

Byra, M., & Jenkins, J. (1998). The thoughts and behaviors of learners in the inclusion style of teaching. *Journal of Teaching in Physical Education, 18*, 26-42.

The Thoughts and Behaviors of Learners
in the Inclusion Style of Teaching

Abstract

The purpose of this study was to describe student decision making in the inclusion style of teaching. Two questions helped to guide the investigation: (a) Will learners select from alternative levels of difficulty within a given task?; and (b) What is the bases for learner decision making when selecting from alternative levels of difficulty? Forty-two fifth-graders in one school received instruction in striking with a bat for two 30-minute lessons. The learners performed three sets of 10 trials of a batting task each lesson and made decisions about level of task difficulty. Data sources were the lesson task sheets and transcribed postlesson interviews. The results indicated that fifth-graders (a) do select different levels of task difficulty when provided the opportunity, and (b) make task decisions based on perceived success and challenge.

The Thoughts and Behaviors of Learners in the Inclusion Style of Teaching

In the 1960s, Muska Mosston caught the attention of the physical education profession by introducing the Spectrum of Teaching Styles. Mosston's Spectrum of Teaching Styles is known by educators in many countries in many different subject matter areas. Many in the arenas of physical education and education have embraced the Spectrum of Teaching Styles as it was established in the 1970s and conceptually refined in the 1980s and 1990s (Franks, 1992; Goldberger, 1992; Greenspan, 1992; Mellor, 1992).

Validating selected theoretical assumptions associated with the Spectrum of Teaching Styles (Mosston & Ashworth, 1994) continues to be critical to the pursuit of knowledge about the Spectrum. Over the past decade a number of different questions have been asked and answered about various aspects of Mosston and Ashworth's teaching styles. Areas researched have included the effect different styles of teaching have on learner skill and knowledge performance (Beckett, 1990; Goldberger, Gerney, & Chamberlain, 1982; Jenkins, 1995); the effect different styles of teaching have on learners of different skill ability (Beckett, 1990; Ernst, 1995; Goldberger & Gerney, 1986); the effect different teaching styles have on learner social interaction patterns (Byra & Marks, 1993; Ernst & Byra, in press; Goldberger, Gerney, & Chamberlain, 1982); and the effect different teaching styles have on learner decision making (Byra & Marks, 1993; Jenkins & Byra, in press).

One teaching style that has been studied over the past decade is the inclusion style of teaching. The purpose of this style is to include all learners at their appropriate level of participation and skill (Mosston & Ashworth, 1994). The inclusion style of teaching allows for individual (skill) differences amongst the learners. It provides all learners an opportunity to enter an activity at an appropriate level, to step backward to a lower level in order to succeed in the activity, or step forward to a higher level to meet a new challenge. In addition, learners are permitted the opportunity to compare their aspirations to reality of performance in the inclusion style of teaching.

The decisions that the teacher and learners make in the inclusion style of teaching can be identified and organized into three sets: (a) pre-impact, those decisions made before the teaching-learning transaction which define the intent; (b) impact, those decisions made during the actual teaching-learning transaction which define the action; and (c) post-impact, those decisions concerning evaluation of the learning-teaching transaction (Mosston & Ashworth, 1994). In the inclusion style of teaching the teacher makes all of the pre-impact decisions. The learner makes the impact decisions related to posture, location, order of tasks, starting time per task, pace and rhythm, stopping time per task, interval, and attire and appearance, as well as those related to the determination of level of skill performance. Post impact decisions are shared between the teacher and learner. The learner assesses his/her skill performance using the criteria sheet (the guide), while the teacher responds to the learner's role in decision making (i.e., communicates with the learner about his/her accuracy of self-checking skill performance and his/her appropriate selection of level of task difficulty).

An important component of the inclusion style of teaching is the criteria sheet. A criteria sheet is the guideline for learner practice. The criteria sheet provides the learner with information about "what to do" and "how to do it," and the teacher with a record of learner progress (Mosston & Ashworth, 1994). Inclusion style criteria sheets provide the learner legitimate options for skill practice, options which are based on factors that make the practice of the given skill more or less difficult.

Student learning in the inclusion style of teaching has been systematically researched. Goldberger et al. (1982) found that students who received instruction within conditions imposed by the inclusion style of teaching improved motor skills at the same rate as those students who received instruction within conditions imposed by the practice and reciprocal styles of teaching. In addition, the learning of social skills related to giving feedback and receiving it from a peer were significantly enhanced in the reciprocal style of teaching. In a comparative study of the inclusion, practice, and reciprocal teaching styles, Goldberger and Gerney (1986) found that average aptitude children learned a hockey task best in the practice style, while exceptional children, those with above and below average aptitude, learned best in the inclusion style. Beckett (1990) found that students who received instruction in the inclusion style of teaching improved their soccer-juggling performance from pretest to posttest. In addition, he found that students who practiced within the inclusion style of teaching scored higher in a knowledge test than those who practiced under the conditions of the practice style of teaching.

Research indicates that learner skill performance does improve over time when instruction is provided to students in the inclusion style of teaching (Beckett, 1990; Goldberger et al., 1982; Goldberger & Gerney, 1986). However, little is known about the types of decisions learners make while receiving instruction in the inclusion style of teaching and why these decisions are made.

