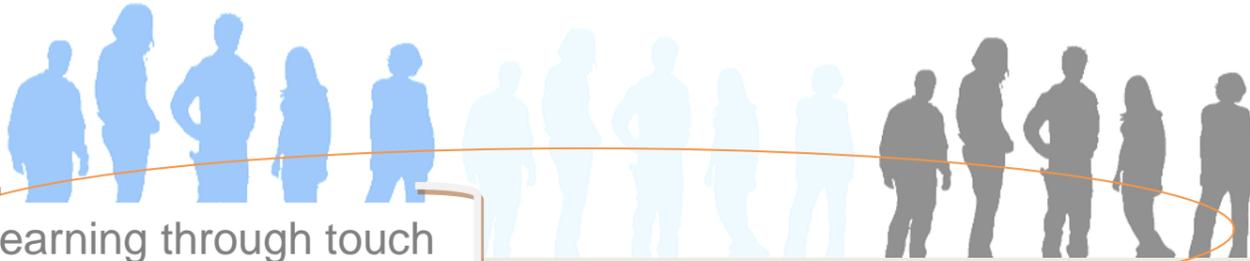


# Haptic thinking; identifying haptic tooling interventions for an online design course.

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## Learning through touch

Tactile sensory perception is often considered as the lesser dominant sense. The sense of touch can become more efficiently utilised and, with practice, can become a very finely tuned acute transducer of the environment. *White (1970) Loomis (1986.) Mayer(2004)* Design, Engineering, applied arts disciplines naturally utilise touch modal processes to work and manipulate materials and forms. Through the advent of touch technology it is currently possible to embed virtual touch sensory perceptions in to the classic design cycle from the germinal stages to prototype. The embedding of the technology can facilitate inclusivity to all OU students' better access to virtual touch affordances.

## Aims & Objectives

The following aims and objectives will structure the project...

- To present a feasibility study to ascertain the need for haptic intervention within current OU design modules/courses.
- To analyse study initial to highlight that modules using 'hands on' techniques/processes could be impacted by this study e.g. engineering, applied sciences.
- To increase knowledge of future technologies and how the OU can benefit from these going forward.
- To show haptic intervention will benefit OU students (universally) and future proof design modules.
- To conduct pilot testing of the haptic device with simple tasks formed from design modules.

## Achievements and IMPACT

### Impact on all categories of students:

- Interactions with novel 'future technologies'
- Increased dual sensory/touch centric input with digital design work
- Increased knowledge of haptic technologies
- Affording tangible discipline & employability skills.
- Enabling learners to design and innovate with a sensory centric tooling.

### References:

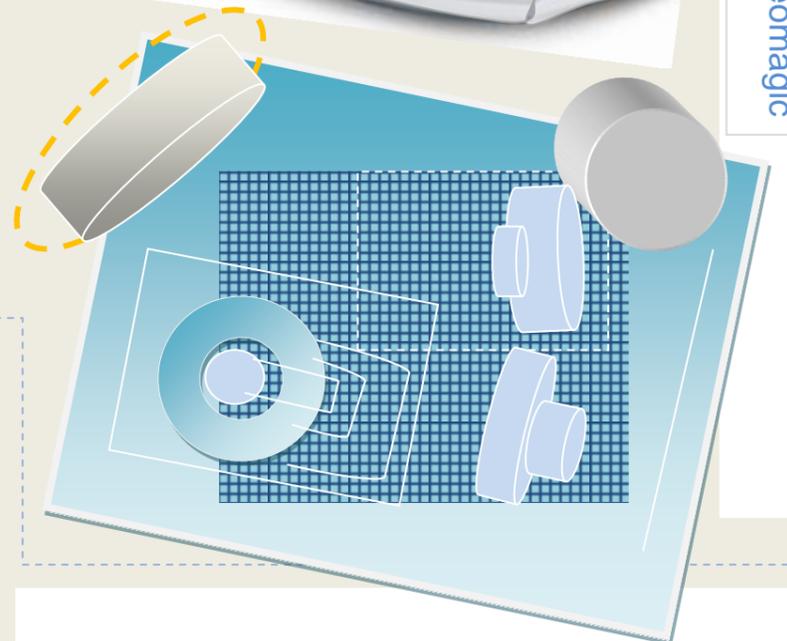
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Inclusive... universal... design for all  
all.....Inclusive... universal... design for all



Haptic device  
Geomagic



### The impact to the OU:

- Building on from 'hybrid material/digital' learning objects (*Mongrel eSTEeM project Elaine Thomas*).
- Affords the OU connections to new innovative teaching and learning technologies
- Adds value to inclusive policies/ philosophies
- Affords discussions and seminars to increase new learning through sensory modes
- Generating novel teaching and learning methodologies which can be disseminated in teaching communities.