

Designing physical interfaces for special user groups

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Waag Society

Founded in 1994, roots in DDS

“Developing creative technology for social innovation”

- Healthcare
- Public Domain
- Culture & Arts
- Education



Storytable

Client: Something with internet

Users: Who cares for my story?

Results:

- Two button interface
- Adaptive search and find
- More than 60 tables deployed
- Increased happiness



Users as designers

True interest in and empathy for the users & their needs

Awareness of user context

- Iterative: rapid prototyping
- Interdisciplinary teams
- Real-life implementation is the goal from the start



Exchange Cabinet

A more local Storytable, with more input possibilities



Exchange Cabinet

- More local content
- Different types of media
- Game element
- Add personal stories
- External furniture designer
- Hardware interfacing



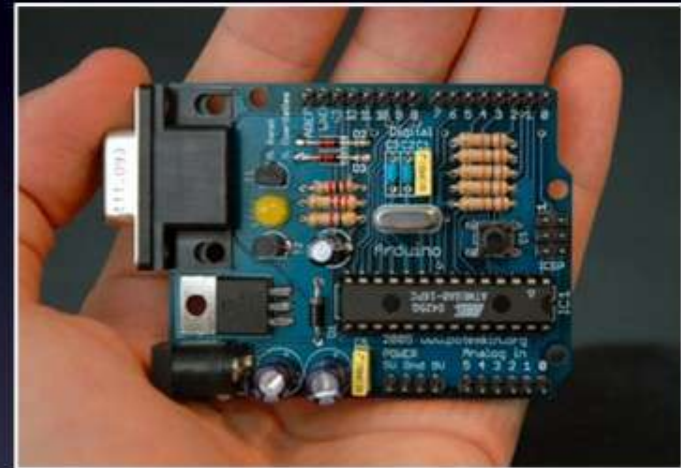
Arduino & Phidgets

Arduino:

- Open source hardware
- Independent and versatile
- Connect with Flash, Java, etc
- Programmable processor
- Bluetooth edition

Phidgets:

- Physical widgets
- Lots of electronics available
- Easy to install and use



Fablab

- Concept by MIT Center for Bits & Atoms
- Worldwide network
- Computer controlled machines
- Open to the public
- Pakhuis de Zwijger, Amsterdam



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Teylers Betalab

Bringing old scientific instruments back to live



Teylers Betalab

- Aesthetics are a feature
- Educational visit for classes
- Hands-on learning experience
- Sound, Light, Force, Electricity
- Hardware dependencies...



Current tendencies

- Clients/partners first want complexity
- Simplicity works much better and inspires
- Iterative processes work well
- Friction between new technology & existing cultures
- Physical interaction stimulates collaboration
- Special user group interfaces have a broader use
- Hidden computers can be very effective



Q & A

Food for Discussion

- Computers are not the end point. If electronic education moves away from the virtual and into the physical environment, what could this mean for classroom of the future?

Food for Discussion

- Statement: The ongoing specialization of media education is a threat to multi-disciplinary skills.
- Statement: Clients should be convinced to forget the linear Concept > Development > Test approach and go for a cycle of Rough Concept > Prototype.

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