Over the past decade much attention has been paid to teaching thinking skills in schools. Administrators and teachers alike have been encouraged to produce curricula that emphasize the development of students' thinking skills in hope that they will be better equipped to make informed decisions in today's rapidly changing society (Brown &

Campione, 1990; Preseissen, 1987). In physical education, research indicates that psychomotor development is one of the primary outcomes of most physical education teachers' programs (e.g., Ennis, Ross, & Chen, 1992; Ennis & Zhu, 1991). Although teaching thinking skills may not be an obvious direction of instruction for physical educators, it is a direction in which physical educators could extend themselves, particularly in light of the evidence Lee (1997) provides about student thinking and subsequent learner engagement.

In her model of student thinking and behavior, Lee (1997) attempts to illustrate how research on learner's thoughts might mediate achievement. According to the model, learner characteristics, learner experience, and environmental variables help shape "students' thoughts about what physical education is or should be, what their roles as students should be, how they should approach the content offered, and what their chances of success might be" (p. 264). Lee suggests that a learner's initial skill and thoughts about a given task combine to influence his/her inclass behaviors, and that these behaviors, in turn, can be influenced by the teacher's actions in the class. The physical educator shapes the learning environment through the selection of activity, instructional and assessment strategies, and the level of student involvement in class decision making. Lee (1997) suggests that if students are required to perform tasks that have little perceived meaning and/or value, or are too challenging or not challenging enough, their level of engagement will be affected in a negative manner. Results from research conducted support Lee's contention. Research studies conducted by Carlson (1995), Hopple and Graham (1995), and Sanders and Graham (1995) support Lee's contention that task value affects the perceptions school aged learners have of physical education. Research also suggests that learners' perceptions of success can be affected by the teacher's selection of instructional strategies (Portman, 1995).

Within the inclusion style of teaching, learners choose level of difficulty within a task and assess their own skill performance (self-referenced evaluation). In choosing level of difficulty, learners are given the opportunity to compare their aspirations to reality of performance. In assessing their own skill performance, the learners compare and contrast skill execution against the model and then conclude with what is correct and incorrect. As reflected in the preceding statements, thinking and reflecting are critical to the role of the learner in the inclusion style of teaching.

A primary goal of the inclusion style of teaching is to provide students opportunity to engage in activity at an appropriate skill level (Mosston & Ashworth, 1994). Given this goal, students who are receiving instruction within the framework of the inclusion style of teaching are likely to perceive success more readily, find the task to be more meaningful and interesting, and, as a result learn to perform the task at a higher level.

The primary purpose of this study was to examine learner decision making in the inclusion style of teaching. Two questions helped to guide the investigation of this purpose: (a) Will learners select from alternative levels of difficulty within a given task?; and (b) What is the bases for their decision making when selecting from alternative levels of difficulty within a given task?

Method

Participants

A total of 42 fifth-graders from two classes in one elementary school (K-5) in a rural setting volunteered to participate in this study. Twenty-one of the learners were girls and 21 were boys, all 11 or 12 years of age. All learners were taught by the same teacher who had 22 years teaching experience in physical education. For the last 16 of those 22 years, the teacher taught at the elementary (K-5) level. This teacher was trained and assessed in the appropriate use of Mosston and Ashworth's Spectrum of Teaching Styles in a university graduate level Models of Teaching course. The teacher achieved a score of 93% on a written exam of the Spectrum of Teaching Styles and demonstrated each of the presented teaching styles (including the inclusion style) accurately (scored 80% or higher on style specific congruency checklists) with real learners. In addition, numerous episodes of each of Mosston and Ashworth's didactic teaching styles were presented to elementary-aged learners in her most recent years of teaching. Having one teacher provide all instruction in this study helped to control for unplanned variability in the teacher factor.

The students and their parents received an orientation prior to the beginning of this study. This orientation included a verbal statement of the purpose of the study and a brief verbal introduction to Mosston and Ashworth's (1994) styles of teaching. The parents were asked to sign a consent form for their child's participation in this research study at the orientation. Approval of this research study was granted by the University Institutional Review Board.

Procedures

For two consecutive lessons, each 30-minutes in length, the learners received instruction on striking with a bat in the inclusion style of teaching. During each of the two lessons the teacher introduced the purpose of the inclusion style of teaching, described the roles of the learner and teacher, demonstrated and explained the striking task and

prepared criteria sheet, and provided the learners with an opportunity to perform 30 trials of the batting task. While the learners were practicing the teacher observed them and provided individual feedback about their role behavior (i.e., choosing a level of difficulty and assessing self-performance). When skill performance errors were observed, the teacher referred the learners to their criteria sheet and checked subsequent performance. At the end of each lesson the teacher reviewed learner role and skill performance. The criteria sheet that was used included a description of the task and factors to be manipulated, critical skill cues for batting, examples of positive and corrective specific feedback statements, and space for recording the task entry decision and prediction as well as subsequent decisions and predictions (see Figure 1).

