

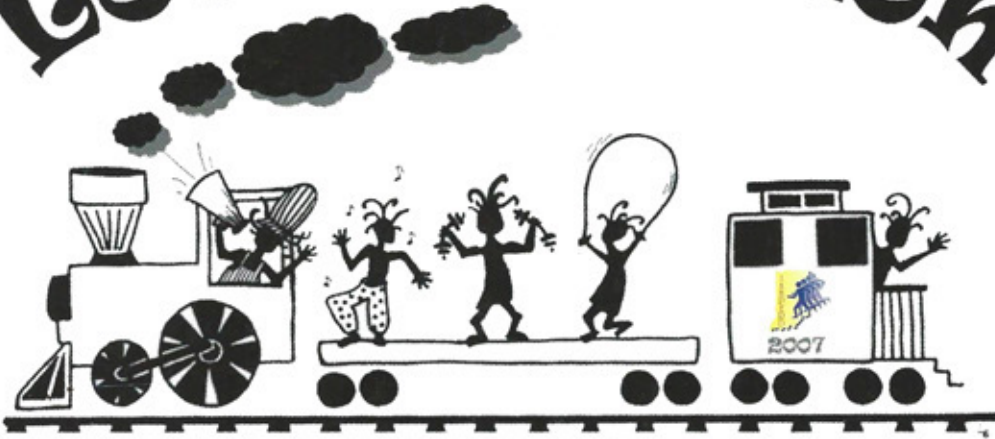
# INDIANA

Volume 36, Number 2

Spring Issue

2007

## Local Motion



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# JOURNAL

# Indiana AHPERD Journal

Volume 36, Number 2

Spring 2007

## Indiana Association for Health, Physical Education, Recreation, and Dance

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## 21 Irrefutable Laws of IAHPERD Leadership

WOW! What an outstanding IAHPERD Leadership Conference! Over 100 leaders in IAHPERD joined forces at McCormick's Creek State Park in February to plan for 2007 events, including the state conference in November. This was the highest attendance in several years. A huge thanks goes to those who dedicated their personal time to make IAHPERD such a

great organization. If you are not an IAHPERD leader and want to be, we need you! Please contact Tom Stubbeman, president-elect, who is currently naming his leadership team for 2008.

The 2007 Leadership conference was truly inspirational to many, including me! It was moving to see the energy, passion, and ability of such tremendous leaders all in one room with one purpose. It reminded me of one of my favorite reference texts. The 21 Irrefutable Laws of Leadership (Maxwell, 1998) apply to many professions as such these laws coordinate well with the success of teachers, which is the profession of the majority of IAHPERD members. Teachers are expected to be leaders of students. Successful teachers are also leaders in their schools, professional organizations, and communities.

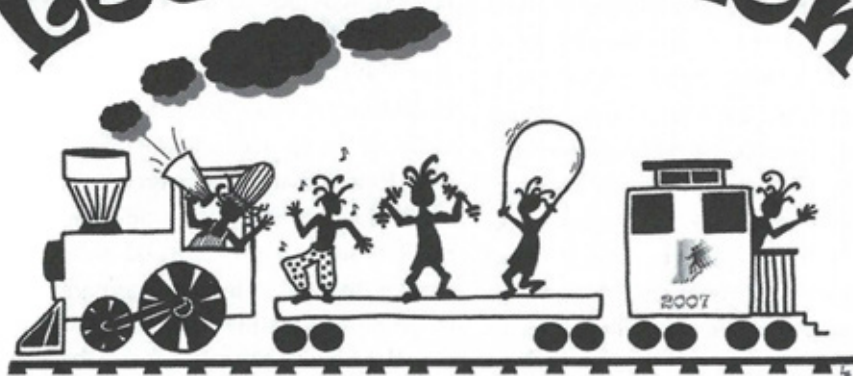
Here are Maxwell's (1998) 21 Irrefutable Laws of Leadership (briefly);

"1. The Law of the Lid: Leadership ability determines a

person's level of effectiveness.

2. The Law of Influence: The true measure of leadership is influence.
3. The Law of Process: Leadership develops daily, not in a day.
4. The Law of Navigation: Anyone can steer the ship, but it takes a leader to chart the course.

### Local Motion



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5. The Law of E.F. Hutton: When the real leader speaks, people listen.
6. The Law of So Ground: Trust is the foundation of leadership.
7. The Law of Respect: People naturally follow leaders stronger than themselves.
8. The Law of Intuition: Leaders evaluate everything with a leadership bias.
9. The Law of Magnetism: Who you are is who you attract.
10. The Law of Connection: Leaders touch a heart before they ask for a hand.
11. The Law of the Inner Circle: A leaders potential is determined by those closest to him.
12. The Law of Empowerment: Only secure leaders give powers to others.
13. The Law of Reproduction: It takes a leader to raise up a leader.
14. The Law of Buy-In: People buy into the leader, then the vision.
15. The Law of Victory: Leaders find a way for the team to win.

16. The Law of the Big Mo: Momentum is a leader's best friend.
17. The Law of Priorities: Leaders understand that activity is not necessarily accomplishment.
18. The Law of Sacrifice: A leader must give up to go up
19. The Law of Timing: When to lead is as important as what to do and where to go.
20. The Law of Explosive Growth: To add growth, lead followers; To multiply, lead leaders.
21. The Law of Legacy: A leader's lasting value is measured by succession."

While all of these principles can be applied to our professions, I would like to highlight a few that can be easily related to excellence in teaching research: Laws of Lid, Connectivity, Intuition, Sacrifice, and Priorities. I will use Teachers of the Year (TOYs) as a comparison with the assumption that such a category of teacher is exemplary of effective leadership.

The Law of the Lid, according to Maxwell, reads that leadership ability is the "lid" on personal and organizational effectiveness and is proportionate to the strength of the leader. A teacher must have a strong foundation from which to draw to be an effective leader. The majority of TOYs also possess a graduate degree and at a higher percentage as compared to non-TOYs (Ange, Greenwood, & Miller, 1994; Brod, Weidemer, & Wiedemer, 1986; Hicks, 2004; Isenberg & Raines, 1990). Excellent teachers are also lifelong learners (Ange, Greenwood, & Miller, 1994; Brod, Weidemer & Weidemer, 1986; Isenberg, & Raines, 1990; Sederberg & Dark, 1990). Thus, to be an effective leader, teachers must continue to gain knowledge (lifelong learners) so the "lid" does not limit their potential.

The Law of Connectivity reads that leaders must touch a heart before they ask for a hand. Leaders cannot move individuals into action without first engaging their emotions. The stronger the relationship, the more the followers will want to assist the leader in achieving the goal. Excellent teachers already are well aware of the need to reach their students on an emotional level. Outstanding teachers are involved with students outside of the classroom (Ange, Greenwood, & Miller, 1994; Brod, Weidemer & Weidemer, 1986; Isenberg, & Raines, 1990; Sederberg & Dark, 1990). Sederberg and Dark (1990) reported that TOYs want to play a role in the lives of students by demonstrating a caring attitude toward their students, both in the classroom and outside of the classroom. Hicks (2004) also found that TOYs in Physical Education were student-focused, provided individual student attention and were a role model for physical fitness. This relationship that TOYs generated with students also correlated with a positive attitude toward Physical Education (Hicks, 2004). Goldsmid, Gruber, and Wilson (1977), in a rare investigation of student perceptions of TOYs, analyzed the supporting statements made by

students and faculty and found that students perceived TOYs as showing a concern for and genuine interest for their lives.

Outstanding teachers, as well as leaders, make a caring connection with their students and followers. The Law of Intuition reads that leaders evaluate everything with a leadership bias. This characteristic is often the difference which separates good from great leaders. Excellent teachers make informed decisions based on their "read" of the situation. This is often called "reflective practice" in teaching. DeMarco (1998), in one of the few TOY studies of Physical Education Teachers, found that these individuals seem to be reflective in their teaching practice, which enhances their overall performance. Reflective thinking is a key to improving effectiveness of teaching as well as leadership.

The Law of Sacrifice reads that a leader must give up to go up. A leader must sacrifice personally, which is an ongoing process, for the focus of the group goal to be approached or reached. Maxwell (1998) states that sacrifice is a necessity for success. Excellent teachers know this as well as they demonstrate their dedication to their craft by spending extra time and energy in their discipline. TOYs appear to be more dedicated to their profession than non-TOYs as 98 of the TOYs reported working at least an additional one-hour per day on uncompensated, school-related activities as compared to 55 of their counterparts (Brod, Weidemer, & Wiedemer, 1986). Hicks (2004) found that TOYs in Physical Education made personal sacrifices by putting in extra time and leading after-school initiatives such as jump rope teams. Sederberg and Dark (1990) also found that TOYs were dedicated to their profession as demonstrated by their additional class preparation and involvement in professional meetings. Excellent teachers realize that excellent performance allocated extra work outside of the required time at their setting.

The Law of Priorities reads that leaders understand that activity is not necessarily accomplishment. Excellent leaders survey the challenge and ask, "What will bring the greatest return or reward?" and spend their time appropriately. They do not waste time on activities that do not produce results. Excellent teachers engage this practice as well and go beyond the "Busy, Happy, Good" mentality. Sederberg and Dark (1990) found that TOYs were dedicated to their profession as demonstrated by their involvement in student assessment. Excellent teachers realize that administration is interested in outcomes of student learning and assess accordingly. How else can learning be proven? Without student assessment, we are merely supervisors and not teachers. Those individuals recognized as outstanding teachers also provide meaningful learning opportunities for their students by providing new ideas for their students, implementing creative ideas, and constantly changing

teaching strategies or curricula approaches to keep the material “fresh” for students (Isenberg & Raines, 1990). Thus, excellent teachers and leaders spend their efforts where results will be most effective and appreciated and utilize assessment techniques.

In conclusion, all results of teacher efforts are dependent upon their leadership qualities. Outstanding teachers know and practice several of Maxwell’s (1998) 21 Laws. They practice raising their “lid” by continually seeking knowledge. They realize that to be effective leaders they must make personal connections with their students.

Outstanding teachers know that they must be reflective in their thinking for continual improvement in their teaching. Excellent teachers also realize that outstanding teaching does not come without a price, but requires a personal sacrifice. Excellent teachers also realize that assessment means validation and engage in ongoing assessment of student learning. The leadership ability of the teacher determines the success of the student, class, school, and community.

What are you doing to improve the situation where you work? Are you a lifelong learner who connects with students, is reflective in teaching practice, sacrifices personally, and sets appropriate priorities? I submit that we owe it to our chosen profession, to ourselves, and to those around us to strive for excellence in order to strengthen today and to prepare for our future society!

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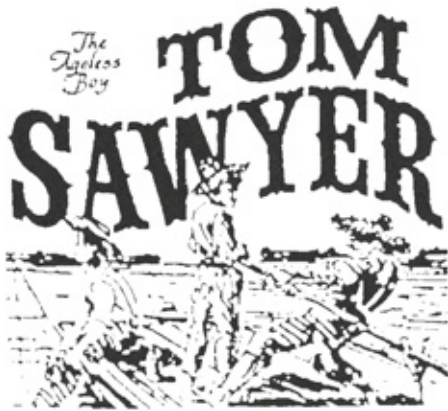
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## Tort Immunity

Catberro v. Naperville School District No. 203  
Appellate Court of Illinois, Second District  
317 Ill. App. 3d 150; 739 N.E. 2d 115; 2000 Ill. App. LEXIS 864 (2000)

Bryan Catberro, a fourth grader at Riverwoods School in Naperville, Illinois, tripped and fell while jumping over a rope that was strung between two poles during physical education class on May 5, 1998. One of the poles tipped over, striking and cutting Bryan's face. The plaintiff alleged that the physical education teacher had bought the poles at a garage sale. The teacher did not hold a policy-making position in the school district and therefore was not protected by discretionary immunity under the Tort Immunity Act. At the time of the incident, the poles needed repair. They had no caps on them, thereby exposing rough edges. When he was injured, Bryan was jumping over the rope as the teacher had instructed. As a result of the injury, Bryan sustained permanent injuries to his face.

### The Complaint

The plaintiff filed a two-count complaint against Naperville School District No. 203, which moved to dismiss it, asserting that it was protected by the Tort Immunity Act. The trial court granted the motion, holding that the district could not be liable for negligence in providing equipment and that the decision to purchase the poles was a discretionary action for which the defendant was also immunized. The plaintiff then filed an appeal.

### The Appeal

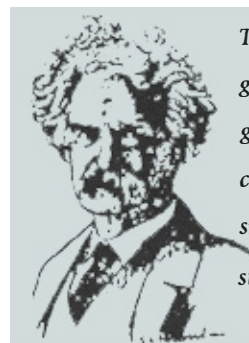
In the appeal, the plaintiff contended that the court erred in (1) changing his complaint from an allegation of negligent maintenance of property to an allegation of negligent supply of equipment, (2) stating that a physical education teacher displayed discretionary authority by

purchasing equipment for physical education, and (3) claiming that the teacher was included in the class of persons protected by discretionary immunity under the Local Governmental and Governmental Employees Tort Immunity Act.

The plaintiff argued that the court misinterpreted the first count—alleging that the district negligently maintained its property—as negligent provision of faulty equipment and thus dismissed the complaint on that basis. The defendant responded that the complaint did not allege negligent maintenance and that it was the plaintiff who was trying to recast the complaint.

The court reviewed the key section of the complaint, which alleged that the defendant was negligent in that it "Failed to properly inspect its poles and rope for safety; failed to ensure that the poles were properly capped; allowed the condition of the pole to deteriorate thus exposing minor plaintiff to sharp edges [and] instructed plaintiff to jump over equipment it knew or should have known was not reasonably safe."

The defendant moved to dismiss the complaint pursuant to section 2-619 of the Code of Civil Procedure. Section 2-619 provides a way to obtain summary



*The secret of getting ahead is getting started. The secret of getting started is breaking your complex overwhelming tasks into small manageable tasks, and then starting on the first one.*

— Mark Twain

disposition of issues of law or easily proved issues of fact. The act governs whether and in what situations local governmental units are immune from civil liability. In interpreting the act, the court's primary goal is to ascertain and give effect to the legislature's intention. The court decided not to depart from the plain language of the act by reading into it exceptions, limitations, or conditions that conflict with the express legislative intent.

The plaintiff contended that the court erred in dismissing the complaint on the basis of discretionary-action immunity. The complaint alleged that the teacher lacked the discretionary authority to purchase equipment on behalf of the district and that this prevents the district from relying on the act's discretionary-immunity provision.

The defendant maintained that the district has the discretion to decide what equipment to use in its schools and that the plaintiff failed to establish that the teacher did not have the authority to make such decisions. The plaintiff argued that the teacher lacked this authority and the defendant responded that the teacher's acts of choosing the rope and poles and having the students jump over the rope were clearly discretionary.

### **Verdict of the Appeals Court**

The court decided that, for purposes of a motion to dismiss, the allegation that the teacher did not have discretionary authority to purchase equipment must be regarded as true (i.e., it must be argued in the trial court rather than dismissed). Therefore, the judgment of the DuPage County circuit court was reversed, and the cause was remanded to the circuit court for further proceedings.

### **Definition of Terms**

Civil liability—A liability imposed under the civil code, as opposed to the criminal code.

Discretionary-action—An action exercised by a person in a position of authority. This person uses his or her training and experience to make decisions. The position

this person is assigned lacks specific actions to be followed to complete daily tasks.

Immunity— Based on the code, federal or state, a governmental entity or person working for the government cannot be held liable for performing its responsibilities.

### **Risk Management Tips**

The following risk management tips related to this case are suggested:

1. All equipment purchased should be approved by the school district.
2. All equipment to be purchased should be evaluated for safety before purchase.
3. All equipment should be purchased from an approved vendor or manufacturer.
4. Selfmade equipment or equipment purchased from an unauthorized source should not be used at school.
5. All equipment should be inspected regularly for safety and repaired when necessary.
6. All equipment should be properly inventoried and stored when not in use.
7. Inform students of all safety rules that pertain to the equipment they are using.
8. All equipment used in physical education classes should be purchased by the school district or with funds that are approved by the school district and raised by booster groups.
9. All equipment used for physical education classes should be the property of the school district.

