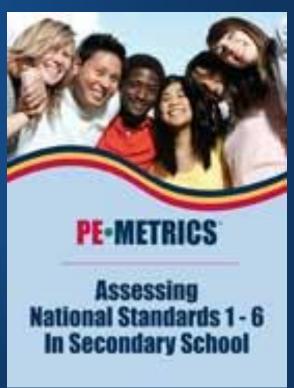
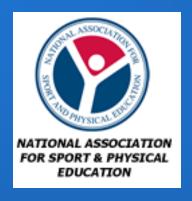


PE Metrics: Standards 1-6 Secondary







Presenters

Marybell Avery
Lincoln (Nebraska) Public Schools

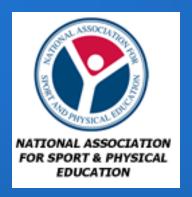
Connie Fox
Northern Illinois University

Derrick Mears
Western Washington University

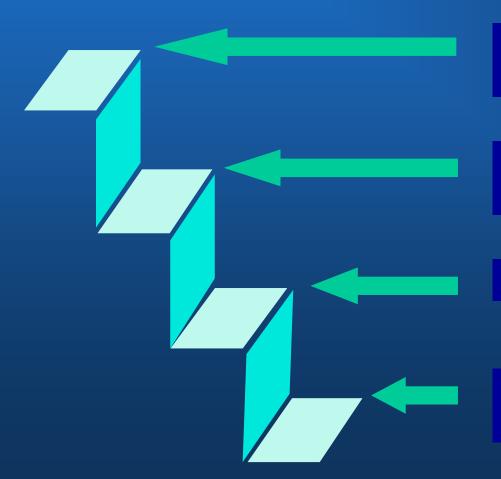


Agenda

- Project Background
- · "PE Metrics: Standards 1-6 Secondary"
 - Standard 1 Assessments
 - CD of Standard 1 assessments
 - Motion analysis (Dartfish video online)
 - Standards 2-6 Assessments
 - CD of test banks
 - PE Metrics Online



PE Metrics Another Step to High Quality Physical Education



High Quality Physical Education & Accountability

PE Metrics: Assessment System, Evaluation & Instruction

Performance Indicators

National Standards for Physical Education



Performance Indicator & Assessment Development

- 1999 NASPE "think tank" of university and public school professionals consider how to advance PE
- 2000 Assessment Task Force formed to create performance indicators with assessments of national standards
- 2001-2010 Assessments revised and pre-pilot tested, revised again and pilot tested, revised again and national data collected. Continuing to collect secondary data. Presentations made at state, regional and AAHPERD conventions.





NASPE Assessment Task Force

Judith H. Placek, Chair

Marybell Avery

Ben Dyson

Jen Fisette

Connie Fox

Marian Franck

Kim Graber

Judy Rink

Lori Williams

Weimo Zhu



"Measuring Student Success"

Assessing the National Standards

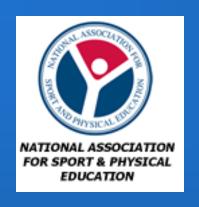
Three Publications

- · Standard 1 Elementary (K,2,5) 2008
- Standards 1-6 Elementary (K,2,5) -March 2010
- Standards 1-6 Secondary (8,HS) -January 2011



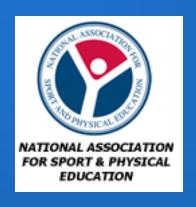
"Measuring Student Success" Assessing the National Standards

- Different assessments on the same scale
- Valid and reliable tools to measure student achievement of National Standards
- Criterion referenced evaluation
- National data collection



Use of assessments

- Teachers formative & summative assessments
- Administrators curriculum planning; program accountability & advocacy
- · Students/Parents feedback
- · Researchers evidence-based practice
- · Policy makers program impact & quality



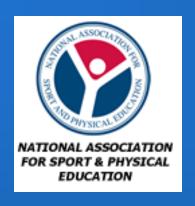
INappropriate use of assessment materials

- Not communicating <u>criteria for success</u> to students
- Students not taught or allowed sufficient learning time
- Not using assessment to <u>inform</u> <u>instruction</u>
- Narrowing the curriculum by excluding other important outcomes



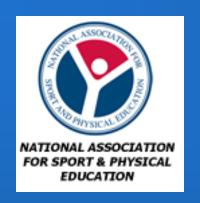
INappropriate grading practices

- Using raw scores from rubrics as a letter grade: while it may be appealing to convert the 4 point rubric scores to letter grades A-D, DO NOT DO IT.
- A 3 in one rubric is not equal to a 3 in another rubric.
- These rubrics have been statistically equated to use ability scores.



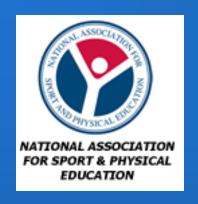
Ability Scores

- The assessments have been linked onto one yardstick. A score on any one assessment can be compared to a score on any other, when both are converted to ability scores.
- Ability scores range from 200-800 and allow you to compare an 8th grade student on one assessment to an 8th grade student on another assessment.



INappropriate grading practices

- Using only the PE Metrics cognitive items and no teacher constructed items.
- Standards 2-6 items are examples of meaningful knowledge that students in quality programs should know.
- They are not exclusive and are not the only things students should know.
- Teachers must still assess knowledge of curricular components.