During each lesson the learners performed three sets of 10 trials of the batting task. Prior to completing each set of 10 trials the learners had to make decisions about two factors that would affect the degree of difficulty of the batting task. The first factor related to the conditions under which the ball was to be batted. The learners could choose from four alternative batting conditions: (a) hit a ball from a batting tee (least difficult), (b) hit a ball that was underhand-tossed from the side by a partner, (c) hit a ball that was underhand-tossed from in front by a partner, or (d) hit a ball that was self-tossed (most difficult). The second factor related to the size of ball to be batted. The learners could choose from three different sized balls: (a) large (least difficult), (b) medium, or (c) small (most difficult). The large ball measured nine inches across its diameter, the medium sized ball five inches, and the small ball three inches. Each learner recorded his/her decision making on the prepared task sheet (see Figure 1). All of the subjects used the same sized bat during the study. Both lessons were audio-videotaped.

Place Figure 1 About Here

Following both lessons the investigator interviewed each learner independently. Three questions were asked: (a) What choices did you make about the task and size of ball for the first set of 10 trials and why did you make these choices?; (b) What changes, if any, did you make for the second set of 10 trials and why?; and (c) What changes, if any, did you make for the third set of 10 trials and why? The post-lesson interviews were audiotaped and subsequently transcribed for analysis.

Having the learners engaged in two successive lessons that included episodes in the inclusion style of teaching was a planned decision (an episode is equivalent to the amount of time a teacher/learners spend in a given teaching style). When instruction was provided in her regular physical education classes, this teacher weaved many of Mosston and Ashworth's (1994) teaching styles into her units of instruction. For example, in a unit on kicking, a practice style episode was included in the second lesson of the unit followed by a practice style episode and an inclusion style episode in the third lesson of the unit. Rarely were more than two episodes in the same teaching style presented in succession in her regular physical education classes. In this study an attempt was made to mirror the realities of this teacher's world of instruction.

Data Sources and Analysis

Data from two sources were analyzed, learner criteria sheets and the transcribed postlesson interviews. From the learners' criteria sheets frequency counts were calculated for the decisions they made about level of difficulty for batting condition (factor 1) and ball size (factor 2) for the first, second, and third sets of task trials across both lessons. Percent scores were then computed for level of difficulty within each factor.

The transcribed postlesson interviews were analyzed using qualitative data reduction techniques (Patton, 1990). The learners' responses for each of the three postlesson questions were analyzed separately. First, two coders analyzed each learner's interview statements to identify common elements across the data. Second, the coders grouped the interview statements according to these common elements and reread the statements to arrive at a consensus for category descriptors. Third, the two coders independently categorized all of the statements according to the category system developed. Frequency counts were made and then percent scores were calculated for each category within each question.

Coder Reliability

The subjects' postlesson interview responses were analyzed by a trained coder. To assess coding bias and reliability, two trained coders recoded the responses from 20 subjects (randomly selected). Intraobserver percentage of agreement for both coders was 94% or higher, while interobserver percentage of agreement was 88%.

Teaching Style Verification

Style implementation during the study was verified through systematic observation. A modified version of the Inclusion Style-Analysis Checklist (Sherman, 1982) was employed to ascertain the level of fidelity between the teacher's instructional behaviors and the style specific behaviors. This checklist included logistical procedures and role descriptions for both teacher and learner. Two trained coders coded the two lessons to assess coding biases and

reliability. Intraobserver percentage of agreement for both coders was 100%, while interobserver percentage of agreement was 96% (the Inclusion Style-Analysis checklist is available from the authors).

Results

First, the results from the criteria sheets for the three sets of 10 trials performed in each of the two lessons are presented according to decisions made about level of performance chosen. Then the reasons why the learners selected their level of performance for each set of 10 trials is presented as reported in the postlesson interviews.

Criteria Sheets

Lesson 1.

From the onset of the first lesson the learners selected from all of the batting conditions and ball sizes. Batting from a tee, the least difficult batting condition of the four presented, was the most frequently selected batting condition with almost 60% of the learners choosing this level of task difficulty. The other three batting conditions, batting a ball tossed from the side, batting a ball tossed from in front, and batting a self-tossed ball, were selected rather evenly across the remaining subjects (see Table 1).

The two ball sizes selected most frequently were the five inch (medium) and three inch (small). Approximately 95% of the students selected from these two ball sizes in lesson one (see Table 1). Only two subjects chose the largest ball size (nine inch).

Place Table 1 About Here

For the second set of 10 trials, more than 50% of the learners chose a more difficult batting condition while maintaining the same ball size (medium or small). A smaller group of learners (36%) stayed with the same batting condition (as in the first set), while an even smaller group (10%) chose an easier batting condition (see Table 2). The learners who did not stay with the same size ball selected the larger sized one (25%) more frequently than the smaller sized one (15%).

For the third set of 10 trials, an even split was observed across the three possible decisions the students could make (see Table 2). Approximately one-third of the learners chose a more difficult task condition, one-third a less difficult task condition, and one-third the same task condition as in the second set of 10 trials. Less movement was observed for the factor of ball size. More than 50% of the learners chose to stay with the same sized ball while an equal number of the remaining learners chose between selecting a larger sized ball and a smaller sized ball.

Place Table 2 About Here

Lesson 2.

In lesson two the majority of the students (62.5%) chose to enter the task at one of the two least difficult performance levels. This decision-making tendency was similar to that which occurred in lesson one. Although the majority selected from the two less difficult batting levels, a sizable number of students did select from one of the two more difficult batting conditions, batting a tossed ball from in front or batting a self-tossed ball (37.5%). In terms of ball size, the learners selected the five inch (medium) and three inch (small) ball sizes most frequently, as was the case in the first lesson (see Table 1).

