Discussion Points

• Split between physical and digital
• Considerations of the physical space
• Transitions between physical and digital
• Accuracy vs free form
• Contextual transparency
• When to use what.... (tangible vs other)
Split between physical and digital

- How do we measure success
- What are the costs/benefits of moving tasks one way or the other or as a blended
- PIBA - DIBA
- Why are we doing this?
- Still needs to work even without power
- Some sort of continuum - graceful degradation - (from a blend just back to physical)
- Some type of layered model of “blends” - basic upto fully blended
- Physical world limits the scope of involvement (here and now not beyond here)
- Transitions yet taking advantage of the physical space.
Considerations of the physical space

• Time - exploration
• Things which are purely physical or things which can and do have a link (implied or actual)
• Is the digital layer on top of the physical space (layer of merge)
• Can we un-blend? Should be a valuable addition.
• Discrete objects vs invisible features...
• Seams and seamless and pure blend
• Before, during and after
• Physical memory (little memory) - physical changes - the spaces aren’t watching - “if these walls could talk”
• Architecture - absolutes that you cannot change
• New build versus old build.
Transitions between physical and digital

• Outputs from the digital to the physical - good other way, not so much
• Moving between devices
• Transition of the person - moving their focus from a digital to the physical
  • The visual transitions are quite hard
  • The other modalities are less hard? (focus on non-visual blending?)
• The ideas of transition between digital and physical and groups
• Working as an individual versus as a group....
Accuracy vs free form

• “Physical world is more reliable”
• Architecture - Aesthetic - Durability - Expectations
  • A generational issue?
  • Think about how electricity became something we depended on
• People think they can do anything with the physical
• The start up cost of a technology vs physical tools (throttle)
• Fragility of the physical items
• Trade offs are key.
Contextual transparency

- Notification “if something is really ‘wrong’ I need to know now”
- The blend must be fluid
- Much of the technology is a luxury
- The thought about the spaces - and how this impacts the blend
- The fabric of life
- Context is king
When to use what.... (tangible vs other)

• Physicality
• When to use the tangibles
  • Phantom force feedback device
  • Demonstration technology
  • Element of speed
  • Switch between the physical tools
  • More can collaborate (awareness)
  • Controllers as proxy for physical elements (eg. Wii)
• Making
• Consequences
• No undo in the real world.
 Interaction Design Process (iterative? vs ...) in Blended Interaction

- Understanding the domain (eg. focus groups)
- Start with the problem - what is the agenda (why are they doing this) - what is the reason - what is the problem you are trying to solve
  - Understand your “client” first and formost
- Ethnographically informed
- Know what is possible today and know what you don’t need to change
- Make sure it’s a good reason to add the digital
- Keep what is good about the physical world
- It’s an iterative process

- Take Home:
  Commercial oriented IxD vs the day after tomorrow’s IxD with blended interaction.