PE-METRICS Protocols for Coding Standard 1 Assessments

- · Study assessment task & protocols
- Understand differences among criteria levels
- · Preview recording before scoring
- Practice scoring for consistency
- · Score student performance
- · File score sheet with recording



Videotaping vs Live scoring

Videotaping

- Used for summative assessment
- Provides a permanent record
- Periodic self-checks for scoring reliability
- Instant replay allows for multiple viewing
- Allows for greater accuracy

Live Scoring

 Used for formative assessment



National Standard 1

Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities



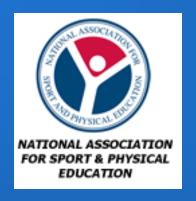
Standard 1 Secondary Assessments

Grade 8

Archery Badminton Floor Hockey Folk Dance Line Dance Pickleball Soccer Softball Team Handball Traverse Climbing Ultimate Frisbee Volleyball

High School

Basketball Bowling Canoeing Flag Football Golf Soccer Swimming Tennis Volleyball Wall Climbing Weight Training



PE-METRICS Standard 1 Secondary

Sample Assessments

8th Grade - Team Handball

High School - Volleyball



All Standard 1 Secondary Assessments are in PDF Format



Standard 1:

Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical

Perform the skills and tactics of team sports in a game-like situation

Play a modified game of 3 on 2 team handball

Criteria for Competence (Level 3):

- 1. Usually uses effective passing, receiving and shooting skills
- 2. Player initiating play effectively passes ball and moves to open space to receive a pass 2 times
- 3. Usually moves to open space to create a passing lane
- 4. Usually moves to intercept ball or make passing difficult for the offensive players

■ Assessment Rubric:

Level	1. Basic Skills	2. Offensive Skills	Movement without the Ball	4. Defensive Tactics			
4	Consistently uses effective* passing, receiving and shooting skills	Player initiating play effectively* passes ball and moves to open space to receive a pass 3 times	Consistently moves to open space with good timing and clear intent to create a passing lane	Consistently moves to intercept ball or make passing difficult for the offensive players			
3	Usually uses effective passing, receiving and shooting skills	Player initiating play effectively passes ball and moves to open space to receive a pass 2 times	Ususally moves to open space to create a passing lane	Usually moves to Intercept ball or make passing difficult for the offensive players			
2	Sometimes uses effective passing, receiving and shooting skills	Player initiating play passes ball and moves to open space to receive a pass 1 time	Sometimes moves to open space	Sometimes moves to intercept ball or make passing difficult for the offensive players			
1	Seldom uses effective passing, receiving and shooting skills	Player initiating play passes ball and never moves to open space to receive a pass	Seldom moves to open space	Seldom moves to intercept ball or make passing difficult for the offensive players			
0	Violates safety procedures and/or does not complete the assessment task						

*Effective is defined as catching or sending a receivable pass, accurate shooting on goal

Scoring: Consistently = 90% or above; Usually = 75% - 89%; Sometimes = 50% - 74%; Seldom = below 50%



Team Handball 8

Assessment Protocols

Directions for Students (Read aloud verbatim):

- · You will play a 3 on 2 modified game of team handball, 3 players on offense and 2 players
- · You will be assessed on your ability to:
- a) Use effective passing, receiving, and shooting skills;
- b) Move to open space after initiating a pass:
- c) Move to open space to create a passing lane:
- d) Move to intercept ball or make passing difficult for the offensive players.
- How to start/restart play: The offensive team will line up behind the center line of the court. The center player starts play with a pass to a teammate. The offense will try to move the ball towards the goal and score. Each offensive player will have 3 trials to begin play. Go back to the starting line and begin again if the defense gets the ball, you score a goal, or the ball goes out of bounds.

Directions for Teachers-

- See the manual for General Protocols for instruction, warm-up, camera location, and operation.
- · Assign students to teams of equally skilled players.
- · Teams will play without a goalie
- Trials will continue until each offensive player has 3 trials to initiate play.
- · Each offensive player rotates to the center position on the starting line to initiate 3 plays.
- . Make sure players begin play on or behind center court line.

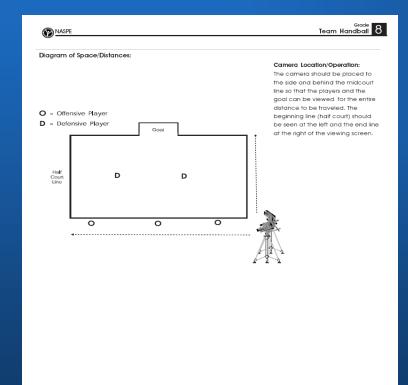
· Courts are to be dry and free of obstruction, with adequate out of bounds space surrounding all sides

Equipment/Materials:

- · One half of a gymnasium
- Team handball
- · Goal or 2 cones to mark goal area
- · Numbered pinnies of different colors for offense and defense

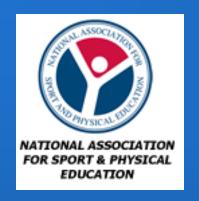


All Standard 1 Secondary Assessments are in PDF Format



National Association for Sport and Physical Education, an association of the American Alliance for Health, Physical Education, Recreation and Dance

