

# An Instructional Pyramid: Expanding Coach Wooden's "Pyramid of Success" to Guide P.E.T.E. Professionals

## 探討應用成功金字塔式的指導於體育教學

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### Introduction

What in the teaching-learning process can PETE (Physical Education Teacher Education) faculty identify as being effective and a critical part of this multifaceted practice? Which of the physical activity learning experiences best serves the student? Finally, how does a future-professional physical education teacher, who is inexperienced and intimidated by their first job circumstances, wade through all the information and responsibilities to perform up to expectations? As described by Veal (2011), "Teachers operate in an intensely complicated and demanding world. They face 30 or more students at once - each one different from the other, demanding individualized attention and treatment. Teachers must respond to a continuous and rapid succession of events, many of which are unanticipated, leaving little time for thoughtful decision making."

This article attempts to identify instructional issues and answer the questions posed above.

The interacting between teachers and learners is a very fluid process. Every factor has an impact on others in the class as well as on the teaching-learning process. The ever-changing dynamics that occur during instruction come from four different groupings which are: character; instructional methodologies; physical fitness advocate and role model and life-long learner and problem solver. These four groupings, along with the instructional forums and equipment, curriculum, school district responsibilities and initiatives impact the variety of decisions that comprise the day-to-day life of the physical education teacher.

While the teaching-learning process is a complex set of decisions based on interactions and responses, the process is generated from the skills that comprise each of the four groupings. Envision a four sided pyramid to encompass the four groupings. The four sides of the pyramid represent character, instructional methodology skills, physical fitness education and role model, and life-long learner and problem solver.

Diagram 1.



Side I of the pyramid, **Character** was developed by Coach John R. Wood as his “Pyramid of Success” and focuses on character. As teaching physical education and coaching sports skills are closely aligned, this set of characteristics and pragmatically tested teaching points fits both settings. Coach John R. Wooden, former University of California–Los Angeles (UCLA) Men’s Head Basketball Coach, developed the “Pyramid of Success.” He explains the strength of the structure is based on the cornerstones of industriousness and enthusiasm. The pictorial representation of a pyramid was intended to identify those personal character traits that serve as a foundation for an athlete, but more importantly, serve as the infrastructure for a life productively lived.

Each of the fifteen building blocks that formed the original pyramid had meaning and gave direction to students and student-athletes. Wooden conveyed the importance of the character traits blocks by positioning, along with his explanation that described the significance of the choices as learning opportunities. The original blocks gave shape and meaning to this impenetrable structure of strength and also served as the pathway for a student to meet the challenges presented by life in an effort to reach what Wooden defined as success. In his development, Wooden also supported the structure with what he called mortar, lining the sides of the structure. These ten supporting characteristics (positioned on each

side) were essential to fortify a feeling of self-satisfaction based on enthusiastic effort, hard work and maximizing potential while facing the challenges.

Side II of the pyramid, **Instructional Methodology Skills**, encompasses teaching pedagogy characteristics. Teachers need to have the intelligence, information seeking powers, and the conviction that no learning plateau is too complex to resolve. Future and practicing physical education teachers, as instructional leaders in the class, must demonstrate current instructional techniques, up-to-date resources and apply critical thinking models to strengthen a learner’s performance. Physical educators must design creative learning experiences that are focused on responding to the needs of each individual learner and help them all find success.

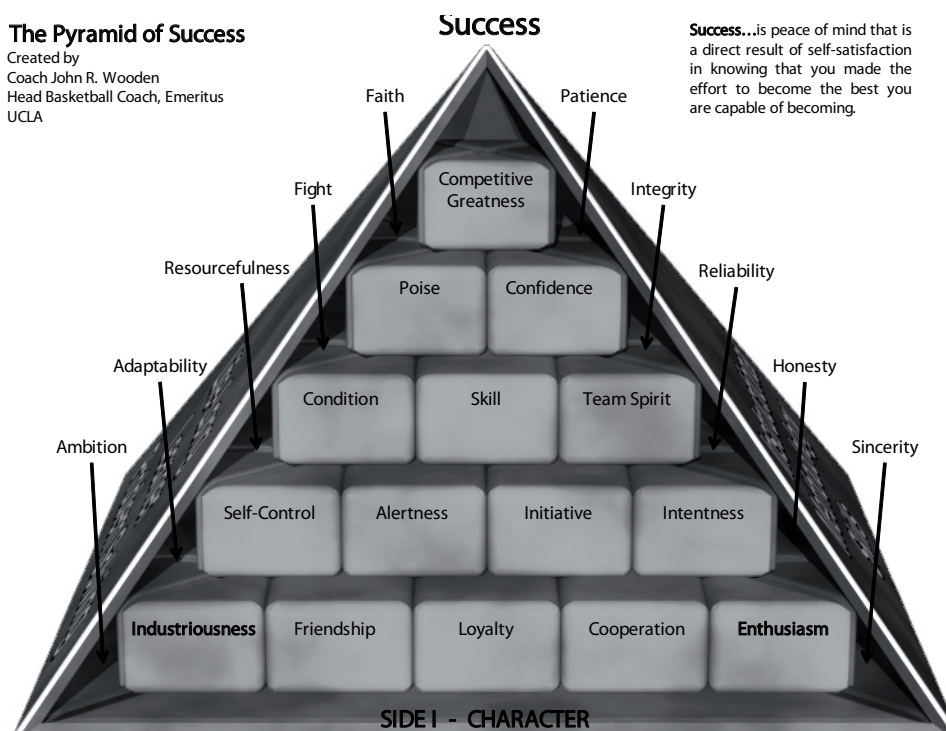
Side III of the pyramid, **Physical Fitness Educator and Role Model** includes the concepts and teaching points of a physical fitness educator and how a teacher in this profession should be a model of health. It is the responsibility of practicing professional physical educators to teach students a love for participation. As a certified teacher of motor skills, movement related activities and sports skills, physical education teachers must know and model behavior that embraces qualities of healthful living. As a subject area expert regarding physical activity and the health-enhancing benefits, physical educators must lead-

by-example and establish a clear path for students to follow. Students must be able to share the vision of a productive life which is the result of engaging in a life-long plan of physical activity.

Side IV of the pyramid, **Life-Long Learner and Problem Solver** covers the aspects of being an individual who is always looking to be a problem solver. As instructional leaders, practicing physical educators must seek a better way to fortify their teaching to strengthen student performance. For teachers who are attentive to the abilities and needs of the learners, a new approach, or different teaching style using an instructional cue may be the break-through influence that makes the difference. The creative problem solver demonstrates the ability to analyze situations in a different way and then bring all the available resources to change a learner's behavior. This individual is not satisfied with things as they are... things can always be better and this physical educator, with a vision for transforming, will find the best way to strengthen performance.

While exploring and contemplating the power of this four-dimensional instructional pyramid, physical educators will see the same organizational soundness and indestructible design initiated by the ancient pyramid-shaped structures of Egypt. Positioned on each of the four sides, the blocks and the mortar hold together the keys to plan and execute a lesson. Positioned with the most critical blocks in the foundation, each row supports the blocks above on the way to the summit. The components of each of the four sides are to be used to build a lesson that draws students into the activity and encourages them to keep learning for a life-time. Physical education teachers need to develop a storehouse of teaching tools, such as presented in the pyramid, that can be accessed and used as the opportunity presents itself during a lesson. This type of reservoir of instructional tools, designed to help teachers attain their instructional objectives when teaching students, are contained within the groupings of the walls of the pyramid. Let's examine each of the sides of the pyramid and the individual blocks that are used to build Wooden's structure, along with the importance every block plays in the formation of the pyramid as a whole. For a more in-depth account of each block and the mortar read Johnson's book to see how the coach built his philosophy.

