"Toto...I don't think we're in Kansas anymore." Dorothy's famous observation came to mind as I watched the school busses unload at Rockhaven Park on the south shore of Clinton Lake, October 7th, 1986. I was there to observe Gene Wee and his Orienteer Kansas crew introduce about 80 middle and junior high school gifted students to the sport of orienteering. Orienteering is a kind of a race, a kind of a treasure hunt and a practical test of navigation skills. Once you've tried it you'll probably want to set up your own orienteering course/trail near your school campus.

Orienteering is a sport with a lot of physical activity and even competition. However, the competition occurs at whatever level the participants agree to. Orienteering is also an academic challenge and has been called "the thinking sport." It requires (and teaches) map reading skills, mathematical calculations of distance and range, following directions, record keeping, critical thinking, and decision making. Success at orienteering comes more readily to those able to make wise decisions rather than those with the ability to outrun someone, somewhat like the sport of life. Perhaps best of all--orienteering occurs out-of-doors! Which is where many students and many of us teachers like to be.

Basically, orienteering requires navigating a course, either singly or as part of a team, over unfamiliar territory. Each runner is issued a map of the area with the location of all of the markers on it. On the reverse side is a score sheet and it is enclosed in a clear plastic envelope, to protect it from the weather or any other hazards. The only equipment the runner needs is a compass and a pair of running/jogging shoes.

It is a timed event but the first to return may not be the overall winner. There is a series of orange and white markers strung out over the course, which can be different each time it is set up. Each has a point value assigned. Those that are further away or in more difficult positions are worth more points than those easy to locate and close to a trail. Each marker has a coded stapler hanging with it and the student needs to staple her score sheet in the corresponding space to verify she actually reached that marker, indicating she properly located the right land feature on the map.

A team can't waste much time deciding which route to blaze and which marker to race for. Though collecting points from far away markers may be alluring, points are subtracted for each minute past the deadline that a team is tardy. The ability to read the terrain from a color coded topographic map is critical. Just as important is the skill to estimate one's ability to race through the woods, the hills, the grass, etc., to reach the selected markers and return in time.
Everyone's a winner. Regardless of who finishes first, or who finds the most markers, or who accumulates the most points, every participant wins. Building one's confidence in wandering away from the beaten path is an essential component in learning to take risks. And, of course, learning—real learning—only takes place with risk taking.

Gene Wee's presentation to these young students was excellent. He was very organized and genuinely enthusiastic. Prior to the day of the meet he had already mailed out some introductory materials. His crew consisted of four other orienteers, who had set up the markers and checked them ahead of time. The first order of the day was to divide the students into groups and have the crew teach the basics of orienteering. They used landmarks they could see from the parking area and practiced using the compasses to locate them on their maps. Then, the crew took their individual groups into the woods to actually locate one of the low point markers. In this way everybody started off the race with at least some points. This pre-race training took about an hour. A classroom teacher with a unit to teach about maps or landforms might have taken even more time.

The students divided themselves into smaller teams, each with at least one watch bearer. Gene gathered the heard around him as he counted down to the start. With the shrill of his whistle a veritable explosion of fledgling orienteers scattered in all directions of the compass. In less than a minute they were out of sight, but not out of hearing range for a while longer.

For the next 30 minutes we would sporadically see a small group emerge from some clump of trees into a clearing and dart right back into the forest again several meters further away. Soon the first of the troops began dashing back to "home base" with their punched score sheets. One of Gene's crew would yell out elapsed time as groups raced in from different directions. Another crew member wrote the finish times on each score sheet while another person began tallying points. As the deadline expired there were still students trailing in. Some of them had so many points accumulated that they outscored some early birds, even after the point penalties were figured. Everyone seemed to urge the sprinters in as they popped out of the woods. Some exhausted students were compelled to run just a little harder at the end, with such a large group cheering them on. Others plopped to the ground just two staggering steps after slapping their score sheets on the scorer's table.

When everyone was in it was picnic time. Gene and crew finished tallying scores while the tired but rosy-cheeked students feasted on some well deserved chow. The Orienteer Kansas group awarded certificates of accomplishment to every student. Red, white, and blue ribbons were awarded to the top finishers in each grade level.
Later, Gene mailed me a computer printout with each participant's results with raw scores, total points, placement, etc. That piece of follow-up was a nice touch.

Orienteering can be practiced at any level with any age group. The Kansas chapter is affiliated with the national organization and there are even international competitions. It is a relatively new sport in the United States and there is only a limited amount of literature available about it. There are several types of orienteering besides the one I witnessed at Rockhaven Park. Other types include cross-country, line, route, team and relay, night, project, trim, bicycle, and ski orienteering.

This out-of-doors "thinking sport" has many of the ingredients that will lead to success as you teach map reading skills, mathematical calculations of distance and range, following directions, and record keeping. If critical thinking and decision making are important parts of your science program, orienteering may be just what you're looking for. Your fun with orienteering may not be on as grand a scale as Dorothy's adventures in Oz, but you may share her parting sentiments about there being "no place like home." Once you've tried it you'll probably want to create an orienteering course near your own school.

To arrange for your own introduction to orienteering or for more information contact Gene Wee, Student Union Activities, Kansas Union, University of Kansas, Lawrence, KS 66045.

For a list of resources including pamphlets, books, films, equipment, and other contacts write to the Science Education Center, Emporia State University, Emporia, KS 66801.

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