		Assessme	ent Score	Sheet			
PE Teacher				Gra	de	Date	
School				Class Period			
Pinnie Number	Student Name	Gender	Basic Skills (0-4)	Offensive Skills (0-4)	Movement Without the Ball I(0-4)	Defensive Skills (0-4)	Total Score (0-16) 12=Competen



PE-METRICS Standard 1 Secondary

Assessment Form - 1st page

- · Standard
- · Performance indicator
- · Assessment task
- Criteria for competence (level 3)
- Assessment rubric (levels 0-4)



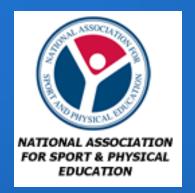
Grade 8 - Team Handball (1st page)

Criteria for Competence (Level 3):

- 1. Usually uses effective passing, receiving and shooting skills
- Player initiating play effectively passes ball and moves to open space to receive a pass 2 times
- 3. Usually moves to open space to create a passing lane
- 4. Usually moves to intercept ball or make passing difficult for the offensive players

Assessment Rubric:

Level	1. Basic Skills	2. Offensive Skills	3. Movement without the Ball	4. Defensive Tactics		
4	Consistently uses effective* passing, receiving and shooting skills	Player initiating play effectively* passes ball and moves to open space to receive a pass 3 times	Consistently moves to open space with good timing and clear intent to create a passing lane	Consistently moves to intercept ball or make passing difficult for the offensive players		
3	Usually uses effective passing, receiving and shooting skills	Player initiating play effectively passes ball and moves to open space to receive a pass 2 times	Ususally moves to open space to create a passing lane	Usually moves to intercept ball or make passing difficult for the offensive players		
2	Sometimes uses effective passing, receiving and shooting skills	Player initiating play passes ball and moves to open space to receive a pass 1 time	Sometimes moves to open space	Sometimes moves to intercept ball or make passing difficult for the offensive players		
7	Seldom uses effective passing, receiving and shooting skills	Player initiating play passes ball and never moves to open space to receive a pass	Seldom moves to open space	Seldom moves to intercept ball or make passing difficult for the offensive players		
0	Violates safety procedures and/or does not complete the assessment task					



PE-METRICS Standard 1 Secondary

Assessment Protocols - 2nd page

- Directions for Students
- · Directions for Teachers
 - preparation
 - safety
 - equipment/materials

Grade 8 - Team Handball (2nd page)



Grade Team Handball 8

Assessment Protocols:

Directions for Students (Read aloud verbatim):

- You will play a 3 on 2 modified game of team handball, 3 players on offense and 2 players on defense.
- · You will be assessed on your ability to:
 - a) Use effective passing, receiving, and shooting skills;
 - b) Move to open space after initiating a pass;
 - c) Move to open space to create a passing lane;
 - d) Move to intercept ball or make passing difficult for the offensive players.
- How to start/restart play: The offensive team will line up behind the center line of the court. The center player
 starts play with a pass to a teammate. The offense will try to move the ball towards the goal and score. Each
 offensive player will have 3 trials to begin play. Go back to the starting line and begin again if the defense
 gets the ball, you score a goal, or the ball goes out of bounds.

Directions for Teachers:

- · See the manual for General Protocols for instruction, warm-up, camera location, and operation.
- · Assign students to teams of equally skilled players.
- · Teams will play without a goalie.
- · Trials will continue until each offensive player has 3 trials to initiate play.
- Each offensive player rotates to the center position on the starting line to initiate 3 plays.
- Make sure players begin play on or behind center court line.



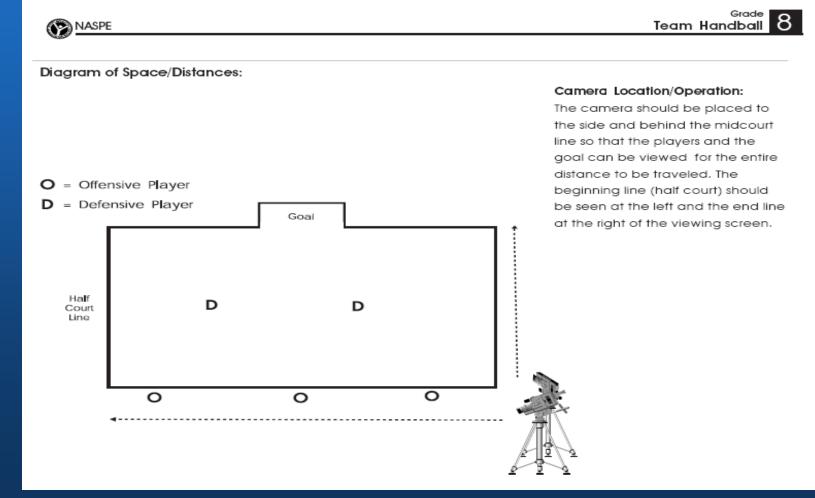
PE-METRICS Standard 1 Secondary

Assessment Protocols - Continued 3rd page

- diagram of space/distances
- camera location & operation



Grade 8 - Team Handball (3rd page)





PE-METRICS Standard 1 Secondary

Assessment Form - 4th page

- Assessment Score Sheet
 - PE Teacher, Grade, Date, School, Class Period
 - Student Name, Pinnie Number, Gender
 - Scores for each section of the rubric as well as an overall score (add score of each section for overall score)



Grade 8 - Team Handball (4th page)

