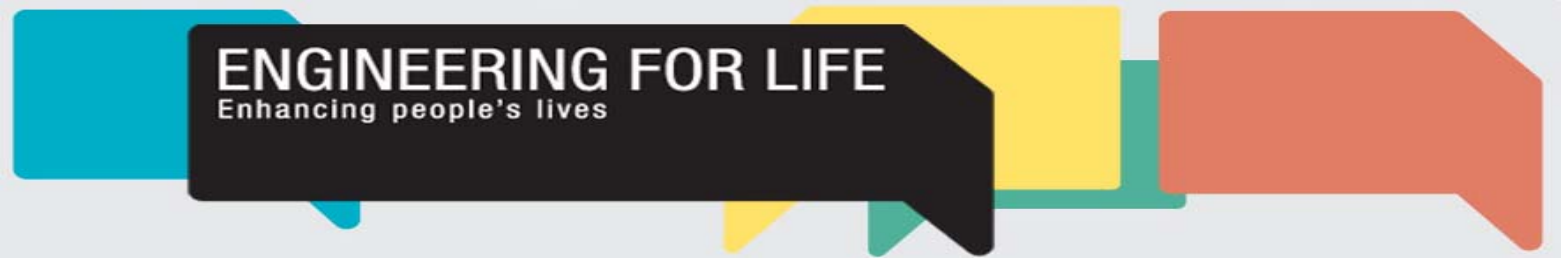

Engineering for Life
Enhancing People's Lives

EPSRC Funded: *Bridging the Gap - Promoting Interdisciplinary Research*
3 year project
Start Date: October 2009

Investigators:

Prof Chris Care: Materials and Engineering Research Institute (MERI)
Prof Paul Chamberlain: Art and Design Research Centre (ADRC)
Prof Steve Haake: Centre for Sport and Exercise Science (CSES)
Prof Nicola Woodroofe: Biomedical Research Centre (BMRC)
Prof Simeon Yates: Communication and Computing Research Centre (CCRC)

Research Network Co-ordinator:

Dr Vesna Milanovic

Project Administrator:

Ms Jennie Harrison

http://research.shu.ac.uk/engineering-for-life

ENGINEERING FOR LIFE
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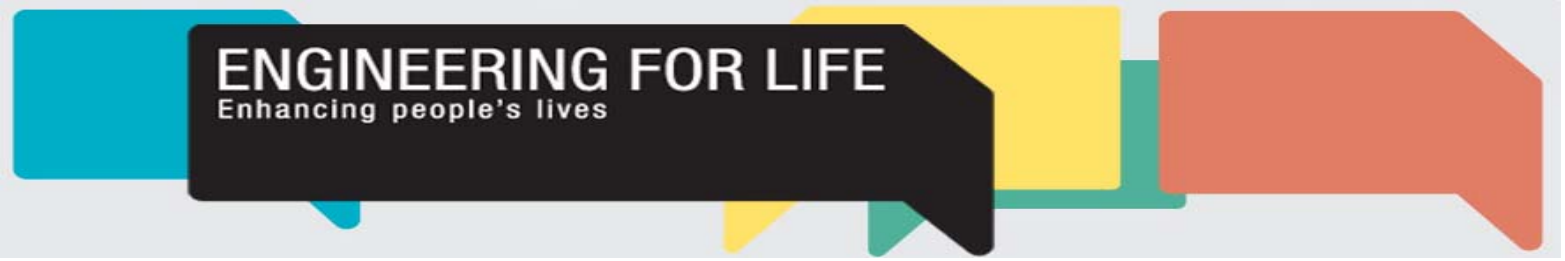
Aims

The Network will create multidisciplinary teams to find pioneering ways to enhance peoples' lives.

