Turn that Noise off!

What's the big deal about sound?

"You just got fragged" *You just got fragged*

Sound increases reaction time* |

Sound tells us about:
- player status
- NPC status
- objects
- off-screen action

For example
- ‘beep’ = I'm a good potion
- ‘boop’ = I'm a bad potion

So, why would I want an alternative to sound?

sound can be intrusive
background noise may interfere
noise is tiring
accessibility for hearing impaired

increase accessibility
increase playability
increase marketability
increase sales!

What can I do to provide an alternative to sound?

[cc] captions
action captions
speech balloons
visual images (like Halo 2’s radar, shown)
icons and symbols

We invented a system, SoundSign, combining icons with positional info, with the following goals:
- easy to implement
- intuitive
- symbolic
- scalable
- language independent
- faster to read than words

Can icons with positional info actually substitute for sound?

Using eye-tracking technology, our tests show that when we turned the sound off in a game with SoundSign:
- 70% of users had longer fixations on icons
- 8% of overall gaze spent on icons
- ~40% increase in time looking at icons*

Here's what our test subjects said:
- "I think you'd be pretty useless at the game without it"
- "It did pretty much the same thing as the sound"
- "I had to look at it to see where the opponent was shooting me from."

Where can I get more info?

See a video or download a demo game at:
www.GamesSound.com/ss.htm

Accessibility: IGDA Accessibility SIG, Game Accessibility.Org, DeafGamers.com, GameAccessibility.Net

SoundSign R&D: Dr. Karen Collins, collinsk@uwaterloo.ca www.GamesSound.com

Eric Luvisotto, University of Waterloo Commercialization Office, Phone: (519) 888-4567 x38678 E-mail: e2luviso@uwaterloo.ca

* A copy of our research paper is available at the above site:

Vector Graphics from DJ Monkey Boy.