### **Disclaimer**

The comments regarding the case presented here are generalized thoughts and not hard law. The cases in Law Review are illustrative of situations that can happen and how the courts have responded to the circumstances. The generalized thoughts may not apply or be proper in all states and jurisdictions and under all circumstances. Finally, it is important to understand that the tips provided may not apply in your state or jurisdiction.

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***Radisson Hotel, City Centre, Indianapolis***

# New Physical Education Teacher Standards: What does this mean for Indiana?

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## New Physical Education Teacher Standards: What does this mean for Indiana?

As of 2008, Indiana Colleges and Universities preparing undergraduate students in physical education teacher education must align their programs with the new PE/APE state standards. These changes have prompted confusion and concerns regarding the new licensure; therefore, the purpose of this article is to clarify the process in which the standards were designed and potential solutions to updating and/or restructuring undergraduate programs to meet the standards.

It is likely that those reading this article have heard of the No Child Left Behind Act (NCLB) and the Individuals with Disabilities Education Act (IDEA). These laws were enacted to address education of all children. While IDEA (or IDEIA) includes more specific information than NCLB regarding the content area of physical education, both mandates are concerned with establishing appropriate educational preparation and delivery for all children.

IDEA reformed public education and finally opened the door to students with disabilities. Specifically stated within IDEA was the mandate for physical education which ensured that along with special education services, students with disabilities also must receive physical education. However, the federal law left to the states how to best prepare professionals and provide direct services for all students with disabilities. Logically, in order to deliver appropriate programming in physical education, professionals (teachers) need to be considered qualified, or more specifically, "highly qualified" for such

a task (NCLB). Despite the fact that physical education is not one of the content areas addressed by the "highly qualified" mandate, the Indiana State Department of Education has taken steps to address this issue of "highly qualified" by implementing performance based licenses intuitive to professional teaching standards to include physical education.

In 1998, the Indiana Professional Standards Board (not then in its current organization structure as a division within the Department of Education) established two sets of teaching standards: one combined for Physical Education and Health and a separate set for Adapted Physical Education. The standards for Physical Education and Health were modeled after the Interstate New Teacher Assessment and Support Consortium (INTASC). There were several sets of standards: Content (which applies to Physical Education and Health), Developmental (Early Childhood, Adolescence, and Young Adult, Middle Childhood), and Technology. Each set of standards had three components: Knowledge, Disposition, and Performance. The Adapted Physical Education National Standards (APENS) were available at that time but were not used. The APE standards were created from a Diversity category within the Content standards of INTASC.

Again in 1998, the IPSB established a state standards review process. The IPSB further determined that the standards needed to be reviewed every seven years. As a result, in fall of 2005, the first review process was implemented for Physical Education and Health and Adapted Physical Education standards by the IPSB. The



mechanism for review was the formation of a Standards Review Committee or SRC.

### SRC Selection

The following is quick review of how the SRC was established and the outcomes produced:

- IPSB contacted its email distribution lists that included: Associations, Charter Schools, District Facilitators, College/University Licensing Advisors, National Board Certified Teachers, Superintendents, and education unit heads at Indiana's colleges and universities.
- An application process was established for anyone interested in serving on the SRC. Applications were made available to the general public on the IPSB website.
- Applications were submitted, screened, and members selected.

### Membership composition and working organization

Following the selection process, the SRC had to determine their operating structure. Here is a brief description of how the SRC was organized:

- Membership consisted of professionals from the content areas of Adapted Physical Education, Physical Education, and Health representing higher education, public schools, administration, and the private sector.
- In addition, one IPSB board member was assigned to the SRC to oversee the activities associated with the review process.
- The SRC agreed to conduct business as two separate sub-committees (one for Physical Education and one for Health). Each subgroup interacted with the other during outcome discussions and document development. Adapted Physical Education was included with the Physical Education sub-committee.

The next section of this article will illustrate the work regarding Physical Education and Adapted Physical Education. The authors were not a part of the Health sub-committee and did not engage in their editorial activities.

### **Physical Education Sub-committee Outcomes**

Much of the committee's discussions centered on the impact students with disabilities were making on the general physical education classes. Committee members shared how they were aware of teachers being challenged to deliver appropriate programming in what could be described as included Physical Education classes (i.e., students with and without disabilities in the same setting). These concerns are supported in a recent article published by Duchane (2007). Duchane reported while the majority of respondents in his study had taken one course in Adapted Physical Education during preparation, all respondents reported less than favorable attitudes toward working

with students with disabilities (learning disabled, mental retardation, and emotional disturbance) in the general physical education setting. Clearly, professional preparation remains an issue.

Within a report to the Indiana General Assembly in 2001 (retrieved February 22, 2007, <http://www.doe.state.in.us>), there was a documented need for further preservice preparation for physical educators teaching students with disabilities (SWD) in general physical education. Over 90 percent of the teachers surveyed indicated they did not have teacher preparation in adapted physical education despite having SWD in their general physical education classes. Less than 10 percent of the respondents took courses beyond the basic introductory course and 75% of these teachers reported they taught SWD in an included setting.

When asked what aspects of student performance were the most difficult to assess, the teachers clearly indicated physical fitness and sports participation were the most difficult to evaluate. The teachers indicated the source of difficulty in addressing the fitness needs of SWD was lack of preparation and test awareness.

Their primary obstacle for improving their ability to service SWD in the general physical education class setting was lack of training (36 %). This report suggests that physical educators teaching SWD in general settings are being required to teach a population for which they have not received adequate training.

Given the consideration of this report and other discussion, two models for the Physical Education standards were discussed within the sub-committee: 1) continue with separate standards as established in 1998 for Physical Education and separate for Adapted Physical Education, or 2) an inclusive model that combined both Physical Education and Adapted Physical Education. The sub-committee voted on a new model of inclusion using the new standards for beginning teachers by NASPE combined with the APENS (see Table 1).

### **Development of Standards Matrix**

The Matrix served as a working document and laid the foundation for structuring the new standards. Once a final version of the Matrix was established, draft versions of the actual standards were developed and submitted through another editing process within the sub-committee members. After approximately two months of editing, a final version of the new combined Physical Education and Adapted Physical Education standards was ready for public comments.

### **Public comments**

The new standards were posted on the Department of Education's web site and notification was sent out to announce the opportunity for public comments. In addition,

flyers were distributed at the 2005 IAHPERD state meeting announcing the same. Once the 45-day public comment time had concluded, all public input was channeled back to the Physical Education sub-committee for additional action. The sub-committee worked to incorporate all reasonable suggestions as received. Once the suggestions were addressed, the final version of the combined standards went before the Health sub-committee for comment and any new edits. Once both sub-committees had developed final products, their work went forward to the Division of Professional Standards Advisory Board (formerly IPSB) and the State Superintendent of Public Schools, Dr. Sue Ellen Reed. The new Physical Education teaching standards were accepted on January 18, 2006. Implementation is scheduled to begin according to policy, 27 months after approval or by April 2008.

### **So what does that mean for Indiana?**

As stated in the opening paragraph, by spring 2008, College and University undergraduate professional preparation programs must align their programs to address these new standards. Many professionals in charge of Physical Education Teacher Education (PETE) programs are concerned that a lack of resources (personnel) and curriculum development will prohibit addressing these standards. Many PETE programs are without an expert in APE and often only have the ability to offer one course in this subject area. The combined standards will lead to a combined license. By 2008, PETE programs within Indiana will have to produce students who will be dually prepared (Physical Education/Adapted Physical Education). Recently, concerns regarding credit hours, faculty expertise, and number of years students would have to be in school to meet the new standards have been voiced.

Whilst neither author argues that the process will not be “easy”, a case must be made for forward thinking and creative approaches to integration. For too long, we have treated adapted physical education as the “PE step-child”. References to the one course or the one faculty further separated the content in students’ minds and frankly, perhaps in faculty, as well.

Special education classroom education suffers the same burden but under different circumstances. How to best include all students in content areas while teaching towards their needs can be difficult and could lie in how teachers are prepared. That is, if PETE pre-professionals see content as “regular education” content and “special education” content (in other words separate), then teaching towards both appears burdensome. Same applies to methodology, if methods seem different for different populations, that can be viewed as something additional to learn. However, when pre-service students are taught as if all students (those with and without disabilities) will be included in their

classes, then content, methods, assessment, and behavior modification will not be viewed as separate. Deciding what is the best vehicle for delivery of this training needs everyone’s consideration.

### **Mechanism to address the new PETE Standards**

The first thing that should be considered is that PETE preparation (PE/APE) has to reflect competencies as measured by the standards and not coursework or credits. While course credits are the most recognized units within College and University PETE programs, delivery of material can come in various forms, i.e., not entirely in a traditional course setting. PETE programs need to consider three things: a) training goal, b) creative delivery of training, and c) collaborative modeling.

### **What is your training goal?**

With the new combined preparation, PETE programs must recognize what type of pre-professional they should be trying to produce. You are not trying to produce a specialist. Specialist training would have to have extensive assessment and methodology preparation for working with students with disabilities. You should not be attempting to produce anyone as certified strictly in APE. Instead, PETE programs need to be targeting professional competencies in three broad areas within APE: a) basic introductory information, b) assessment, and c) methodology supported by substantial practica experiences. Perhaps after several years of working experience, these professionals would elect to seek national certification (i.e. successful completion of the APENS exam).

### **Creative delivery**

The following are suggestions provided for consideration to College and University PETE preparation programs. These are offered merely as suggestions; adoption is a program specific decision. Remember the Indiana State Department of Education is not mandating “how” you address the compliance to these new standards, just that you can demonstrate successful compliance as a result of field initiated review from DOE. Consider the following:

#### Traditional systems

A traditional approach would be to deliver training through campus classes as many of us do now. However, in preparation your PETE, faculty should conduct an extensive self check to determine what content is in place or missing to address the new standards. Such a self study might lead to new course offerings or perhaps better infusion of APE content in identified courses. Creative course development might mean faculty from other disciplines could team teach, (i.e., Special Education with General Physical Education to address material related to legal mandates). Infusion of material might require the PETE pedagogist to utilize other resources

during preparation (i.e. web sites, shared materials from other faculty across the state). A self check might help determine that some courses could be offered during an interim semester or summer school.

### Emerging systems

The use of technology must be considered your guest to address the new teaching standards. Several electronic formats are becoming very common place on many campuses (i.e. full on-line courses, electronic correspondence courses using Black board, or video conferencing). Several on-line courses in APE currently exist from the University of Florida and New Mexico State University. Concerns arise with the thought of “am I outsourcing” my responsibilities or “why should my students have to pay another university to receive this content?” Both concerns are legitimate, must be faced with the reality that this is the way education is moving and the use of technology to facilitate learning is a highly utilized resource.

Video conferencing is perhaps the easiest of the electronic modes to deliver or receive course offerings. Much of the video conferencing utilizes the Internet, making it relatively easier to bring your class lecture into another university’s classroom. Professional technical support staff on you campuses can help you discern whether this mode is available for you. If it is, all that is required is for the instructor to lecture from the classroom just as he/she normally would. So if a course in APE Assessment were offered at Indiana State University (ISU) and not at DePauw or Franklin College, the ISU course could be brought into the other schools with minimal interruption.

### Hybrid systems

The term hybrid refers to utilizing the combination of tradition and emerging delivery systems. This system would support delivery of material through workshop formats or inservices. For example students could receive their assignments and course material via Black board from Ball State University, then on several pre-established dates, they could come together in cohorts at other university or school based programs for on-site activities, (i.e. practical experiences with students with disabilities at IUPUI or Walt Disney Elementary in the Elkhart area). There are several excellent grass roots professionals who could utilize their talents to further the student’s educational training in APE.

### **Collaborative modeling**

Professionals of PETE programs need to consider partnering and working collaboratively with the Indiana State Department of Education and seek federal funding to support their endeavors. Collectively seeking financial

support from the US Department of Education would help present a united front in the effort to address these new standards. This initiative must come from the IHE professionals. Competitions such as the State Improvement Grants or Preservice Professional Preparation within the Division of Special Education of the US Department of Education exist for projects such as this. Perhaps the Indiana AHPERD could consider forming a writing team to work with the Indiana DOE to submit such a proposal. Seeking funds to support endeavors to train professionals to teach children with disabilities on a statewide platform is a powerful proposal. Your leadership is needed.

### **Summary**

Thirty two years after IDEA was passed, students with disabilities in the state of Indiana still receive sub-par physical education. Teachers still feel under-prepared to teach students with disabilities. Undergraduate preparation programs, with the exception of a few, are not gaining ground when it comes to helping pre-service teachers’ ability to teach all students.

Physical Education teacher attitudes toward working with SWD within general physical education settings are less than favorable as identified by Duchane (2007). Additional training for the general practitioners is still needed to improve attitudes for working with SWD in physical education. Why wait until teachers have completed their PETE training? Change the preparation now. To those interested in moving Indiana PETE preparation to the front of the national line, work together to combine your curriculums, infuse your content, pool your resources, and seek alternative ways to get this done. Consider this glass half-full and work to make sure others see it the same.

While it can be argued that there is a moral obligation to meet the new standards, programs need to recognize that moral obligation is a poor argument for quality teacher preparation. While there are several underserved populations that exists within our schools, it is the history of disability that makes the new standards significant. Students with disabilities are in our schools. They have a mandated right to quality physical education programs. With that right comes the obligation of preparation. One can argue that these new standards stress already full curriculums; but, in doing so, we are arguing for poor quality teacher preparation programs that fail to produce teachers who know how to teach all students.

***No Child Left on  
His/Her Behind!***

Table 1 Standards Matrix – Sample of Working Document

New Beginning Teacher NASPE Standards	APENS	New Indiana Standards
<p><b>1. Content Knowledge</b> Physical education teachers understand physical education content and disciplinary concepts related to the development of a physically educated person.</p>	<p><b>10. Teaching</b> An APE teacher understands the principles of human development, motor behavior, and exercise science, as applied to individuals with disabilities.</p> <p><b>3. Exercise Science</b> The APE teacher must foster the modification and application of exercise principles (ie. physiological and biomechanical) when working with diverse populations to ensure that all children with disabilities enjoy similar benefits of exercise.</p> <p><b>5. History and Philosophy</b> The APE teacher understands the contribution that physical education can make in children’s lives through components of each law that related to the education of individuals with disabilities.</p>	<p><b>1. Content Knowledge</b> Understand physical education content and disciplinary concepts related to the development of a physically educated person with and without a disability.</p>
<p><b>2. Growth and Development</b> Physical education teachers understand how individuals learn and develop and can provide opportunities that support their physical, cognitive, social, and emotional development.</p>	<p><b>1. Human Development</b> The APE teacher understands the foundation of proposed goals and activities for individuals with disabilities which are grounded in a basic understanding of human development. The APE teacher is familiar with theories and practices related to human development and their application to individuals with disabilities.</p>	<p><b>2. Growth and Development</b> Understand how individuals learn and develop and can provide opportunities that support their physical, cognitive, social, and emotional development.</p>
<p><b>3. Diverse Students</b> Physical education teachers understand how individuals differ their approaches to learning, and create appropriate instruction adapted to these differences.</p>	<p><b>2. Motor Behavior</b> The APE teacher should have knowledge of typical physical and motor development as well as understanding the influence of developmental delays on these processes. It also means understanding how individuals learn motor skills and apply principles of motor learning during the planning and teaching of physical education to students with disabilities.</p> <p><b>6. Unique Attributes of Learners</b> The APE teacher needs to know the disability areas identified in the Individuals with Disabilities Education Act (IDEA) found within the school age population. They should be able to treat all children as individuals and assess them to determine what needs they have for learning.</p>	<p><b>3. Diverse Learners</b> Understand how individuals differ in their approaches to learning and create appropriate instruction adapted to these differences.</p>

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# A College Supervisor's Reflection on Student Outcomes in Physical Education

by

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I am in favor of holding teachers accountable for student outcomes and I support the implementation of assessments which help us view the impact of teacher behavior and instruction on student learning. I observed one of my student teachers today and my reflection challenges and stretches me.

