Title: Teaching the Spectrum to Physical Education Teacher Preparation Majors at University of Wyoming

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Introduction
In studying alternative styles of teaching, Joyce, Weil, and Showers (1992) indicate that the successful implementation of a new teaching strategy is dependent on a procedure that includes four elements:

1. The study of the theoretical basis or the rationale of the teaching method;
2. The observation of demonstrations by persons who are relatively expert in the model;
3. Practice in relatively protected conditions (such as trying out the strategy on each other and then on children who are relatively easy to teach); and
4. Observing one another as they work the new model into their repertoires, providing companionship, helping one another to learn to teach the appropriate responses to their students and to figure out the optimal uses of the model in their courses, and providing one another with ideas. (p. 385)

Once the teacher develops skill in the teaching strategy Joyce, Weil, and Showers (1992) believe that the teacher must acquire “executive control” (p. 386) over the strategy, that is, the ability to employ the strategy in a variety of instructional contexts. Achievement of executive control requires the practice of the teaching strategy in an environment similar to that in which it was originally learned, followed by practice in an environment in which the strategy must be adapted to the students and classroom setting.

Faculty at the University of Wyoming have attempted to incorporate the procedures Joyce, Weil, and Showers (1992) propose for mastering a new teaching strategy when presenting Mosston and Ashworth’s (1994) Spectrum of Teaching Styles to undergraduate majors in Physical Education Teacher Education (PETE). Our students learn Mosston and Ashworth’s teaching styles by means of (a) participating in lessons in which the teaching styles are incorporated; (b) understanding the theoretical framework of the Spectrum and each individual teaching style; (c) observing modeled episodes on videotape and in a school setting; (d) practicing in relatively protected conditions (teaching peers; teaching one student; and teaching small groups of students) in the presence of a coach; and (e) instructing intact classes with no coaching, only self-reflection. Spectrum instruction spans three years for these PETE students. In the remainder of this paper I will attempt to describe the step-by-step process used to teach our PETE majors Mosston and Ashworth’s Spectrum of Teaching Styles.

STEP I: ACTIVE PARTICIPATION: FIRST EXPOSURE TO THE SPECTRUM

a. Course: PEFR 1025, Movement Core II: Striking and Volleying
b. Taken: During the first or second year in the program
c. Semester: Spring
d. Clientele: Freshman or sophomore level students
e. Purpose: To experience the role of the learner within the context of Mosston and Ashworth’s teaching styles.

Movement Core II is a two credit hour course in which students meet four times a week, 50-minutes per session. It is one of five movement core classes taught within the program. This course is based on the Skill Theme and Movement Concept Approach as presented by Graham, Holt/Hale, and Parker.

Spectrum Workshop, AAHPERD Convention, Boston, April 20, 1999
(1998). Striking and volleying, as they pertain to the pre-control, control, utilization, and proficiency levels, are the skill themes of focus in Movement Core II.

The students actively participate in styles A through I in this course. One or two different styles of teaching (episodes) are presented in over half of the lessons delivered; a course goal is to expose the students to each teaching style at least five times during the length of the course. The lessons are delivered by instructors who are trained in Mosston and Ashworth’s teaching styles. Lesson episodes are frequently checked to ascertain the level of fidelity between the instructors’ behaviors and the style specific behaviors. In this course students learn about the styles through active participation. In doing so, they experience each style from the perspective of a learner.

**STEP II: THEORY AND PRACTICE I: ONE-ON-ONE TEACHING**

a. Course: PEPR 3012, Teaching Lab I

b. Taken: During the third year in the program

c. Semester: Fall

d. Clientele: Junior level students

e. Purpose: To observe, understand, and practice (in a protected environment) several of Mosston and Ashworth’s teaching styles.

Teaching Lab I is designed to provide pre-service teachers with an opportunity to acquire the knowledge and develop the skills needed to teach physical education to young children. This course combines theory and practice. The teaching styles studied in this course are Practice, Guided Discovery, Convergent Discovery, and Divergent Production.

During the first seven weeks of this course the PETE majors learn the four aforementioned styles of teaching through lecture, discussion, demonstration, and peer practice. For the last eight weeks of the course the PETE majors teach one four or five year old child twice a week, 90 minutes per session. In the one-on-one setting the learner receives instruction in the areas of physical fitness, aquatics, and skill themes and movement concepts.

Our students plan and deliver instruction using at least two of the four teaching styles identified each session. In most cases multiple episodes in the Divergent Production style are included each lesson. The thrust in Teaching Lab I is two-fold: (a) to learn the what, why, and how of the Practice, Guided Discovery, Convergent Discovery, and Divergent Production styles of teaching, and (b) to practice each of these styles as frequently as possible within a highly controlled teaching environment.

**STEP III: THEORY AND PRACTICE II: SMALL GROUP TEACHING**

a. Courses:  • PEPR 3011, Methods of Teaching Physical Education  
                   • PEPR 3015, Teaching Lab II

b. Taken: During the third year in the program

c. Semester: Spring

d. Clientele: Junior level students

e. Purpose: To receive theory and practice (peer and small group instruction) in teaching styles A through I.

Spectrum teaching styles are presented in whole in the Physical Education Methods course. The primary textbook used is *Teaching Physical Education* (Mosston & Ashworth, 1994). In addition, four chapters (chapters 2, 9, 16, and 17) from *The Spectrum of Teaching Styles* (Mosston & Ashworth, 1990) are used to supplement the materials presented in *Teaching Physical Education*.