Diagram 2.



**Character (foundation)**

1. **Industriousness:** (Johnson, 2003) "There is no substitute for work. Worthwhile results come from hard work and careful planning." "You can work without being industrious, but you cannot be industrious without work."
2. **Enthusiasm:** (Johnson, 2003) "Your heart must be in your work if you are to learn more... If you are a leader, you must influence those under your supervision and you must be enthusiastic to do that."
3. **Friendship:** (Johnson, 2003) "We must work at friendship. We must have a sincere liking for all. Too often friendship is taken for granted. ...Friendship comes from mutual esteem, respect, and devotion - 'mutual' being the key word."
4. **Loyalty:** (Johnson, 2003) "I don't see how anyone can truly make the most of his or her abilities without expressing loyalty at all time to the people, institutions, and principles that are important to one's life."
5. **Cooperation:** (Johnson, 2003) "We must be cooperative on all levels with co-workers, with everyone. Listen if you want to be heard. Always strive to understand the other point of view. Be interested in finding the best way, not your own way."

**(Tier TWO)**

6. **Self-Control:** (Johnson, 2003) "Practice self-discipline and keep your emotions under control. Good judgment and common sense are essential to maintain the delicate adjustment between mind and body."
7. **Alertness:** (Johnson, 2003) "We must be alert, observing constantly, seeing the things that are going on around us. Otherwise, we are going to miss so many things from which we can improve ourselves."
8. **Initiative:** (Johnson, 2003) "We must not be afraid to act. If we are afraid to do something, for fear of making a mistake, we will not do anything and that is the worst mistake of all. Realize that the road to achievement could be difficult, but don't let the difficulty deter you from making the effort."
9. **Intentness:** (Johnson, 2003) "Intentness is not giving up, but the ability to resist temptation and stay on course, to concentrate on your objective with determination and resolve."

**(Tier THREE)**

10. **Condition:** (Johnson, 2003) "We must be conditioned for whatever we are doing." "How can you have physical conditioning without spiritual conditioning, moral conditioning, and mental conditioning? There is no way. You cannot have moral conditioning without spiritual conditioning. These characteristics are a matched set and they operate in an integrated manner, otherwise the entire system is out of kilter."
11. **Skill:** (Johnson, 2003) "At the center, if not the heart, of the structure (pyramid) is skill: the knowledge of and the ability to, not only properly, but quickly execute the fundamentals. Skill means being able execute all your job, not just part of it. As much as I value experience, and I value it greatly, I'd rather have a lot of skill and little experience than a lot of experience and little skill. You must have that (skill) in any profession."
12. **Team Spirit** (Johnson, 2003) "...is simply a genuine consideration for others, an eagerness - not just a willingness, which doesn't mean you want to - to sacrifice personal interests or glory for the welfare of all."

**(Tier FOUR)**

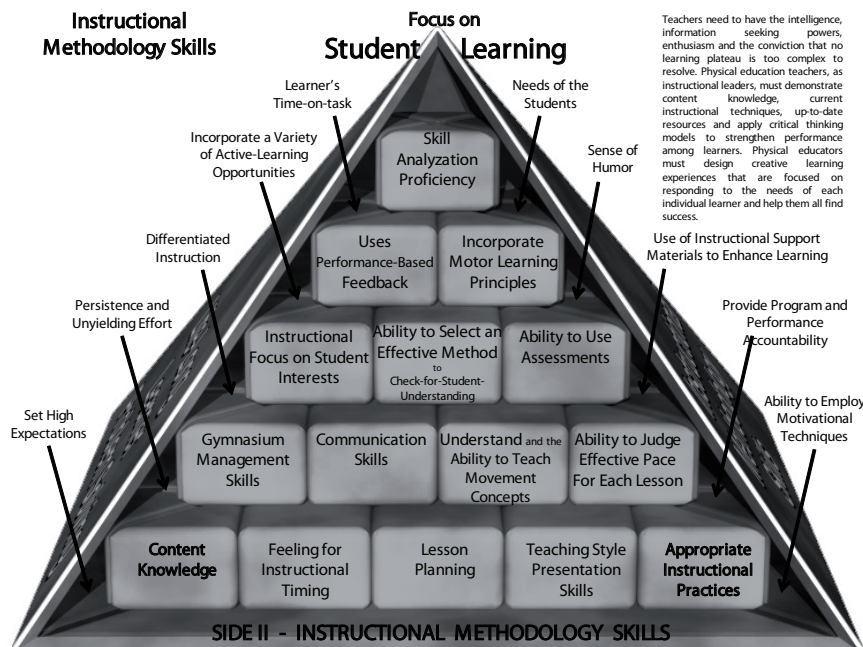
13. **Poise:** (Johnson, 2003) "Just being yourself." "You're not trying to be something you're not. You are yourself. Therefore, you're going to be able to function closer to your own particular abilities."
14. **Confidence:** (Johnson, 2003) "You must have confidence." "You must believe in yourself if you expect others to believe in you."

**(Tier FIVE)**

15. **Competitive Greatness:** (Johnson, 2003) "What a wonderful thing competitive greatness is - enjoying it when things are difficult." The mortar that stabilizes side I as well as supports the structure of Coach Wooden's pyramid is:
16. **Ambition:** (Johnson, 2003) "Ambition must be carefully and properly focused and have noble and worthy purpose. Never let ambition cause you to sacrifice your integrity or diminish your efforts on any other aspect of the 'Pyramid'."
17. **Sincerity:** (Johnson, 2003) "Sincerity makes and keeps friends. It is the glue of friendship and team spirit."
18. **Adaptability:** (Johnson, 2003) "Be adaptable to any situation. Change is constant and inevitable. Know about it, grow with and learn from it and by it."

19. **Honesty:** (Johnson, 2003) “Honesty must occur at all times in all ways of thought and action. By being dishonest we deceive others as well as ourselves. By doing so (dishonest) we destroy our credibility and reputation and we lose our self-respect.”
20. **Resourcefulness:** (Johnson, 2003) “The human mind is the most wonderful weapon for overcoming adversity. Use it to invent the solution to whatever problems you face, whatever goals you seek to achieve.”
21. **Reliability:** (Johnson, 2003) “If we are not honest or sincere, we cannot be counted upon as being reliable. ...Others depend on us so we must earn and create their respect.”
22. **Fight:** (Johnson, 2003) “I mean determined effort.” “Stand your ground, grit your teeth, and dig in - with exuberance and gusto - when required.”
23. **Integrity:** (Johnson, 2003) “Integrity is purity of intention. Integrity speaks for itself. Sincerity, honesty, and reliability are components that encourage and lead to integrity.”
24. **Faith:** (Johnson, 2003) “Have ‘faith’ that things will turn out the way they should.”
25. **Patience:** (Johnson, 2003) “You must have patience and realize that worthwhile things take time, and should. Things that come easy, as a general rule, are not meaningful.”
26. **Wooden’s summit, which every teacher should strive to attain along with motivating students to achieve is Success:** Coach Wooden chose to start building his Pyramid by first defining success. (Johnson, 2003) “Peace of mind which is a direct result of self-satisfaction in knowing you’ve made the effort to become the best you are capable of becoming.” In building this last block, Coach Wooden commented that (Johnson, 2003) “there is but one person who can measure your achievement of success: you. Forget what others think, ignore all accolades; you alone know the truth about your capabilities and performance. Winning is irrelevant, doing your best is all that matters.”