Luke has come such a long way since I met him in his sophomore year of college. He was shy, quiet, and insecure. Today, I admire the transformation that has taken place as he confidently teaches these elementary students in his new teacher voice, which is firm yet kind and caring. It is obvious to me that he loves these children and desires great things for them in fitness, skill development, and in life.

While Luke is teaching today, he is working on an assignment given by our teacher education department. This assignment requires him to examine the impact he is having on the students... asking the question... "How have the students changed as a result of my teaching?" The assignment further dictates that he assess students and document the outcomes in a quantitative way, as is the current emphasis in this country.

Prior to this lesson, Luke has had these third grade students perform the 1/2 mile run/walk Presidential Fitness test and he recorded baseline times. In teaching his unit, he has focused the lessons on activities which enhance cardiovascular fitness. Additionally, he has been talking to the children about pacing and Luke pushes them toward learning by asking them to reflect on how they can improve their energy levels and performance. The children articulate the importance of lifestyle behaviors such as eating healthfully, and getting sleep, and provide examples of how to warm-up properly. He has done everything to maximize learning and cardiovascular improvement.

Today is the final run/walk test. When I arrive, Luke shares with me his hope that the students will better their personal times. He feels stress similar to that felt by the classroom teacher as students sit for the ISTEP tests. He longs for data to show he is, in fact, having an impact on

these third graders.

As we head outside, the children are excited and most of them run out to the track. After reminding them to pace themselves, he lines them up and calls "Ready, set, go." The children take off sprinting down the track as they cannot stifle their anaerobic tendencies. They move around the first turn and one little girl falls. Immediately, three of her friends stop and kneel beside her to inspect the wound on her knee and to comfort her. She is fine; but, Luke sighs as he notes it is unlikely these girls will better their times. As the children continue around the track, most slow to a walk, talking with friends as they go. On the far side, two boys stop to inspect a bug crawling across the track and on the straight stretch, a girl has stopped to tie the shoe of a classmate. The "class clown" feigns complete exhaustion and actually crawls toward the finish line at the end. I see the test validity slipping.

We both realize Luke is probably not going to have quantifiable data to suggest he is having the intended impact on his students. The times would be better if the children weren't so distracted. I reflect... What happened in class? What outcomes am I observing? What if the children just ran by the little girl who fell? What if a third grader doesn't stop and look at a bug? What if a child won't help another tie her shoe? What am I observing here and what is really important?

This experience suggests to me that the focus on quantitative outcomes may cause me to miss some important but difficult to measure outcomes. Is it possible that these children have learned some very important concepts from Luke even though they can not yet focus or pace themselves? I believe the children have learned much about cardiovascular fitness; but I also wonder if I am seeing the impact of Luke's kindness and caring being enacted by the children. Have I observed outcomes from the questioning techniques Luke uses to help student reflect and wonder? I conclude that, although Luke may not have the data to show off student outcomes, he is still the kind of teacher I would want for my child.

# CHOCTAW AND CHEROKEE HERITAGE AND GAMES

by

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## INTRODUCTION

### CHOCTAW HERITAGE

The name Choctaw is the anglicized form of the Tribal name: CHAHTA, as the Choctaw belong to the MUSKHOGEAN linguistic family. The Choctaw have a reputation for being prolific storytellers and have passed on, orally, two stories dealing with their origin. These creative stories have been passed generation to generation for many centuries. One story maintains that the Choctaw first lived in what is now the far western part of the United States which was captured from Mexico during the Mexican War. They eventually migrated to the present-day state of Mississippi. The prominent version of the story indicates that their home land had become over populated for agricultural pursuits.

The second story indicated, through a myth, that they were created by the Great Spirit in the depth of NANIAH WAIYA. They then crawled out through a hole in the center of the mound. All of the Civilized Nations believed in this theory to a degree.

The early Choctaws lived in villages in homes made of posts fastened together with vines. The interiors of the homes were plastered with mud which provided insulation. Fields adjacent to the villages were used to raise food such as corn, squash, peas, pumpkins, beans, melons, and sweet potatoes.

All farmland was held in common by the tribe and families were allowed to claim tracts for their personal use. If a family failed to cultivate the assigned plot, control over it reverted back to the tribe for reassignment. When the men and boys were not farming, they fished and hunted to provide food for their families. Primary food sources of meat were fish, deer, turkey, bison, raccoon, otter, bear, rabbit, and possum.

The winters were mild, summers hot and there was sufficient rainfall for crops. The forests provided firewood, building materials, and game. The numerous

rivers and creeks provided fish and clams for food, cane, and recreational activities.

### CHEROKEE HERITAGE

Many years ago, the Cherokee people called themselves, ANI YUN WIYA, which meant "Principal People". According to one author, they were the largest Native American Nation in the south. The name Cherokee, meaning, "people who speak another language," was given to them by other Indian tribes (Sharpe, 1970). Within the last hundred years, they have adopted the name TSALAGI for themselves. The question has arisen many times regarding the theory as to the origin of the Native American people. Many researchers have viewed this origin as a series of migrations from northeastern Asia to Alaska. This migration led to the occupation of the North American continent. Remnants of the old race have been found in Asia and the possibility that they crossed the Bering Strait has been carefully researched and recorded.

The Cherokee people have been forced to go through times of peace, conflict, success, and failure. Yet, they have had a relatively adaptive social structure which provided for favorable social and political change. They were subject to strong external pressures from several Western colonial powers and then from the United States federal government.

Historically, from the beginning of their civilization to present time, the Cherokees have lived in the valleys and near rivers in the Appalachians where they built their towns, cleared their fields, planted their crops, conducted marriage ceremonies, raised their families, and buried their dead. The original area consisted of 135,000 square miles that covered parts of what are now eight states.

The Cherokee Nation has been a population that has valued informal as well as formal education throughout history and this nation has placed an emphasis on educating its people. The Cherokee's had a written language that began in 1821 with

the invention of the Cherokee Syllabary by Sequoyah. Sequoyah was a man who gave his people the opportunity to communicate the Cherokee language both orally and in written form. Within a few years, nearly all Cherokees were able to read and write their own language.

Prior to the removal west in the early 1800's and before the establishment of the Qualla Boundary Reservation in 1885, the Cherokees excelled in agricultural production, informal and formal education, trade, and democratic self-government, as well as maintaining a rising standard of living. They had become successful farmers, lived in log cabins, cultivated fields, raised livestock, and sent their children to private schools and provided them with private educational tutors.

The rise, progress, and the flourishing of the two Cherokee Nations (Eastern and Western) have indicated the Cherokees' confidence in their fundamental beliefs, in their conception of a harmonious world, and in their ability to overcome adverse conditions. They have had a positive, progressive, and uplifting belief regarding their future.

### **CHOCTAW AND CHEROKEE GAMES**

Both the Cherokees and the Choctaws were active physically, mentally, socially, and emotionally. They were stimulated to do their best in any activity in which they participated. Games were played not only for social pleasures and entertainment but were also played for gambling and games were used to settle differences as well as wars. Boys were taught early in life to become skillful hunters, warriors, and workers. Eventually, once hunting, warring, and gathering of food had been accomplished, the Indians occupied the remaining unobligated time by participating in many different sports, games, and activities.

A gambling game, called disk ball, (CHUNKY) resembled spear throwing. A stone was rolled across a court and then the players threw long poles to the place where they expected the stone to stop. The one nearest to the stone gained a point according to Macfarlan (1958).

Another game named overhead stick ball, (ISHTABALI) demanded courage, strength, and skill. It was used to settle wars, disputes, and arguments between other tribes and clans. The equipment consisted of a long pole with a small net on the end. A small stone or ball and a small target that was 20 or more feet in the air were used. The ball was made of deer or bear hide and stuffed with animal hair. A player gripped the pole with both hands and then held the pole overhead. The person selected to hit the target whipped the stone or ball toward the target. The person hitting the target the first time or the most times settled the dispute.

The game of stick ball was not to be confused with another game the Cherokees and Choctaws played that resembled the present day game of hockey. It too used a stick and ball but was played by small groups confined to a small area. The Indian version of stick ball had as many as 20 warriors (or more) on a side. The game was started with the ball in the middle of the field. There were two goals and each team attempted to score a point in the opponents' goal. When a team scored a predetermined number of

points, they were declared the winner. There were very few rules and most anything was allowed. Sometimes, they played without boundaries of any sort. This game was also used to settle disputes, arguments, and wars.

Another game played by the two nations and used for practical purposes was blow darts. Blow darts originally were used for hunting small game and were used as a gambling game, as a source of pleasure, and as a social recreational activity. A long hollow pole made from river cane and hollowed out was used to blow a dart. Its length ranged from 2½ feet to 3 feet (sometimes, the reed was as long as six or seven feet in length). The darts used in competition were flint arrow heads or wooden darts.

According to one source (Macfarlan, 1958), games and activities of the Cherokees and Choctaws were varied. Many were used as training for the young. Even in several of the different activities and games, women participated. Games and activities were a vital part of the Native Americans life cycle. Their games had deep religious overtones that were neither understood nor fully appreciated by early Caucasians. Hunting skills were, at first, used out of necessity but later, games were to become a source of social enjoyment and entertainment.

Another main activity was dancing. This was a method used to pass to future generations the history, rituals, and myths of the Indian Nations. Furthermore, dancing proclaimed various festivals. Ritualistic rhythmic movement or dancing was central to the Indian culture. Many movements reflected the natural rhythm of days and seasons. In addition, Cherokees' believed that the Great Spirit was the central force in the universe of dance. Dancing rituals reflected the daily lives of the Cherokees and provided rules to be followed. The Choctaws also believed dancing was a spiritual form influencing their lives. The Choctaws were unique since the women of the tribe performed the war dance. No other Indian Nation was known to have the women dance this important event.

Of all the games, Lacrosse was the most popular activity for all Indian Nations. There were no standardized playing fields, no set number of participants, and no special type of equipment. Tribal customs, seasons, weather, and other factors determined the facets of the game. Some Indians used a stick and a small basket on the end that was used to catch and throw a ball. The ball was made from deer hide and stuffed with animal fur or hair. The length of the sticks varied in length from 18 inches to five feet. The object of the game of Lacrosse was to advance a ball across the opponent's goal by throwing the ball with the stick and basket. Each year a national tournament is still played between the Cherokee and Choctaw Nations.

Beside racket and stick games, there were pitching activities. An unnamed game similar to Jai Alai was played within two high-walled courts. Vertically, in the center of each of the two walls, were placed several hoops. These hoops were six to twelve inches in diameter. A ball, five to eight inches in diameter, was used. Players attempted to throw the ball through the hoops, thus scoring points. The game held a ritualistic significant component. Chiefs,

Shamans, and Priests sat near the playing area. They performed sacred rites when a score was made.

Hunting of deer had been a type of game for the Cherokees as well as a source of food. It became a game when they placed a deerskin on their heads and attempted to approach deer without frightening them. Usually, this was accomplished when the deer came to drink at a stream. Children, especially, used this technique for sharpening their hunting skill. The Choctaws used a similar method to pursue food for their families and for the children to practice hunting skills.

The use of bow and arrows was necessary for survival skills, for military tactics as well as training, and for pursuing food. In addition, the shooting of arrows was used in fishing and that became a form of competition along with the use of blow darts. Heavy betting often occurred during the archery contests. The Cherokee method of archery has stimulated and had influenced many modern day archery enthusiasts. Contests are still part of the Cherokee celebrations during the fall. The Cherokee and Choctaw Nations hunted large game with bows, arrows, and spears while small game was hunted with cane blowguns. Both Nations believed that hunting was considered a sacred rite, as animals were thought to be brothers and sisters of mankind.

Aquatic activities have long been an important part of the Choctaw and Cherokee lives. They have swum in the rivers, used the water for purification rites, used water for cleanliness, and used water as a form of recreational activities, and for a source of food. For example, the Choctaw had ceremonial uses for water while the Cherokee used the rivers for purification purposes and for cleanliness during competition. They also believed they had to duck under water seven times during the purification rites.

Participation in track and field events was an important element in the lives of both Nations. Track began when they had to run from wild animals. Additionally, the quest for food, protection from the elements, and self-preservation from human enemies were other needs that track and field provided. Endurance and speed races were held to develop the body and to develop skills. Competition in relay races and intertribal competition served as incentives for good running techniques.

Additionally, both the Choctaws and Cherokees were noted for types of wrestling and for the use of weapons such as throwing the tomahawk, spear, and knife. These combative activities were practiced for survival. Soon, they became a form of entertainment such as betting and gambling.

## CONCLUSION

Games and activities of the Choctaw and Cherokee Nations have been varied but useful in the daily lives and have been a vital part of the daily life cycle. They have been used as training for the young men, though women often participated in the many games and activities. Games and activities were first used out of necessity and for preparing for war, disagreement,

and arguments but later became a source of competition, social enjoyment, and entertainment. Today, there is still competition between the two nations. Finally, today, many societies and cultures have embraced the many types of play, gambling, and competition of the Choctaws and Cherokees.

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# Mentoring 1st Year Faculty in Physical Education Departments: Enhancing the Academic Experience

by  
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## Abstract

With the dearth of research in the area of mentoring in Physical Education or Kinesiology Departments, the present study was undertaken to gain a deeper understanding of the mentoring relationship between experienced Chairs and first year faculty in Physical Education or Kinesiology Departments. The purpose of the study investigated four areas in regards to mentoring first year professionals in a Physical Education or Kinesiology Department. The four research questions included the following: (a) what advice was provided to the mentor as protege in the areas of teaching, scholarship, and service when he or she was a first year faculty? (b) what were the most critical pieces of advice given the mentor as protege when he or she was a first year faculty? (c) what advice was provided by the mentor to first year faculty in the areas of teaching, scholarship, and service? and (d) what were the most critical pieces of advice the mentor provided to the first year faculty?

A phenomenological research design was chosen to examine the mentoring relationship from the perspective of the mentor. A group of Chairs from a Midwest state were contacted for the study (N = 5, 3 female and 2 male). Each participant provided informed consent. The primary means of collecting data for this study was in-depth phenomenological interviews with each participant. The researcher used the constant comparative method of analysis throughout the study. The mentors provided some interesting advice for first year faculty to follow in terms of preparing the first year faculty through orientation of the department expectations, providing advice in the areas of teaching, scholarship and service, and providing advice in terms of helping with service projects in the department, for the university, and the community.

The benefits of mentoring have clearly been established for proteges, mentors, and the organizations they serve. Mentors help proteges to professionally advance by helping to increase self-esteem, develop networks, and provide guidance all leading to a higher paying position (Weaver & Chelladurai, 2002). Mentors benefit by the loyal support received from the protege, greater internal satisfaction and creativity, and a sense of rejuvenation and recognition from the organization for his or her capabilities as a teacher and advisor (Kram, 1985). Organizations benefit from mentoring relationships through enhancing organizational commitments, lowering levels of turnover, increasing employee productivity, developing managerial talent, and educating new employees or socializing them regarding the organization's values (Ragins & Scandura, 1994).

While various definitions of mentoring exist in the literature, the most enduring image of a mentor was predicated in the classical vision of Odysseus. The term "mentor" actually derived from the character named

Mentor who was a faithful friend of the Greek hero Odysseus in Homer's epic story *The Odyssey*. Odysseus left for war, leaving Mentor behind to serve as a tutor to his son Telemachus. Mentor served in this role, earning a reputation of being wise, sober, and loyal. The classic understanding of the term "mentorship" evolved from the relationship of these two characters. A similar relationship may be needed for those individuals entering a first year position as a faculty member in higher education. With the pressures of teaching accountability, research expectations, and service, first year faculty face the requirements for scholarly achievement to obtain tenure and promotion. Early in the academic career, mentoring can provide much needed guidance in all three areas, helping the protege early on with managing conflicting requirements of course preparation, research expectations, and meeting the appropriate level of service which, in turn, all help the young protege to become a good colleague within a new culture (Gaskin, Lumpkin, & Tennant, 2003). Mentoring will also introduce the first year faculty "to senior cross-disciplinary faculty, provide

new faculty with information about on-campus resources, and promote interdepartmental discussion and collegiality” (Savage, Karp, & Logue, 2004, p.23).