NASPE						Team	Handball 8
		Assessm	ent Score S	Sheet			
PE Teache	rr			Grac	de	Date	
School				Class Period _			
Pinnie Number	Student Name	Gender	Basic Skills (0-4)	Offensive Skills (0-4)	Movement Without the Ball I(0-4)	Defensive Skills (0-4)	Total Score (0-16) 12=Competent



Sample Grade 8 Assessment

Team Handball

Assessment Task: Play a modified game of 3 on 2



Criteria for Competence

- Usually uses effective passing, receiving and shooting skills
- Player initiating play effectively passes ball and moves to open space to receive a pass 2 times
- Usually moves to open space to create a passing lane
- Usually moves to intercept ball or make passing difficult for the offensive players



Standard 1 High School - Volleyball





Standard 1:

Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical

Performance Indicator

Demonstrate competency in team court sports

Assessment Task:

Play a modified game of 4 on 4 volleyball

Criteria for Competence (Level 3):

- 1. Usually sends a playable* forearm pass to a teammate or over the net with good technique
- 2. Usually sends a playable* overhead pass to a teammate or over the net with good technique
- 3. Usually puts the ball in play with a legal serve

■ Assessment Rubric:

Level	1. Forearm Passing Technique	2. Overhead Passing Technique	3. Serve
4	Consistently sends a playable* forearm pass to a teammate or over the net with good technique	Consistently sends a playable* overhead pass to a teammate or over the net with good technique	Consistently puts the ball in play with a legal serve, sometimes difficult to return (i.e., spin, placement, form)
3	Usually sends a playable forearm pass to a teammate or over the net with good technique	Usually sends a playable overhead pass to a teammate or over the net with good technique	Usually puts the ball in play with a legal serve
2	Sometimes sends a playable forearm pass to a teammate or over the net with good technique	Sometimes sends a playable overhead pass to a teammate or over the net with good technique	Sometimes puts the ball in play with a legal serve
1	Seldom sends a playable forearm pass to a teammate or over the net with good technique	Seldom sends a playable overhead pass to a teammate or over the net with good technique	Seldom puts the ball in play with a legal serve
0	Violates safety procedures and/	or does not complete the assessme	ent task

^{*}A playable ball is one that a player should be able to reasonably reach.

Scoring: Consistently = 90% or above; Usually = 75%-89%; Sometimes = 50%-74%; Seldom = below 50%

Volleyball



Assessment Protocols:

Directions for Students (Read aloud verbatim):

- You will be asked to play a modified game of volleyball with four people on a side, for at least 20 minutes, or additionally as long as needed to allow every player on the court to serve at least four times, alternating service after every point.
- · Change sides of court after 10 minutes.
- · You will be assessed on your ability to use the forearm pass, overhead pass, and serve from behind the service line with good technique.
- · All the rules of volleyball will be used except you will:
- a) Alternate serves with the other team regardless of who scores;
- b) Call out your number just prior to serving the ball;
- c) Play on a modified-sized court that has been identified by boundary markings on the floor.

Directions for Teachers:

Preparation:

- See the manual for General Protocols for instruction, warm-up, camera location, and operation.
- Assign the students to a team of four students, in a manner that would best allow students to display their ability.
- · Assign teams to play each other.
- · Start each game and camera at the same time.
- · For assessment purposes, focus only on the serve, forearm pass, and underhand pass and not other responses (e.g., spike, dink, dig).

Safety:

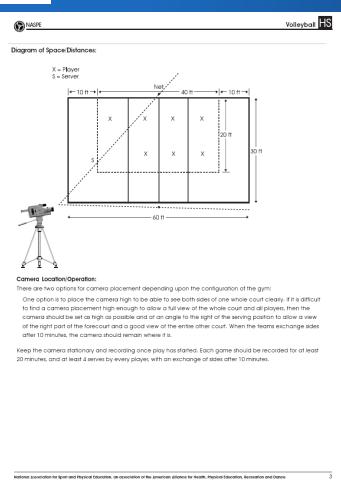
. Floor is to be dry, clean, and clear of obstacles at least beyond the boundary of the court.

Equipment/Materials:

- · Regulation leather vollyeballs
- . Clearly mark a 20 x 40 foot volleyball court. Net should be 7 feet 6 inches high. Mark the net with tape or string to indicate the 20 foot boundary.
- · Numbered pinnies



High School - Volleyball



		Assessm	ent Score Shee	at .		
				•		
				Grade	Date	
			Class	Period		
Student Name	Gender	Grade	Forearm Passing Technique (0-4)	Overhead Passing Technique (0-4)	Serve (0-4)	Total Score (0-12) 9=Competent
	Student Name	Student Name Gender	Student Name Gender Grade	Student Name Gender Grade Forearm Passing Technique	Student Name Gender Grade Forearm Overhead Passing Passing Possing Technique Technique	Passing Passing (0-4) Technique Technique



Sample HS Assessment

Volleyball

Assessment Task: Play a modified game, 4 v 4, alternating service after every point and allowing every player to serve at least 4 times



Criteria for Competence

- Usually sends a playable forearm pass to a teammate or over the net with good technique
- Usually sends a playable overhead pass to a teammate or over the net with good technique
- Usually puts the ball in play with a legal serve



HS - Volleyball

Assessment Rubric:

Level	1. Forearm Passing Technique	Overhead Passing Technique	3. Serve				
4	Consistently sends a playable* forearm pass to a teammate or over the net with good technique	Consistently sends a playable* overhead pass to a teammate or over the net with good technique	Consistently puts the ball in play with a legal serve, sometimes difficult to return (i.e., spin, placement, form)				
3	Usually sends a playable forearm pass to a teammate or over the net with good technique	Usually sends a playable overhead pass to a teammate or over the net with good technique	Usually puts the ball in play with a legal serve				
2	Sometimes sends a playable forearm pass to a teammate or over the net with good technique	Sometimes sends a playable overhead pass to a teammate or over the net with good technique	Sometimes puts the ball in play with a legal serve				
7	Seldom sends a playable forearm pass to a teammate or over the net with good technique	Seldom sends a playable overhead pass to a teammate or over the net with good technique	Seldom puts the ball in play with a legal serve				
0	Violates safety procedures and/or does not complete the assessment task						



HS - Volleyball





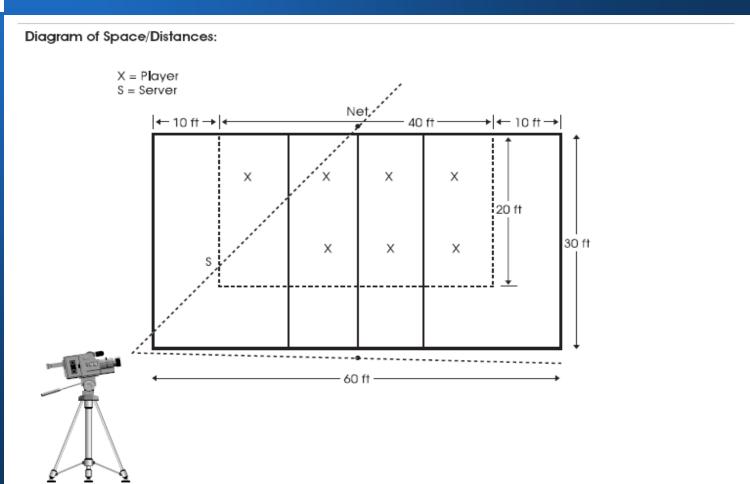
Assessment Protocols:

Directions for Students (Read aloud verbatim):

- You will be asked to play a modified game of volleyball with four people on a side, for at least 20 minutes, or additionally as long as needed to allow every player on the court to serve at least four times, alternating service after every point.
- · Change sides of court after 10 minutes.
- You will be assessed on your ability to use the forearm pass, overhead pass, and serve from behind the service line with good technique.
- All the rules of volleyball will be used except you will:
 - a) Alternate serves with the other team regardless of who scores;
 - b) Call out your number just prior to serving the ball;
 - c) Play on a modified-sized court that has been identified by boundary markings on the floor.



HS - Volleyball



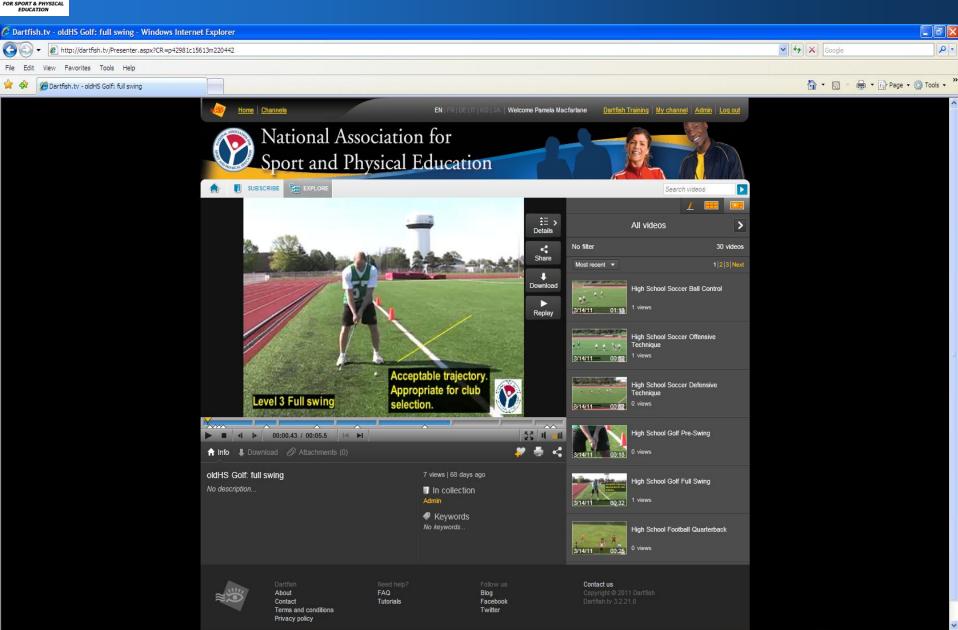


PE-METRICS Dartfish Video

- · Available free online
- Video of each assessment task
- Examples of Level 3 (competent) performance
- Sample errors from Levels 1 & 2