Diagram 3.



The second side of the structure, Instruction Methodology Skills, contains the blocks that represent the expertise associated with instructional methodology and the pedagogy expertise needed to conduct a physical education class. These talents are necessary to be successful with content, effective with learners and efficient with regard

to organization of the class. The foundation, with the two corner-stones, content knowledge and appropriate instructional practices, are positioned to support and enhance the other blocks. Each component is positioned and held in place with the concepts detailed in the mortar.

### Instructional Methodology Skills (Foundation)

1. **Content Knowledge:** The first corner-stone of this foundation starts with the basic knowledge necessary for students to know. A teacher must be able to identify each topic, skill, issue, strategy, application, and the diverse uses based on the learner's interest and ability to be part of an instructional unit. The physical education teacher must also be able to anticipate questions, comprehend purposes and create teaching-learning situations that challenge students to stretch outside their comfort zone. In an effort to fortify abilities, PETE future-professionals must also be able to point learners to places and resources in the school, community and geographic region where interests can be built into solid strengths.
2. **Appropriate Instructional Practices:** This second corner-stone embodies the educational soundness of activities, problem-solving, cooperative efforts and proper lesson objectives that help the learner master the skills, as well as how it is expected to be performed during participation. This includes the progression of learning activities, and creating an instructional environment focused on building self-confidence based on success. The PETE teacher must understand how to create instructionally sound activities focused on learning specific motor skills and then use assessment as a teaching-learning opportunity during the practice phase of the process, as well as to monitor progress and measure learning.
3. **Feeling for Instructional Timing:** An important talent that is developed by professional physical education teachers, through instructional experience with learners and interacting with individuals during a lesson, is the ability to observe students learning and know when it is time to move on to the next phase of the lesson or re-teach the skill.
4. **Lesson Planning:** One of the most valuable and proactive skills necessary for an efficient as well as effective lesson is the planning necessary to bring all the components of a lesson to life outside the curriculum document. The planning process is an identification of the details to be taught, sequencing the component parts, developing a progression and listing the "key elements," along with teaching cues essential to respond to the instructional objectives. A comprehensive lesson plan is a "snapshot" in the whole teaching-learning curriculum that responds to the interests of the students and the learning styles of the students, considering their collective abilities.

5. **Teaching Style Presentation Skills:** There must be a symbiotic relationship between the teacher's capability to teach and the student's learning aptitude. There must be a blending of learning opportunities with the potential for the student to learn and apply the specific piece of knowledge and then be able to strengthen and creatively apply the learned concept. Mosston (1994, 2002) in his "Spectrum of Teaching Styles" identified different techniques to present content knowledge to students that each has a unique learning style. This very complex process of selecting a teaching style starts with the teacher selecting specific content from the curriculum to be learned efficiently and effectively during the lesson.

### (Tier TWO)

6. **Gymnasium and Class Management Skills:** The "authority" in the room responsible for instruction and learning must have a set of strategies to control student behavior. The approach used to deal with student conduct must be based on established rules. The teacher's response to inappropriate actions must be educationally sound, fair, and consistent.
7. **Communication Skills:** Physical education teachers convey information primarily through verbal and non-verbal means, but attention must also be paid to the manner in that ideas, emotion and reactions are presented.
8. **Understand Movement Concepts:** Body awareness, space relationships and movement principles are all necessary skills that should not be left to chance. The technically correct biomechanics of sports skills can be progressively taught from an early age monitoring speed, direction, striking, twisting and other forms during safe participation.
9. **Pace for Each Lesson:** A physical education teacher must have a feeling for where the lesson is going and that it is flowing in a supportive way that encourages each student to experience success with the tasks. Being able to read behavior and then respond to the student's performance during a phase of the lesson will impact the pace of the lesson and is best learned with experience.

**(Tier THREE)****10. Instructional Focus on Interests of the Students:**

The curriculum is a document that expresses course content with all the planned learning experiences. Teachers are expected to bring the document to life while enticing students to participate and luring them into wanting to engage the activity outside of class. It is also part of the teaching responsibility to map a course for effective learning and then be able to navigate through all the plateaus using creative activities.

**11. Checking-for Student-Understanding:** At various stages in the lesson, it is important to be sure that all students are attentive to the lesson, and more importantly, grasping the focus of the lesson. This process is accomplished in a variety of ways, including: questioning; demonstrating; task sheets; checklists; drill; test/ quiz and through active participation in an authentic activity (i.e. game or modified game activity).

**12. Assessments Focused on the Teaching-Learning Process:** Formative and summative assessments are a critical part of the teaching-learning process. Formative assessments, administered at the start or during an instructional phase, provide a place to start or as a monitor of progress. Vital information is provided that must impact the instruction as well as practice opportunities. Summative assessments, while administered as a means of measuring learning, provide direction for instruction and create a chance for students to demonstrate what has been learned as well as how it can be creatively applied.

**(Tier FOUR)**

**13. Uses Performance-Based Feedback to Create a Supportive Learning Environment:** Feedback is used by teachers to describe a learner's performance in an effort to influence that behavior. When offered in a positive and constructive way, learners are more likely to listen and invite suggestion to strengthen the performance. Whether obtained intrinsically or extrinsically, for learning to occur, there must be a knowledge of results and feedback based on how the skill is performed. There are a variety of ways that teachers communicate feedback, including: verbal, peer feedback; checklists, pictures; assessments, and digital imagery.

**14. Motor Learning and Skill Acquisition Principles:**

Physical education future-professionals must understand the principles that govern as well as surround the learning, acquisition and strengthening of motor skills throughout an individual's life-time. Each lesson, practice and play opportunity must attempt to incorporate, or at least not violate, these psychomotor learning concepts: (a) NASPE appropriate practices guidelines; (b) accuracy then speed concept; (c) understanding feedback is essential to changing behavior; (d) using intrinsic feedback during self-analysis will help to strengthen a performance toward mastery; (e) lessons, activities, drills and games must be age appropriate recognizing the need to observe that learning is influenced by readiness, motivation, reinforcement and the individual differences present in each student in the class.