Research on mentoring in Academia has focused on the importance of the mentoring relationship in professional development of faculty (Grosshans, Poczwardowski, Trunnell, & Ransdell, 2003). Limited research has focused on mentoring in sport with regard to administration, athletes, and students and even less research has focused on mentoring in educational institutions in regards to Physical Education or Kinesiology (Bower, in Press; Bower, 2006; Silverman, 2003).

With the dearth of research in the area of mentoring in Physical Education or Kinesiology Departments, and no studies specifically focused on chairs and proteges in this area, the purpose of the study was to gain a deeper understanding of the mentoring relationship between experienced Chairs and first year faculty in Physical Education or Kinesiology Departments. The study focused on two research questions: (a) what advice was provided to the first year faculty in the areas of teaching, scholarship, and service? and (b) what were the most critical pieces of advice the mentor gave the first year faculty?

## Methods

### Study Design

The researcher chose a phenomenological research design to examine the mentoring relationship from the perspective of the mentor (Denzin, 1994). Creswell (1998, p. 51) described a phenomenological study as “the meaning of lived experiences for several individuals about a concept of the phenomenon.”

### Participants

Purposeful sampling provided the researcher with a reason or “purpose” for selecting particular participants (Rossman and Rallis, 2003). Since these participants were identified as mentors, it was likely they had a better conceptualization of the mentoring relationship. The sample size of the research was based on the recommendation for a phenomenological study and was five (N=5; 3 women and 2 men). According to Rossman and Rallis (2003), “if you are doing a phenomenological study with three very long interviews with participants, you would be unwise to have a sample of more than three to five people” (p. 138).

### Pilot Study

The initial mentoring interview procedures for this study were developed and used in a prior study by Alien, Poteet, & Burroughs (1997). Since the Alien, Poteet, and Burroughs study, the interview procedures were modified and used in three previous studies focused around campus recreation (Bower, Hums, & Keedy, 2004; Bower, Hums, & Keedy, 2005; Bower, Hums & Keedy, in press). Questions were revised to reflect an Academic setting for the current study. A pilot of the interview was conducted to check for any problems with either procedure before data collection.

### Data Collection

This research study relied on demographic and in-depth interviews for its primary means of collecting data.

*Demographic Information.* Demographic information included gender, age, race, number of years in academia, number of years in current position as Chair, degree programs falling under leadership, and number of years worked at current university.

*Phenomenological Interviews.* For this study three interviews were conducted with each participant during a single session. (Siedman, 1998) The interviews varied between 45 and 120 minutes depending on the participant. The first interviewees narrated their personal life histories relative to the topic up to the present time. The researcher asked the participants to talk about their lives up until the time they become mentors. The second interview focused on bringing the narrative to the present by focusing on specific details of participants experiences as a mentor. The third interview consisted of asking the participants to reflect on the meaning of their experiences of the mentoring relationship phenomenon by integrating the two previous interviews.

*Data Analysis Procedures.* The researcher reduced interview data by analyzing and interpreting it through the use of four phases of a qualitative analysis (Wolcott, 1994): (a) organization (each interview was tape recorded and verbatim transcribed, transcripts were labeled with pseudonyms to protect identities, the qualitative software HyperResearcher 2.0 was used to pull together the data, and a journal was kept of data collected and notes from each interview, (b) familiarization (re-read the transcripts to review the data), (c) categories/themes (categorical strategy of analysis - sorting to determine appropriate categories), and coding (themes begin to emerge through intensive analysis and categorization of data).

### Trustworthiness of the study

Trustworthiness of the study is the quality of research that convinces others to pay attention to the researcher’s findings (Lincoln & Guba, 1985). Credibility (internal validity) was established through “authenticity” of tape-recorded conversations and verbatim transcription, the interview structure, piloting questions, and using the constant comparative method. Transferability (external validity) was established through the use of a “thick description” that enables readers to determine whether the findings can be transferred because of shared characteristics (Eriandson, Harris, Skipper, & Alien, 1993). Dependability (reliability) relied upon external auditing of the transcripts by a chair and professor familiar with the mentoring literature. Finally, to promote confirmability (objectivity), the researcher made every attempt to limit the bias and premature conclusions through the use of the constant comparative analysis, external auditing, and rereading the data. The researcher also made a conscious effort to remain neutral in verbal responses and body language as the interviews were conducted.

## Results and Discussion

### Demographics

The demographics consisted of gender, age, race, number of years in academia, number of years in current

Table 1 Demographic Data of Mentors Data

	Mentor 1	Mentor 2	Mentor 3	Mentor 4	Mentor 5
Gender	F	M	M	F	F
Age	60	48	58	53	52
Race	White	White	White	White	White
Career Profile	High School Athletic Adm Coaching University	University	Elementary	Elementary University	Middle Athletic Adm Coaching University
Number Years in Academics	39	25	34	30	16
Number Years as Academic Chair	12	6	1	15	1
Number Years at Current University	29	14	32	26	16
Department Name	Health & PE	PE	PE	PE, Sport & Exercise Science	Kinesiology

position as Chair, degree programs falling under leadership, and number of years worked at current university. These results may be found in Table 1.

**Personal Life History Portraits as Proteges**

The personal life history portraits examined the past looking at the mentor as a protege. The mentors as proteges were mentored through the following four general themes: (1) advice on knowledge and skills, (2) advice on tenure and promotion process. The mentors as proteges indicated their mentor provided them with the knowledge and skills to be successful within a Physical Education or Kinesiology Department. The mentors as proteges described how the mentors provided knowledge and skills necessary for promotion and tenure, teaching, scholarship, and service.

The mentor explained the promotion and tenure process in terms of submission of forms, applying for promotion, and necessary information about annual reports. The teaching attributes obtained from the mentor included learning how to communicate with students, developing class assignments, understanding course evaluations, attending teaching workshops, developing and changing course work, understanding formalities (syllabus, expectations of paperwork), and developing a teaching style.

**Scholarship**

Scholarship was not as important as teaching when the mentors were proteges. This is not unusual considering the average age of the participants was 54 and many of the universities focused on teaching. Although the mentors were supportive in encouraging young faculty to submit papers to state journals while helping the mentor as protege with proper format for submission. The mentors as proteges also helped young faculty to improve teaching in the classroom.

**Service**

Service was the hallmark of many of the universities during the time the participants were proteges; therefore, mentors as proteges were encouraged to be “good

university citizens”. Good university citizens were faculty members who focused on serving the university through committees and being a part of other functions. In terms of committees, senior faculty were encouraged to nominate young faculty during the second or third year.

The mentors provided critical pieces of advice for the mentor as protege during their first year as faculty members. The mentor provided additional advice to the mentor as protege on promotion

and tenure in terms of balancing and keeping track of all items completed in teaching, scholarship, and service and listening to senior faculty. In balancing teaching, scholarship, and service, the mentors as proteges indicated their mentors “protected” them throughout their career so they would not be overwhelmed. The mentors also encouraged keeping a file and writing down everything they contributed to throughout the year in teaching, scholarship, and service. This information would eventually be used for an annual review.

The mentors’ advice specific to teaching included attending teaching and learning workshops, taking advantage of the resources available on campus, and being clear on expectations of the department and university. The mentors’ advice specific to scholarship included establishing a research line, submitting research presentations, and collaborating with others on research projects. The mentors’ advice specific to service included not volunteering too much too early. The mentors explained teaching and scholarship were important and that lack of service would not keep someone from being promoted and tenured. Finally, the mentors’ expressed the importance of being professional. The professionalism dealt with students, colleagues, the classroom, conferences, and university functions.

The personal life history portraits as proteges identified one major function. This major function was identified by Kram (1983) and was named “career related functions.” The career related functions identified by Kram included sponsorship, exposure and visibility, coaching, protection, and challenging assignments. The career related functions for the current study included helping the mentor as protege professionally develop in terms of teaching, scholarship, and service. These functions were directly related to helping the mentor as protege with advancement outcomes, such as promotion and tenure.

Olsen (1993) examined the experiences of faculty

and found that early experiences in academia exerted a great influence on later success. More specifically, first year faculty are receptive to understanding and learning the values and norms of the profession and university, and allowing faculty to “hit the ground running” (Olsen, 1993, p. 1). This seems to be the case with the five mentors in the study who “hit the ground running” to the point of becoming Department Chairs. In turn, these mentors are mentoring other first year faculty with the same desire as their mentors mentored them, as seen in the personal life history portraits as mentors.

### **Personal Life History Portraits as Mentors**

The second interview focused on bringing the narrative to the present by focusing on specific details of participants’ experiences as a mentor.

*What knowledge and skills were important for success of first year faculty within Physical Education or Kinesiology Departments?*

The mentors identified the knowledge and skills important for success of first year faculty entering a Physical Education or Kinesiology Department. The knowledge and skills were identified in the areas of promotion and tenure, teaching, scholarship, and service.

### **Promotion and Tenure**

The important knowledge and skills identified under promotion and tenure included keeping track of everything the protege did for the annual review, knowing how to utilize resources on campus, learning how to balance teaching, scholarship, and service, and developing a good vita. Although the requirements for scholarly productivity to obtain tenure and promotion may vary by academic department and institution, the majority of universities require some form of teaching, scholarship, and service. Silverman (2003) discussed tenure requirements and “how teaching fits with those requirements and how teaching and scholarship interface” in Physical Education or Kinesiology departments (Silverman, 2003, p. 73). The emphasis is on being an effective teacher which is a requirement for promotion and tenure in most institutions (Silverman, 2003). The balance of teaching, scholarship, and service during the tenure and promotion process has been discussed by many (Glover, 1993; Shulman, 2000) and is important for first year faculty to survive.

### **Teaching**

Silverman (2003) describes teaching as helping the protege to do the following: (a) develop intellectually, develop learning styles, prepare for class (how classes fit into curriculum or sequence, accreditation and course planning, selecting books and other resources, determining and sequencing content, and preparing a syllabus), (b) develop teaching methods (effective lectures, discussions, and labs, methods to stimulate thinking, methods for group process, teaching methods and large classes, preparation of teaching materials, use of technology, and assignments as part of the teaching process), (c) learn to assess and grade (assignments as a form of assessment, designing good tests, grading), improving teaching (self-critiquing teaching,

peer assessment, student evaluation), and (d) act ethically (relationship with students, student cheating, and other academic infractions).

The mentors indicated the knowledge and skills necessary for teaching included utilizing the teaching and learning center, focusing on course material, looking at course evaluations, learning to balance a teaching load with responsibilities, coming prepared for class everyday, and having a senior faculty observe a class to provide feedback to the proteges. Related to these themes, Miller and Noland (2003) discussed the efforts to improve teaching through observing good teachers, locating resources, learning from other faculty, obtaining feedback, and utilizing the teaching and learning center to provide resources and to evaluate teaching.

### **Scholarship**

Scholarship usually refers to research funding, number of professional presentations, publications of peer-reviewed journal articles, books, book chapters, and monographs, and training graduate students to be researchers (Ransdell, Dinger, Beske, & Cooke, 2001). In terms of scholarship, the mentors indicated it was important to establish a research line early while developing a “research agenda”, collaborating with senior faculty within the department, and staying active through publishing and presenting. The mentors also indicated it was important to develop a “research cycle” where the proteges always had a manuscript “in press”, one “in review”, one the protege was writing, one the protege was collecting data on, and one the protege was thinking about. Having a “research cycle” helps establish a research line.

Miller and Noland (2003) also established the importance of working with senior faculty on research projects. Miller and Noland (2003) found that working in research teams developed a synergistic effect in terms of productivity and creativity, sharing resources such as facilities, expertise, and funding. Ransdell et al. (2001) reported that 40 percent of the participants indicated a mentoring relationship fostered success in publishing.

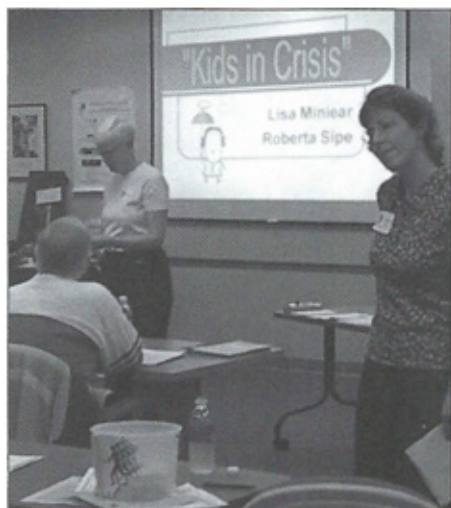
### **Service**

Service related to promotion and tenure usually consists of volunteering for a department, state, regional or national committee, serving as an officer at the state, regional or national level, reviewing manuscripts, working with community projects, and participating in governance at the department or university level (Miller & Noland, 2003).

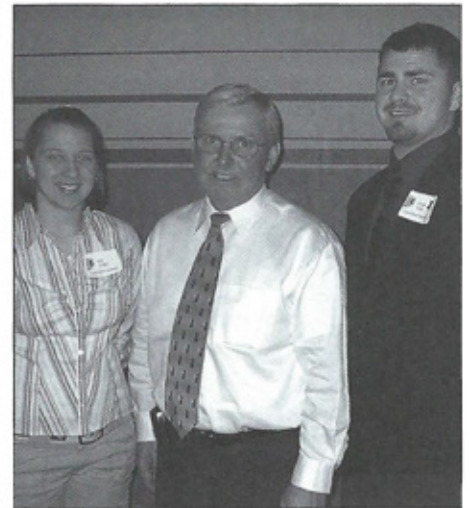
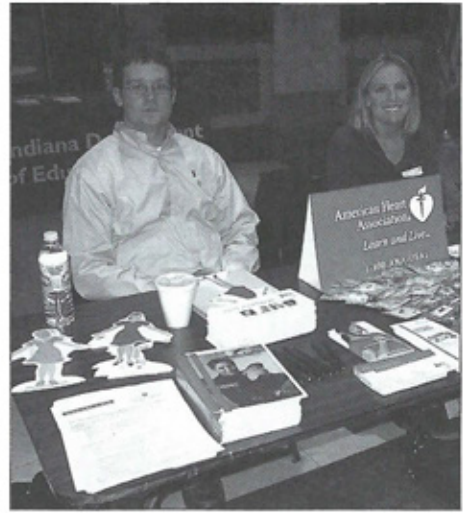
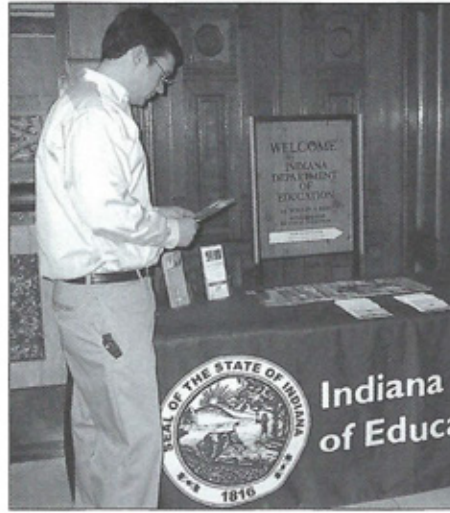
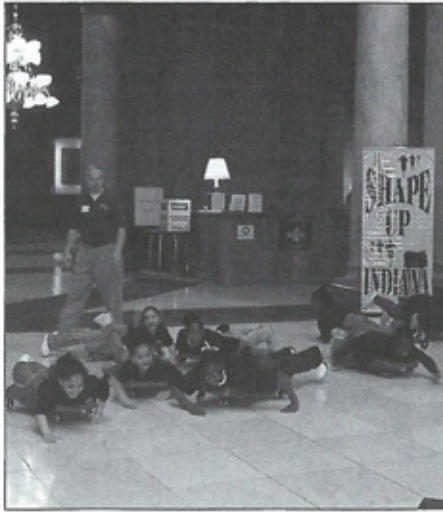
The mentors in this study also encouraged the proteges to complete service projects and focus on reaching the goals the department discussed during faculty meetings. Service projects include committees that host certain events, such as an Employee Wellness committee. This committee will host an Employee Wellness Fair and connect first year faculty to many other faculty on campus (campus recreation, student wellness office, counseling center). Although this study did not provide additional information in terms of completing service projects, Miller and Noland (2003) indicated that service should be used to “make connections”. First year faculty should perform service to grow professionally

*continued on page 22*

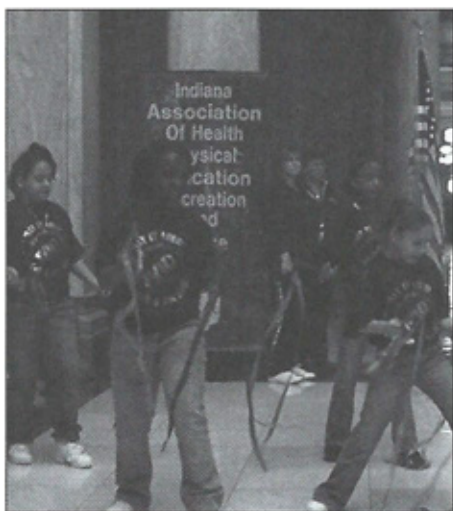
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# January 2007



through building skills, keeping current in the field, and making connections.

