Project Data Sheet

Information Accessibility Lab

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Project Objectives (two year)

- Provide software tools that enable development of assistive instructional software applications for sensorily impaired K-12 students.
- Utilize a combination of graphing, sonification, and mathematical analysis software to represent mathematical and scientific information.
- Provide unique, NASA-technology teaching tools that enhance STEM education for sensorily impaired students.

Customers

- Vision impaired secondary students and their teachers.
- Sighted secondary students and their teachers.
- Researchers seeking information from complex, scientific data.
- Software application developers who wish to integrate IAL library components into their applications.

Use Cases

- Teachers use the IAL to instruct vision-impaired as well as sighted students in mathematics and science concepts.
- Researchers model mathematical equations and raw data using IAL as a means of visualization.
- Application developers incorporate IAL components to provide alternative representations of data, formulae and concepts.

Deliverables and Schedule (year one)

- 5 Jan 2004 – Beta versions of Math Description Engine (MDE) Graphing Calculator and the MathTrax application available.
- 31 Mar 2004 – Initial educator review of plans.
- 31 Mar 2004 – Completion of Virtual Design Center training.
- 30 Sep 2004 – One or more applications identified in which to integrate IAL components.
- 30 Sep 2004 – Alpha versions of data description, sonification and graphing components ready for application integration. Each component is capable of independent instantiation, and is able to draw from sources including mathematical equations and data sets.

People

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Partnerships

- National Federation for the Blind (NFB) (http://www.nfb.org)
- Southeast Regional Clearinghouse (SERCH) (http://serch.cofc.edu/serch) Special Needs Group
- Texas School for the Blind and Vision Impaired (TSBVI) (http://www.tsbvi.edu)

Dependencies

- None currently

Assumptions

- A segment of the IAL user demographic will utilize a JAVA™ capable screen reader technology such as JAWS™ (http://www.freedomscientific.com) to relay aural information.