One characteristic of a quality physical education program is that students are exposed to, and can participate in, a variety of sports and activities (Darst & Pangrazi, 2006). Most physical educators would agree that a primary objective for teaching physical education is for every student to find at least one activity to enjoy and participate in regularly. All students need and deserve exposure to numerous sports and activities during their K-12 physical education experience, so they can make informed decisions as adults about how they want to be physically active.

One activity that is increasing in popularity is the game of “Ultimate.” Ultimate was invented more than 40 years ago and is played today in over 90 countries (Ultimate Players Association [UPA], 2005). Opportunities to play both for recreation and competition are increasing across the country. Ultimate is an invasion game in which a team attempts to complete a pass in the opposing team’s endzone. The game includes strategies and tactics similar to football, soccer, and basketball. What makes Ultimate unique is that a disc (i.e., a Frisbee) is used instead of a ball. Discs are peculiar playing objects that offer activity experiences unlike traditional “ball” sports, because their aerodynamics differ so greatly from that of balls. This is why some dog owners love to throw discs for their dogs to run and catch. Discs sail and hover through the air, often giving more time for a receiver to run them down and catch them.

Our favorite part of teaching Ultimate is exposing students to an activity that can be played anywhere as long as there is a field, a disc, and a few players. Our approach to teaching Ultimate focuses on creating learning experiences that enable students to have fun, be successful, and be highly engaged in activity for a majority of class time (Prusak & Vincent, 2005). The purpose of this article is to describe why Ultimate is an appropriate activity for physical education, how to play it, and how to teach it effectively.

A Fit for Physical Education
Based on our experience in teaching Ultimate, we have identified seven reasons why it is an appropriate activity for physical education:

1. Students do not have to be highly skilled or athletic to be successful. All students can learn to throw or catch a disc even if they are not highly skilled. This is advantageous because it can lead nonathletic students to develop feelings of “I can do this.”

2. Students are likely to get lots of “touches” (i.e., opportunities to catch and throw the disc) because the game transitions quickly from offense to defense and vice versa. More touches are good because they help students feel that they are “part of the game” and can significantly improve performance.
3. Playing the game requires lots of physical activity. Our students return from playing Ultimate with red faces and sweaty foreheads. This is because a typical game consists of sprinting, jumping, sliding, cutting, pivoting, and leaping with little down-time in-between.

4. Ultimate is a simple game to learn. Students can learn the game quickly, enabling them to spend more time practicing, playing the game, and getting physical activity.

5. Self-refereeing is the officiating method of choice. Self-refereeing encourages students to solve their own disputes by listening to and communicating with one another.

6. Ultimate is conducive for single-gender or coed physical education classes. As long as a student can throw and/or catch a disc, he or she is likely to enjoy playing the game even with members of the opposite gender who might be more or less athletic.

7. Equipment needed to play is inexpensive and minimal. Discs, cones, and a playing field are the only necessary pieces of equipment. Discs can be purchased for $5 to $10 each, depending on design and weight.

Teaching How to Play Ultimate
The rules for Ultimate appear in table 1. Rather than explain these rules while students sit and listen, we have found it advantageous to use small-sided lead-up games to teach students how to play Ultimate. *Five Passes* and *Invade* are excellent lead-up games for this purpose. A teacher should stop these games every few minutes to teach (one minute or less) a new rule or concept (e.g., fouls, the pull, marking). Through this method, students learn rules and strategies by way of a brief explanation and immediate hands-on experience.

**Lead-up Games**
*Five Passes.* To play, mark off a few playing fields measuring about 20 by 20 yards. Organize students into teams of three, four, or five students, with two teams playing against each other on one field. The object of the game is for a team to complete five passes within the playing area. If the disc is dropped, intercepted, or thrown out-of-bounds, the other team gets the disc and attempts to complete five passes. A point is scored when five passes are completed. Play short games to five points.

*Invade.* Mark off a few playing fields of approximately 30 by 30 yards. In the center of each field, use cones to make a circle 15 feet in diameter. Create teams of three, four, or five students, with two teams opposing each other on one field. The object of the game is to complete a pass inside the circle. A point is awarded each time a team accomplishes this. Members of both teams can run through the circle but they cannot run outside of the playing field. Games are played to five points.

**Ultimate Modifications**
Modifications can make the game of Ultimate more fun and developmentally appropriate for students of different ages and abilities.

