

# **IMPACT BEHAVIOR BARRIERS AND FACILITATORS TO LEARNING**

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## TOPIC OVERVIEW

Teacher behaviors that either influence or set barriers to learning are affected by many factors. Instructional tasks, managerial tasks, teacher expectations, feedback, as well as teaching style and enthusiasm, all create a concept in the physical education environment known as the “ecology of the gym.” This paper describes some impact behavior barriers and facilitators to learning that teachers might consider prior to entering the classroom.

### Impact Behavior Barriers and Facilitators to Learning

Barriers and facilitators to learning in physical education are inter-related. Barriers are factors that may cause ineffectiveness, such as poor curriculum, poor teacher education, or poor teaching. Facilitators are those factors that create an effective learning environment such as effective administration, synthesis of curriculum, teacher education, and effective teaching. Teacher behaviors prior to, during, and after class influence the student learning environment and are referred to as teacher impact behaviors (Graber 2001). Some teacher impact behaviors that may serve as facilitators to student learning are instructional task, managerial task, teacher feedback, teacher expectations, teaching styles, and teacher enthusiasm.

### Instructional Tasks

Instructional tasks are defined as a teacher’s task presentation: how they communicate direction and instruction to students. Rink (1994) describes three instructional task subcategories: (a) introduction – communicating the lesson objective, (b) organizational conditions – gym layout, equipment, space, and practice time, and (c) goal of practice – reinforcing the purpose of the task (p.271). Other examples of instructional tasks are providing additional cues, refinement, and practical application of skills throughout the lesson. Instructional tasks should also incorporate full demonstrations, use of appropriate cues, and additional practice time for skill progression (Rink 1994). For example, teaching a cartwheel to forty or more students with varying skill sets may seem a daunting task. However, defining clear instruction, demonstrating each progression of the cartwheel, providing sufficient time on task, and providing positive constructive feedback may result in varying degrees of proficiency. Instructional tasks implemented effectively promote and influence student learning. Instructional time constraints, unsuitable climate, lack of management skills, poor planning, lack of desire, and lack of interest all facilitate a negative P.E. experience presented by the teacher to the student (Graber 1995). Greenockle, Lee, & Lomax (1990) state, “that providing non-positive experiences of education in P.E. will have profound effects on current and future student activity behaviors” (p.60).

### Managerial Tasks

Managerial tasks are defined as the judicious controls teachers employ in the classroom in order for students to accomplish learning. This is demonstrated by a teachers incorporation of rules, routines, and procedures in the gym or classroom. Graber (2001) describes three managerial tasks: (a) organizing – procedures and set up of students and equipment for the class, (b) maintaining student behavior – ability to direct

and maintain order during instruction, and (c) reactions to student disinterest – not giving up on students by maintaining an enthusiastic demeanor (p. 500).

Further examples of managerial tasks are outlining student behavior role expectations and allowing for time and space allocation. For example, teaching a specific core curriculum class like military movement, aquatics, boxing, or self defense in fifty minutes requires judicious actions by teacher and students. Defining and demonstrating class procedures, defining instructor standards, coordinating facilities, sufficient equipment, and teaching aids will facilitate student learning. When management tasks are established, students have an increased opportunity to learn. Studies conducted by Bain (1990) and Hendry (1975) reveal that P.E. is often perceived as a non-academic course. Research also indicates that class size, lack of equipment, and facilities further suggest that P.E. is not an emphasized academic instruction. This only reinforces student beliefs on what to expect or not to expect – that P.E. is not an integral part of the education process (Faucette, McKenzie, and Patterson, 1990).