Some videos have text on video







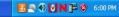










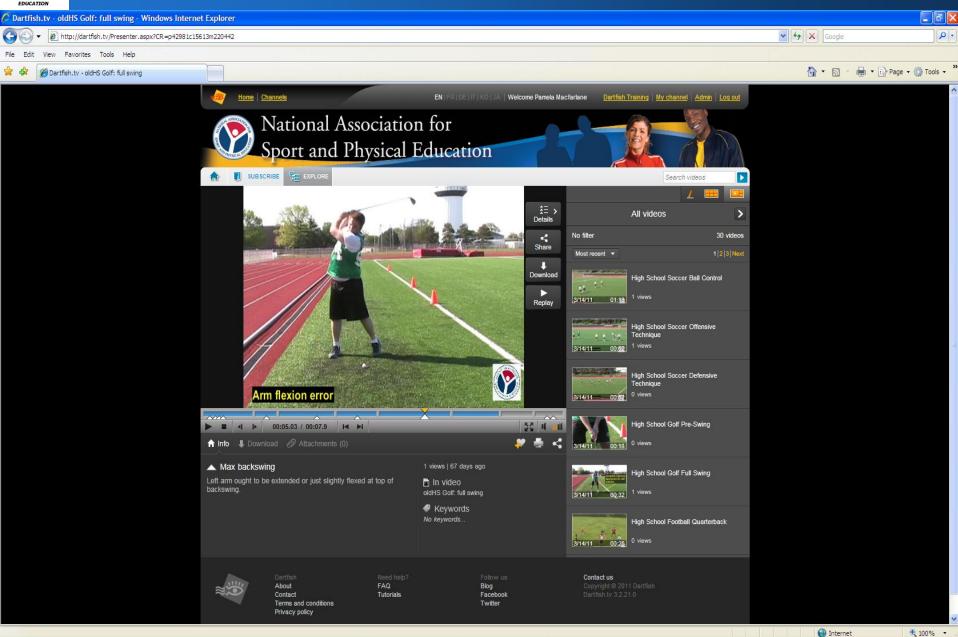


€ 100% ▼

Internet



Some have criteria at bottom

















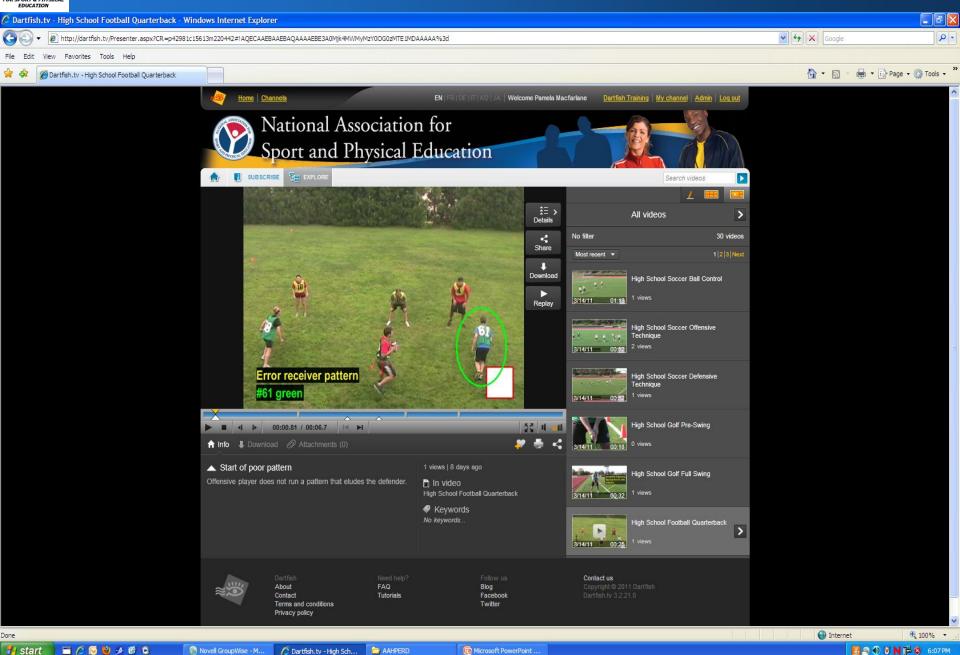




Novell GroupWise - M...

@ Dartfish.tv - High Sch...

Some errors noted at beginning then run clip



Microsoft PowerPoint ...