**(Tier FIVE)****15. Ability to Analyze Skill Performance and Teaching Focused on Skill Mastery:**

In order to observe and analyze a performance, a teacher must have a solid grasp of the techniques that govern skill performance, a comprehensive knowledge of sport specific content and be able to provide learners with a "whole" picture of what the skill looks like when performed. In the teaching process, following a demonstration of the whole task, students must be provided a phase-by-phase demonstration that is then put back together (whole-part-whole). Using teaching cues and over-emphasizing each element, the teacher must clearly convey the type of performance that is expected in an effort to challenge each student. The mortar that stabilizes side II as well as supports the conceptual framework include,

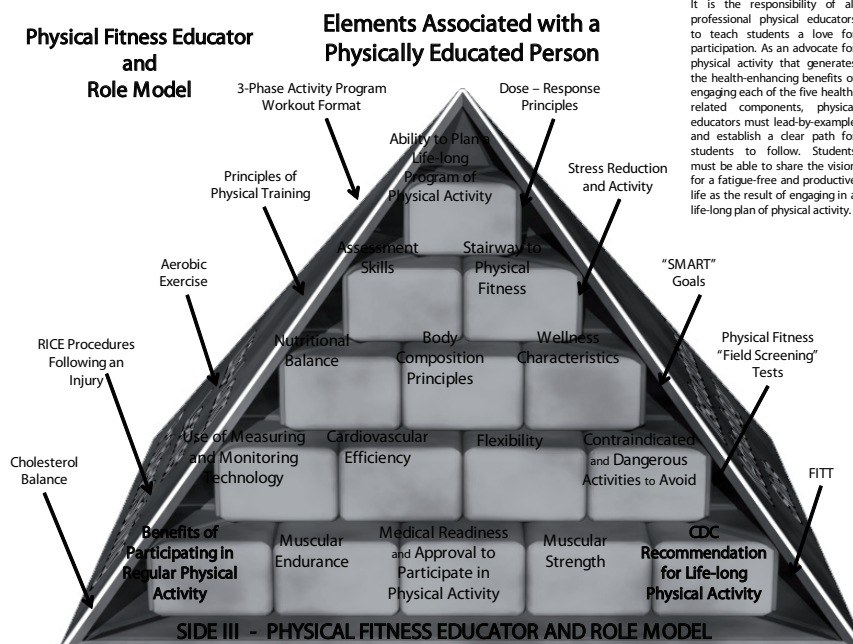
**16. Set High Expectations:** Learners must set their outlook on high performance achievement based on the clear message from the teacher. Skill mastery should be the goal based on both an intrinsically high self established standard and an extrinsically conveyed message from the teacher.

**17. Employ Motivational Skills:** As motivation is a critical element that influences learning, teachers must develop instructional skills that encourage learners to participate. The activities must be exciting, interesting and have relevance to their lives, while also being interesting as well as have the potential for success.

18. **Persistent and Unyielding Effort:** Future physical education teachers need to develop an attitude that upon their shoulders lies the “teaching – learning” process and that their leadership is critical to the process moving forward.
19. **Provide Program and Performance Accountability:** Assigning responsibility and setting standards that must be achieved is now an emphasis in schools for programs as well as for teachers and students. Whether a nationally administered test, state or district assessment, the focus is on how well students are learning.
20. **Variety of Active-Learning Opportunities:** Creative teachers develop learning experiences that keep students on-task and perfecting their skills as a focus of the lesson. Actively engaging in the application of the task-to-be-learned is critical to this process so new, age-appropriate, ability-challenging, and interesting learning situations should be used each time a unit is presented.
21. **Use of Instructional Support Materials:** Utilizing all the resources available to enhance a lesson and impact learning in a positive way is the responsibility of the teacher. In physical education classes today, there are pictures/posters, charts, and a variety of technology that is safe in the gymnasium setting.
22. **Differentiated Instruction Focused on Student Learning:** Providing each individual participant with content in a way that can be understood, demonstrated, mastered and applied in an authentic setting is the very definition of student success. In physical education classes, where there usually is a wide range of performance abilities (novice to varsity athlete), developing an effective match between teaching styles and learning capability is an ominous planning responsibility.
23. **Sense of Humor:** In addition to all the instruction methods, future-professional physical education must demonstrate to students that it is not just a job... but a sincere caring for them, their health, their academic achievement and their interests that inspires teachers every day.
24. **Maximize Time-on-Task:** Developing lessons that focus on student learning and utilizing time efficiently to participate in activities that help in skill mastery is a difficult responsibility. It involves much more than just starting instruction early, minimizing or eliminating distractions and ending class with only enough time to attend to business and move to a next class. Time-on-task seeks to utilize all instructional time effectively.
25. **Selects Content in Response to the Needs of the Learners:** Curriculum, instruction units and lessons should each have a focus that is presented in a systematic way designed to answer a student needs. While developed in an age-appropriate lesson that is sequenced to build upon previous learning experiences, it is the teacher who must communicate the reason for the lesson and why the focus of the lesson is important. The summit which every physical education teacher should strive to attain is,
26. **Focus on STUDENT LEARNING:** Achieving a permanent change in the learner’s behavior is a sign of positive growth in the teaching-learning process. Students, parents, school faculty and community must value the learning outcomes and the achievements of students. While sometimes impacted by budget, facilities and those involved in the teaching-learning process, the focal point must always be the needs of the students and how best to put students first in an effort to reach full potential. Appropriate assessments, when used to determine starting points (formative assessment), serve to teach and monitor. Final appraisal (summative assessment) should also be used as a teaching tool in the process of student learning and must always be the primary focus as a characteristic of excellence. In an effort to bring understanding to the process, students must understand the goal, embrace the reason for the process and be able to see the application at the end.



Diagram 4.



The third side of the pyramid, Physical Fitness Educator and Role Model holds the blocks and mortar connected with a teacher’s condition, performance ability and perception by students to be a role model. It is the responsibility of future and practicing professional physical educators to teach students the “how,” but more important is instilling a love for participation. As an advocate for physical activity that generates the health-enhancing benefits of engaging each of the five components of physical fitness (cardiovascular; muscular strength; flexibility; muscular endurance; and body composition), physical educators must lead-by-example and establish a clear path for learners to follow. New and future professional physical education teachers must be able to communicate the essence of the corner-stones, which embrace the benefits of participation in regular activity and the recommended time for engagement, on the way to the summit which has the educational objective of being a “physically educated person.” Learners must be able to share the dream for a health-enhancing, fatigue-free and productive life as the result of engaging in a life-long plan of physical activity.

**Physical Fitness Educator and Role Model (Foundation)**

1. **Benefits of Participating in Regular Physical Activity:** As the first corner-stone, a critical element of this set of characteristics, physical education teachers must embrace the positive aspects of physical activity and preach to students the reasons

for participating. Regular physical activity promotes positive increases in the five components of health-related physical fitness; reduces the risk of premature death; reduces the risk of dying from heart disease; reduces the risk of developing diabetes; reduces the risks associated with high blood pressure; reduces the risk of developing colon cancer; helps build healthy bones; helps promote good psychological health and helps older adults maintain balance.

2. **Center for Disease Control and Prevention Recommendation for Life-long Physical Activity:**

As the second corner-stone, future professional physical education teachers should be motivating children and young adults to participate in regular activity. Each individual should take part in regular physical activity for 30 to 60 minutes, most days of the week, at a moderate to vigorous level of intensity. Students who participate on a regular basis have an increasing potential for healthful living and also decrease the possibility of suffering from hypokinetic diseases. This important block in the foundation also includes an explanation of physical fitness: (Corbin, 2005) “..the ability of your body systems to work together efficiently to allow you to be healthy and effectively perform activities of daily living, without undue fatigue... a fit person also has the ability to respond to emergency situations such as running to get help or aiding a friend in distress.”