*Smaller Fields.* Instead of playing on a regulation-size field (i.e., 70 yards long by 40 yards wide), a smaller field (e.g., 40

---

**Table 1. How to Play the Game**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>The Field</strong>—A rectangular shape with endzones at each end. A regulation field is 70 yards by 40 yards, with endzones 25 yards deep.</td>
<td></td>
</tr>
<tr>
<td>2. <strong>Initiate Play</strong>—Each point begins with both teams lining up on the front of their respective endzone line. The defense throws (“pulls”) the disc to the offense. A regulation game has seven players per team.</td>
<td></td>
</tr>
<tr>
<td>3. <strong>Scoring</strong>—Each time the offense completes a pass in the defense’s endzone, the offense scores a point. Play is initiated after each score.</td>
<td></td>
</tr>
<tr>
<td>4. <strong>Movement of the Disc</strong>—The disc may be advanced in any direction by completing a pass to a teammate. Players may not run with the disc. The person with the disc (“thrower”) has ten seconds to throw the disc. The defender guarding the thrower (“marker”) counts out the stall count.</td>
<td></td>
</tr>
<tr>
<td>5. <strong>Change of Possession</strong>—When a pass is not completed (e.g., out of bounds, drop, block, interception), the defense immediately takes possession of the disc and becomes the offense.</td>
<td></td>
</tr>
<tr>
<td>6. <strong>Substitutions</strong>—Players not in the game may replace players in the game after a score and during an injury timeout.</td>
<td></td>
</tr>
<tr>
<td>7. <strong>Non-contact</strong>—No physical contact is allowed between players. Picks and screens are also prohibited. A foul occurs when contact is made.</td>
<td></td>
</tr>
<tr>
<td>8. <strong>Fouls</strong>—When a player initiates contact on another player, a foul occurs. When a foul disrupts possession, the play resumes as if the possession was retained. If the player committing the foul disagrees with the foul call, the play is redone.</td>
<td></td>
</tr>
<tr>
<td>9. <strong>Self-Refereeing</strong>—Players are responsible for their own foul and line calls. Players resolve their own disputes.</td>
<td></td>
</tr>
<tr>
<td>10. <strong>Spirit of the Game</strong>—Ultimate stresses sportsmanship and fair play. Competitive play is encouraged, but never at the expense of respect between players, adherence to the rules, and the basic joy of play.</td>
<td></td>
</tr>
</tbody>
</table>
yards long by 20 yards wide) keeps a higher percentage of students engaged in play (Griffin et al., 2005). In addition, teams tend to score more frequently on smaller fields, helping students feel successful.

Eliminate the Pull. Students love fast-paced, action-packed play. Eliminating the pull after a score enables the team that gave up the point to immediately take command of the disc. This increases the pace of the game.

Make It, Take It. This game requires three teams. Team A and Team B are on the playing field. Team C is waiting on the sideline. If Team A scores, it remains in the game, maintains possession of the disc, and attempts to score another point in the opposite endzone. Team C now replaces Team B on the field and opposes Team A. A new team rotates in each time a point is scored. Games are played to five points. If a team is scored on, it is given a chance to regroup while the next point is played out.

Before teaching students how to play Ultimate, it is critical for practitioners to select discs that are developmentally appropriate for their students. Discs are measured by their weight in grams; discs of 100 to 140 grams are appropriate for elementary students, while middle school and high school students should use 175-gram discs. Practitioners can visit the UPA web site (www.upa.org) to determine where to buy discs at discount prices. In addition, the UPA web site can provide other helpful information pertinent to making preparations to teach Ultimate.

Basic Skills

Throwing a Disc. This is the premiere skill in Ultimate. All students, regardless of athletic ability, need competency in this skill to play Ultimate. Students who learn to throw a disc competently tend to enjoy the game. For this reason we teach throwing skills first and practice them daily. There are many kinds of throws that can be used in a game of Ultimate. The backhand and the forehand (the “flick) are the most common throws. Students are more likely to develop a sense of “I can play this game” if they can execute these two throws.