For their second set of 10 trials, over 40.0% of the learners chose to keep the same batting condition and over 75% the same ball size (see Table 2). This represented a slight increase over the scores reported for lesson one. While the majority of the students stayed with the same batting condition, some did opt for a less difficult (20.0%) or more difficult (37.5%) batting condition. The ball size selected for the entry set of 10 trials in lesson two continued to be the student's most popular choice for the second set of 10 trials. Fewer students changed ball size in lesson two (22.5%) compared to lesson one (40%).

For the third set of 10 trials, slightly more than 50% of the learners chose to retain the same batting condition and 75% the same ball size (see Table 2). Fewer students changed their level of task performance for the third set of 10 trials compared to the second set.

Postlesson Interviews

Lesson One.

Following each lesson the learners were asked about the choices they had made regarding task performance and why they had made these choices. The learners who selected the lower levels (i.e., batted a medium or large sized ball off a tee) at the beginning of lesson one reported that they did so because they wanted to enter the task at an easy level and work their way up to performing the task under more difficult conditions. Those who selected the higher levels (i.e., batted a tossed ball of medium or small size) stated that they did so because they had previous

experience playing baseball. A small group of the learners reported that they didn't know what they could do prior to entering the task and thus selected a batting condition and ball size arbitrarily (see Table 3).

Place Table 3 About Here

After completing the first 10 trials the majority of the learners who had made the task easy for themselves reported that they wanted to increase the level of task difficulty because the task conditions chosen were too easy. Others who had initially made the task easy reported that they wanted to improve their batting performance and could do this by increasing the level of task difficulty in future sets. A smaller group reported that they wanted to do something different with the second set of trials (see Table 4).

Half of the learners who chose to make the task difficult right from the start stated that they had made the task too difficult and wanted to make it easier for themselves in the second set of 10 trials. Others who chose from one of the easier batting conditions in the first set reported that they wanted to improve their batting skill and that they perceived improvement would be achieved by making the task more difficult (see Table 4).

Place Table 4 About Here

Those students who decided to make the task more difficult in the third set perceived success as being the major reason for increasing the level of task difficulty (see Table 5). They indicated that their decision was based on the success that they had experienced during the previous set of trials. Others who decided to make the task more difficult in the third set stated that they needed practice hitting a tossed ball. A smaller group of learners reported changing level of task difficulty upward because they wanted to do something different, as was the case for the second set of 10 trials.

Just under 20% of the learners reported that they stayed with the same batting condition and ball size for set three because the batting task as designed for the second set of trials "felt good." One student expressed, "if you are doing well with something, there is no sense in changing." Another said, "because I thought I could do the same thing better I tried it again." Those students who chose to make the task easier in the third set did so for the purpose of success (see Table 5).

Place Table 5 About Here

Lesson Two.

In the second lesson approximately half of the learners reported that they wanted to begin with an easier batting condition to be assured of success (see Table 3). Several learners stated that they were choosing easier conditions for the first set of trials in lesson two to increase their score (over lesson one). Others stated that their choice was based on experiences in lesson one. They indicated that they liked what they had done in the previous lesson and thus continued with the levels of difficulty chosen.

The learners who chose to immediately make the task more difficult in lesson two felt that they had performed it under conditions that were too easy in lesson one. A few students reported that they chose a more difficult level of performance because they "simply wanted to do something different." One of the learners responded, "I wanted to see, like, what the self-tossed ball was like, to see if I was capable of doing it;" another said, "cause it's kind of fun, it's more of regular baseball, not just the tee ball."

Those learners who reported making the task "easy" for themselves in the first set of 10 trials indicated that they needed to increase level of task difficulty because the task conditions chosen had made the task too easy (see Table 4). Others who increased level of task difficulty stated that they felt a need to do something different. This meant choosing a batting condition that they had yet to experience, one that was more difficult. For the first time, some learners reported that they didn't know why they had chosen a more difficult batting condition.

About a third of the learners indicated that they kept the batting condition the same to improve their score. Several of the learners who chose to make the task difficult right from the start stated that they needed to make the task easier for themselves in the second set.

Those learners who selected a smaller ball size or a more difficult batting condition in the third set reported that they needed to make the task harder for themselves (see Table 5). Learners who chose to go in the opposite direction, that is, chose a less difficult batting condition and/or ball size, did so because they lacked success in the second set or wanted to try a new task condition. The students who kept the same batting condition and ball size in the third set reported following this action because they had felt successful in the second set of 10 trials.

Discussion

In the inclusion style of teaching learners must make decisions about level of task difficulty. They must first decide at which level to enter the presented task and then, for additional sets of trials, decide whether to perform the task under the same conditions, make it more difficult, or make it less difficult. One of the questions posed at the beginning of the study was, "will learners select from alternative levels of difficulty within a given task when provided instruction within the inclusion style of teaching?" The results from the entry (first) set of 10 trials in lessons one and two indicate that given the opportunity learners (fifth-graders) will select from different levels of difficulty when entering task performance at the beginning of a lesson. These data support Mosston and Ashworth's (1994) contention that well planned episodes in the inclusion style of teaching can accommodate individual skill differences among students. Learners in this study were provided an opportunity to enter the activity at their ability level.

