



Lab 11

Skill Analysis

Statement of the Problem

The purpose of this lab experiment is to provide students with practice analyzing the technical execution of a motor skill.

Reference

Chapter 11

Materials Needed

- Tablet with Ubersense app
- Non-slip floor for takeoff and soft landing area
- Piece of tape for a takeoff line
- Tape measure
- Individual Data Sheet

Procedure

The objective of this task is to jump as far as possible.

Divide into groups of four. You will take turns in the roles of experimenter, participant, and measurers. The experimenter will use the Ubersense app and a tablet to capture video of the participant performing a standing long jump. Experimenters will position themselves perpendicular to the path of motion of the participant at a distance that allows full capture of the participant's movements from the side without having to pan the camera. Upon completion of the jump, the measurers will determine the distance achieved. The measurement is taken from takeoff line to the nearest point of contact on the landing (back of the heels).



video DEMONSTRATION

Results

1. Using the video captured, analyze your technique using the [Individual Data Sheet](#).
2. Working in pairs, use the Ubersense app to
 - a. Perform a side-by-side comparison of two participants' techniques.
 - b. Perform an overlay comparison of two participants' techniques.

Discussion

1. How would you categorize yours and your partner's performance: (a) highly skilled, (b) moderately skilled, or (c) unskilled, and why?
2. What factors other than technique, if any, affected the outcome?
3. What cues would you provide to your partner to help improve his or her technique? Why?

Name:

Date:

Individual Data Sheet

| | | | | | |
|---|--|--|----------------|----|--|
| Participant:_____ | | | Distance:_____ | | |
| Key Elements | | | Yes | No | |
| Loading | | | | | |
| • Bent knees | | | | | |
| • Arms back | | | | | |
| • Forward lean right before push | | | | | |
| | | | | | |
| Take Off | | | | | |
| • Full extension of arms and legs at take off | | | | | |
| • Take off near 45 degrees | | | | | |
| | | | | | |
| Landing | | | | | |
| • Land on both feet | | | | | |
| • Thighs parallel to floor/ground at foot contact | | | | | |
| • Knees flex | | | | | |
| • Arms thrust forward | | | | | |
| | | | | | |
| Observations | | | | | |
| | | | | | |