Catching a Disc. Students will never be able to use their throwing skills unless they can catch a disc. Catching skills are relatively simple to teach and learn. The sandwich catch, in which the receiver claps his or her hands together so as to trap the disc between them, is quick and easy way to learn how to catch a disc. This catch should be taught first, especially to beginners. The C-catch can be used with one or both hands. The hand formation is made by separating the thumb from the other fingers in a “C” shape. If the disc is coming above the waist, the C is made with the thumb(s) down. If the disc is coming below the waist, the thumbs are up.

Both types of catches mentioned above can be used while a receiver is moving. Learning activities should give students the opportunity to practice catching the disc while standing and also while moving. As catching ability improves, more time should be devoted to catching on the run, since it is more game-like.

Cutting. Most teachers have seen a student stand still on the court or playing field yelling to a teammate with the ball, “I’m open, pass to me.” This happens while playing Ultimate, too. Like basketball, soccer, and football, a student who wants to receive the disc should learn to cut (move) to an open area on the playing field. This is called “cutting” or moving without the disc. Students who learn to cut are likely to get more “touches.”

Marking. This is a one-on-one defensive skill. “To mark” means to guard the person who has the disc. The aim of marking is to make throwing the disc for the thrower as difficult as possible by using one’s body (i.e., hands, arms, feet, legs) to obscure the thrower’s vision of the playing field and by attempting to block the disc after it is released. A marker
must maintain a space cushion of at least one yard.

Pivoting. The ability to pivot while holding the disc enables the thrower to create space so she or he can execute a throw out of the reach of a defender. Like cutting, this is often a difficult skill for students to learn. It is best to teach pivoting when students are practicing throws with a partner in the absence of defensive pressure. Later on, lead-up games like Five Passes or Invade (explained above), provide opportunities to practice pivoting in a game-like situation. When students are being “marked” by a defender, they tend to want to throw the disc up into the air, hoping a teammate will catch it. Discs thrown up into the air have an inconsistent flight pattern (especially in windy conditions) and are difficult to judge, making catching them highly unlikely. A student who learns to pivot can break a “mark,” or throw around the defender, enabling her or him to execute a better throw.

Teaching Tactics for Throwing a Disc

Since throwing a disc is the premiere skill in Ultimate, teaching students how to throw is extremely important. This section is designed to guide practitioners in teaching students how to throw a disc.

Generally speaking, for a disc to fly in its intended direction, the person throwing must impart spin on the disc. Without spin the disc is unable to sail and hover through the air. Putting spin on the disc will happen when one learns how to (1) grip the disc properly, (2) position the body and throwing arm, and (3) snap the wrist upon release. These three skills should be taught and reviewed with students for both backhand and forehand throws until they master them. Doing so will enable students to throw discs successfully.

Students should begin practicing throwing a disc with a partner at distances between 5 and 15 yards apart. As their skill improves they can move farther apart (i.e., up to 30 or 40 yards). Also, students should begin throwing to a standing partner first and then advance to throwing to a partner on the move. We will now specifically discuss how to teach the backhand and forehand throws. For both of these throws, described below, teachers should emphasize the importance of releasing the disc parallel to the ground. When the disc is tilted upon release, it will not fly straight.

Backhand Throw

The backhand is the easiest throw to learn. For this reason, it should almost always be taught first. Most students, before receiving any instruction, will attempt to throw a disc by using a backhand throw. Teaching students the backhand, in most instances, will not be as difficult as teaching the forehand because many students will already be somewhat familiar with it.

Grip. Grab the disc with the throwing hand and hold the disc in a horizontal position; place the thumb on top of the disc and the index finger along the side of the disc. The three remaining fingers go underneath the disc for stability. There are other types of backhand grips. The one described here is used for increased control and accuracy and is an appropriate grip to teach to beginners (Studarus, 2003).

Body and Arm Position. Stand sideways to the intended target so the throwing shoulder points toward the target. Body weight should be distributed evenly on both feet. Bring the throwing arm backwards (away from the target) while holding the disc parallel to the ground. When ready to throw, step towards the intended target with the front foot and rotate the throwing arm forward. Shifting body weight from back foot to front foot can add velocity and power to the throw.

Wrist Snap. Prior to release, the wrist should be relaxed so it can snap towards the target. Using wrist snap to throw a disc can be likened to snapping a wet towel. The better the wrist snap, the better the throw.

Here are the main points described above summarized into performance cues.

1. Grip the disc.
2. Stand sideways to intended target (throwing shoulder points towards target).
3. Rotate throwing arm back away from the target.
4. Step towards the target with front foot.
5. Snap the wrist towards target upon release.