*What are the most critical pieces of advice you would give to first year faculty in his/her first position?*

The mentors described the most critical pieces of advice they would give young faculty entering their first position. The mentors encouraged proteges to document everything, have multiple mentors, establish a balance between teaching, scholarship, and service, and be professional. The mentors indicated documentation included materials from classes, presentations, publications, and service to the university, department, and community. The mentors also recommended having multiple mentors to meet the needs of the protege. The chair may have more experience in the area of teaching and less in research. A senior faculty may be better suited for mentoring the first year protege in another area, such as research. Mentoring may come from outside the department or another university. The first year faculty may keep the same mentor they had when they were in graduate school. The mentors also thought it was highly important to balance teaching, scholarship, and service. The young protege needs to understand what is most important to the university in terms of the teaching, scholarship, and service areas. The first year faculty should not focus the greatest efforts on scholarship if the university is a teaching institution and vice versa. Finally, the mentors encouraged the young faculty to be professional by being punctual in the classroom, having a syllabus with academic content, and choosing appropriate tests and class activities.

The personal life history portraits of the mentors revealed they were motivated by a desire to build competent workers through engaging them in Kram's (1983) career-related mentoring activities (teaching and learning workshops, writing for refereed journals, presenting at state, regional, and national conferences).

### **Reflections on the Mentoring Relationship**

The third interview consisted of asking the participants to reflect on the meaning of their experiences about the phenomenon of the mentoring relationship. The mentors described the mentoring relationship as one that could begin as early as the hiring process. As chairs are interviewing candidates for a position, they are also looking for characteristics that will make the young faculty a "good fit" for the department. A mentoring relationship is more likely to happen if the young faculty is accepted during the hiring process. The mentors also indicated a successful mentoring relationship is best when the mentor and protege approached each other. The mentor indicated it is important for the chair to take the initiative to guide the young faculty but the protege also needs to be willing to be mentored by the chair. Finally, the mentors indicated the mentoring relationship often develops from former students who eventually enter academics. The mentors discussed the factors which make a successful mentoring relationship. The factors included the protege's willingness to be mentored, the characteristics of the protege, the eagerness of the mentor to do well, a long-term friendship developing, the mentor providing feedback to the protege, and the

sharing and learning between the individuals. The mentors also discussed the factors which make an unsuccessful mentoring relationship. The factors included the protege's unwillingness to be mentored, the negative attitude of the protege, the lack of initiative from the mentor, and the protege lacking respect for authority.

### **Implications**

This study has several implications for current and future chairs and first year faculty wanting to enter a mentoring relationship. First, the mentor needs to be prepared to orient first year faculty to the department expectations. The mentor needs to help the first year faculty to understand the promotion and tenure process and the importance of balancing teaching, scholarship, and service. According to Savage et al. (2004), "the mentoring should attract, retain, and facilitate promotion of new faculty by thoroughly explaining the university's tenure and promotion systems and by introducing first year faculty to unique organizational cultures and definitions of work responsibilities" (p. 23). To balance teaching, scholarship, and service, the mentor needs to explain to the first year faculty the hierarchy of importance among teaching, scholarship, and service. In understanding the promotion and tenure process, the mentor should encourage the first year faculty to keep track of everything; folders (course content, teaching philosophy, updated vita), use resources on campus (grants, research fellowships), and update research agenda.

Second, it is important to provide first year faculty with advice to improve on teaching. The mentor can provide advice in terms of attending teaching and learning workshops offered throughout the year. The mentor can also provide information on focusing on course material to make sure there are not mistakes on the syllabus, assignments, or exams. The first year faculty needs to keep up with the latest course material, examine course evaluations, and make a plan for improvement. The mentor can help the first year faculty to make suggestions for improvements. Finally, mentors need to stress the importance of being professional in terms of showing up for class on time, being organized, and dressing appropriately.

Third, it is important to provide first year faculty with advice to improve on scholarship. The mentor needs to encourage the first year faculty to develop a research agenda over the next three years. This research agenda provides an idea of the research and presentations the first year faculty plan to do in the next three years. The first year faculty needs to be encouraged to collaborate with senior faculty; but, the senior faculty need the initiative to take the first steps. This mentoring provides opportunities to facilitate mutual respect and avoid counterproductive divisions between old and young professors (Magner, 1999). One of the most important recommendations by the mentors included establishing a "research cycle". A "research cycle" keeps the young faculty with a manuscript "in press", a manuscript "in review", writing a manuscript, collecting data, and developing new ideas.

Fourth, the mentors provided advice in terms of helping with service projects in the department, the university, and



the community. First year faculty may not want to do a considerable amount of service the first year, nor should they be expected to do so. The additional time will allow the first year faculty to get acclimated to the teaching load and establish a research line. According to Miller and Noland (2003), first year faculty should seek out specific types of service that will do the following: (a) be advantageous to them, (b) keeps a perspective about the amount of service to which they commit, (c) provide a purpose in providing a learning opportunity while helping to make contacts in the field, (d) avoid committees unrelated to their academic area, (e) limit service related to the governance of the department and university, (f) seek out opportunities to serve on committees for professional organizations at the national level, and (g) the service selected should build his or her skills to do other things. First year faculty also need to determine the university priorities in terms of teaching, scholarship, and service. Each of these institutions have different expectations for teaching, scholarship, and

service. Therefore, the advice and experiences discussed are specific to the particular institution. The reader needs to determine the hierarchy of importance between teaching, scholarship, and service at his or her own institution. In the majority of universities, service is important but limited in order to establish credibility in the other two areas of teaching and scholarship.

### Future Research

Future research should focus on examining several areas. First, future research should focus on interviewing senior faculty. Do senior faculty see as one of their roles to mentor first year faculty or do they see the role of a mentor as a job requirement handed down by the chair? Second, the different areas of teaching, scholarship, and service could be examined separately to provide specific needs for each.

### Conclusion

This study illustrated the need for department chairs to continue mentoring to create opportunities for first year and senior level faculty to work together (research, teaching together, grant writing). This mentoring will help first year faculty create a balance between professional and personal life and identify institutional resources which help with career development. Therefore, it is imperative that university department chairs do not neglect first year faculty as they start their careers. It is important for chairs to help first year faculty to hold on to the dream to "enter the profession with a vision of freedom, autonomy, and opportunities for intellectual discovery and growth" (Rice, Sorcinelli, & Austin, 2000, p. 22).

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**Table 2**

*Personal Life History Experience as a Protege, Mentor, and the Mentoring Relationship*

*Personal Life History Experience as a Protege*

**Research Question 1 - What advice did the mentor provide the protege in the areas of teaching, scholarship, and service?**

- Theme 1 Promotion and Tenure
- Theme 2 Teaching Ability
- Theme 3 Scholarship
- Theme 4 Service

**Research Question 2 - What were the most critical pieces of advice your mentor gave to you in your first year as a faculty member?**

- Theme 1 Promotion and Tenure
- Theme 2 Teaching
- Theme 3 Scholarship
- Theme 4 Service not as important early
- Theme 5 Be Professional

*Personal Life History Experience as a Mentor*

**Research Question 3 - What knowledge and skills were important for success of new faculty within Physical Education and/or Kinesiology Departments?**

- Theme 1 How to obtain promotion and tenure
- Theme 2 Teaching
- Theme 3 Scholarship
- Theme 4 Service

**Research Question 4 - What are the most critical pieces of advice you would give to a new faculty in his/her first position?**

- Theme 1 Documentation
- Theme 2 Having multiple mentors
- Theme 3 Establishing a balance between teaching, research, and service
- Theme 4 Being professional

*The Mentoring Relationship*

**Research Question 5 - What were the factors that make a successful mentoring relationship?**

- Theme 1 Factors in a Successful Mentoring Relationship
- Theme 2 Factors in an Unsuccessful Mentoring Relationship

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# Factors Relating to Nutritional Supplement Use in College Students: Do the Same Motives Apply to Athletes and Non-Athletes?

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## Abstract

**Background:** Recent studies have found an increase in nutritional supplement use in college students. Although it is frequently assumed that athletes use nutritional supplements to a greater extent than do non-athletes, few studies have actually investigated this claim or reasons for this possible difference.

**Method:** One hundred eighty seven undergraduate college students were surveyed in Psychology classes and Health and Wellness classes at the end of a class period. Participants were grouped based on athletic status: 151 non-athletes, 36 athletes. Participants were asked if they had ever taken nutritional supplements (e.g., creatine, glutamine, HMB, ZMA, caffeine, ephedrine, ma huang). They were also asked about their alcohol consumption patterns, drinking motives, body satisfaction, self-esteem, and mood.

**Results:** As we hypothesized, there were no differences in supplement use between athletes and non-athletes. The use of performance supplements in both collegiate student-athletes and non-athletes was related to alcohol usage patterns. However, the use of performance supplements in non-athletes was also related to psychological variables, such as having higher levels of body dissatisfaction, lower levels of self-esteem, higher levels of fatigue, anger, tension, depression, confusion, and overall negative affect.

**Conclusions:** Although a relatively small number of students used supplements compared to previous research, as we hypothesized, there were no differences between performance-enhancing supplement use in athletes and non-athletes. There were, however, differences in the factors relating to supplement use in the two populations. Future studies should examine this issue more closely and

colleges need to be advised that many of their students using supplements may be doing so for the wrong reasons.

Evidence suggests that the use of nutritional supplements such as creatine, glutamine, HMB, ZMA, caffeine, ephedrine, and ma huang has become increasingly common among college students in this country and one recent study that found 81% of college students reporting the use of various types of supplements. [1] Furthermore, the vast majority (over 90%) of college students indicated that they began using nutritional supplements without first consulting a physician or other health care professional to discuss the potential benefits or adverse side effects that may result from supplement use. [2] More alarming is the fact that, of the college students who did report suffering adverse effects, 58% continued using supplements despite experiencing health problems. [2] However, it also appears that many college students who do in fact take nutritional supplements may not actually need them. For example, Newberry et al. reported that 81.5% of students taking supplements for weight loss were of normal weight, with no need of weight loss or gain. [2]

Speculation exists as to why the use of nutritional supplements is so prevalent among college students. One common but little tested assumption is that athletes are more likely to use supplements than are non-athletes. In fact, a recent study reported that 89% of college student-athletes use supplements of some sort. [3] Given their association with coaches and nutrition professionals, it is also commonly assumed that athletes are relatively well-informed consumers, using nutritional supplements in order to enhance sport performance. Unfortunately, athletes' knowledge about supplements is often as poor as

that of their non-athlete counterparts. For example, a study by Jacobson and Aldana found that 77% of athletes believed that multivitamins provided energy and over half believed that protein, not carbohydrates, is the body's primary energy source. [4] Such mistaken beliefs are put into perspective when it is noted that athletes are most likely to obtain their supplement information from family members, store employees, friends, or fellow athletes. [3] In a recent joint statement by the American College of Sports Medicine, American Dietetic Association, and Dieticians of Canada, these organizations argued that athletes should not even need to use supplements as long as they are consuming an appropriate diet. [5] This statement concludes that supplements should be used with caution and only after a careful evaluation of their safety, efficacy, potency, and whether or not the supplement is banned.

With such large numbers of college students, especially athletes, reporting the use of various forms of nutritional supplements, it is important to identify motivational factors that lead to this practice. Among athletes, the most common physical reason to use supplements is simply to enhance athletic performance, with other factors being an increased ability to cope with pain and enhanced physical attractiveness. [6] Furthermore, it appears that students' overall health behaviors (e.g., alcohol consumption patterns) may relate to their supplement use as well, and these patterns may differ by athletic status. Goldberg and colleagues found that use of both alcohol and other illicit performance enhancing supplements in male athletes is widespread, and often co-exist together. [7] There is some evidence to suggest that as a result of the unique stressors experienced by the college student-athlete, sport participation could lead to increases in the use of both alcohol and nutritional supplements because athletes believe that they will receive both performance enhancement and stress relief through these substances. [8; 9] Additionally, the use of performance enhancing supplements is often related to other risky behaviors in athletes, such as the abuse of tobacco, alcohol, and other illicit drugs. [10] However, few extant studies have compared athletes and non-athletes in terms of motivations for nutritional supplement use.

One study of motivations among non-athlete college students found that those who used supplements reported greater positive beliefs regarding the benefits of supplement use. [11] Unfortunately, students often overestimate the benefits that a supplement may provide. Ironically, students with the least amount of knowledge about nutritional supplements may be most likely to use them. [12]

Moreover, other motives for the use of nutritional supplements may be related more to the desire for optimal physical appearance than sport performance. For example, media messages that promote "thinness" in women and muscularity in men have been associated with dietary supplement use. [13] It is often speculated that weight concerns and body image dissatisfaction relate to low self-esteem [13; 14], and that in an effort to increase self-esteem and body image satisfaction, students (especially athletes) may turn to supplement usage [see 14, 15,

16] Thus, individuals often use performance enhancing supplements for body appearance, specifically having their bodies look slim, strong and firm, rather than performance enhancement [6].

Finally, a number of studies have indicated a correlation between mood and supplement use. [17, 18, 19] For example, several studies have found that certain foods and food supplements can decrease depression levels. [18, 20] Hence, it is plausible that college students may take nutritional supplements as a means of enhancing their mood in addition to both performance and body image concerns.

Although research has established that nutritional supplement use among both college student-athletes and non-athletes is widespread, few extant studies have directly compared supplement use in student-athletes and non-athletes. In addition, no studies have examined motivational factors relating to supplement use in collegiate athletic and non-athletic populations (e.g., alcohol consumption patterns, body dissatisfaction and self-esteem, and mood). Thus, the present study sought to answer these two questions. Based on independent research on athletes and non-athletes, this investigation hypothesized there would be no differences in the use of nutritional supplements between athletes and non-athletes. However, it was also hypothesized that athletes and non-athletes might differ in the motivational factors relating to supplement use in each population. Specifically, we hypothesized that there would be a greater relationship between nutritional supplement use and alcohol consumption, body dissatisfaction, and self-esteem in athletes than in non-athletes but that the relationship between mood and supplement use would be similar for the two groups.

## Method

### Participants

One hundred eighty seven undergraduate college students ( $M = 19.32$  years,  $SD = 1.67$  years) were surveyed in Psychology classes and Health and Wellness classes at the end of a class period. Participants were grouped based on athletic status: 151 non-athletes (117 were female), 36 athletes (19 were female). This division approximates student distributions of the university. Participation in this survey was voluntary and the University Subcommittee for the Protection of Research Subjects prior to initiating the study had approved procedures for this investigation.

### Measures

*Supplement use.* Participants were asked if they had ever taken nutritional supplements (e.g., creatine, glutamine, HMB, ZMA, caffeine, ephedrine, ma huang).