The underlying premises and assumptions of the Spectrum are presented to the students in addition to each teaching style via lecture, discussion, observation, and demonstration. Opportunity to practice each style is also presented in the Methods course. The students are provided a chance to try out the styles on each other. Peer teaching allows pre-service teachers to focus on the task at hand, to learn the nuances of each new teaching style. Once the students have achieved a minimal level of competence and comfort with a given style, they graduate to the real world.

In Teaching Lab II students are provided the opportunity to incorporate models of teaching in their day-to-day instruction with elementary and secondary aged learners. The PETE students are enrolled in Teaching Lab II and the Methods course concurrently, spending six hours per week in Teaching Lab II.
and three hours per week in Methods. In Teaching Lab II the students are assigned to teach different units of instruction (e.g., striking with racquets, throwing and catching, juggling, etc.) to small groups (10 to 15) of elementary and secondary level learners. The students continue to teach in relatively protected conditions in Teaching Lab II while being coached by university supervisors. In doing so, they become more comfortable in delivering the different teaching styles, and in turn their willingness to take chances in the instructional setting increases.

**STEP IV: THEORY AND PRACTICE III: TEACHING INTACT CLASSES**

a. Courses:  
   - PEPR 4012, Curriculum Development in Physical Education  
   - PEPR 4017, Teaching Lab III

b. Taken:  
   During the fourth year in the program

c. Semester:  
   Fall

d. Clientele:  
   Senior level students

e. Purpose:  
   To implement teaching styles A through I in the public school (K-12) setting with the help of peer coaches and self-reflection.

In Teaching Lab III the pre-service teachers teach in the public schools from 8:00 AM to 10:00 AM, daily. Two pre-service teachers are assigned to each cooperating teacher. At each site the two pre-service teachers are responsible for teaching one lesson (each) per day under the supervision of a cooperating teacher and university supervisor. While one pre-service teacher teaches, the other observes and systematically collects information for the one teaching (peer coaching). Frequently, the information collected, and subsequently discussed, is specific to the implementation of one of Mosston and Ashworth's teaching styles. In Teaching Lab III the pre-service teachers are assigned to an elementary setting for five weeks and a secondary setting for five weeks.

While completing Teaching Lab III the PETE students are enrolled in the course titled Curriculum Development in Physical Education. In the curriculum class the students are required to reflect on the teaching they do in Teaching Lab III, specifically as it relates to the Spectrum. They also learn how the productive and reproductive teaching styles relate to the different curriculum models (e.g., productive styles with models that focus on motor skill development).

**STEP V: STUDENT TEACHING: IMPLEMENTING THE STYLES WITHOUT A COACH**

a. Courses:  
   - PEPR 4099, Student Teaching in Physical Education

b. Taken:  
   During the fourth year in the program

c. Semester:  
   Spring

d. Clientele:  
   Senior level students

e. Purpose:  
   To further develop their repertoire of teaching styles A through I through practice and self-assessment.

The student teaching experience consists of a 16-week period of time in which student are provided an opportunity to apply the theories and concepts learned during undergraduate preparation. This experience is evenly split between the elementary level (K-6) and secondary level (7-12).

We expect that the student teachers continue to incorporate a variety of teaching styles in their teaching while completing the student teaching experience. However, this expectation is embedded in the reality that the student teacher is mentored by a cooperating teacher who in most cases knows little about Mosston and Ashworth's teaching styles. It is difficult to coach someone when one lacks knowledge in the area. This situation is being addressed through the delivery of a graduate level course specific to Mosston and Ashworth's teaching styles. This course will be delivered via videotape and teleconferencing.

**STEP VI: THE SPECTRUM IN THE TRENCHES: OBSERVATION OF A PETE FACULTY TEACHING**

a. Courses:  
   NA

b. Semester:  
   Spring

c. Clientele:  
   PETE students at all level

d. Purpose:  
   To provide PETE undergraduates the opportunity to observe a teacher employing Mosston and Ashworth's teaching styles in a school setting.

Spectrum Workshop, AAHPERD Convention, Boston, April 20, 1999
At the University of Wyoming PETE faculty engage in teaching physical education to school children each year. In the Spring of each year one intact class of learners is taught (three 30-minute sessions per week) by one of two PETE faculty, thus creating a schedule where each PETE faculty member teaches school children every other spring. Two parochial schools, one K-6 and the other K-12, serve as the setting for this teaching. The two PETE faculty members began this schedule of teaching grade school children in 1996, and plan to continue in the upcoming years given the successes associated with the endeavor.

The teaching majors are encouraged and sometimes required to observe the PETE faculty teach. One of expectations of the PETE faculty is to incorporate Mosston and Ashworth's teaching styles into their daily instructional routine. Observing the PETE faculty teach has particular significance for those students enrolled in Teaching Lab II because they are in the midst of practicing the teaching styles themselves. When observing the PETE faculty teach, the Teaching Lab II students are expected to perform the duties of coach. This role reversal situation is extremely powerful for both the Teaching Lab II students and the PETE faculty. Much has been learned by both groups.

Summary
The framework that we have created for the undergraduates to learn Mosston and Ashworth's teaching styles continues to be refined. One of our most important endeavors in the next five years is to research the impact this educational program has on the students. Following are several questions that we would like to answer: (a) What impact does this educational program have on the cognitive behaviors of our pre-service teachers?; (b) What impact does this educational program have on the instructional behaviors of our pre-service teachers?; and (c) What are the long term effects of this educational program on the program graduate's use of Mosston and Ashworth's teaching styles?

References