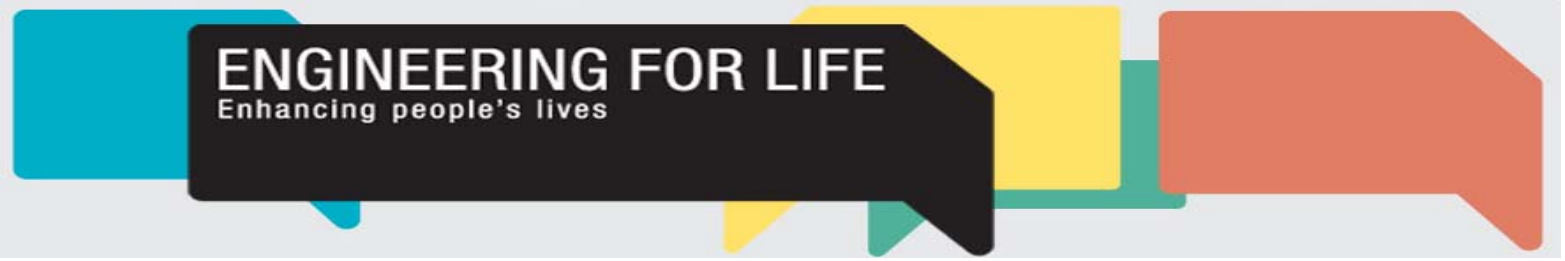
Themes

- technologies for rehabilitation and assisted living
- materials, technologies and engineering designs relevant to sport, physical activity and medicine
- approaches to problems associated with sustainability



Seedcorn funded EFL Team

Team Members: Alaster Yoxall, Claire Craig, Ann Light, Chris Roast and Katrzyna Machaczek



Project in Seven phases:

- Phase One -Interviews
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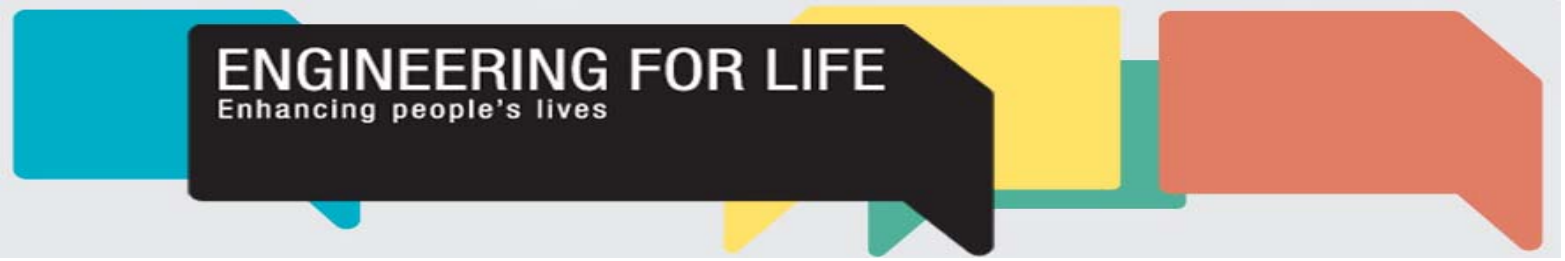
- Phase Six -Re-test
- Phase Seven -Dissemination



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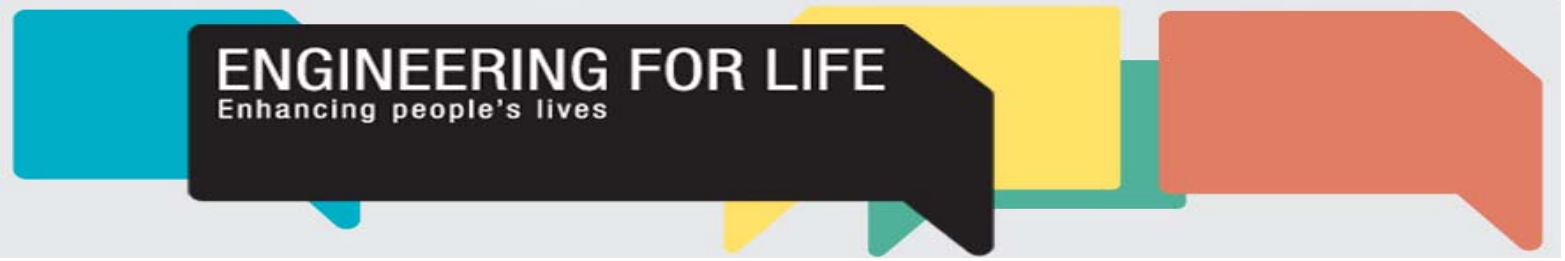
- Bathing equipment (bath boards and seats), grab rails etc.
- Mobility aids (walking frames, rollators, wheelchairs).
- Seating.
- Sleep equipment.
- Kitchen equipment: tap-turners, kettle tippers, plate guards, adapted crockery, drinking devices