3. **Muscular Endurance:** This definition includes the ability of a muscle, or group of muscles, to sustain

a contraction or perform repeated contractions over a period of time without fatigue. Muscular endurance plays a role in daily activities such as walking, climbing stairs or carrying backpacks, but also plays an important function in posture, head positioning and with the muscles of the abdomen and spinal column to keep the backbone in correct position, free from disabling pain.

4. **Medical Readiness and Approval to Participate in Physical Activity:** Physical education teachers must have the safety and health of those students participating as their first priority. To this end, before starting any program of physical activity that “stresses” the body systems, basic medical history, prior medical limitations and risk related precautions must be reviewed. For most schools, this means a trip to the school nurse for an review of students with a history of restrictions based on the records. The second important connection within this block is an emergency plan to respond to an emergency if one should arise.
5. **Muscular Strength:** The definition of muscular strength can be presented as the “force” a muscle, or group of muscles, can exert during a single contraction of a skeletal muscle. Generally associated with “power” activities such as jumping for height, throwing for speed, or kicking for distance, strong muscles with greater mass than smaller muscles also serve as protection to the organs of the body.

#### *(Tier TWO)*

6. **Use of Monitoring Technology:** Integrating teaching methodologies with electronic technology equipment creates diversity in the teaching-learning process. Blending these instructional support devices into lessons generates student interest and creates a more inviting experience. These new tools help teachers with instructional techniques, and students with measuring devices and together these offer different opportunities to record the impact of activity on the different systems of the body which adds value to participating in physical activity.
7. **Cardiovascular Efficiency:** It represents how well the systems of the body can distribute and process oxygen. Future-professional physical education teachers must be able to provide an age-appropriate explanation that describes how the heart, circulatory system and oxygen (gas) exchange process facilitates physical activity. In physical education classes, a

variety of screening tests are used to measure the heart’s reaction and recovery to varying levels of predetermined activity. While heart-rate, in beats-per-minute will yield this potential, examples of field-based tests to estimate maximum  $VO^2$  include the FitnessGram PACER test, 1-mile walk/run or step test.

8. **Flexibility:** This the ability to move the body and each of the joints of the body through a “full range of motion.” Physical education teachers must be able to provide an age-appropriate explanation and demonstrate of how joints (the structure) and connective tissue has an impact on movement. Lessons should include how physical activity promotes joint health (flexibility), and how inactivity contributes to stiffer joints.
9. **Contra-indicated and Dangerous Activities to Avoid:** Physical education teachers must know, eliminate and explain the reasons students should avoid using exercises that could potentially harm a participant. These activities generally involve rapid, extreme flexion, hyper-extension, extreme twisting or explosive activities in a confined area where there is potential for a collision. It is also important to recognize that most times these restrictions are for the general public and that “trained” participants, under certain conditions, could use these activities as they resemble actions used in authentic game situations.

#### *(Tier THREE)*

10. **Nutritional Balance:** Physical education teachers must be aware of and be able to provide an age-appropriate explanation for the science of food and how the body uses food for energy, to fight off disease and as storage. This includes the six classes of essential nutrients as associated with their different effects on health and wellness, energy content in food (calories), and amino acids. Instruction in this area is critical as choosing a balance between all the available foods is important to living a long and productive life.
11. **Body Composition and the Principles to Keep the Caloric Scale in Equilibrium:** Physical education teachers must be able to provide an age-appropriate explanation that defines the proportion of body fat to lean body mass. A healthy individual has a larger percentage of lean mass (fat free tissue – muscle, bone, minerals and water) compared to a lower amount of body fat (subcutaneous fat). An estimated measure of body composition can be generated by

Body Mass Index (BMI), skin-fold measurements (using regression equations), underwater-weighing, bio-electric impedance analysis (BIA) and “Bod Pod” which measures air displacement. Lessening the percentage of body fat while increasing the lean mass, which involves changing the caloric scale equilibrium, is impacted by adjusting the food eaten (caloric intake of everything consumed) offset by all the energy used to stay alive (basal metabolism) and activities that burn additional calories. This component is considered the second most important component of health-related fitness.

12. **Wellness Characteristics:** Future-professional physical education teachers need to expand the idea of illness-free and physical fitness to embrace the optimal condition of all of the interrelated dimensions that impact an individual’s life. Positive life skills as they pertain to children and young adults can be identified and described as having several interrelated dimensions of an individual’s life. These include, but are not limited to areas such as: physical; nutritional; intellectual; emotional; social; career; spiritual; and medical. (Tier FOUR)
13. **Physical Fitness Assessment Skills and Monitoring Techniques:** When assessment is imbedded into the curriculum and the teaching-learning process, accountability is brought to both teachers and students for learning. The specific nature of the assessment, along with the desired outcomes, gives direction and focus to what is to be learned and adds a time-stamp so it is clear by when. Task-sheets, check-lists, peer assessment and teacher measurement of what a student has learned are each an element of monitoring growth and measuring learning.
14. **Stairway to Lifetime Fitness:** Future professional physical education teachers must find creative ways to instill in students the importance of physical activity as well as find original ways to help them embrace the concept. The “Stairway to Lifetime Fitness” was developed by Corbin (Corbin, 2005) to engage learners to set goals and then go about achieving the target through physical activity. This concept is a three-level and six-step pathway to the life-long benefit of physical activity. The illustrative diagram moves from a floor-level of a reliance on others to help with the program, to an independent level of creativity where a variety of self-planned activities brings the individual to the top stair achieving physical fitness. (Tier FIVE)
15. **The Ability to Plan a Life-Long Program of Physical Activity:** The block that sits at the apex of this pyramid side and instructional purpose for future-professional physical education teachers is to enable a learner (with knowledge, skills, resource information and a knowledge of the benefits) to plan and participate in an interesting life-long program of physical activity. The program should be specifically designed to interest the participant, meet the CDC recommendations, incorporate the exercise principles, create challenging opportunities and yield healthful benefits as a result of the intensity of the activity. The mortar that stabilizes side III as well as supports the structure,
16. **Cholesterol Balance:** Blood cholesterol levels are affected by a variety of different factors both from within the body as well as from outside with dietary intake. Total cholesterol is a number that reflects different levels of high-density lipoproteins and low-density lipoproteins and should be below 200 MG/DL. There are also other test results that can be provided when the “lipid group” is analyzed, including tri-glycerol level and cholesterol level ratios.
17. **FITT:** Future-professional physical education teachers must recognize and teach the many principles that are associated with physical activity and exercise programs. The FITT acronym is used to represent the four dimensions of an exercise program. These include: Frequency; Intensity; Time; Type.
  - Frequency** – Reflects the regularity with which the participant is going to engage the exercise program. The number, for example, will indicate how many days per week.
  - Intensity** – Reflects how hard the exercise will be as compared to resting or as a percentage of maximum.
  - Time** – Reflects the duration of the exercise bout expressed in time or repetitions.
  - Type** – Reflects the mode of activity or the type of exercise to be engaged. Many times this will simply announce which of the five areas of physical fitness is to be addressed during the exercise bout.

