**Worker on a ladder Scenario**

Worker:

Q: How effective are current measures in preventing students from encroaching on your workplace, on a scale of 0 to 10.

A: a zero, non-existent

Q: On average, how many times do you experience students walking into your work area?

A: No less than 25, but can expect up to 50 depending on the area and time of day.

Student:

Q: As a student who is walking while focused on their phone, is there anyway for you to know if there is a work area in your path?

A: Listening to noise and decipher where it is coming from

Q: On a scale of 0 to 10, how effective is this way of understanding that a dangerous work area is around you?

A: around 2 or 3

Reactions from ladder scenario with non-goat noise

Student perspective:

“Like that it got faster was we got closer. Having a noise get’s my attention, and having it on the come from the ladder pulls my attention towards the ladder.”

“It grabbed my attention, but sounded like a weird noise, like pots and pans banging”

Q: What kind of noises would out want to hear?

Want to hear “Caution someone is working!”

Once we play the goat noise

“It sounds like it means means you’re not supposed to be there.”

“It grabs your attention”

Q: On a scale of 1 to 10 how effective were the sounds you heard at grabbing your attention away from your phone to the worker?

A: a 6, an 8

Perspective of worker:

The system accomplishes the goal because it grabs the attention of the student, making them look of from their phone and take in what’s going on in their surroundings. When it got to its fastest point, the worker looked around and noticed the students walking and can take appropriate action.

**The junction Box Scenario** (all worker perspective)

Q: How long does it usually take to trace a faulty wire through the wall via junction box?

A: About an hour, but some more complex rooms can take a days.

Q: If fully developed according to this prototype, how long would it take to complete the task?

A: About three minutes

Q: How would you rate the current process on a scale of one to ten?

A: About a 2 or 3

Q: How would you rate the process using our device?

A: 10

**Wall Tracing Scenario**

Q: On an average day, how long would it take for you to trace a wire to its source through the wall?

A; Range from one the three hours

Q: Using our device how long would it take to complete a job:

A: About 25 minutes. If the device had a focus on different kinds of wires like ours does, then it can take a six hour job to a one hour job.

Q: How would you rate the current process on a scale of one to ten?

A: About a 2 or 3 again

Q: How would you rate the process using our device?

A: 10. This not only makes the electrician’s jobs easier, but it prevents the carpenter and painter having to patch up the unnecessary holes in the wall the electrician created.