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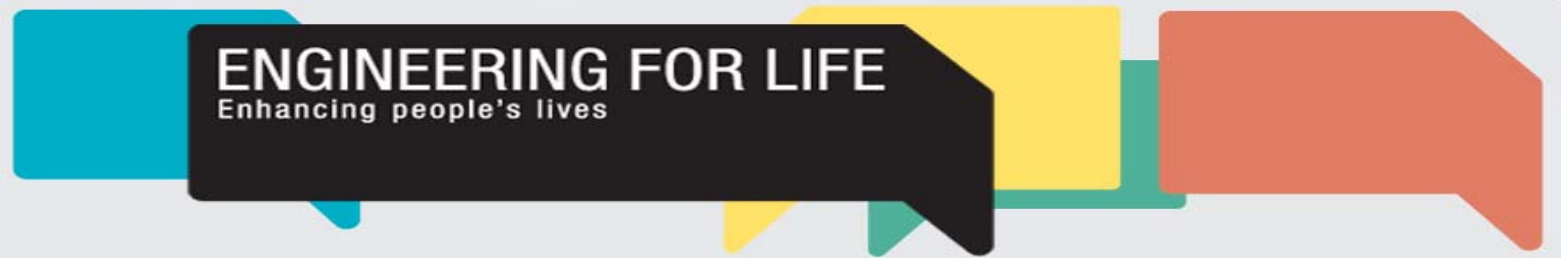
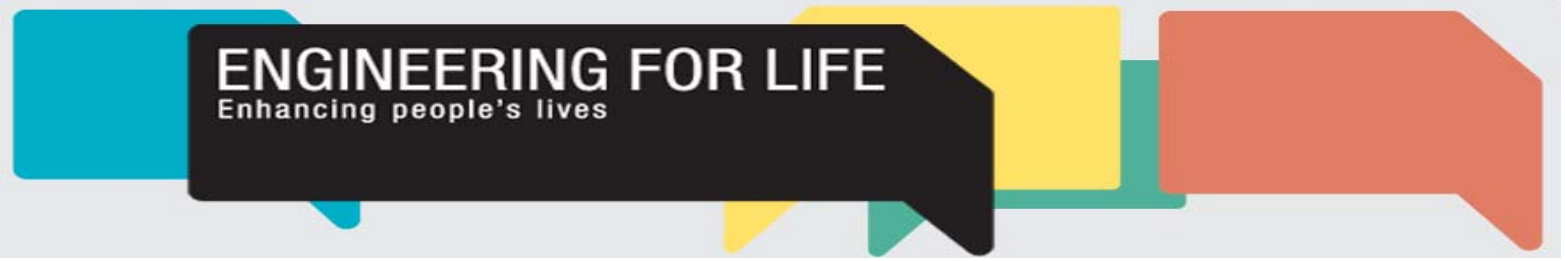


Intervention	Cost	Adaptability	Observation	Social Interaction	Total
Bathing Aids	4	2	1	2	10
Mobility	2	3	3	4	12
Seating	2	3	3	3	11
Sleeping	2	5	5	5	17
Kitchen	1	2	1	1	5