18. **RICE Procedures Following an Injury:** During the course of activity, accidents happen and injuries occur to soft-tissue (muscle and joints) of the body. It is the responsibility of the future-professional physical education teacher who is supervising the class to develop a plan of action to respond to the injury. It includes a course of action not to allow any additional harm to come to the injured part of the body. The process is intended to positively impact the injured area by addressing the body's reaction to an injury (pain, swelling, loss of function due to vascular trauma). "RICE" includes:

**Rest** – Stop the activity and do not use the affected area.

**Ice** – Apply ice for 36 to 48 hours after the injury.

**Compression** – In an effort to minimize the swelling to the area, wrap the impacted area with an elastic bandage.

**Elevation** – To minimize inflammation, use gravity to keep both lymphatic fluid and blood from the injured area.

19. **Physical Fitness "field screening" Tests:** The assessments, intended to be administered outside the laboratory setting, in a physical education class, each include a variety of health-related physical fitness tests (assess aerobic capacity; muscular strength, muscular endurance, and flexibility; and body composition) or skill-related physical fitness tests (speed, power, agility, balance, coordination, reaction time, cardiovascular endurance). While there are primary tests, each of the components has alternate tests selected to meet the needs of the participating students. Scores from these assessments are compared to criterion-referenced standards and (Meredith, 2005) Healthy Fitness Zone® standards (health-related physical fitness test), or to normative tables which compare scores to large groups. The scores determine students' overall physical fitness and suggest areas for improvement when appropriate.

### **FitnessGram**

Ages 5 – 19

6 item test w/ alternates available

PACER test

1-mile run/walk

Curl-up

Push-up, pull-up or flexed-arm hang

Sit-and-reach or shoulder stretch

Skinfolds measurements or body mass index

### **President's Challenge**

Ages 6 to 17

5 item test: Curl-up

Shuttle run

1-mile Endurance run/walk

Pull-ups or right angle push-up

V-sit and reach

### **President's Challenge**

Ages 18 and up

4 item test: Aerobic Fitness

Muscular strength and endurance

Flexibility

Body composition

### **International Physical Fitness test**

Ages 9 – 19

6 item test: 50-meter sprint test

Flexed arm hang

10-meter shuttle run

Back throw

1000-meter run

Standing long jump

### **Marine Corps Physical Fitness Test**

Ages 17 – 46+

3 item test: Pull-up (M) or flexed arm hang (W)

Abdominal crunch

1-Mile run

20. **Aerobic Exercise:** Physical education teachers must be familiar with the energy systems that create adenosine triphosphate (ATP) and fuel cellular activity in the muscles. Each of these systems uses a different fuel to initiate the chemical processes utilized during exercise. The aerobic (oxidative energy) system is used during any physical activity that lasts more than about two (2) minutes. This aerobic (literally translated to: with air or oxygen) system supplies energy, in the form of ATP, to the muscle cells for work as the result of a chemical reaction between oxygen and glucose, fats, and amino acids. The intensity of the work will depend on the extent the system can function independently

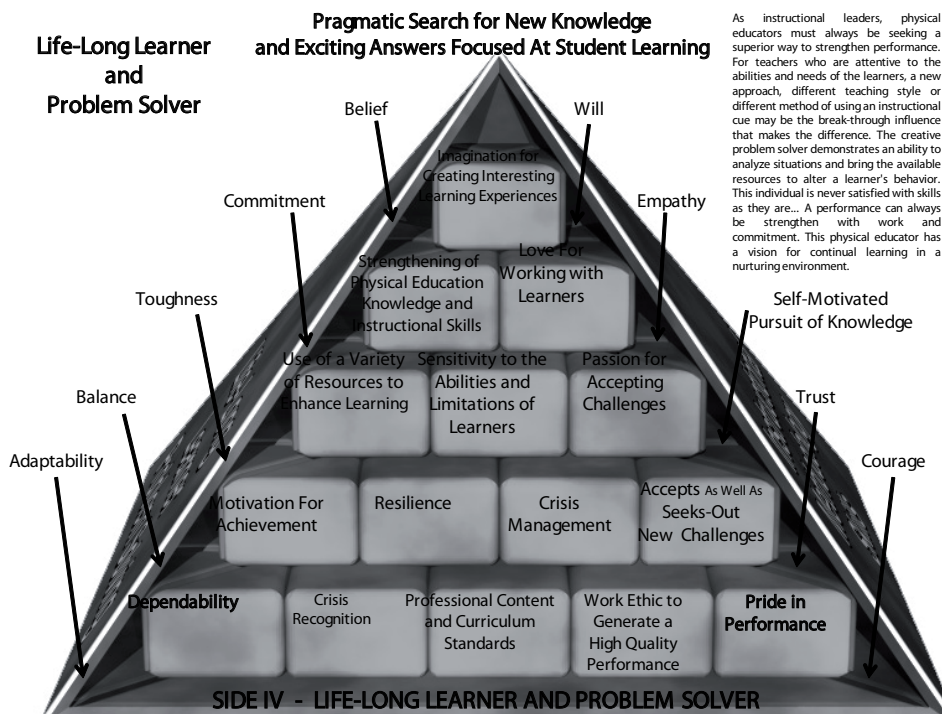
or will share the energy producing responsibilities with the non-oxidative (anaerobic) energy system. This shared responsibility will result in limiting the amount of work as a result of chemical reaction using sugar to burn causing lactic acid that causes fatigue.

21. **“SMART” Goal Setting Procedures:** SMART (S = specific; M = measurable; A = action orientated; R = realistic; T = time stamped). Managing behavior for a new professional or future-professional physical education teacher is an ominous task, but an effective one to promote growth. The process provides a clear path to an end product. In the teaching-learning environment, this process is enhanced by dividing goals into short-term and long-term, thus giving more checkpoints using smaller intervals on the way to the final target. Learning and/or performance objectives help define the significant concepts that need to be addressed along the path, with a valid assessment used to monitor progress (formative assessment) and final achievement (summative assessment) documented within the timetable requirement. The acronym SMART has been extended to put an additional “ER” (SMARTER) to include two more helpful hints (E= evaluate; R= reflection) as evaluation brings accountability and reflecting on the process is provided to strengthen the goal.
22. **Principles of Physical Activity:** Future-professional physical education teachers must have a solid grasp of the concepts and research findings that govern as well as shape the physical activity programs. These concepts are important because they address safety, specific types of programs, concepts governing improvements and myths, as well as half-truths that permeate the “exercise water fountains.”
  - \* Principle of overload
  - \* Principle of specificity
  - \* Principle of progression
  - \* Principle of threshold of training (target zones & ceiling)
  - \* Principle of recovery
  - \* Principle of individual differences
  - \* Principle of variety and balance
  - \* Principle of reversibility (use/disuse)
23. **Stress Reduction and Activity:** Future-professional physical educators must recognize the stress caused by the anticipation of physical education for some students and the stress-reduction response physical education serves for others. Being sensitive to these conditions, as well as the biological (from the nervous system and endocrine system) and psychological implication (causing emotional and behavioral reactions), can make any future-professional physical educator a better teacher.
24. **3-Phase Activity Program Format:** Future-professional physical educators should teach and format the guided practice phases of their activity segments during lessons to follow the 3-phase format. This format includes a “warm-up,” followed by the full activity and then concludes with a “cool-down” just before dismissal.
25. **Dose-Response Principle:** The concept of dose-response is built on a pharmacological model. The amount of drug and how the body responds when administered involves the same concept and biological as well as psychological response. While exercise is not a drug, the positive effects of physical activity create the same type of biological effect and the principle is the same. Using the dose-response model, exercise can have a very beneficial impact on the body. By adjusting the FITT “dosage,” the positive impact of exercise can be felt and ultimately realized by the systems of the body. The summit, which every physical education teacher should strive to attain is,
26. **Focus on the Elements Associated with a Physically Educated Person:** The National Association for Sport and Physical Education (NASPE, 2004) has created a five part description for a “Physically Educated Person.” It should be the instructional goal for every future-professional physical education teacher to create learning opportunities that challenge every student to be a physically educated person. It is essential that each of the twenty supporting outcome statements is included in lessons in an attempt to encourage students to enjoy activity and participate for a lifetime. As developed by NASPE, the Physically Educated Person is defined as:
  - Has**—learned skills necessary to perform a variety of physical activities.
  - Knows**—the implications of and the benefits from involvement in physical activities.
  - Does**—participate regularly in physical activity.
  - Is**—physically fit.
  - Values**—physical activities and its contribution to a healthful lifestyle.