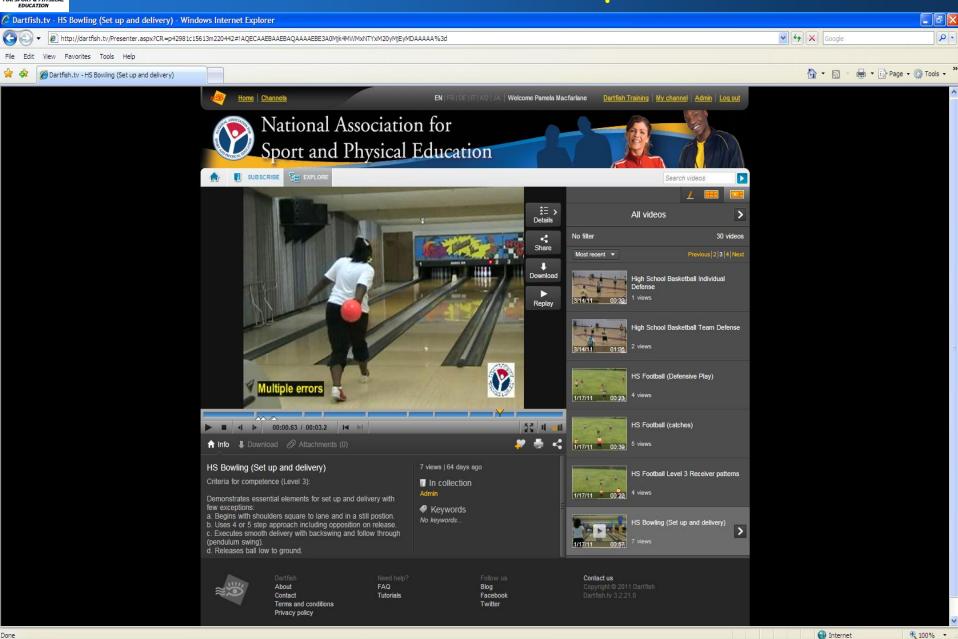


🚜 start

Novell GroupWise - M...

Dartfish.tv - HS Bowli...

We show level 3 and all possible errors



Microsoft PowerPoint ...



Standards 2-6 Grades 8 and HS

- · Paper pencil assessments
- · Multiple choice format
- Final version in two forms
 - Grades 8, HS = 40 questions each
- · Grouped by Standards 2, 3 & 4, 5 & 6



Standards 2-6 Grades 8 and HS

- Performance descriptors were identified for standards 2-6
 - Grade level performance descriptors
 - Sequence progression over grades
 - Activities in examples tied to Standard 1 activities



Standards 2-6 Grades 8 and HS

- 3 forms of questions were pre-piloted,
 n=200 per form
- Revised
- Piloted, n = 400 per form
- Revised
- Reduced to 2 valid forms: one reproduced in book, one in the Online version



National Standard 2

Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities



National Standard 2 Performance Indicators Grade 8

- Explain critical elements of specialized skills
- Analyze how positive transfer improves skill performance



Standard 2 Grade 8

What may help Diana learn the tennis serve? Comparing it to the

- A. basketball free throw
- B. badminton serve
- C. soccer throw in
- D. volleyball overhand serve



National Standard 2 Performance Indicators High School

- Compare/Contrast critical elements of specialized skills originating from a common movement pattern (e.g., tennis serve, volleyball oh serve, oh throw)
- Design advanced game strategies for invasion, net, fielding and target activities



Standard 2 - High School

A researcher has found out how to measure how hard you push off the floor to jump up into the air for a rebound. If I have three people who are the same height and weight, which one will jump the highest?

- A. The one who pushes hardest against the floor; this is Newton's law.
- B. The one who pushes least against the floor; this is Archimedes' principle.
- C. The one who slides feet across the floor before pushing; this is principle of friction.
- D. The one who jumps balanced; this is the principle of equal reaction.



National Standard 3

Participates regularly in physical activity



Standard 3 - Grade 8

Performance Indicator

- Participates in a variety of physical activity as part of a healthful lifestyle



Standard 3 - Grade 8

Which of the following would best help you maintain a healthful level of aerobic fitness?

- A. participate in moderate to vigorous physical activity for 60 minutes on most days of the week
- B. play 18 holes of golf 3 days a week
- C. walk to and from school for a total 30 minutes 5 days a week
- D. work for a lawn mowing business 3 days a week after school and on weekends



Standard 3 - High School

Performance Indicators

- Implements a personal physical activity plan that is part of a healthful lifestyle
- Employs self management skills to maintain physically active lifestyle.



Standard 3 - High School

Which set of activities best describes an adequate amount of physical activity to promote a healthy life style?

- A. Ride a bike 2 miles to and from school and swim 30 minutes 5 days a week
- B. Walk 2 blocks to and from school each day
- C. Jog on a treadmill 10 minutes every day
- D. Swim and play volleyball at least once a week



National Standard 4

Achieves and maintains a healthenhancing level of physical fitness



Standard 4 - Performance Indicators - Grade 8

- Applies principles of training to improve and or maintain the specific components of health related fitness
- Describes the relationship of cardiorespiratory fitness, muscular strength and endurance, and flexibility to body composition
- Applies principles of conditioning that enhance performance



Standard 4 - Grade 8

The three things you need to prepare for when doing physical activity to enhance your performance are

- A. a warm up, the workout, a cool down.
- B. equipment, facility, clothing.
- C. running, practice, teammates.
- D. proper clothing, running, shower.



Standard 4 - High School

Performance Indicator

Demonstrates the skill, knowledge, and desire to monitor and adjust activity levels to meet personal fitness needs.



Standard 4 - High School

When planning your exercise program you should start with

- A.assessing personal fitness needs and determining personal goals
- B. creating a plan of physical fitness activities specific to goals
- C. keeping a log of your participation in all physical activities
- D. deciding how much time you have to exercise



National Standard 5

Exhibits responsible personal and social behavior that respects self and others in physical activity settings



Standard 5 - Performance Indicators Grade 8

- Demonstrates concern for safety of self and others during physical activity
- Negotiates and resolves conflict
- Works cooperatively and productively with a variety of diverse partners and groups



Standard 5 Grade 8

Susan's partner can lift more weight during the bench press exercise than she can. When it is Susan's turn to lift she should

- A. lift the appropriate amount of weight to match her strength level.
- B. attempt to lift the same amount of weight as her partner.
- C. skip the bench press station.
- D. change partners.