The results from the second and third sets of trials for lessons one and two showed that some learners chose to continue practicing at the same level of task difficulty (as in the first set) while others selected to make the task less difficult or more difficult. This finding supports Mosston and Ashworth's (1994) assertion that learners will choose to step backward (make the task easier) to succeed in an activity or, conversely, step forward (make the task more difficult) to be challenged in an activity when delivered within the framework of the inclusion style of teaching.

A trend that was apparent in learner decision-making across the two lessons was that more students performed the task under the same conditions (same as in the previous set of trials) than under different conditions from one set of trials to the next. This finding suggests that over time these fifth-graders used the different levels of task difficulty to help identify an appropriate match between their aspirations and the reality of their ability. Mosston and Ashworth (1994) identify this relationship as one of the objectives of the inclusion style of teaching.

Although slightly more than half of the learners chose to retain the same task conditions across the second and third sets of task trials, changes from one level of task difficulty to another were not precluded over time. Approximately 45% of the learners selected a different batting condition and 25% a different ball size for the last set of trials in the second lesson. This suggests that even after completing five sets of 10 trials the learners were still attempting to challenge themselves by increasing or decreasing level of task difficulty.

Knowing that children will enter a task and proceed with the task at a self-selected level of difficulty is important information for physical educators given that learner ability varies in most classes. Within an intact class of 30 students 10 will likely be highly skilled at performing the given task, 10 moderately skilled, and 10 poorly skilled. If a teacher wants to meet the needs of all of his/her learners, then a teaching strategy such as the inclusion style of teaching must be employed.

The second guiding question posed at the beginning of the study was, "what is the basis for learner decision making in the inclusion style of teaching?" In general, the students seemed to have acted in a logical manner, that is, acted in accordance with how they felt about their own skill ability when selecting level of task performance for the entry set of trials in lessons one and two. Those who were familiar with batting selected from the more difficult task conditions, while those who were unfamiliar with batting selected from the less difficult task conditions. "I wanted the small ball tossed from in front because it was harder, cause it (ball) was little, like a regular baseball" was one experienced student's response to why he had made his selection. "I chose to hit the bigger ball (medium sized) off the batting tee because I thought it would be somewhat easier" was one inexperienced student's response. The message reflected in these sample responses were representative of the other experienced and inexperienced students' remarks.

The reasons for making changes from one set of trials to the next also seems to be grounded in sound thinking. Learners who chose to make the task more difficult indicated that their first selections were too easy. One learner who made the task more difficult by selecting a smaller ball size stated, "I chose the smallest ball because I knew I could get 10 out of 10 with the medium ball." Another student said, "I changed the ball size to medium to work harder cause I wanted to get more better at baseball!" Learners who simplified the task indicated that they initially had made the task too difficult for themselves. One learner who selected a less difficult batting condition for the last set of 10 trials said, "I changed to a tee because I got frustrated, cause I only got seven (out of ten)."

Being successful and being challenged were themes that emerged from the learners' interview responses. Learners who were unsure about their ability to bat a ball chose to make the task easy for themselves at the beginning of each lesson because they wanted to experience success. Those who knew they could bat a ball chose to make the task more difficult for themselves and in doing so challenged their perceived ability level. As the learners proceeded to complete their second and third sets of trials in each lesson, "success" and "challenge" continued to be reflected in their reasoning for making the task condition selections they did.

The following are examples of student responses that help to highlight the emergent themes of success and challenge: "I stayed with the same (task conditions) because I liked this way---I could hit!; cause I got 9 out of 10

and I thought that maybe I should try again to see if I could get 10 out of 10;" "I chose the same batting (off of a tee), but then I chose the smallest ball because I knew that I could get 10 out of 10 with the medium ball." "I changed to the second level (batting a ball tossed from the side) because I thought I could do better. Then (in the third set) I did it just like in the second set because I thought I could do even better."

Another emergent theme primarily associated with the students' second and third sets of skill trials was "I wanted to do something different." Whether trying to make the batting task more or less difficult, the students indicated that choosing a new task not only involved challenge or success, but also one's desire to try something new. In making the task more difficult, one student said, "I changed to number, um, four, so that I could hit a ball that was tossed." Another said, "I decided to go into number four which I didn't do last time." Two students who made their task easier responded with, "I used the big ball because it was kind of fun to see what I could do [with it];" "well, I was curious to see what the other ones [balls] felt like when I was using them." The answers provided by students who "wanted to try something different" suggest that decision making in the inclusion style of teaching is not as simple as one may think. These fifth-graders did want to succeed and be challenged in class, however, they also wanted to try new things.

Educational Significance

In the inclusion teaching style teachers can structure their classes to empower learners to think and perform in ways that will promote skill learning. This is important as research indicates that students who practice effectively (i.e., complete a greater number of practice trials at an appropriate level) reflect greater gains in skill performance (Hebert & Solmon, 1996; Solmon & Lee, 1996). If students are provided opportunity to think and behave in certain ways, as is the case in the inclusion style of teaching, it is likely that student learning will be impacted in a positive manner (Solmon & Lee, 1996).

