thomas that instant, and if necessary, he would withhold any further contributions to the school until she was fired. Later Nicole learned that the Bowmans contributed over \$300,000 annually to Lakeside View. At that moment Nicole realized what her professors had meant by educational politics.

Nicole was reprimanded by Mr. Thomas and “firmly” asked to call and apologize to the Bowmans. Further, Nicole was to emphasize how enjoyable Angie was to have in class and that the misbehavior of students would be more tightly

controlled. Humiliated, Nicole made the call. Recalling the coldness of that conversation upset her even six months later.

Nicole was jarred from her memories by the phone. Wrong number. Nicole picked up her juice and moved to the couch. No sense in looking for jobs at the moment - she couldn't concentrate with the instant replay of the last few months. Her thoughts turned to Jarrod.

Jarrod was also a seventh grader lacking social skills. Not fitting into any group and incessantly teased by the majority of his peers, Jarrod was often prone to fits of rage, screaming and tears. His emotional maturity was lagging behind his peers and everyone was well aware. However, Jarrod's mental acuity was slightly above his peers and Nicole feared that that exacerbated the problems. The first day of the dance unit, early into the second quarter, Jarrod threw himself into the corner and screamed that he didn't want to dance, especially with girls. His classmates didn't help the situation by taunting him. As with all previous units, Nicole used the self-monitoring system but to no avail - these students weren't just of jr. high age, some were just downright cruel. Nicole wanted to badly to consult with Mr. Thomas at that point but had become fearful and somewhat distrustful.

A new girl joined the student body in November. Melissa McPhail, grade seven, had recently moved with her parents, both professionals, to Centralia. What was different about this family was that Melissa's parents were a lesbian couple. Sarah, a general practitioner, and Joan, a lawyer, had moved to Centralia in hopes of finding a better life for their daughter, a life without hatred, a life without ridicule. The faculty was privy to this information, if only to enable Melissa to be accepted. It

wasn't long before Melissa's peers caught wind of this information and the downward spiral or ridicule began, again.

During the seventh-grade winter basketball unit, Nicole introduced the Sport Education Model. Students were placed on teams and each student had specific individual and team assignments. With care, Nicole placed Melissa on a team she deemed "safe", but was she ever wrong. Three of Melissa's team members refused her and warned Nicole that she would be receiving calls from their parents. Sure enough, Nicole had three phone calls from parents, all utterly upset that their child was on the same team as "that lesbian kid."

Nicole also received a call that evening from Melissa's parents, expressing concern for the treatment of their daughter. It was Nicole who was then asking for advice, turning to Joan for both legal and moral support. Nicole confided in both Joan and Sarah that her ultimate goal as a teacher was to help students see the bigger picture and to understand their role in society, as well as develop a lifelong love for activity. Nicole said she'd do her best; Joan and Sarah offered their support.

Life at Lakeside did get better for Melissa and students did begin to comply with the discipline policies in Nicole's class. This was only after Nicole summoned the courage to discuss with Mr. Thomas the sequence of events surrounding the start of the basketball unit. One side comment by Mr. Thomas, and almost under his breath, left Nicole stunned and shocked. Mr. Thomas mentioned that he'd hate to lose the McPhail's financial support. "Did you know that Melissa's parents are doctors and lawyers?"

The event of the year, and the turning point for Nicole, was the lambasting by the Lakeside school board and administration of an upcoming theater production. A musical, brought to Centralia by a number of businesses and private organizations in town, was heralded by many critics as a first-rate show, one surely not to miss.

Lakeside had prided itself as a diverse school with vested interests in the arts and humanities. Interestingly enough, the administration of Lakeside, and some parents, denounced the production as the majority of performers were openly gay and lesbian. Fearful of destroying family values, Lakeview vehemently discredited the production and obtusely vilified the entire case and crew.

Nicole had grown suspicious of the school, some of the faculty and even the board by this time, but this action prompted her decision to leave, leave Lakeside View and leave Centralia. Sara, Joan and Melissa, with whom Nicole had become close friends, were devastated by this homophobic outburst and were making immediate plans to leave. Melissa was home-schooled from that point forward. Without coaching responsibilities Nicole could work with Melissa a few days a week on skills and activities, and offer emotional support that wasn't coming from outside the family structure. Nicole couldn't quite think of the underlying message sent to Melissa and her family - money, social class and sexuality definitely are factors in how humans view other humans.

Emotionally drained from the replaying of events, Nicole sat back down at her computer to look, once again, at job announcements. If she couldn't teach maybe she could work with the Boys & Girls Club, Parks & Rec., or at a fitness center.

Somewhere, Anywhere, USA would be her destination, just as long as it was far from Centralia.

As she was scrolling down the job search screen the phone rang. It was Melissa. They were moving tomorrow and she had wanted to say goodbye, as did her parents. Hanging up the phone, Nicole burst into tears, exhausted from the emotional turmoil. She questioned her actions over the previous months - was there something she didn't do that might have altered the course?

Nicole caught sight of one of the posters and was reminded of her elementary kids. If it weren't for them she could quit tomorrow and not even care.