Standard 5 - Performance Indicators High School

- Describes appropriate leadership and followership behaviors
- Demonstrates responsibility for following safe practices, rules, procedures, and etiquette in physical activity settings



Standard 5 High School

- How should you behave when your group chooses a course of action with which you disagree?
- A. Say "Okay, let's try the idea to see if it works for our group"
- B. Keep trying to convince the group to select your idea
- C. Point out the flaws you see with the chosen plan
- D. Try to convince the group that their decision is not the best one



National Standard 6

Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction



Standard 6 Performance Indicators Grade 8

- Values participating in physical activity because of the health benefits, personal enjoyment, and/or social interaction
- Identifies personal preference (e.g. enjoyment, fun, social interaction) as criteria for selecting physical activities



Standard 6 Grade 8

Which activity should Tom select if he likes activities that are creative, artistic, and allow him to express himself?

- A. Dance
- B. Football
- C. Weight lifting
- D. Boot Camp Fitness



Standard 6 Performance Indicators HS

- Makes appropriate choices regarding engagement in physical activity
- Recognizes the value of participation in a variety of activities for health, enjoyment, challenge, self expression and/or social interaction



Standard 6 HS

Susan has moved to a new town and wants to become involved in a local softball league and ballroom dance class. Of the following choices, these activities primarily promote

- A. social interaction.
- B. spending time alone.
- C. risk taking challenges.
- D. competition.



PE Metrics Online

Web-based system that allows teachers to:

- Upload students' information or manually enter their data.
- Select
 assessments to administer from available
 motor skill and cognitive assessments
- Prepare tests using a data bank of test questions.

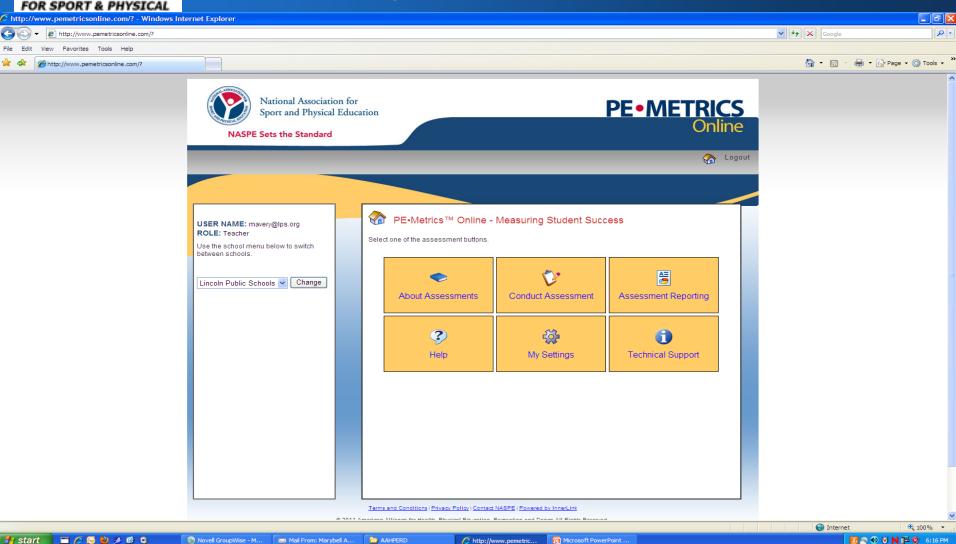


PE Metrics Online

- Run reports on classes and students
- Use the information provided in PE·Metrics[™] online's scoring rubrics to guide instruction.
- Track student data and compare assessment data from year to year by student, school or even district.
- Available Spring 2012



Sample showing all options for teachers



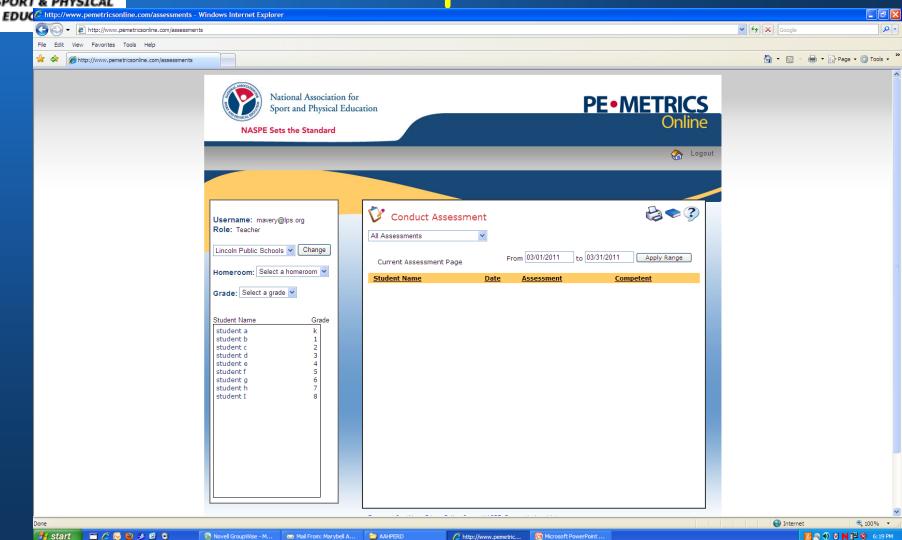


The elem. test bank std. 1





Student names are imported





Questions?