In reflecting on Lee's (1997) mediation model of student thinking and behavior, the inclusion style of teaching has much to offer learners. In the inclusion style of teaching, learners choose the level of difficulty within a given task and assess their own skill performance. The fifth grade learners in this study felt challenged and successful within the framework of a teaching style that allowed for choice in task, the development of task-oriented goals, and the employment of self-referenced assessment strategies. Lee (1997) suggests that a learning environment of this type, one that influences student interest, enjoyment, and personal meaning, likely has a positive impact on learner task engagement which, in turn, mediates achievement.

The findings of this study are interesting when compared to those associated with a study where all learners performed tasks to a single standard, a standard decided upon by the teacher (Portman, 1995). One of the themes that emerged from Portman's research of low-skilled students in physical education was "I like PE when I am successful." The learners in Portman's study reported few successes in physical education; most could recall only one instance of success during the entire school year. The activities or tasks that students were asked to perform in Portman's study were designed with one standard decided on by the teacher. Given this situation, the learner's task would then have been to perform at that level. Mosston and Ashworth (1994) indicate that single standard tasks induce the process of exclusion; the responses from the learners in Portman's study seems to confirm this contention. It would be interesting to study the stories of high, moderate and low-skilled learners who received instruction within the framework of the inclusion style of teaching where task design provides for multiple levels of performance.

Two variables critical to learning are time spent in good practice and matching tasks to learner ability (Gusthart, Kelly, & Rink, 1997; Rink, 1996). The data from the present study indicate that learners can make appropriate decisions about level of skill difficulty and, in turn, affect the amount of time spent in good practice. It seems that these variables can be facilitated in well designed inclusion style of teaching episodes. Students can experience success in physical education.

Summary and Conclusions

Within the design limitations of this study---a moderate number of fifth-graders receiving instruction over two 30-minute lessons---the findings provide some answers to the questions posed. Firstly, learners will select from alternative levels of difficulty within a given task when provided instruction within the inclusion style of teaching. Secondly, learners' decision making regarding task performance revolves around the themes of success, challenge, and curiosity.

Given the limited data base, there is a need for continued research to further examine student decision making in the inclusion style of teaching. One area of particular importance is how student decision making is linked to student performance. The results from this study suggest that students can make decisions and that these decisions are based, at least for some, on their perception of success---but are these accurate perceptions, ones that led to more

success? Other questions that need to be addressed in future research include: (a) Will primary aged and/or secondary aged learners select from alternative levels of difficulty within a given task as did these fifth-graders?; (b) Will primary aged and/or secondary aged learners make skill performance selections for the same reasons as identified by these fifth-graders?; (c) What is the effect of the inclusion style of teaching on primary aged and/or secondary aged learners' skill performance?; (d) Will learners experience more success in an instructional setting that allows for multiple levels of performance in the same task or a setting in which every task represents a single standard?; and (e) Would the stories of high, moderate, and low-skilled learners who receive instruction within the framework of the inclusion style of teaching differ?"

References

- Beckett, K. (1990). The effects of two teaching styles on college students' achievement of selected physical education outcomes. Journal of Teaching in Physical Education, 10, 153-169.
- Brown, A.L., & Campione, J.C. (1990). Communities of learning and thinking, or a context by any other name. In D. Kuen (Ed.), Developmental perspectives on teaching and learning thinking skills (pp. 108-126). Basel: Karger.
- Byra, M., & Marks, M. (1993). The effect of two pairing techniques on specific feedback and comfort levels of learners in the reciprocal style of teaching. Journal of Teaching in Physical Education, 12, 286-300.
- Carlson, T.B. (1995). We hate gym: Student alienation from physical education. Journal of Teaching in Physical Education, 14, 467-477.
- Ennis, C.D., Ross, J., & Chen, A. (1992). The role of value orientations in curricular decision making: A rationale for teachers' goals and expectations. Research Quarterly for Exercise and Sport, 63, 38-47.
- Ennis, C.D., & Zhu, W. (1991). Value orientations: A description of teacher's goals for student learning. Research Quarterly for Exercise and Sport, 62, 33-40.
- Ernst, M. (1995). The effect of peer teaching on middle school learners' skill performance, cognitive performance, and comfort level. Unpublished master's thesis, University of Wyoming.
- Ernst, M., & Byra, M. (in press). Pairing learners in the reciprocal style of teaching: Influence on student skill, knowledge, and socialization. The Physical Educator.
- Franks, B. (1992). The spectrum of teaching styles: A silver anniversary in physical education. Journal of Physical Education, Recreation, and Dance, 63(1), 26.
- Fronsk, H.A. (1997). Teaching cues for sport skills. Boston, MA: Allyn and Bacon.
- Goldberger, M. (1992). The spectrum of teaching styles: A perspective for research on teaching physical education. Journal of Physical Education, Recreation, and Dance, 63(1), 42-46.
- Goldberger, M., & Gerney, P. (1986). The effects of direct teaching styles on motor skill acquisition of fifth grade children. Research Quarterly for Exercise and Sport, 57, 215-219.
- Goldberger, M., Gerney, P., & Chamberlain, J. (1982). The effects of three styles of teaching on the psychomotor performance of fifth grade children. Research Quarterly for Exercise and Sport, 53, 116-124.
- Greenspan, M.R. (1992). The spectrum introduced: A first-year teacher's project. Journal of Physical Education, Recreation, and Dance, 63(1), 40-41.
- Gusthart, J.L., Kelly, I.M., & Rink, J.E. (1997). The validity of the qualitative measures of teaching performance scale as a measure of teacher effectiveness. Journal of Teaching in Physical Education, 16, 196-210.
- Hebert, E.P., & Solmon, M.A. (1996, April). The impact of content development strategies on student cognition, behavior, and achievement in physical education. Paper presented at the meeting of the American Educational Research Association, New York, NY.
- Hopple, C., & Graham, G. (1995). What children think, feel, and know about physical fitness testing. Journal of Teaching in Physical Education, 14, 408-417.
- Jenkins, J.M. (1995). Examination of Mosston and Ashworth's Practice, Self-check, and Inclusion Styles of Teaching on Elementary Age Learners. Unpublished master's thesis, University of Wyoming.
- Jenkins, J., & Byra, M. (in press). An exploration of theoretical constructs associated with the Spectrum of Teaching Styles. In F. Carreiro da Costa (Ed.), Research on teaching and research on teacher education: What do we know about the past and what kind of future do we expect? Lisbon, Portugal: AIESEP.
- Lee, A.M. (1997). Contributions of research on student thinking in physical education. Journal of Teaching in Physical Education, 16, 262-277.
- Mellor, W. (1992). The spectrum in Canada and Great Britain. Journal of Physical Education, Recreation, and Dance, 63(1), 47.
- Mosston, M., & Ashworth, S. (1994). Teaching physical education (4th ed.). New York, NY: Macmillan.
- Patton, M.Q. (1990). Qualitative evaluation and research methods. Newbury Park, CA: Sage.
- Portman, P.A. (1995). Who is having fun in physical education classes? Experiences of sixth-grade students in elementary and middle schools. Journal of Teaching in Physical Education, 14, 445-453.
- Preseissen, B.Z. (1987). Thinking skills throughout the curriculum: A conceptual design. Bloomington, IN: Pi Lambda Theta.
- Rink, J.E. (1996). Effective instruction in physical education. In S.J. Silverman & C.D. Ennis (Eds.), Student learning in physical education (pp. 171-198). Champaign, IL: Human Kinetics.
- Sanders, S., & Graham, G. (1995). Kindergarten children's initial experiences in physical education. The relentless persistence for play clashes with the zone of acceptable responses. Journal of Teaching in Physical Education, 14, 372-383.

