



Da Vinci Discovery Center Discovers Kiosks

Science Center encourages Hands-on learning through Interactive Kiosks

The link between a science center and a kiosk seems obvious, doesn't it? Science centers focus on hands-on learning and kiosks focus on interactivity. Why not reinforce learning with an interactive kiosk?

Long ago, The Da Vinci Discovery Center recognized the benefits of utilizing this type of technology. Located in Allentown, Pennsylvania, the center targets elementary to middle school aged children and promotes knowledge about science, math and technology through problem-based learning. Leonardo Da Vinci himself is a perfect example of how interactive learning helps in better understanding the science behind things, as he was one of the first to dissect a cadaver to study human anatomy.

The center uses 5 different kiosks to reinforce its message in the human biology exhibit. Sponsored by Lehigh Valley Hospital, the exhibit focuses on vehicle safety using physical tools such as a mock vehicle to demonstrate car seat safety and a CPR dummy for life-saving tips. The mock vehicle sits behind a plasma screen that constantly flashes information on laws pertaining to vehicle safety.

The first kiosk, placed at the very front of the exhibit, is a pre-test on vehicle safety to measure visitor knowledge prior to entering. Questions are asked before visitors have a chance to go through the area. And answers including extra facts, such as at least 100,000 crashes in Pennsylvania are caused by fatigue, are posted to help users learn more about the answer.



This kiosk tests student knowledge after they have traveled through the exhibit.

The second kiosk focuses on how easy it is to get distracted while driving, demonstrated through a video. The third kiosk showcases a similar danger: multitasking while driving. It does this by requiring the visitor to answer 10 simple questions in 1 minute. The task becomes difficult as windows pop-up to distract the user.

While the majority of the machines are targeted towards kids, the fourth kiosk focuses on parents and teens, allowing access to the "Gift of Life" website. The non-profit organ and tissue donor program's website allows users to become an organ donor on the spot, access information about different volunteer groups to join, and read more about donors and recipients.



A simulated vehicle with a plasma screen mounted in front teaches kids about car seat safety.

The last kiosk is a post-test for all of the information obtained from the entire exhibit including the previous kiosks. An example of one of the questions asked is how tall should you be when you stop sitting in a booster seat? The answer: 4 foot 9 inches. In the future, this kiosk will also be used as an evaluation for the exhibit, replacing the current paper forms.

Since the project is sponsored by Lehigh Valley Hospital, the exhibit concentrates on providing access to health information, not limited to displays at the museum. All of the kiosks use KiOWare kiosk software, which allows the machines to show an unlimited amount of secured information through related websites.

KiOWare kiosk software also provides a constant stream of usage data. Rob Fox, the kiosk manager, is continuously examining the data. Fox states, "According to the evaluation forms, the project has been progressively successful over the past few years."

As Da Vinci himself recognized the importance in creating technology, the Da Vinci Discovery Center recognizes the importance in utilizing and learning from technology. The integration of kiosks with an interactive exhibit allows visitors to fully understand the information presented and help maintain that knowledge, while it also gives exhibit managers the ability to study usage data otherwise not available.

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