This original, five-part description of the lifetime healthful components have been expanded and used as the basis for the six National Standards for Physical

Education (NASPE, 2004) found on side three, in the foundation of the instructional pyramid.

Diagram 5.



The final and side IV of the pyramid identifies the characteristics associated with being a Life-Long Learner and Problem Solver. These are personal as well as operational traits that are developed as instructional leaders and future-professionals, as well as practicing physical educators, should always be seeking for a better way to strengthen performance. For teachers who are attentive to the abilities and needs of the learners, a new approach, different teaching style or different method of using an instructional cue may be the break-through influence that makes the difference. The creative problem solver demonstrates the ability to analyze situations differently and bring all the available resources to change a learner's behavior. The corner-stones are critical in the foundation, as both dependability and pride in performance support the structure on the way to the "vision" at the summit of this side of the pyramid. The individual with a focus on these components is never satisfied with things as they are... things can always be better and this physical educator, with a vision for transforming weakness into perfection, will find a way to strengthen performance.

**Life-long Learner and Problem Solver, (Foundation)**

1. **Dependability:** This characteristic serves as a cornerstone for this set of traits as a teacher must be relied upon to complete assigned tasks or students will not receive a comprehensive set of the best and up-to-date learning experiences. Physical education teachers must be expected to report for all classes, teach course content and plan learning experiences that will challenge students to be better learners.
2. **Pride in Performance:** Following a teaching episode and during the reflective process, pride comes from knowing the plan worked and that every detail worked to perfection...the students learned and are able to demonstrate the focus of the lesson in an authentic setting. The intrinsic feeling of satisfaction as a direct result of an accomplishment is created as a outcome of knowing that you want your name associated with the project and the results are "mastered."
3. **Problem and Crisis Recognition:** As a future-professional physical education teacher, one of the most useful skills that can be developed is that of anticipation. This can be as simple as correcting a

teaching element or a performance technique misstep to an altercation between students. This skill can be interpreted as an observation skill and is the result of experience. The crisis recognition element of this foundation block is knowing how to keep the students in a safe and protected environment. This is the presence of mind not to panic, direct students to safety and knowing the organization guidelines for unusual situations.

4. **Work Ethic to Generate Only a High Quality Performance:** Physical education teachers must recognize what is expected of them as teachers and be able to perform to that level. A sense of accountability for performance and achieving expectations is an intrinsic essential. The expectation for excellent quality work is a response to an established standard, which is that students deserve the very best education. A solid work ethic is essential for students to realize a quality experience.
5. **Curriculum Standards and Professional Content:** Each physical education teacher must embrace the subject area and grade level curriculum standards. In many cases, these types of standard documents are used to establish a minimum level of content to be included as well as instructional performance and disposition to shape educational experiences. This vision for high quality education includes the specific knowledge-based skills, concepts, rules, theories, applications and strategies that are age-appropriate for the class. In addition, there are department, school and district-wide educational initiatives that must be blended into the course of study. On the national level for physical education, the National Association for Sport and Physical Education (NASPE 2004) has developed national standards and professional guidelines to set expectations but, more importantly, give direction as well as consistency to the subject.
  - \* Demonstrate competency in motor skills and movement patterns needed to perform a variety of physical activities;
  - \* Demonstrate understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities;
  - \* Participate regularly in physical activity;
  - \* Achieve and maintain a health enhancing level of physical fitness;

- \* Exhibit responsible personal and social behavior that respects self and others in physical activity settings;
- \* Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

\*\*\* There are these same types of standard documents for adapted physical education and coaching.

#### *(Tier TWO)*

6. **Motivation for Achievement:** In general, physical education future-professionals understand and sometimes thrive on competition that is focused on achievement and in the process doing good work. This driving force, whether intrinsic or extrinsic, is a basic reason for wanting to be associated with the successful completion of a goal. In addition, the capacity to exceed expectations as well as demonstrate high quality results is a force that is associated with self-motivation and triumph.
7. **Resilience:** For all teachers, including physical educators, resilience is the “bounce-back” ability to stay focused in very stressful situations that require an individual to stretch far beyond a comfort zone of normal operation.
8. **Crisis Management:** A future-professional’s ability to manage the day-to-day events of the class is a requirement that takes great concentration. The skill that is required necessitates anticipation for what could happen and be there to stop the event from jeopardizing the safety of the students or integrity of instruction. This effort to pre-manage everyday events involves knowing students and how they will react to each other during a part of the school day or curricular experience. The second part of this component is how to manage an unforeseen event that poses a serious threat. Being able to take control of a situation immediately and manage students in an emergency, such as a fire, tornado or even a traumatizing health situation is essential. Well trained, experienced and prepared professionals have the ability to remain calm, have a plan and are able to assume a strong respected presence that students respond to when a crisis arises.
9. **Accepts and Seeks-Out New Challenges:** This characteristic of a future professional physical educator is essential as it signifies that this individual is looking to provide the best, most current and inviting learning experiences for the students. There never seems to be a question about accepting a

responsibility or engaging a new opportunity. Many times this very busy professional is looking for more things to do.

*(Tier THREE)*

10. **Uses a Variety of Resources in the Examination of a Problem:** Imaginative physical education teachers explore interesting, enticing and motivating ways to reach students as a means of enhancing learning. Requiring learners to examine the task, analyze each phase of a skill and critically examine a situation before deciding how to solve a problem requires a large “tool box” full of resources. This requires learners to incorporate a variety of resources as well as strategies to creatively attack a performance challenge presented during a guided practice component of a lesson.
11. **Sensitivity to the Abilities and Limitations of Learners:** A future-professional physical education teacher must have a solid understanding for the various disabilities and limitations of the students “included” in physical education classes. This involves being able to read and develop activities that respond to a student’s Individual Educational Plan (IEP). In addition, teachers must be able to differentiate the activities to match learning capabilities with the different learning opportunities designed into the lesson. As a supervisor, a future-professional physical education teacher must be sensitive to the interaction of all the students so that classified students with IEPs learn from “normal” students and “normal” students learn from the special needs students.
12. **Passion for Accepting Challenges:** Demonstrating a strong feeling for physical activity and overcoming challenges is a character trait that physical education teachers must make obvious to learners with an expectation that learners will catch the “fever” to achieve.