**Case #5 - Krista Adams**  
**Back to the drawing board!**

Krista sat on her couch frustrated, agitated and reflective. She was facing the biggest dilemma of her fledgling career that she couldn't have ever imagined and felt somewhat betrayed by her new administration. How was she to start the new year and a new career with a positive attitude?

It was Krista's first year of teaching and she had been anxiously awaiting the start of her career. Krista remembered dreaming of the moment she would be in charge of her own classes, have her own students, and be able to choose her own curriculum. Working experiences would surely be nothing compared to teaching full time, being fully responsible *and* getting a real paycheck for it all. At the moment, she was not looking forward to dealing with this current predicament.

Krista reflected back to the beginning. She reminisced about her times attending a small state school in the south for 5 years. She had initially come into the physical education department with little direction. Though she knew she loved sports and begin active, and was playing volleyball for State, Krista wasn't sure teaching was for her. She wasn't exactly sure where she fit. Krista's initial experience working in the public schools with elementary children propelled her into the world of teaching. She found her home and future career - she would become a physical education teachers, and in her mind, hopefully coach.

During her time as an undergraduate student Krista developed her own sense of what physical education should look like and be like. Her philosophy of physical education leaned toward the development of both motor skill performance and physical fitness of students. Thus, the purpose of physical education was to help

students develop a variety of motor skills as well as develop their fitness levels.

Krista thought that if students were competent in a variety of skills they would be more apt to participate more often. At least this seemed logical. Further, if students were more fit as kids wouldn't that increase their chances of a healthier adult life?

Thus, Krista had planned that her elementary classes would focus on the development of fundamental motor skills, movement concepts, fitness, and fitness/health related concepts and knowledge.

Her philosophy of jr. high and high school physical education was essentially the same. Her future jr. high and high school students would continue to improve and refine their motor skills as well as increase their knowledge of fitness / health related concepts. These students would also work to improve their personal fitness levels. With older students, Krista felt she could implement, to a degree, the Fitness for Life curriculum, whereby students develop both fitness and an understanding of fitness related concepts. To Krista, her philosophy was sound and reasonable and would shape her future physical education curriculum and program. But at the moment, her plans and philosophy of quality physical education were being challenged.

Krista's thoughts turned to her experiences with students and how those times shaped her life as a teacher. Krista did her early field experiences at each level and found each level to be unique and challenging. She could truly say she enjoyed working with students in all grades. Student teaching was completed at each level as well, with half of the semester (8 weeks) spent in the elementary school and half (8 weeks) with middle and high school students. While this experience gave her another look at all ages, there wasn't really enough time to delve into each age group.



Therefore, Krista wasn't sure which level she preferred but she did prefer employment. When it came time for job hunting, her K-12 teaching certificate allowed her more freedom as well as marketability. With her athletic training background, surely a school district would want her.

Thoughts flowed into her new job. In May Krista was hired to teach elementary and junior high school physical education in the Beaver Creek school system. She was one of the first of her cohort to get a job and was grateful for not having to fight the "job war" anymore. She would be one of two physical education teachers in Beaver Creek.

Krista was the sole elementary / jr. high teacher at Beaver Creek and the high school physical education teacher was Scott Ridenour. Scott taught one elective and two freshman physical education classes, two history classes and coached football and track & field. Scott seemed like a good guy and willing to help in any way he could. However, Krista knew how much time coaching would require of Scott's schedule and wasn't sure how much he would actually be around to help. Further, Scott had never taught at the elementary or jr. high level. Being one of two physical education teachers was a change from her student teaching experience when she worked with one other teacher at the elementary level and three teachers in the jr. high and high school setting. Such a small staff left her wondering if she would feel or actually be isolated.

Beaver Creek was a small town of 1,200 people. The elementary school had approximately 220 students and the jr. high had 45. There were about 130-140 students at the high school. Beaver Creek was famous for their Class 1A athletics

teams, both boys and girls. Though Krista knew she'd make a great physical education teacher at any level and that she was hired to teach, she also knew she was hired to coach. Her college volleyball experiences and youth soccer league from 7 to 18 made her marketable and desirable as a coach. At Beaver Creek Krista would be coaching the high school girls' volleyball and jr. high girls' soccer team.

July was used to move to Beaver Creek and begin the initial planning stages of her first year of teaching and coaching. Krista attended a volleyball coaching clinic at State for a week which helped with planning the volleyball season. She also participated in a weekend workshop on elementary physical education in a neighboring state. These two clinics were beneficial and the new ideas, activities and drills would definitely be implemented into Krista's program. Spending time with several coaches and physical education teachers, even during the summer months, was invigorating and Krista knew she'd be back again the following year for more.