#### Teacher Feedback

Teacher feedback is defined as a response to student performance. This is what teachers say or do before, during, or after class. A teacher may provide feedback to one student, a group of students, or the entire class at one time. Graber (2001) describes three findings regarding feedback: (a) teachers that have a high level of subject matter knowledge provide more content-related feedback, (b) teachers that are able to diagnose error provide more feedback, and (c) feedback may have a negative and or positive affect to learning (p. 501). Most physical educators will agree that teacher feedback is necessary in a learning environment; however, research studies have reported that many physical education teachers do not know how to use or when to use teacher feedback to promote student learning (Rink, 1996a). For example, if feedback is provided and causes a change in some aspect of a movement task, then teacher feedback has enhanced learning. However, if feedback is provided and causes no change in movement task but may elicit frustration or confusion, then teacher feedback is a hindrance to learning. Rink further describes seven motor learning and pedagogy points to consider when using teacher feedback: (a) More feedback is usually better than less feedback, (b) specific feedback is more effective than general feedback, (c) immediate feedback is more effective than delayed feedback, (d) corrective feedback helps the learner more than negative feedback, (e) combination feedback is more helpful than verbal or nonverbal alone, (f) advanced learners can get by with less feedback, but it should be more specific, and (g) novice learners need all the feedback they can get, including feedback that motivates (Meztler, 2000, p. 106). Regardless of the insufficient research to fully support teacher feedback, communicating with students is necessary.

#### Teacher Expectations

Teacher expectations are described as the pre-conceived judgements or inferences made by teachers about students that, knowingly or unknowingly, influence instructional behavior. Research suggests that these expectations will impact student performance. Graber synthesizes leading scholars' research by saying teacher expectations influence student self-perception, engagement in learning, and ultimately achievement (Graber, 2001, p 501). Other examples used by Graber are the self-fulfilling prophecy or

Pygmalion effect. In other words, teacher expectations will rub off on students, and teachers have the responsibility to influence student learning. How teachers interact or comment around students in the classroom or out of the classroom may have a profound effect on the student. For example, if a teacher interacts or comments constructively on performance, students may listen and take an interest in their own learning. If a teacher does not take the time to provide constructive material related feedback, then students may not engage. Teacher expectations may be perceived by students as positive or negative influences to learning. For example, in a military movement course the student body composition varies in gender, meso-type, motor skill, muscular fitness, and confidence level. What instructors do and say throughout the lesson directly influences what students believe they are capable of doing. Projecting expectations of success will encourage students to engage without fear of getting hurt or embarrassed.

### Teaching Styles

Teaching styles refer to the various instructional models used for Physical Education. These instructional models assist teachers in addressing the different learning styles of their students. Ashworth identifies three points: teachers that are trained in differing styles are more likely to (a) engage learners, (b) provide feedback, and (c) alter instructional styles to meet the needs of the class (Graber, 2001, p. 502). For example, teaching a handstand, ankles to the bar or backward knee circle must initially incorporate a direct teaching method as well as utilizing some aspects of the peer teaching model of instruction. Initially students are instructor directed on all skill progressions. Peer teaching is then implemented and highly encouraged in order to address those students who prefer to work with peers as opposed to an authority figure. During rock climbing and simulated applied military task classes, the inquiry teaching model is employed to allow students to problem solve and use some guided discovery. Throughout the teaching unit, the personalized system for instruction might also be utilized. This technique allows students to practice all skills at their own pace and are provided numerous opportunities to reach their full potential through one-on-one feedback from the instructor. Each model is designed to assist in accomplishing learning. The more one becomes familiar with different teaching and learning styles, the more tools a teacher has to refer to for student-learning to occur.

### Teacher Enthusiasm

Teacher enthusiasm has not been researched thoroughly in the physical education setting. Some researchers define teacher enthusiasm as a teacher's inspiration for content, content knowledge, and pedagogical content knowledge, leading them to display enthusiastic behaviors. Enthusiasm is a characteristic variable. Graber (2001) identifies research conducted in the physical education setting that suggested that students display greater achievement when teachers are enthusiastic. Locke, Lawrence, and Griffin's (1986) paper on „Profiles of Struggle“ noted that obstacles to effective teaching or implementation of quality P.E. programs were directly influenced by teacher strategies demonstrating characteristics such as compromising, substituting, ignoring, giving up, tinkering, challenging, overcoming, and getting out.