*(Tier FOUR)*

13. **Continuous Strengthening of Physical Education Knowledge and Instructional Skills:** Future professional physical education teachers must always be looking for new and creative learning opportunities. In an effort to serve all learners, physical education teachers must deliver ingenious activities that challenge each student to become a better performer. This ongoing effort must be educationally sound, age-appropriate and ability-suitable.

14. **Love for Working with Learners:** A teaching professional must, above all, enjoy working with individuals and seeing their joy when success is realized. The feeling of self-contentment is attained when learners are growing and the skills are no longer rote but being creatively used to respond to a rapidly changing situation.

*(Tier FIVE)*

15. **Imagination for Creating Interesting Learning Experiences:** While experience is many times the best teacher, vision for the future and the ability for a professional physical education teacher to see new methods and create new opportunities helps learners to grasp and apply the focus of the lesson. Thinking and reflecting on the drills and activities used to strengthen motor skills also helps students see the performance in their mind’s eye prior to attempting to replicate the demonstration. A physical education teacher with a dynamic ability to challenge students, increase their skills and performance strengths while at the same time incorporating their interests into activities, will be able to effectively reach learners.

*The mortar that stabilizes these components as well as supports the structure is,*

16. **Adaptability:** Future physical education teachers perform their miracles in the psychomotor domain. As a direct result of the activity-based movement structured environment, the ability to modify lessons and adapt learning opportunities is an important skill necessary for leading students.
17. **Trust:** In the teaching-learning process, the element of “trust” helps to define the student and teacher relationship and has an enormous impact on the exchange culture of the environment. The feeling that a teacher cares, is giving and wants to see learner success, helps to send a message that the course of action is about the student.
18. **Balance:** For the future-professional physical education teacher, balance comes as a relationship between explaining and listening; between instruction and participation; between status quo and new growth; and mastery and settling for mediocrity. Each individual teacher must resolve the issue of balance based on the growth of the class as well as each individual.



19. **Courage:** Courage in the teaching-learning process is about fortitude and certainty that the instructional needs of the students are being served. In addition, it is a belief that as challenges face the learners, as the instructional leader, the physical education teacher has provided the “tools” to resolve the situation. More importantly, the skills learned during class can be transferred to real-life situations.
20. **Toughness:** Future-professional physical education teachers must develop a “thick skin” to avoid a disruption in the process as the result of an insensitive comment. Having the ability to listen to personal attacks, meaningless noise, as well as self-serving distractions, and then respond with a helpful or even some constructive feedback rather than react with emotion, is professional strength.
21. **Risk:** Future-professional physical education teachers begin to organize their instruction in a setting of control. It is important, that with experience, teachers step outside their comfort zone and try new and creative instructional methods. New teachers must have faith in their ability to try new things.
22. **Commitment:** Future-professional physical education teachers need to develop an intrinsic passion for teaching physical education with an ongoing drive to present a better lesson every day.
23. **Empathy:** Future-professional physical education teachers, in order to earn more respect as a teacher, must develop the capacity to appreciate the students being served. This includes the students’ academic strengths, in-school activities, responsibilities and interests outside school and their learning styles. This ability to relate to students will strengthen the student-teacher bond.
24. **Belief:** This is a state-of-mind that motivates future-professional physical education teachers that every performance can be better, student performances can be strengthened and that there is always a way to improve.
25. **Will:** Another very strong inner feeling future-professional physical education teachers need to develop is the urge to be successful and achieve great things. This desire to be successful must also be broaden to finding a successful path for the learners in the class.

*The summit that every teacher should strive to attain is,*

26. **Focus on STUDENT LEARNING:** All experiences in the curriculum must be focused on the growth and development of the learner. Future-professional physical education teachers must be able to match teaching style with learning capabilities. Teachers must help students set SMART goals and then establish both student-centered as well as teacher-centered lessons that spotlight on the needs of the learner.

In conclusion, using the pyramid blocks and mortar to build an effective learning environment is a complex process that needs a plan with the “tools” to respond to observations, feedback and student performances. NASPE, in their document outlining What Constitutes a High Quality Physical Education Program (NASPE, 2007) identifies the essentials of a high-quality physical education program as including the following components: “opportunity to learn, meaningful content and appropriate instruction.” Rink (2008) expands the expectations and amplifies the criteria for an effective program by more closely embracing the NASPE 2004 updated version of the National Content Standards for Physical Education. She describes the development of a solid program as starting with a foundation that embraces the six critical areas including “effective programs develop motor skills, impart knowledge needed for a physically active lifestyle, encourage regular participation in physically activity, facilitates the development and maintenance of fitness, cultivate responsible personal and social behaviors, and help students to value participation.”

The final component for high quality physical education is appropriate instruction. While there are a wide range of definitions (Silverman 2003; Mawer 1995; Rink 1993, 2008, 2010; Borich 2007; Fronske 2001; Gordon 2003) for what constitutes a quality physical education teacher, the common characteristics almost always include: solid grasp of content in the curriculum; planning; uses a variety of teaching styles to match learning capabilities; creates learning opportunities that serve the needs of students; well designed lessons that create practice opportunities to strengthen performance for all; high expectations for achievement; vision for opportunities; establishes learning outcomes; organizational; management skills; assesses learning and develops remedial plans to improve performance for all students

and can serve as an advocate for physical activity . The instructional pyramid contains blocks and mortar that represent over 104 personal and professional characteristics that can impact learning for new and future-professional physical education teachers. Each of the blocks and the related mortar serve as the stimulus for the interaction between teachers and learners over knowledge, skills, strategies and assessments.

Shimon (2011) writes, “In addition to the science side of teaching (research), effective teaching also involves applying effective tactics with students and delivering lessons in unique ways, which is often referred to as the art of teaching. While the lesson development and sequence, as well as progression of activities lies with the trained (certificated specialist) professional physical education teacher, based upon the appropriate curriculum, the decisions about when to progress to the next phase of instruction are made during the lesson. Each of the four sides of the pyramid contains the options available for use. While each set of characteristics on a side of the pyramid are related, intertwining and blending the components enhances the presentation. The future-professional physical educator must feel comfortable with the full set of “tools” and have them available for use in the minute-to-minute instructional balancing act needed to serve learners.

Finally, it is the variety of different teaching-learning experiences and different ways to respond to the learners needs and creative ways to build pathways to success that will help future-professional physical education teachers become visionaries. Being able to use the tools that are included in the pyramid will make any professional physical education teacher a technician who is able to regurgitate the components of a lesson. It will be the desire to see students achieve, the intrinsic enthusiasm for serving, and that rewarding day-to-day interaction with learners that will turn technician into a physical education artist. For currently practicing, both experienced and “blooming” professional physical education teachers, the pyramid is a list of resources to use as a self-evaluation checklist. A look at the characteristics and an assessment of current pedagogy should be used to strengthen the students being served in the program. While learners keep the program alive, as a teacher it is your responsibility to keep challenging each individual to stretch to their fullest potential every single day as there is no block or mortar that allows for complacency.

For future-professionals and new professional physical education teachers, the instructional pyramid is a comprehensive directory of characteristics to be used to develop lessons, design presentations and deliver the instructional opportunities that lead to an effective instructional physical education program. Day-by-day and lesson-by-lesson, the climb to the top of the pyramid is a continuous effort that needs to be attacked with enthusiasm and love for physical activity and physical education.

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