Praxis Paper

In this project we set out with the mindset of that games can deliver a great amount of education if done correctly. That being said, teachers too often make games that simply deliver trivia. In our game, we incorporated the math into the gameplay, such that students are training in their skills of assessing the probability of situations. This will then lead well into a formal unit in probability, or can simply serve as a fun math game on days when teachers cannot teach a proper lesson. This game is generally non-competitive as well so all students should feel included.

Tele-Prob encourages active critical thinking, assessing the likelihood of a given situation, as well as creating situations with a given likelihood of occurring. It also creates group discussion about math as students reveal to everyone their booklet. Students will see how other students think about probability and will expand their familiarity with the probabilities in terms of situations they would normally not immediately think of. In this sense multi-culturalism can also shine through into this activity, in that they will have different situations they pull from for their drawings in the game (Vacca, p63).

Students can call back to this game as they progress into the more complicated ideas discussed in probability. Intersection, union, independence, and conditional probability are all incorporated into the game, though it is left to the teachers discretion whether they would like to address these concepts, or simply let the students explore them as they come up in the game, then call back to them as they explain the concepts in future lessons. We recommend that the inquiry-based approach of explaining the different types of probability after the game would be more effective. Students can consider for themselves the interaction of events in different ways and think on how it affects the probabilities of those events.

This game also engages those students who learn visually and kinesthetic learners, who are often overlooked in math lessons. This can then also give them a good basis for reference in later lessons, when the concepts being drawn are then addressed. Creating this basis and drawing back to it later will be especially effective for these students as the later ideas in probability can become more theoretical, and therefore harder for these students to grasp. This also ensures that students will go into the probability unit with a similar prior knowledge base. (Vacca, p. 22-23). It also allows a more creative approach to math, which again is often overlooked.

Our lesson plan offers one way teachers can introduce the game as a teaching resource. Quickly discussing probability as a whole, and then letting the students play the game. We also offer a follow up handout which will cause the students to reflect on what not only they, but what the other students drew and guessed. This means they will be reflecting on how they viewed intersection, union, and conditional probabilities to be calculated, and explore how other students viewed the problem. This furthers the inquiry in their learning, bringing to the forefront of the students minds the subconscious learning that may took place during the game.

Works Cited

**Vacca, R. (2013). *Content Area Reading: Literacy and Learning Across the Curriculum* (11th ed.). Prentice Hall.**