Forehand Throw (the “Flick”)

The forehand is a more difficult throw to learn, and therefore practitioners should use short practice sessions when teaching it, in order to prevent students from getting discouraged. This is an important skill to learn for game play, because doing so will enable students to throw from either side of their body (assuming a student can already throw a backhand). The forehand is thrown from the right side of the body for a right-handed thrower or from the left side of the body for a left-handed thrower.

Grip. Hold the disc in the non-throwing hand; extend the throwing hand out as if preparing to shake someone’s hand. Position the disc so it rests in the web between the thumb and the index finger of the throwing hand (Studarus, 2003). The thumb goes on top of the disc; the middle
and index fingers go underneath the disc; firmly press the middle finger along the inside rim of the disc and position the index finger so it points to the center of the disc. Figure 1 portrays a disc vertically rotated so one can see how to perform a forehand grip.

**Body and Arm Position.** With the forehand grip in place, stand facing the intended target. Extend (not fully) the throwing arm out to the side of the body (i.e., for a right-handed thrower extend to the right side or to the left side for a left-handed thrower). Cock the wrist so the disc rotates back away from the target but remains parallel to the ground. Hold the arm relatively still. Many beginners tend to use a side-armed throwing motion (like a softball throw) when throwing the forehand. This is a serious mistake because spin cannot be put on a disc this way.

**Wrist Snap.** Instead, hold the arm relatively still and quickly snap the wrist towards the intended target so the disc flies off the middle finger.

Here are the main points described above summarized into performance cues:

1. Grip the disc.
2. Stand facing the target.
3. Extend (not fully) the throwing arm out to the side of the body.
4. Hold the arm relatively still.
5. Snap the wrist towards the target.

**Outside-In Throws**

In a game of Ultimate, sometimes it is necessary to execute throws that do not fly straight. For example, a person with the disc would not want to utilize a straight throw when a defender is standing directly between him or her and the receiver. Instead, the thrower could execute a throw that goes around the defender (out of the defender’s reach) and back in to the intended receiver (figures 2 and 3). This is called an outside-in throw. Performing an outside-in throw is a challenging skill that many of our students have mastered after significant amounts of practice. Teach students that the idea is to alter the angle of the disc upon release. Instead of releasing the disc parallel to the ground, release it so the disc is tilted at approximately a 45-degree angle, where the side of the disc that is farthest from the body is tilted higher than the side closest to the body. This way the disc can curve out around the defender and back in towards the intended target. For a right-handed thrower, when throwing an outside-in throw to one’s right, use a forehand throw. When throwing to one’s left, use a backhand throw.

**Assessing and Grading Ultimate Skills**

We have included in table 2 an Ultimate Programmed Practice Sheet (PPS). An Ultimate PPS is designed to provide students with the opportunity to practice Ultimate skills for points and/or a grade (Prusak, 2005). This one primarily focuses on throwing and catching skills. We like the PPS because it is a useful tool for assessing and grading student performance and it gives students the chance to choose the skill difficulty level most appropriate for them. For more information about how to create and/or use a PPS, see Prusak (2005).