*Alcohol consumption patterns.* Alcohol consumption patterns were assessed with four items from Cooper, Russell, Skinner, and Windle. [21] These items have been successfully adapted in previous research with college student-athletes and non-athletes. [22] Participants were asked to indicate the frequency of drinking (e.g., once a week, once a month), frequency of intoxication, and how much they drink per drinking occasion (number of

drinks) during the week and during the weekend. Finally, drinking motives were assessed using a 15-item scale that assessed social motives (e.g., "As a way to celebrate.";  $a = .86$ ), coping/relaxation motives (e.g., "To forget about your worries.";  $a = .87$ ), and enhancement motives (e.g., "To get high.";  $a = .92$ ). Participants rated each item on a Likert scale, from 1 (almost never/never) to 4 (almost always). See Cooper et al. for scoring information. [21]

**Body image dissatisfaction and self-esteem.** To assess body satisfaction, students responded to the Body Shape Questionnaire (see 23 for discussion on validity and reliability; reliability in the present study was high,  $a = .94$ ). The survey asked students how they feel about certain aspects of their body (e.g., "Have you felt ashamed about your body?"). Responses were rated on a 6-point scale (1=never, 6=always).

Levels of self-esteem were measured using the Rosenberg Self-Esteem Scale, which has been shown to be both valid and reliable. [24] This scale uses a variety of questions assessing personal feelings about oneself as well as positive and negative emotions (e.g., "I feel I have a number of good qualities."). Responses were measured on a 4-point scale (1=strongly agree, 4=strongly disagree) ( $a = .85$ ).

**Mood.** To measure mood, students responded to a 30-item short version of the Profile of Mood States [POMS; 25]. The POMS is divided into six 5-item subscales and assesses tension, depression, anger, vigor, confusion, and fatigue. Responses were measured on a 5-point scale, from 1 (not at all) to 5 (extremely). Responses were summed for each subscale. In addition, we created an overall negative affect score (see McNair et al. for scoring information). [25]

## Results

As we hypothesized, there were no differences in supplement use between athletes and non-athletes,  $\chi^2 (1, N = 187) = 1.53$ , with 14% of non-athletes and 22% of athletes using supplements. Given this, we wondered if different factors related to supplement use in athletes and non-athletes. Thus, for each category (athlete, non-athlete), we ran t-tests to examine factors that might relate to the decision to use supplements for the different groups. As displayed in Table 1, use of performance supplements in collegiate student-athletes was related to alcohol usage patterns: consuming more alcohol on weekends,  $t(34) = 3.17, p < .01$ , drinking to intoxication more often,  $t(31) = 2.90, p < .01$  and drinking to "get high",  $t(34) = 2.08, p < .05$ . As displayed in Table 2, the use of performance supplements in non-athletes was related to the same alcohol consumption patterns found in student-athletes: consuming more alcohol on weekends,  $t(148) = 3.88, p < .001$ , drinking to intoxication more often,  $t(132) = 2.86, p < .01$ , and drinking to "get high",  $t(146) = 2.74, p < .01$ , along with drinking to relax,  $t(146) = 3.70, p < .001$ . In addition, the use of nutritional supplements was also related to more psychological variables, such as having higher levels of body dissatisfaction,  $t(149) = 3.00, p < .01$ , lower levels of self-esteem,  $t(148) = 2.75, p < .01$ , higher levels of fatigue,  $t(147) = 2.30, p < .05$ , anger,  $t(147) = 4.63, p < .001$ , tension,  $t(147) = 2.66, p < .01$ , depression,  $t(147)$

$= 3.53, p < .001$ , confusion,  $t(146) = 2.80, p < .01$ , and overall negative affect,  $t(146) = 3.82, p < .001$ .

## Discussion

The purpose of this study was to fill a gap in the literature concerning comparisons of supplement use in college student-athletes and non-athletes. Specifically, this study examined whether supplement use and factors relating to supplement use differed in student-athletes and non-athletes. We hypothesized that there would actually be no differences in nutritional supplement usage between student-athletes and non-athletes but that the factors relating to supplement use would differ between the two populations. Results from this study supported this hypothesis.

Contrary to previous research [1], a relatively small number of students in this study used nutritional supplements (14% of non-athletes and 22% of athletes). This might be because we limited our supplements to performance-enhancing supplements whereas many previous studies have included vitamins and minerals as supplements. In addition, our research was conducted at a small, private Midwestern university rather than a large state school. Future studies should examine whether school size, affiliation (e.g., public or private), or region of the country affect supplement use in college students.

Although a relatively small number of students used supplements compared to previous research, as we hypothesized, there were no differences between performance-enhancing supplement use in athletes and non-athletes. There were, however, differences in the factors relating to supplement use in the two populations. In athletes, use of performance-enhancing supplements was only related to alcohol usage patterns. Although this confirmed our hypothesis and previous research [7, 8, 9], we were surprised that none of the other variables we predicted would impact athletes more so than non-athletes came out. This may reflect the low number of athletes in our study relative to non-athletes or it may imply the presence of an unmeasured variable in this study. Future studies need to examine these possibilities.

In addition to alcohol consumption, non-athletes use of performance-enhancing supplements was related to more psychological variables, such as having higher levels of body dissatisfaction, lower levels of self-esteem, higher levels of fatigue, anger, tension, depression, confusion, and overall negative affect. Although we expected body dissatisfaction and self-esteem to relate to supplement use more in athletes than in non-athletes, the non-athletes experienced significantly greater body dissatisfaction and lower self-esteem in our study than did the athletes, which may have impacted our results. We also expected there to be no differences in the use of supplements in relation to mood between the two groups; but, in fact, non-athletes seemed to be the only group showing a relationship. It is unclear why this occurred; but, future studies should more closely examine specific motivations for supplement use to better flesh out this difference. Regardless, it appears that the use of performance-enhancing supplements may relate to different behaviors in the two populations, with supplement

use in non-athletes relating more to psychological well-being than in athletes.

Regardless of students' motives for supplement use and factors relating to supplement use, colleges need to be aware that their students are using supplements and very likely, they are doing so for the wrong reasons. In addition, this is not just a problem for the student-athlete. Colleges may wish to provide educational seminars to all students concerning the risks and benefits of various nutritional supplements and what one can reasonably expect from using them.

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Table 1 Means and Standard Deviations of Factors Related to Performance Supplement Usage in Athletes

Use Supplements?	yes	no	t
Alcohol Quantity Weekdays	2.38 (4.14)	.59 (1.64)	1.87
Alcohol Quantity Weekends	6.00 (5.32)	1.70 (2.67)	3.17**
Frequency Alcohol Consumption	3.25 (2.12)	1.67 (2.06)	1.90
Frequency Intoxication	2.88 (2.23)	.96 (1.40)	2.90**
Body Dissatisfaction	22.00 (5.13)	25.61 (12.31)	.80
Drinking for Social Reasons	2.30 (1.00)	1.68 (.82)	1.79
Drinking to Relax	1.48 (.55)	1.33 (.48)	.73
Drinking to "Get High"	2.23 (.80)	1.57 (.78)	2.08*
Self-esteem	34.38 (3.85)	33.11 (5.04)	.66
Vigor	14.50 (3.96)	14.86 (4.83)	.21
Fatigue	17.25 (5.90)	14.62 (4.85)	1.29
Anger	11.25 (4.30)	10.02 (3.49)	.84
Tension	10.25 (4.13)	11.86 (3.63)	1.07
Depression	10.75 (3.41)	10.07 (3.55)	.48
Confusion	8.25 (3.88)	9.18 (3.27)	.68
Negative Affect	83.25 (21.47)	80.89 (14.08)	.37

Note: \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Use Supplements?

Table 2 Means and Standard Deviations of Factors Related to Performance Supplement Usage in Non-Athletes

Use Supplements?	yes	no	t
Alcohol Quantity Weekdays	.76 (1.48)	.41 (.86)	1.55
Alcohol Quantity Weekends	4.57 (5.07)	1.94 (2.37)	3.88***
Frequency Alcohol Consumption	3.05 (2.28)	2.22 (2.07)	1.66
Frequency Intoxication	2.10 (2.02)	.97 (1.52)	2.86**
Body Dissatisfaction	40.85 (13.40)	32.53 (11.53)	3.00**
Drinking for Social Reasons	2.11 (.94)	1.79 (.75)	1.80
Drinking to Relax	1.96 (.95)	1.41 (.57)	3.70***
Drinking to "Get High"	2.17 (.97)	1.63 (.81)	2.74**
Self-esteem	28.55 (4.32)	31.72 (4.85)	2.75**
Vigor	13.26 (3.49)	14.13 (3.99)	.90
Fatigue	16.47 (4.80)	13.67 (4.97)	2.30*
Anger	13.84 (4.37)	9.63 (3.60)	4.63***
Tension	13.74 (4.34)	11.16 (3.88)	2.66**
Depression	13.16 (5.17)	9.60 (3.93)	3.52***
Confusion	10.58 (3.13)	8.68 (2.70)	2.80**
Negative Affect	94.52 (20.95)	78.71 (16.18)	3.82***

Note: \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

# An Analysis of Indoor Physical Education Facilities in Indiana High Schools

by

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## Abstract

In order to develop planning guidelines for the construction or renovation of physical education facilities in Indiana high schools, a detailed analysis of 60 high schools' activity and ancillary spaces was conducted. Direct measurements of all activity and ancillary areas were obtained. Additional survey and interview data from each physical education department chairperson including input on the adequacy of current space and recommendations for any needed additional space. Analysis of the data revealed that 90 of the schools had inadequate activity space, ancillary space, or both. A significant relationship ( $r=0.760$ ,  $p<0.001$ ) between school enrollment and recommended activity space provided the basis for the creation of a regression analysis prediction equation for activity space as follows: Total Activity Space (in square feet) =  $20,037 + (18.45 \times \text{Enrollment})$ . The determination of an ancillary space guideline based upon the activity space guideline would be for total ancillary space to be 38% to 42% of the total activity space. The development of space planning guidelines for the subcomponents of ancillary space based upon the data collected include: locker room space = 54% to 60% of total ancillary space, classrooms = 5% to 10% of total ancillary space, offices = 10% to 12% of total ancillary space, and storage areas = 18% to 22% of total ancillary space.

## Introduction

The indoor facilities used for physical education in high schools are a large and expensive component of the school's physical plant. The possible errors made in the allocation of square footage for these facilities will be encountered over the entire lifespan of the facility which is typically well over 50 years. Therefore, it is critical that these facilities are planned and built with the appropriate amount of space from the beginning. The development and application of research-based space guidelines will help to prevent these types of errors in the planning and building process. This includes the consideration of the activity areas such as the high ceiling spaces (gyms), low ceiling spaces (weight rooms & wrestling rooms), and pools. It also includes the ancillary areas composed of support spaces such as locker rooms, faculty offices, classrooms, and storage areas. A physical education facility that best meets the needs of its programs and users will help to ensure a positive impact on all those using the facility over the entire lifespan of the structure.

Unfortunately, the amount of research and other literature regarding the planning for high school physical education facilities has been limited. The National Education Association (1925) was one of

the first organizations to adopt size standards for gymnasiums in secondary schools. In 1932, architect John Donovan published a comprehensive checklist for the planning of school buildings that included four gym sizes based on enrollment. The National Council on Schoolhouse Construction published a general guide for planning school physical plants which included a brief section on physical education facilities (Waite, 1958). Penman (1977) suggested that the minimum size of a gymnasium be set at 13,000 square feet based on the single module concept allowing for one main basketball court or two cross courts, 3 volleyball courts, or eight badminton courts all to be accommodated within the space of one facility.

Specific studies on high school facilities have been limited. Moench (1949) created a formulation for standards for functional planning for the secondary schools in the state of New York and Ezersky (1967) focused on physical education facility planning for New York City high schools. Schooler (1950) and Acre (1956) both completed research regarding facilities for athletics, health, physical education and recreation for secondary school boys. Unfortunately, all of these studies took a functional approach and no specific numerical guidelines were given.



Sapora and Kenney (1961) pioneered a research driven approach for the development of space standards for physical education, recreation, and athletic facilities. As a part of the development of a master plan for the University of Illinois, the College of Physical Education was requested to help plan the facilities for physical education and intramurals. Their study recommended 8.5 to 9.5 square feet per student (total undergraduate enrollment) for Type A indoor teaching stations. These teaching stations included gym floors, mat areas, swimming pools, and courts. They also determined that the space needed for ancillary areas should equal approximately 40% of the total activity area. These formed the first research driven recommendations based upon school enrollment.

Berryhill (1969) developed indoor space guidelines for senior high schools under the direction of Kenney. This study involved the examination of facilities at one high school with a panel of experts. It was concluded that a standard of 19 square feet of activity space per student be established for high schools with an enrollment of 1700 or more students. It was also concluded that an ancillary space standard of 35% of the total activity space was acceptable for high schools. Turner (1993) later proposed a standard of 125 square feet of activity space per student at peak load as a minimum standard for activity space in secondary schools. Petersen (1997) collected data on 40 high schools in New Mexico and developed an activity space guideline based upon school enrollment as: Total Activity Space = 16,294 + (10.5 x enrollment).

Ancillary areas have typically been lumped together as the service areas of the physical education facilities. In 1962, the National Facilities Conference established 11 distinct categories of ancillary space which included: dressing rooms, shower rooms, towel rooms, equipment drying rooms, storage rooms, toilets, first aid rooms, laundry rooms, custodial areas, kitchenettes, and staff/faculty areas. Strand

(1988) grouped and categorized the ancillary areas into seven distinct categories in his research involving member schools of the Big Ten Conference. These categories included: locker rooms, classrooms, offices, secretarial spaces, storage, laboratories, and training rooms. Walker (1989) evaluated the recommendations of Strand for small colleges and universities and suggested altered standards for allocation of space in these seven classifications. For the specific needs of small colleges and universities in contrast to the large university setting, Walker recommended that locker room, classroom, and training room spaces be increased while the other ancillary areas be decreased. Petersen (1997) then applied similar methodology to high schools in New Mexico, recommending ancillary space comprise a space equal to 50-52% of the total activity space present. The study also recommended ancillary space allocations as 55-57% locker rooms, 5-7% classrooms, 10-12% offices, 0-1% secretarial, 20-22% storage, 0% labs and research, 4-5% athletic training room. This prior facility research provides some guidance and structure to methods, analysis, and interpretation for this study.

### Methodology

A stratified random selection of 60 high schools from

**TABLE 1**  
**Indiana Physical Education Program Characteristics**

	Combined Mean (SD) (n=60)	Class 4A Mean (SD) (n=15)	Class 3A Mean (SD) (n=15)	Class 2A Mean (SD) (n=15)	Class 1A Mean (SD) (n=15)
School Enrollment	957.7 (+/- 653.1)	1801.3 (+/- 652.7)	962.4 (+/- 293.5)	709.4 (+/- 246.6)	357.9 (+/- 101.8)
Physical Education Enrollment	495.4 (+/- 455.1)	987.1 (+/- 481.5)	566.1 (+/- 398.4)	281.4 (+/- 189.5)	146.9 (+/- 52.6)
Percent of Students Enrolled in PE Annually	51.7%	54.8%	58.8%	39.7%	41.1%
Peak Load (in students)	72.6 (+/- 43.5)	104.5 (+/- 51.9)	89.9 (+/- 42.6)	56.1 (+/- 21.8)	40.5 (+/- 13.6)
Number of Different PE Elective Courses	2.25 (+/- 1.56)	3.93 (+/- 1.67)	2.40 (+/- 1.06)	1.73 (+/- 0.63)	1.27 (+/- 1.03)
Full-Time PE Teachers	2.68 (+/- 1.85)	4.93 (+/- 2.25)	2.40 (+/- 1.06)	1.73 (+/- 0.70)	1.66 (+/- 0.49)
Part-Time PE Teachers	0.95 (+/- 1.14)	0.86 (+/- 0.99)	1.20 (+/- 1.57)	1.0 (+/- 0.76)	0.7 (+/- 1.16)
Health Included in PE Department	88%	93%	86%	86%	86%
Community Recreation Program Included in PE Facilities	38%	40%	47%	33%	33%
*school enrollment includes jr. high/middle school students if campus and programs are combined					

**TABLE 2**  
**Physical Education Chairperson Evaluation of Facility Space**  
**Percent Indicating Current Space as *Inadequate* for Current Programming**

Facility Area	Combined (n=60)	Class 4A (n=15)	Class 3A (n=15)	Class 2A (n=15)	Class 1A (n=15)
Activity Space	62%	60%	53%	67%	67%
Locker Rooms	37%	40%	47%	33%	27%
Class Rooms & Conf. Rooms	70%	73%	73%	67%	67%
Faculty Office	28%	53%	20%	27%	14%
Storage & Supply Areas	68%	73%	73%	67%	67%

the 398 high schools within Indiana resulted in 15 schools from each of the four primary classifications (1A, 2A, 3A, and 4A) as designated by the Indiana High School Athletic Association (IHSAA). This selection method allowed for an equal distribution of schools of all enrollment sizes within the state. The primary data collected was direct facility measurements of all indoor activity and ancillary spaces utilizing a Leica DISTO™ Classic 5, a laser distance measuring device. All facility measurements were obtained during on-site visits to the participating schools.