Sherman, M. (1982). Style analysis checklists for Mosston and Ashworth's spectrum of teaching styles. Unpublished manuscript, University of Pittsburgh.

Solmon, M.A., & Lee, A.M. (1996). Entry characteristics, practice variables, and cognition: Student mediation of instruction. Journal of Teaching in Physical Education, 15, 136-150.

Figure Caption
Figure 1. Striking criteria sheet for fifth-graders.

Striking Criteria Sheet

Name _____ Date _____ Class _____

TASK

<u>Level</u>	<u>Task Description</u>	<u>Level of Difficulty</u>
1	Batting a ball from a tee.	Least Difficult
2	Batting a ball tossed from the side.	
3	Batting a ball from an underhand toss.	Most Difficult
4	Batting a ball self tossed (fungo style).	

BALL SIZE

<u>Level</u>	<u>Ball Size</u>	<u>Level of Difficulty</u>
1	Large	Least Difficult
2	Medium	Most Difficult
3	Small	

DIRECTIONS TO THE STUDENT

1. Select a task and ball size for your first set of 10 trials.
2. Write the level of the task and ball size chosen in the appropriate box below.
3. Write the number of successful hits you think you will make out of 10 trials (prediction).
4. Now do the 10 trials and record the number of successful attempts out of 10 (actual).
5. After completing the first set of 10 trials, decide which task and what size ball you wish to use to complete a second set of 10 trials. Follow DIRECTIONS 2, 3, and 4.
6. After completing the second set of 10 trials, decide which task and what size ball you wish to use to complete a third set of 10 trials. Follow DIRECTIONS 2, 3, and 4.

Set	Task Level	Ball Size	Prediction	Actual
1			/10	/10
2			/10	/10
3			/10	/10

PERFORMANCE CRITERIA

1. Hands touching with dominant hand on top?
2. Bat swing is in a horizontal plane?
3. Are you taking a forward step?
4. Are you rotating your hips, trunk, and shoulders?
5. Do your wrists uncock with contact?

Table 1
Learner Decision-making for Task Entry Point in Lessons One and Two

Factor	Level of Performance	Lesson One Frequency (%)	Lesson Two Frequency (%)
Batting Conditions	Tee	23 (59.0)	23 (57.5)
	Side Toss	4 (10.2)	2 (5.0)
	Front Toss	6 (15.4)	8 (20.0)
	Self Toss	6 (15.4)	7 (17.5)
Size of Ball	9 Inch	2 (5.2)	2 (5.0)
	5 Inch	27 (69.2)	23 (57.5)
	3 Inch	10 (25.6)	15 (37.5)

Table 2
Frequency (%) Scores for Learner Decision-making in the Second and Third Sets of Trials in Lessons One and Two