Nonetheless, while it seemed that she had been prepared to teach any level, it was crunch-time and Krista was getting nervous. The hours spent pouring over elementary and secondary physical education textbooks, looking through notes and portfolios, reading *Strategies* and *JOPERD*, and talking with former professors helped Krista plan her yearly, unit and lesson plans. Introductory activities, fitness routines and fitness development, fitness and skill testing, skill development, games and lifetime activities, sports, cooperative activities, closures - it seemed endless. Oh, what about knowledge and cognitive development - that had to go in there too. What had seemed so easy now became ominous; what had seemed enjoyable now became laborious. Thought of self-doubt and 'am I really ready for this' filled Krista's mind

from time to time. But Krista was determined to fulfill her responsibility as a teacher and provide quality physical education experiences for her students. To do that would require lots of preparation and probably even more modification.

What made the job that much more difficult was that she would be working with kindergarten through 8<sup>th</sup> graders - 5 year olds through 13 year olds. There was a huge difference in age and ability and Krista had to accommodate each learner *plus* attend to her philosophy and beliefs of what makes for good physical education. The hard part, though Krista, would be making out several lesson plans each week. However, making the mental shift might be the most taxing part of her job as she would need to shift from the kindergarten class immediately into the 7<sup>th</sup> and 8<sup>th</sup> graders. Krista questioned whether this was more than she could handle? Another thought ran through Krista's mind - would she be teaching any students with disabilities? This would be an important question for the administration.

These memories led Krista to thoughts of this morning. Krista had the elementary and jr. high unit plans completed for the year and was in the faculty lounge making copies. Ms. Crandall, the principal, walked in and it was then, by happenstance, that Krista learned the fate of the coming year. The news sent her into immediate shock. What she had been planning for was vastly different than what was going to be happening for the upcoming year. Krista could feel herself getting mad all over again.

When Krista interviewed for the job in early May, all elementary students had physical education three days a week for 35 minutes. During the interview Krista was assured she would have the same time block with her students. So much for

assurance! For this coming year, Krista would see all elementary children, but would see them on a rotating schedule for 25 minutes. This meant that students would have physical education three days one week and two days the following week.

this wasn't the only shock for the new teacher. Ms. Crandall dropped the second bomb. This year's schedule for the jr. high students was changed as well. Students had been participating in physical education 5 days a week for 55 minute classes. This year Krista would work with the jr. high students only three days a week. Classes were still 55 minutes in length but given the dressing and showering time, she would have 40 minutes maximum to teach skills and hopefully improve fitness levels, not to mention improving fitness and skill knowledge.

Ms. Crandall's news was rather disturbing. Krista remembered questioning the reason for the change and feeling that Ms. Crandall seemed rather indifferent and short. Stated plainly, the cuts were due to budget difficulties and decreasing "academic" test scores. The school board felt the need to cut time in physical education, art and music to increase the time spent in reading, math and science.

Pointedly, Krista tried to convey her beliefs about the importance of quality and daily physical education. Ms. Cradnall listened patiently to this new teacher explain why fitness and health are important to an improved quality of life, and how active lifestyles should be instilled in the youngest of youth. Krista continued illustrating that working with young children only 5 days out of 10, and for only 25 minutes, may not be enough to instill any healthy lifestyle patterns. Furthermore, how could she teach children concepts to increase their knowledge and understanding about health, fitness and active lifestyles? Without knowledge development and

multiple opportunities to practice healthy behaviors, would children ever learn to value physical education or physical activity? Ms. Crandall left Krista with little hope and minimal reinforcement or support by saying, “Now Krista, we hired you knowing you’d be a great teacher, no matter the conditions. We’re all sure you’ll do fine.” And then Ms. Crandall added, “So, how do you think the volleyball season will go?”

Krista remembered feeling despondent as she walked back to her office. She really wanted to know why the administration didn’t tell her earlier of the change. Didn’t they realize that physical education was as important as any other subject area? Didn’t they realize how much time and effort was necessary to plan and deliver a quality physical education program? Didn’t they realize how much she cared? Obviously not!

Krista then looked at her unit plan that she had spent so much time developing. She then started marking out days and trying to consolidate activities. Frustration abounded. Krista had made her initial plans for the elementary children based on the 3 days a week for 35 minutes model. She then realized she should figure how many days and hours she now actually had with her kids. What had been 63 total contact hours over 108 days of class was now reduced to 37.5 hours over 90 days. Such a change really threw a wrench into her plans and goals for the physical education program. Naturally these hours were an overestimate and didn’t include assemblies, shortened class periods, miscommunication between teachers and the like, so she wondered just how much time she would actually have. Frustrated, she then turned to determining the hours and days she would see her jr. high students.

The actual “learning” time for her jr. high classes would be reduced from 120 contact hours to 72 hours; from 180 days to 108 days.

What was really frustrating and downright infuriating was that she was led to believe she would have adequate time to develop skills and fitness, and that physical education was important in the Beaver Creek school district. What was evident was the lack of commitment to physical education and lack of communication with faculty. Given Krista had already signed a contract to teach, and it was the beginning of August, she could not back out now. Her mind was racing and thoughts were spinning. Gaining perspective and clearing her head was necessary - she just couldn't concentrate so she left her office for some fresh air and a walk.

With a big sigh, Krista brought herself to the present and her living room. Wanting to scream but maintaining an irritable calmness about her, Krista's only thought was.....back to the drawing board!