Impact behavior barriers and facilitators affect student learning. Impact behaviors may cause ineffective learning or create effective learning. How teachers utilize tools such as instructional tasks, managerial tasks, teacher expectations, feedback, as well as teaching style and enthusiasm, all create the learning environment foundation. This foundation may serve to set the stage for improved student achievement and attitude by showing them that these six impact behaviors are put into place for their benefit. When students perceive that their performance matters, they will respond.

## ANNOTATED BIBLIOGRAPHY

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This work describes the conceptual model of areas of research on teaching. The model is grouped in three categories. The first category describes teacher characteristics, competencies, and pre-impact behaviors prior to teaching. The second category describes instructional content, mediating constructs, and impact behaviors while teaching. The third category describes student characteristics, outcome, and post impact behaviors that influence student and teacher during and after teaching.

**Rink, J. (1994).** Task presentation in pedagogy. *Quest.*, 46, 270-280.

This work describes three instructional tasks subcategories: (a) introduction – communicating the lesson objective, (b) organizational conditions – gym layout, equipment, space, and practice time, and (c) goal of practice – reinforcing purpose of task.

**Graber, K.C. (1995).** The influence of teacher education programs on the beliefs of student teachers: General pedagogical knowledge, pedagogical content knowledge, and teacher education course work. *Journal of Teaching in Physical Education*, 14, 157-178.

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**Greenockle, K., Lee, A., & Lomax, R. (1990).** The relationship between selected student characteristics and activity patterns in a required high school physical education class. *Research Quarterly for Exercise and Sport*, 61, 59-69.

This work describes how providing non-positive experiences of education in physical education classes impact future student behaviors.

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This work describes that physical education is perceived as a non-academic class and not an integral part of the education process.

**Hendry, L.B. (1975).** The role of the physical education teacher. *Educational Research* 17(2): 115-121.

This work describes that physical education is perceived as a non-academic class and not an integral part of the education process.

**Faucette, N., McKenzie, T.L., & Patterson, P. (1990).** Descriptive analysis of nonspecialist elementary physical education teachers' curricular choices and class organization. *Journal of Teaching in Physical Education*, 9, 284-293.

This work describes that gym environment such as class size, lack of equipment, and facilities further suggest that physical education is not an emphasized academic instruction. This only reinforces student beliefs on what to expect from physical education classes or not to expect – that P.E. is not an integral part of the education process.

**Rink, J. (1996a).** Effective instruction in physical education. In S. Silverman & C. Ennis, eds. *Student learning in physical education: Applying research to enhance instruction* (pp.171-198). Champaign, IL: Human Kinetics.

This work describes how there is not enough research that links teacher feedback to student learning in physical education classes. This work also describes how there is contradicting research that expresses that many physical education teachers do not know how to use or when to use teacher feedback to promote student learning.

**Meztler, M.W., (2000).** Instructional modes for physical education. *Effective teaching skill areas for model-based instruction* (pp. 87-111). Needham Heights, MA: Allyn & Bacon.

This work describes the effective teaching skills for a model based instruction regarding teaching skills, strategies, and knowledge areas in physical education. Effective teaching skill areas for model-based instruction are planning, time and class management, task presentation and structure, communication, instructional information, use of questions, and review and closure. Strategies for teaching physical education are task presentation, task structure, task engagement, learning activities, student safety, task

**Locke, Lawrence F., and Patricia Griffin,** eds. 1986. Profiles of struggle. *Journal of Physical Education, Recreation and Dance* 57(4): 32-63.

This work describes obstacles to effective teaching or implementation of quality P.E. programs were directly influenced by teacher strategies such as compromising, substituting, ignoring, giving up, tinkering, challenging, overcoming, and getting out.

progression, use of questions, and review and closure. Knowledge areas for model based instruction are learning contexts, learners, learning theories, developmental appropriateness, learning domains and objectives, physical education content, task analysis and content progression, assessment, social and emotional climate, equity in the gym, and curriculums for PE.

### ADDITIONAL READINGS

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