Factors	Level of Performance	Lesson One		Lesson Two	
		2nd Set	3rd Set	2nd set	3rd Set
Batting Conditions	Less Difficult	4 (10.3)	14 (35.9)	8 (20.0)	7 (17.5)
	Same	14 (35.9)	13 (33.3)	17 (42.5)	21 (52.5)
	More Difficult	21 (53.8)	12 (30.8)	15 (37.5)	12 (30.0)
Size of Ball	Larger	10 (25.6)	8 (20.5)	5 (12.5)	5 (12.5)
	Same	23 (59.0)	22 (56.4)	31 (77.5)	30 (75.0)
	Smaller	6 (15.4)	9 (23.1)	4 (10.0)	5 (12.5)

Table 3
Reasons for Decisions Made for Task Entry Point in Lessons One and Two

Response Categories	Frequency (%)
Lesson One	
• Was inexperienced; wanted to make the task easier.	24 (61.5)
• Was inexperienced; didn't know what I could do.	3 (7.7)
• Was experienced with baseball.	12 (30.8)
Lesson Two	
• Wanted to make the task easy to be successful.	22 (55.0)
• Liked doing the task this way (during lesson one).	11 (27.5)
• Make more difficult compared to lesson one.	5 (12.5)
• Wanted to do something different.	2 (5.0)

Table 4
Reasons for Decisions Made in the Second Set of 10 Trials in Lessons One and Two

Response Categories	Frequency (%)
Lesson One	
Made Task More Difficult	
• First set of trials was too easy.	19 (48.7)
• Performed well in first set of trials.	8 (20.5)
• Wanted to do something different.	5 (12.8)
Made Task Less Difficult	
• Made task too difficult in first set of trials.	6 (15.4)
• Didn't want to get a bad score.	1 (2.6)
Lesson Two	
Made Task More Difficult	
• Make task harder compared to the first set of trials.	9 (22.5)
• Wanted to do something different.	8 (20.0)
• Don't know.	6 (15.0)
Made Task Less Difficult	
• Task too difficult in the first set of trials.	4 (10.0)
Kept Task the Same	
• Wanted to stay the same to improve score.	13 (32.5)

Table 5
Reasons for Decisions Made in the Third Set of 10 Trials in Lessons One and Two

Response Categories	Frequency (%)
Lesson One	
Made Task More Difficult	
• Was successful with the task in the second set of trials.	16 (41.0)
• Wanted to do something different.	7 (18.0)
• Needed practice hitting a tossed ball.	3 (7.7)
Made Task Less Difficult	
• Wasn't as successful as I thought I would be.	6 (15.3)
Kept Task the Same	
• Felt good so I stayed with it.	7 (18.0)
Lesson Two	
Made Task More Difficult	
• Make task harder yet.	9 (22.5)
• Wanted to do something different.	8 (20.5)
• Don't know.	6 (15.4)
Made Task Less Difficult	
• Wasn't as successful as I thought I would be.	6 (15.0)
• Wanted to do something different.	12 (30.0)
• Don't know.	2 (5.0)
Kept Task the Same	
• Was successful in the second set of trials.	11 (27.5)

Inclusion Style-Analysis Checklist

Phase One: Role Identification

- | | | | |
|---|---|----|---|
| T | L | 1. | Locates learners for introductory ceremony. |
| T | L | 2. | Names the teaching style. |
| T | L | 3. | States the purpose of the teaching style. |
| T | L | 4. | Describes the roles of the learner and teacher |
| T | L | 5. | Explains the importance of privately selecting an entry level for task performance. |

Phase Two: Subject Matter Identification

- | | | | |
|---|---|-----|--|
| T | L | 6. | Announces the general subject matter (objectives). |
| T | L | 7. | Announces the specific task. |
| T | L | 8. | Delivers task to learners (show and tell). |
| T | L | 9. | Describes the factor determining the degree of difficulty and various levels specified in the program. |
| T | L | 10. | Establishes quality and quantity of task performance. |
| T | L | 11. | Establishes parameters and logistics for the nine impact decisions. |
| T | L | 12. | Establishes order of task performance. |
| T | L | 13. | Delivers the criteria (explains what a criteria is and how to use it). |
| T | L | 14. | Provides and explains task sheet. |
| T | L | 15. | Asks questions for task and role clarification. |
| T | L | 16. | Announces "You may begin when you are ready." |

Phase Three: Performance of the Task

- | | | | |
|---|---|-----|---|
| T | L | 17. | Acquires equipment and materials. |
| T | L | 18. | Conducts self-assessment and selects an entry level. |
| T | L | 19. | Makes impact decisions within established parameters. |
| T | L | 20. | Performs the task. |

Phase Four: Evaluation and Feedback

- | | | | |
|---|---|-----|---|
| T | L | 21. | Has the task sheet. |
| T | L | 22. | Monitors the task performance. |
| T | L | 23. | Compares and contrasts learner task performance against criteria. |
| T | L | 24. | Draws conclusions about accuracy of task performance. |
| T | L | 25. | Offers task-related feedback. |
| T | L | 26. | Responds to communication initiated by the learner. |
| T | L | 27. | Reminds learners about details of task and roles, if necessary. |
| T | L | 28. | Monitors role performance. |
| T | L | 29. | Offers-role related feedback to the learner. |
| T | L | 30. | Makes episode adjustments when deemed necessary. |

Phase Five: Closure

- | | | | |
|---|---|-----|--|
| T | L | 31. | Locates learners for closure. |
| T | L | 32. | Summarizes main points of episode. |
| T | L | 33. | Provides role-related feedback to learners based on objectives of the inclusion style of teaching. |