BULLY TRACKER

GREEN MOUNTAIN GEARS FLL 2014 WORLD CLASS TEAM 3958

SUMMARY

We are members of a FLL team working on World Class, which challenged us to solve a problem in education.

According to experts we met: Julie Pidgeon, Donna MacDonald and Greg Bemis; kids are bored at school and that games, videos, songs and many other instructional methods are way better than books and lectures.

We also know that kids are scared in school because of bullying. According to Stanford University Medical School, 90% of elementary students experience bullying from their peers.

We felt we had to act to help reduce bullying. We wrote a video game that empowers kids to be an ally. The ally repels the bully, comforts the target and converts bystanders to allies. According to research at Stanford University, games like this can change realworld behaviors

EXPERT INTERVIEWS

- Julie Pidgeon teaches language arts and social studies at Folsom School in South Hero, VT. She felt that activities like the Oregon Trail are among her favorite to teach.
- Greg Bemis teaches in the Emergent Media Department at Champlain College. He thinks that game based learning is the way of the future.
- Donna MacDonald is a media arts specialist at Orchard School in South Burlington. She feels are an excellent way to helps kids learn.

DEFINITUN OF BULLING

Bullying is unwanted, aggressive behavior among school aged children that involves a real or perceived power imbalance. The behavior is repeated, or has the potential to be repeated, over time. Both kids who are bullied and who bully others may have <u>serious, lasting problems</u>.

<u>http://www.stopbullying.gov/what-is-</u> <u>bullying/definition/</u>

BULLING IS COMMON

- According to a study at Stanford University Medical School, "90% of kids experience bullying." <u>http://med.stanford.edu/news/all-news/2007/04/schoolbullying-affects-majority-of-elementary-studentsstanfordpackard-researchers-find.html</u>
- According to Trudy Ludwig, "kids are, on average, the targets of bullying about once every three to six minutes from the start of kindergarten to the start of first grade" (Trudy Ludwig (2010) <u>Confessions of a Former Bully</u>) Dragon Fly Press)

BULLING IS HARAFUL

- According to National Educational Association, 160,000 kids miss school each day in America beacuse they are being bullied. (<u>http://www.nea.org/home/53298.htm</u>)
- According to the American Federation of Teachers, targets of bullying miss 9 days of school a year and have test scores that are 3.5 to 5% less because of bullying. (http://www.uft.org/insight/bullying-takes-academic-tolltoo)

ADULTS ARE A PROBLEM

- According to NoBully.org, 70% of teachers see bullying and 62% of witnesses see bullying.
- According to NoBully.org, kids, don't report bullying because they are afraid of retaliation and they do not think adults will do anything about it.
- According to NASP, "1 in 4 teachers see nothing wrong with bullying and will only intervene 4% of the time." (<u>http://www.nasponline.org/resources/factsheets/</u> <u>bullying_fs.aspx</u>)

intervention Works

- According to Dan Olweus (1997), when bystanders intervene, bullying is reduced by 50%
- (Olweus, D. (1997). Bully/victim problems in school: Facts and interven-tion.European Journal of Psychology of Education, 12 (4), 495–510)

HOW TO GET BISTANDERS TO BECOME ALLIES?

- According to Stanford University, "giving test subjects Super-man like flight in a virtual reality simulation makes them more likely to exhibit altruistic behavior in reallife" (<u>http://news.stanford.edu/news/2013/january/virtualreality-altruism-013013.html</u>)
- According to Emily Bazelong, the "riddle has not been solved" <u>http://www.slate.com/articles/</u> <u>life/bulle/2013/02/</u> <u>bullying can we teach kids to stop being bystanders.ht</u> <u>ml)</u>

BULLY TRACKER

- we wrote a video game in Game Maker that places the player in the role of the ally, who has super-man like powers to:
 - repel bullies
 - make targets feel better
 - make friends with bystanders to make them allies too

GAME CHARACTERS-

- VILLAINS
- bully
 - black color
 - moves toward the target
 - moves away from teacher and ally.
- henchmen
 - grey color
 - moves toward bully
 - increases speed of bully and comfort near ally

NEUTRAL

- bystander
 - off white
 - moves randomly
 - turns into ally after three interactions with ally
- teacher
- blue color
- moves on a fixed path
- moves parallel to bully after three reports from ally

ALIES ALIES

- green color
- controlled by user
- repels bully
- interacts with teacher
- heals target
- converts bystanders to allies

GAME PLAT

- The user explores an open space and has to discover the rules of Bully Tracker.
- Surprises await the user, such as jokes and statistics about bullying.

Fütüne

- We hope to test our game at a school to get some data on whether or not the game helps convert bystanders to allies and to get feedback to improve the game.
- We hope to improve the graphic design of the game to include more interesting graphics and effects.
- We hope to add more levels to make the game more challenging.
- We hope to allow users to design their own avatar to play the game.
- We hope to make an online high score to make the game more social