Additional data collected from the physical education department chairperson included a questionnaire on the scope and size of the programs utilizing the facilities and the enrollment of the school. The questionnaire also addressed questions of facility space adequacy for the physical education programs operated within the facilities. During the on-site visit, follow-up interview questions were asked of the physical education department chair. These questions included input on any additional space needed in both activity and ancillary areas. This data collection procedure followed much of the same methodology pioneered by Sabora and Kenney (1961) that formed the basis for an application to New Mexico high schools by Petersen (1997).

### Results

The general characteristics of the physical education programs were gathered through a questionnaire completed by the department chairpersons. The physical education requirement for all high schools surveyed was one credit (2 semesters) of physical education in order to graduate and not one school had adopted a higher standard. Despite the lack of additional requirements in physical education, 58 of the 60 (96.7%) schools did offer one or more elective class in physical education. The most common types of elective courses offered included: weight training (31), advanced PE (20), strength and conditioning (14), team/individual sports (10), life guarding/lifesaving (9), and cardio/aerobics (8). A

summary of the physical education program characteristics is provided in Table 1. It should be noted that the peak load represents the greatest number of physical education students utilizing any PE facilities at any one time during the school day.

The facilities included in the study ranged in date of original construction from 1928 to 2005 with a mean of 1970. The date of most recent significant renovation or addition to the PE facilities ranged from 1967 to 2005 with the mean year of most recent renovation at 1996. Of the 53 schools built prior to 1990, only three have not been renovated since construction. Despite the amount of recent construction and renovations related to high school physical education facilities, 90% of schools studied had a space deficiency in at least one or more areas. Table 2 details the input of the physical education department chairperson regarding areas needing additional space in order to adequately operate the physical education program.

It is vital to consider first the activity space for the PE program, as it forms the foundation for the instructional activities. Activity spaces for this study were divided into three categories: A1 space - high ceiling spaces such as gyms, A2 space - low ceiling space such as weight rooms, wrestling rooms, or aerobic exercise areas, and A3 space - pools. The mean square footage of the actual activity space present for the total sample, as well as for each enrollment classification, is presented in Table 3. This table also includes the recommended space gathered from the input of the PE chair. The recommended mean activity space of 37,705 square feet is 12.7% higher than actual mean for activity space of 33,443 square feet. Although a univariate t-test was applied to compare the mean actual activity space and the mean recommended activity space, it did not reveal a significant difference ( $t=2.33, p=0.130$ ).

It is important to consider the relationship between the activity spaces and the school enrollment. A significant relationship demonstrated in a prior study (Petersen, 1997)

**TABLE 3**  
**Indiana High School Physical Education Actual and Recommended Activity Space**  
**All data in square feet**

	Combined Mean (SD) (n=60)	Class 4A Mean (SD) (n=15)	Class 3A Mean (SD) (n=15)	Class 2A Mean (SD) (n=15)	Class 1A Mean (SD) (n=15)
A1 Space Actual	24,712 (+/- 10,177)	35,528 (+/- 12,221)	23,245 (+/- 5,697)	22,739 (+/- 7849)	18,333 (+/- 6,307)
A1 Space Recommended	27,490 (+/- 10,789)	37,969 (+/- 9,970)	28,817.1 (+/- 9,666)	23,693 (+/- 7,379)	19,480 (+/- 6,286)
A2 Space Actual	5,216 (+/- 3,093)	7,165 (+/- 2,852)	6,116 (+/- 3,206)	4,558 (+/- 2,941)	3,028 (+/- 1,652)
A2 Space Recommended	6,301 (+/- 3,653)	8,631 (+/- 3,324)	6,839 (+/- 3,228)	5,304 (+/- 2,920)	4,428 (+/- 3,910)
A3 Space Actual	3,978 (+/- 5,821)	9,261 (+/- 7,908)	3,844 (+/- 4,352)	2,806 (+/- 3,598)	0 (+/- 0)
A3 Space Recommended	4,365 (+/- 5,969)	9,461 (+/- 7,893)	4,994 (+/- 4,604)	3,006 (+/- 4,003)	0 (+/- 0)
Total Activity Space Actual	33,443 (+/- 14,734)	47,129 (+/- 16,611)	33,202 (+/- 7,193)	30,103 (+/- 10,698)	21,362 (+/- 6,438)
Total Activity Space Recommended	37,705 (+/- 15,852)	54,220 (+/- 14,954)	40,644 (+/- 11,379)	32,010 (+/- 10,579)	23,945 (+/- 7,405)

A1 = high ceiling space, A2 = low ceiling space, A3 = pool space

was also found for this sample. The correlation between the school enrollment and the recommended total activity space was significant ( $p < 0.001$ ) with an  $r = 0.760$ . Figure 1 displays a scatter plot of these variables as well as a regression analysis line of best fit. The equation for this line of best fit. Total Activity Space (square feet) = 20,037 + (18.45 x Enrollment), forms the basis for creating recommendations for both activity and ancillary spaces for Indiana high school PE programs.

The subcomponents of recommended activity space accounted for the following portions of the total activity space: A1=72.9%, A2=16.7%, and A3=11.6%. When considering the A3, pool space component, it should be noted that only 40 of the schools included in the study had pools. The mean size of the 24 pool spaces was 9,945 square feet and it was recommended that the mean size be increased to 10,913 square feet. Only two of the 36 physical education chairpersons without aquatic facilities on campus requested that pool space be added.

The ancillary spaces, or support spaces, are also vital to the physical education programs. Of the seven types of defined ancillary spaces, four are applicable to this study including: type I - locker rooms, type II - classrooms and conference rooms, type III - faculty offices, and type V - storage and supply areas. The mean square footage of the actual ancillary space present and the PE chair recommendations for ancillary space for the total sample,

as well as for each enrollment classification, is presented in Table 4. This table also includes the recommended space gathered from the input of the PE chair. The recommended mean ancillary space of 15,010 square feet is 12.3% higher than actual mean for ancillary space of 13,363 square feet. Although, a univariate t-test applied to compare these means did not find the difference statistically significant ( $t = 1.29, p = 0.259$ ). There was a significant relationship between the recommended total ancillary space and the recommended total activity space ( $r = 0.660, p < 0.001$ ). A regression analysis created a prediction equation for developing a space guideline of: Total Ancillary Space (square feet) = 0.39 x Total Activity Space. An analysis of the subcomponents of ancillary space revealed the following percentage allocations within the PE recommendation data: Type I - 54.8% of ancillary total, Type II - 8.2% of ancillary total, Type III - 11.1% of ancillary total, and Type V - 19.7% of ancillary total. A significant difference ( $t = 12.04, p = 0.001$ ) between the actual classroom space of 652 square feet and the recommendation of 1,241 square feet. Within the sample, there were 22 schools (37%) without any classroom space available for instruction outside of the activity areas.

### Discussion

Based upon the data collected, recommendations for indoor PE facility space allocations can be made. Activity space can best be determined in relation to school enrollment. Prior guidelines based upon peak load of

**TABLE 4**  
**Indiana High School Physical Education Actual and Recommended Ancillary Space**  
**All data in square feet**

	Combined Mean (SD) (n=60)	Class 4A Mean (SD) (n=15)	Class 3A Mean (SD) (n=15)	Class 2A Mean (SD) (n=15)	Class 1A Mean (SD) (n=15)
Type 1 Actual	7,795 (+/- 5,709)	11,218 (+/- 3,145)	7,599 (+/- 1,828)	8,574 (+/- 9522)	3,791 (+/- 1,738)
Type 1 Recommended	8,233 (+/- 5,765)	11,962 (+/- 2,927)	8,113 (+/- 2,224)	8,751 (+/- 9,467)	4,104 (+/- 1,856)
Type II Actual	652 (+/- 828)	1,367 (+/- 1,185)	346 (+/- 423)	390 (+/- 489)	503 (+/- 565)
Type II Recommended	1,241 (+/- 1,023)	2,227 (+/- 1,367)	1,193 (+/- 686)	844 (+/- 405)	702 (+/- 622)
Type III Actual	1,577 (+/- 761)	2,476 (+/- 684)	1,523 (+/- 507)	1,260 (+/- 434)	1,050 (+/- 506)
Type III Recommended	1,660 (+/- 771)	2,629 (+/- 562)	1,619 (+/- 524)	1,300 (+/- 403)	1,092 (+/- 511)
Type V Actual	2,680 (+/- 1,892)	4,233 (+/- 2,138)	2,543 (+/- 722)	1,803 (+/- 900)	2,140 (+/- 2,332)
Type V Recommended	2,954 (+/- 1,980)	4,704 (+/- 2,225)	2,842 (+/- 683)	1,986 (+/- 977)	2,284 (+/- 2,318)
Total Ancillary Space Actual	13,363 (+/- 7,869)	20,403 (+/- 5,679)	12,594 (+/- 2,951)	12,632 (+/- 10,802)	7,823 (+/- 4,018)
Total Ancillary Space Recommended	15,010 (+/- 8,040)	22,746 (+/- 5,339)	14,478 (+/- 3,465)	13,633 (+/- 10,510)	9,183 (+/- 4,318)

physical education students (Turner, 1993) were proven to underestimate the activity space required. The mean recommended activity space based upon Turner's peak load method was 9,094 square feet which was 76% lower than the recommended activity space of 37,705 square feet. According to a univariate t-test, these differences were significantly different ( $t=22.29, p<0.001$ ).

The strong relationship between school enrollment and recommended activity space allowed for the use of regression analysis to create a prediction equation that establishes guidelines for activity space. This was based upon the space allocation recommendations of the PE chair, as these were not significantly different from the actual space present, and they would better reflect the true needs of the programs housed within these spaces.

**The regression equation.** Total Activity Space (in square feet) =  $20,037 + (18.45 \times \text{Enrollment})$  allows for the creation of a baseline of activity space to be established for any school based either upon the current or projected enrollment over the lifespan of the building. From this initial guideline of indoor activity space, additional recommendations for ancillary spaces can be determined.

A similar regression equation was developed for high schools in New Mexico with an activity space guideline

based upon enrollment of: Activity Space =  $16,294 = (10.5 \times \text{Enrollment})$ . The application of this equation to the Indiana high schools resulted in a mean activity space of 26,350 square feet which is a significant 30% underestimated ( $t=25.93, p<0.001$ ) from the 37,705 square feet recommended in the Indiana study. This demonstrates differences within the facility space requirements for PE between these two states, and demonstrates that high school PE facility guidelines may be different for each state.

Guidelines for the ancillary spaces can be determined in relation to the total activity space (Petersen, 1997). Since the activity spaces provide the basis for the development of the support facilities, it is logical to develop ancillary space guidelines in relation to the total activity space.

**The regression analysis equation.** Total Ancillary Space (square feet) =  $0.398 \times \text{Total Activity Space}$ , demonstrates that for these schools, ancillary facilities should account for a space of approximately 39.8% of the total activity space. Based upon the data analyzed, recommendations for the subcomponents of ancillary space should be established as follows: Type I - 54% to 60% of Total Ancillary Space, Type II = 5% to 10% of Total Ancillary Space, Type III = 10% to 12% of Total Ancillary Space, and Type V - 18% to 22% of Total Ancillary Space. These ranges are similar to prior

facility research regarding ancillary areas (Petersen, 1997, Walker, 1989, & Strand, 1988).

Projections from the National Center of Educational Statistics (Hussar, 2006) expect additional growth in students at Indiana public high schools of 6.8% from 2003 to 2015. As schools continue to be built and renovated in response to this growth, it is vital to establish planning guidelines for the PE facilities within the high schools. Inadequate space for physical education hampers the physical education programs in the state and the students it serves. The utilization of the space guidelines presented here allows each school district to consider a researched facility baseline for the creation or renovation of physical education facilities. Proper planning also helps to ensure a better use of the funding appropriated for these facilities.

While this study has presented specific guidelines for high school PE facilities, it is also important to consider the impact of the high school athletic program on these facilities. Additional study in this area should include input from the athletic program as the PE chairs indicated that 100 of the schools share activity spaces with athletics and 92 share ancillary spaces with athletics.

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# Apply for an IAHPERD grant

## What's on your wish list?



- Workshop for parents
- Fun and fitness - intergenerational night out
- Cooperative public information program with American Heart Association
- Teen abstinence program
- Adaptive materials

### For more information contact

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Purdue University  
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West Lafayette, Indiana 47906  
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# “Recess Pieces – A Small Solution to a Growing Problem”

Submitted by Roberta Sipe  
Rosa Parks-Edison Elementary

We know the drill. Schools are cutting back on elementary physical education in order to spend more time on math and language arts skills – all in an attempt to boost state test scores. While this is not the case at my school, Rosa Parks-Edison Elementary on the south side of Indianapolis, a different situation is in place – no scheduled recess time.

My school is a partnership school with the Edison Corporation. There are only two Edison schools in Indiana, both of which are in the M.S.D. of Perry Township District. Our curriculum is rigorous with heavy emphasis on reading, math, etc. Our K-1-2 students have specials’ classes (art, music, Spanish, and health/fitness) once every four days. Students in grades 3-4-5 have specials every other day. So while not perfect, we see our older students an average of 100 minutes each week – much more than elementary schools in surrounding districts.

Where is recess time? When can our students let off steam and get some extra time to be on the playground? Our students have only 10-12 minutes of recess time after lunch each day, weather permitting. Occasionally, teachers take their students out in the afternoon for “Wonderful Wednesday” or “Fresh Air Friday” time. We have done a great job of creating two “recess carts” full of equipment that our students enjoy. More change is necessary.

I decided on two goals: change recess from after lunch to before lunch. That will be at the top of the agenda for the scheduling committee. My hope is that we can make this important change by the fall of 2007. The second change was to provide my classroom teachers with a mesh bag full

of equipment to use during the occasional afternoon recess time. As it stands now, kids have nothing to play with as it takes too much time to take the recess carts back outside after noon recess. Thus our kids run around playing tag, which leads to accidents.

The grant “Recess Pieces” was submitted and funded by the IAHPERD Mini-Grant committee. With a total of \$350, I was able to provide “buddy classrooms”(two classrooms within the same house) with a mesh bag filled with playground balls, soccer balls, basketballs, jump ropes, Frisbees, and footballs. I received additional support from my school’s PTA. They gave me a total of 13,000 Campbell Soup Label points to purchase all of the playground balls and a few additional balls. Classrooms have established monitors who will make sure that all equipment is returned when recess time is finished.

Warmer weather is such around the corner. I am anxious to witness how effective my “Recess Pieces” grant is in giving our students equipment for constructive playtime. A survey will be conducted in late spring to judge the effectiveness of this grant. I will be sharing the results of my grant with the IAHPERD Mini-Grant Committee. I know that this grant will be a huge success and that students and teachers will appreciate this opportunity.

In conclusion, ideally we should be providing our students at Rosa Parks-Edison Elementary with daily fresh air recess time. I am willing to take baby steps toward that ultimate goal. Changing the time of noon recess and encouraging teachers to take their students out for recess will ultimately help my school reach its goals.