**Conclusion**

Students crave novelty and variety in physical education (Pennington & Krouscas, 1999). The game of Ultimate is one example of a novel sport because a disc is the object of manipulation instead of a ball. Since discs sail and hover in the air they create opportunities for play unlike traditional “ball” sports. Teaching Ultimate is a great way to enable students to feel successful, be highly active, and have lots of fun in physical education.
<table>
<thead>
<tr>
<th>Date</th>
<th>Score</th>
<th>Witness Initials</th>
<th>Skill Level A (beginning to intermediate)</th>
<th>Skill Level B (intermediate)</th>
<th>Skill Level C (intermediate to advanced)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td>Backhand Throws &amp; Catches&lt;br&gt;Complete 25 consecutive backhand throws with a partner standing 10 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
<td>Backhand Throws &amp; Catches&lt;br&gt;Complete 25 consecutive backhand throws with a partner standing 20 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
<td>Backhand Throws &amp; Catches&lt;br&gt;Complete 35 consecutive backhand throws with a partner standing 30 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td>Forehand Throws &amp; Catches&lt;br&gt;Complete 15 consecutive forehand throws with a partner standing 10 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
<td>Forehand Throws &amp; Catches&lt;br&gt;Complete 15 consecutive forehand throws with a partner standing 20 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
<td>Forehand Throws &amp; Catches&lt;br&gt;Complete 25 consecutive forehand throws with a partner standing 30 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td>Outside-In Backhand Throws&lt;br&gt;Complete 10 consecutive outside-in backhand throws with a partner standing 10 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
<td>Outside-In Backhand Throws&lt;br&gt;Complete 10 consecutive outside-in backhand throws with a partner standing 15 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
<td>Outside-In Backhand Throws&lt;br&gt;Complete 20 consecutive outside-in backhand throws with a partner standing 20 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td>Outside-In Forehand Throws&lt;br&gt;Complete 10 consecutive outside-in forehand throws with a partner standing 10 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
<td>Outside-In Forehand Throws&lt;br&gt;Complete 10 consecutive outside-in forehand throws with a partner standing 15 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
<td>Outside-In Forehand Throws&lt;br&gt;Complete 20 consecutive outside-in forehand throws with a partner standing 20 yards apart. Repeat 3 times. Check off when completed. 1. ____ 2. ____ 3. ____</td>
</tr>
</tbody>
</table>

References


### Table 2. Ultimate Programmed Practice Sheet (continued)

<table>
<thead>
<tr>
<th>Date</th>
<th>Score</th>
<th>Witness Initials</th>
<th>Skill Level A (beginning to intermediate)</th>
<th>Skill Level B (intermediate)</th>
<th>Skill Level C (intermediate to advanced)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>/10</td>
<td></td>
<td>Cutting, Marking, Pivoting</td>
<td>Cutting, Marking, Pivoting</td>
<td>Cutting, Marking, Pivoting</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Explain to a younger student what “cutting, pivoting, and marking” are and why they are important.</td>
<td>Explain and demonstrate to a younger student what “cutting, pivoting, and marking” are and why they are important.</td>
<td>Observe a younger student play and give feedback on his or her performance cutting, pivoting, and marking.</td>
</tr>
<tr>
<td>6.</td>
<td>/20</td>
<td></td>
<td>Playing the Game</td>
<td>Playing the Game</td>
<td>Playing the Game</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Organize and conduct a 20-minute Ultimate game outside of class with family members and/or friends.</td>
<td>Organize and conduct a 30-minute Ultimate game outside of class with family members and/or friends.</td>
<td>Participate on an Ultimate intramural or tournament team outside of class.</td>
</tr>
<tr>
<td>7.</td>
<td>/10</td>
<td></td>
<td>Activity Level</td>
<td>Activity Level</td>
<td>Activity Level</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Record how many pedometer step counts you took during a game of Ultimate on two separate occasions.</td>
<td>Record how many pedometer step counts you took during a game of Ultimate on two separate occasions.</td>
<td>Record how many pedometer step counts you took during a game of Ultimate on two separate occasions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1. _____ 2. _____</td>
<td>1. _____ 2. _____</td>
<td>1. _____ 2. _____</td>
</tr>
<tr>
<td>8.</td>
<td>/10</td>
<td></td>
<td>Effort &amp; Attitude</td>
<td>Effort &amp; Attitude</td>
<td>Effort &amp; Attitude</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Demonstrate a good attitude throughout the ultimate unit. Only Coach can sign this one off.</td>
<td>High-Five the teacher five times during the ultimate unit. Only Coach can sign this one off 1 2 3 4 5</td>
<td>Give Coach and every classmate a High-Five sometime during the unit. Only Coach can sign this one off.</td>
</tr>
<tr>
<td>9.</td>
<td>/10</td>
<td></td>
<td>Writing</td>
<td>Writing</td>
<td>Writing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Explain below what you did or did not like about Ultimate during our unit.</td>
<td>What skills do you think you are good at? What skills do you need to work on? Answer below.</td>
<td>Explain what kind of physical training is needed to play a full-game of Ultimate.</td>
</tr>
</tbody>
</table>


Tyler G. Johnson (tyler.g.johnson@asu.edu) is a doctoral student, Paul W. Darst (darst@asu.edu) is a professor, and Timothy A. Brusseau (timothy.brusseau@asu.edu) is a doctoral student at Arizona State University–Polytechnic, Mesa, AZ 85212.