## Remember!

**IAHPERD 2007 State Conference and Exposition**

**Radisson Hotel, City Centre, Indianapolis**

**Thursday-Friday, November 8-9, 2007**

**Conference Information @ [www.indiana-ahperd.org](http://www.indiana-ahperd.org)**



# Roving Ropes

Dale Berry, Program Director  
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Floyds Knobs, IN 47119  
812-923-8770  
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Want to help save somebody's life? Want to help keep Americans heart healthy? Well, if you do Jump Rope and Hoops for Heart is the ticket to you and your students doing just that! This year Moorhead Elementary will participate in its second annual Jump Rope for Heart (JRFH) (grades K-3<sup>rd</sup>) Hoops for Heart (HFH) (grades 4<sup>th</sup> & 5<sup>th</sup>) event to raise funds for the American Heart Association (AHA). The money our school raises helps fund potentially lifesaving research for heart and blood vessel diseases. In short, our school is joining the fight against our nation's **No. 1 killer and No. 3 killers heart disease and stroke.**

The JRFH/HFH event will be the climax of our jump-roping and basketball units, which takes place in February. During the unit, students perform several activities such as learning to jump rope, jump rope games, tricks, basketball skills, basketball games, etc. The unit will conclude with the JRFH/HFH event! The event will take place during regular P.E. times; so, there is no need for permission slips. Jump Rope for Heart and Hoops for Heart are a fun and effective way to teach heart-healthy living. It emphasizes the importance of physical activity, as children do something they enjoy—jump rope and play basketball. The event also provides the opportunity for children to perform community service as they raise funds for the American Heart Association.

Last year Moorhead hosted our very first JRFH/HFH event here in the school's gymnasium. The school-wide goal was to raise \$1,500 for the AHA. Thanks to the parents and wonderful children of Moorhead, I am proud to say that at the conclusion of our first event, the Moorhead family raised a mind-blowing \$6,910! Last year, I had several students who raised over \$300 a piece and another 25 that at least raised over \$100! Even more exciting, we set a record of donations for JRFH/HFH events in MSD of Warren Township. Out of all of the schools in the state of Indiana that participated in both events, we collected the 3<sup>rd</sup> highest amount of money. Additionally, out of all the schools in Marion County, we collected the 6<sup>th</sup> highest total! As a result of both student and parent efforts, we gained some well deserved notoriety for our wonderful school and township!

Family and friends can support each child's participation through contributions. However, please do not let children go door-to-door asking for donations. Also, students can earn money via online donations through the AHA; the collection envelope has more details. In addition to individual donations, some employers will match donations. If they do, then those funds will go toward the child's total. For example, someone donates \$100 and their employers match 100 of donations, then the employer donates an additional

\$100 to the child. Incentives are a fun way to help motivate student participation. Participants earn prizes based on the amount of contributions collected. There are two sets of prizes to be earned. First, there are the "thank you gifts" that the AHA is giving for money collected. Second, there is an additional set of prizes that I will be offering to the students (a list is included below)!

The AHA holds a special place in my life and in my family's lives. When I was two years old, I was diagnosed with tetralogy of the fallot or the more common term of having a hole in my heart. This was a condition that I had since birth but only through the valiant efforts of my family did the doctors conduct enough tests to finally discover what was ailing me. With the help of great organizations like the AHA, I was able to undergo a successful open-heart surgery at the age of 2. After the surgery, doctors informed my family that I would not grow into a "regular" size man and that I would not be athletic or capable of participating in athletic type events and exercises. Needless to say, they were incorrect in their post-surgery diagnosis. Currently, I am a physical education teacher, I have grown into an "above-average" man, and I am very active and, if I must say so myself, athletic. This has been my fuel for becoming the man that I am and the teacher that many have entrusted with the privilege of physically educating their children. Please note that I tell my parents that if a child does not participate in the fundraiser, their grade or my outlook on them will not be altered in any shape, form, or fashion.

JRFH/HFH is a great opportunity for you to help a worthy and life saving cause. Always remember that every monetary amount is helpful and needed. The AHA is very supportive and has well trained and informed people that will assist you in your endeavors and visions for your program. My regional person, Mrs. Sunni Duval, will do everything within her will to help make my dreams for my program come true. And that means a lot to me because knowing that the AHA supports what I decide to do, lets me know that they appreciate what I do. So, I urge you to "have a heart" and begin or enhance your JRFH or HFH program.

Below are some of the incentive prizes I give to my students. I must admit that these prizes are somewhat extreme; but, I am willing to do whatever, even be embarrassed to help save somebody's life and return the good will that the AHA gave me to someone else. Feel free to use these ideas to jump start your event and together let's save the world, one heart at a time.

## Prizes/Incentives

- FOR EVERY \$25 YOU RAISE:  
Your name will go in a **DRAWING** for a **special prize**. We will draw names on **Friday March 16th**, and announce the winners that day! (For example, if you raise \$100, we will put your name in the drawing **FOUR** times! **There will be ONE WINNER PER GRADE LEVEL!**)
- ALL STUDENTS WHO RAISE TWO PRIZES: **\$50 OR MORE:**  
**TWO PRIZES:**
  1. **You** will sign your name on **Mr. Woods'** 2007 Jump Rope for Heart/ Hoops for Heart T-shirt. Mr. Woods will wear the shirt on the days of the event!
  2. **Mr. Woods** will sign your shirt too!
- ALL MONEY RAISERS FROM **\$100:**  
For every **\$100** you raise you will have a chance to hit Mr. Woods in the face with a whip cream pie on "Fun Day". For example if you raise **\$300** you will get **THREE** pies to hit Mr. Woods with!
  1. **Family Fun Night** at Moorhead with Mr. Woods. Date and time TBA.
  2. And will receive **3 chances to dunk Mr. Woods in "Dunk Tank"**.  
**Lunch** with **Mrs. Beasley, Mr. Woods, and Mrs. Miller** in the office! Mr. Woods will treat you with a special treat on this day!
- ALL MONEY RAISERS **\$200 & UP:**  
The top class will earn a "Free Gym Class" during school (not during specials time). This will be organized with the classroom teacher and will occur during my scheduled prep time.
  1. **Family Fun Night** at Moorhead with Mr. Woods. Date and time TBA.
  2. And will receive **3 chances to dunk Mr. Woods in "Dunk Tank"**.  
**Lunch** with **Mrs. Beasley, Mr. Woods, and Mrs. Miller** in the office! Mr. Woods will treat you with a special treat on this day!
- **#1 AND #2 MONEY RAISERS: (IN EACH GRADE LEVEL)**
- **TOP CLASS IN SCHOOL;**

Mr. Charles A. Woods  
cwoods.3@warren.k12.in.us

Physical Education Teacher • Moorhead Elementary • MSD Warren Township- Indianapolis

## Great Ideas from JRFH & HFH Great Coordinators

- ♥ Have an open gym event.
- ♥ Make the event personal; most students know at least one person who has dealt with Heart Disease.
- ♥ Students get excited to raise money for others or in honor of a loved one.
- ♥ For every \$100 a child raises they get to throw a whip cream pie, in PE teacher or principal's face.
- ♥ Kick off your event on Go Red for Women Day.
- ♥ Show the students the equipment you've been able to purchase from the US Games Certificates. Students love more PE equipment!
- ♥ Share personal stories of being affected by heart disease - you'll get an overwhelming response!
- ♥ Community Response - reach out for donations from local Wal-Marts, sporting goods stores, etc.
- ♥ Make Jump or Hoops a tradition at your schools; the students will look forward to the event each year.
- ♥ Hold your event during the school day. Have all students participate in the event whether they raised money or not - they will see how much fun it is and want to raise money next year.
- ♥ Have a bowling party for students who raise \$250+.
- ♥ Check to see if the PTO/PTA will fund a party for students who raise a certain amount of money.
- ♥ Don't be overwhelmed—make the program what you want to make it.
- ♥ Create a Heart Wall with names and/or photos of people students are raising money for.
- ♥ Communicate with parents!
- ♥ Principal promotion is key - have the principal jump rope with the kids, the principal wears the Jump or Hoops T-Shirt, Broadcast on school news and announcements.
- ♥ Get the faculty and staff to raise money - the teacher whose class raises the most gets an extra prep time and the students get extra PE time OR have a staff incentive for donations. Example: teacher raises \$20 they get a comfy week, \$50 they get a comfy 2 weeks, teacher who raises the most gets a comfy month.
- ♥ \$1 hat day for students.
- ♥ ONLINE FUNDRAISING—show the video, the instructions are on the envelope, it's easier to get larger donations, IT teacher assignment.
- ♥ Event Promotion - get the envelopes out there early!
- ♥ Colored paper — pink memo to teachers about when the event is.





Sports, Play & Active Recreation for Kids!

TRAINING FOR GRADES K-8  
JUNE 13: 8:30-4:00 p.m.

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REGISTRATION BEGINS MARCH 1, 2007  
Registration limited to 40 per grade level • Levels include grades: K-2, 3-6, and 6-8  
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Name: \_\_\_\_\_ School: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Check which grade level you will attend:

\_\_\_\_\_ K - 2      \_\_\_\_\_ 3 - 6      \_\_\_\_\_ 6 - 8

\*\*\$50 Registration fee:

Send registration form and check, made out to IAHPERD, or school purchase order to:

Janet Vahle  
SPARK Registration  
Room 229, State House  
Indianapolis, IN 46204

For questions contact Janet at [jvahle@doe.state.in.us](mailto:jvahle@doe.state.in.us) or 317-234-2516

\*\*Deadline for early bird registration is June 1, 2007. Registration on-site will be \$75.00

# Share Your Ideas in the Next Indiana AHPERD Journal

## Guidelines for Authors

Throughout the year, original articles are received and considered for publication in the Indiana AHPERD Journal. This Journal is published in May, September, and February by the Indiana Association for Health, Physical Education, Recreation, and Dance. Articles that share opinions and ideas, as well as those based on serious scholarly research, are welcomed and encouraged. Each article is reviewed by two to four readers who are selected on the basis of areas of interest, expertise, and qualification in relation to the content of the article.

Authors need not be professional writers. Editors are encouraged to provide assistance in developing the article when there are great ideas that need to be shared. In peer reviewed and more scholarly works, a blind review process is used whereby the name of the author and persons reviewing the article are known only to the editor.

All submissions must include four hard copies and an electronic version or prepared on a CD. These should be mailed to: Tom Sawyer, Editor, 5840 South Ernest Street, Terre Haute, IN 47802, pmsawyr@aol.com. Below is a checklist of items to be considered when submitting material for publication. All publications must use APA style (5th ed.).

## The Manuscript

- Must be processed on 8 1/2 by 11 inch paper (double spaced, left and right margins of 1 1/2 inches, pages numbered).
- Direct quotations of more than 3 lines should be single spaced, indented 1/2 inch, and kept to a minimum.
- Length should not exceed 2,500 words (8 pages).
- Should be written in third person.
- Brief biographical information for each author should be provided on a separate page.

## Documentation

- References should be listed in accepted bibliographical style directly at the end of the article, arranged alphabetically by author's last name, and numbered consecutively.
- Each reference cited in the text must be listed and only those cited should be listed as references.
- Documentation within the text should be made by placing the number of the cited reference within parentheses at the appropriate point, i.e., at the end of a direct quote or after the author's name for indirect quotes.

## Tables

- Use tables for reporting extensive statistical information.
- Data in tables should not be duplicated or extensively discussed in the text. Titles of tables should be succinct yet adequately describe the contents.
- Each table should be numbered, typed on a separate page, and reference made within the text as to where it should be placed.

## Illustrations

- Pictures, graphs, or drawings break the monotonous look of the article and add to its readability. Use them where appropriate.
- Original photos and artwork should be provided for final production of the article.
- Each illustration should be numbered and captions provided.
- Black and white photos are preferable; but, good quality color photos are usually acceptable for reproduction.

## Author's Statement

- The author must provide a signed statement certifying that the article has not previously been published or submitted for publication elsewhere, either in identical or modified form.

## Deadlines

### Journal

- Spring Issue - March 1
- Fall Issue - July 1
- Winter Issue - December 1

### Newsletter

- Spring Issue - Feb. 15
- Fall Issue - Sept. 15

## Send it In

### . . . to the Editor

A new idea that you have penned,  
Share it with a Indiana AHPERD friend.  
On the Journal pages let it end.  
We sure do want it... send it in!

It may be an article you did write  
In sheer frustration one weary night.  
But someone else it may excite  
... Send it in.

Is it a cartoon that you have drawn?  
Did you compose a unique song?  
Could our whole profession sing along?  
... Well, send it in.

Some folks are inspired by poetry,  
And works of art let others see  
The inner thoughts of you and me.  
Please, send it in.

Then, there are works that scholars do,  
Great research... we need that, too.  
But, you know we must depend on YOU  
To send it in.

Won't you share with us your thought  
That we all just may be taught?  
My, what changes could be wrought  
If you'd just send it in.

Tom Sawyer  
Indiana AHPERD Journal Editor

# Leadership Opportunities on Councils

**FUNCTION.** The duties and responsibilities of the Program and Regional Councils are to:

1. Work closely with the Program Director or Regional Coordinator to promote the special program area.
2. Attend annual IAHPERD Leadership Conference. (Hotel and meals paid for by the Association.)
3. Solicit programming for the State Conference or Regional Workshops.
4. Serve as host to greet and direct presenters during the

conference.

5. Serve as presider for the various programs in your special area. Support includes introducing presenter, assisting during the presentation (distribute handouts), and providing presenter with the special gift from the Association.
6. Make nominations to the Awards Committee chair for Teacher of the Year and Association awards.

**PROGRAM AREAS.** The various program areas include:

1. Adapted Physical Education

2. Aquatics
3. Council for Future Professionals
4. Dance
5. Fitness
6. Health
7. Higher Education/ Research
8. Jump Rope and Hoops for Heart
9. Physical Education: Elementary
10. Physical Education: Middle School
11. Physical Education: Secondary
12. Recreation

13. Sport
  14. Sport Management
  15. Technology
- INTERESTED?** To apply for a leadership position on a council, send an email of interest to Dr. Mark Urtel, Nominating Committee Chair, at [murte11@iupui.edu](mailto:murte11@iupui.edu). For additional information, go to the IAHPERD website at [www.Indiana-ahperd.org](http://www.Indiana-ahperd.org), click on About, Constitution, Operating Codes, and scroll down to the leadership position of interest.

## INDIANA AHPERD APPLICATION FOR MEMBERSHIP

*(Please Print/Type)*

Last Name \_\_\_\_\_ First \_\_\_\_\_ M.I. \_\_\_\_\_

Address \_\_\_\_\_  
*Street*

\_\_\_\_\_ *City* \_\_\_\_\_ *State* \_\_\_\_\_ *Zip*

\_\_\_\_\_ *County*

Telephone: Area Code (\_\_\_\_\_) \_\_\_\_\_ E-mail \_\_\_\_\_

Member Class:  Professional \$40.00  Student \$20.00  
(Undergraduate or Full-Time Graduate Student)

New  Renewal

Make check payable to: Indiana AHPERD.  
Send to: Karen Hatch, 2007 Wilno Drive, Marion, IN 46952

MEMBERSHIP EXPIRES 1 YEAR FROM DATE  
DUES PAYMENT IS RECEIVED.

Your JOURNAL cannot be forwarded.  
If a change of address occurs, please notify:

Karen Hatch  
2007 Wilno Drive  
Marion, IN 46952

### OPPORTUNITY FOR INVOLVEMENT

Involvement is the key word to making a contribution to your professional association. The IAHPERD provides an opportunity for involvement through the choices below and we encourage each of you to become active participants by serving on a committee or by holding an office. Please, check any position listed below that interests you.

### HELP NEEDED:

- \_\_\_\_\_ Would you be willing to become involved?  
 \_\_\_\_\_ District level  
 \_\_\_\_\_ State Level  
 \_\_\_\_\_ Committee Involvement  
 \_\_\_\_\_ State Office  
 \_\_\_\_\_ Regional Leadership

Karen Hatch  
Executive Director, IAHPERD  
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email: hatch@comteck.com

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**Indiana Association  
for Health, Physical  
Education, Recreation,  
and Dance**

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**[www.inahperd.org](http://www.inahperd.org)**