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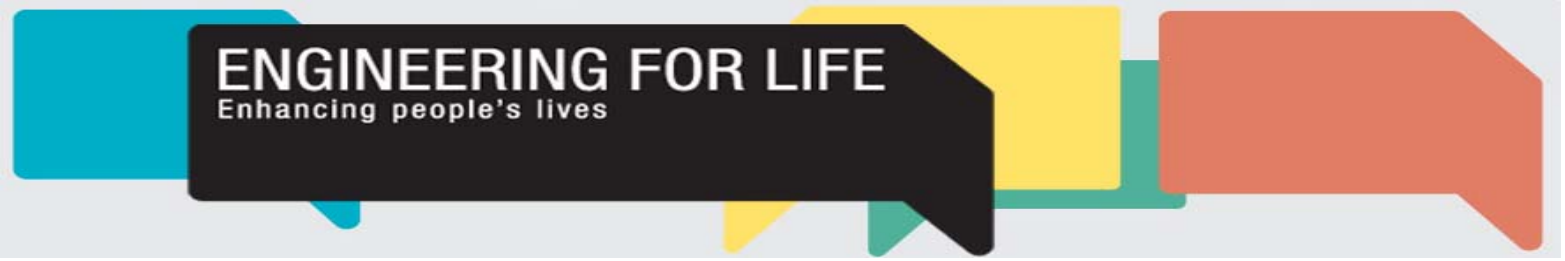

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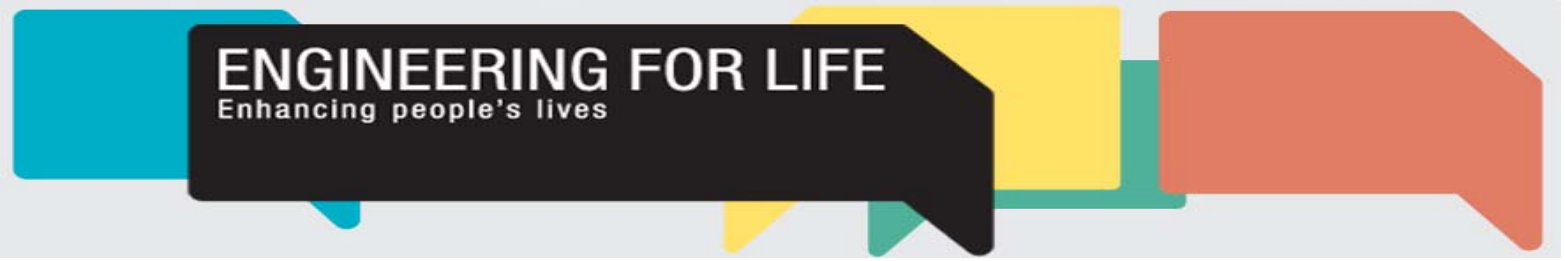
- it wasn't obvious what some of the tools were for (i.e explanation was needed)
- a lot of the tools felt very "patienty"
- cheap and tacky feel to much of the equipment (poor quality)
- the packaging was actually hard to open
- tap-turners consistently came off the taps
- there was some difficulty accessing the fridge and the cooker. The handles were not adapted for use.

- emptying waste into the bin was also seen to be difficult
- the amount of movement was quite "wearing"
- poor portion size
- the plug for the kettle was not adapted even though the kettle was
- washing some of the items seemed difficult
- lifting the bowl of water was trick



Conducted a series of interviews:

- In the home
- In the kitchen
- 3rd Year Design students
- In a Restaurant

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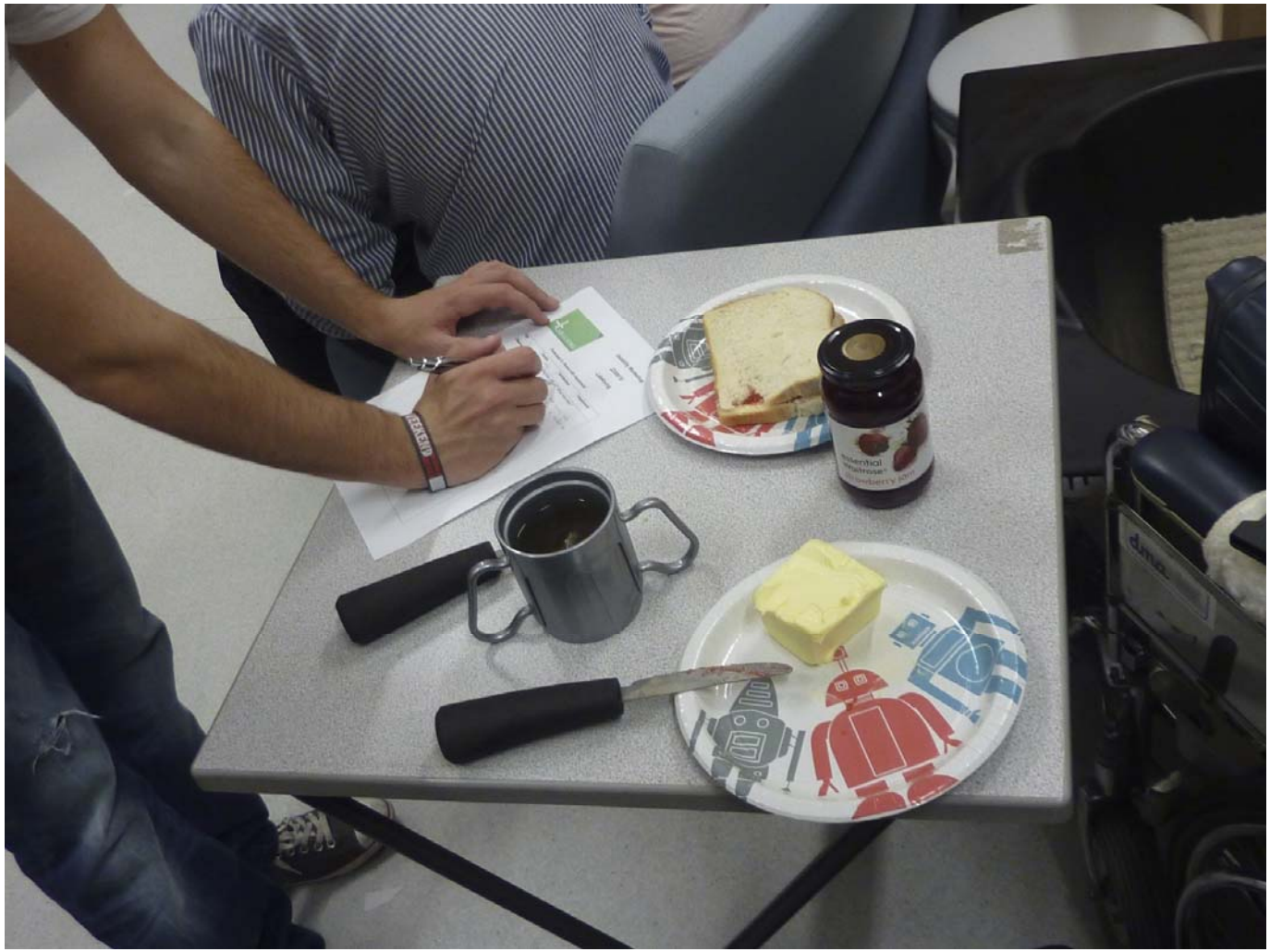
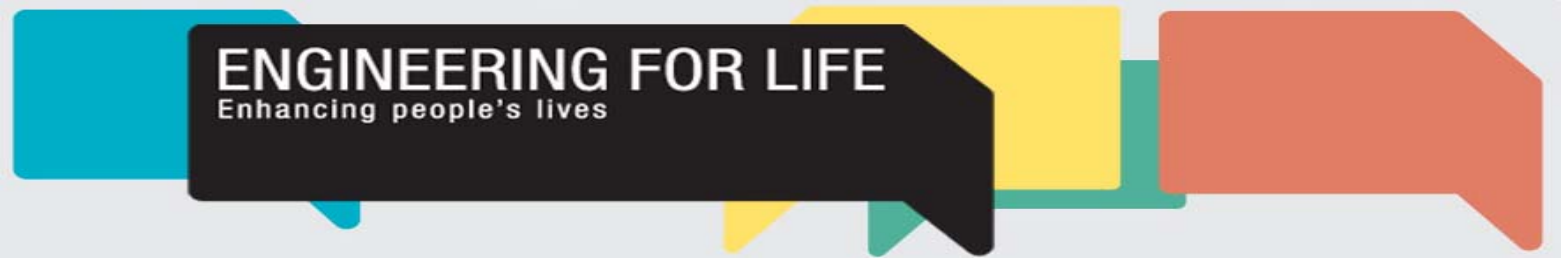
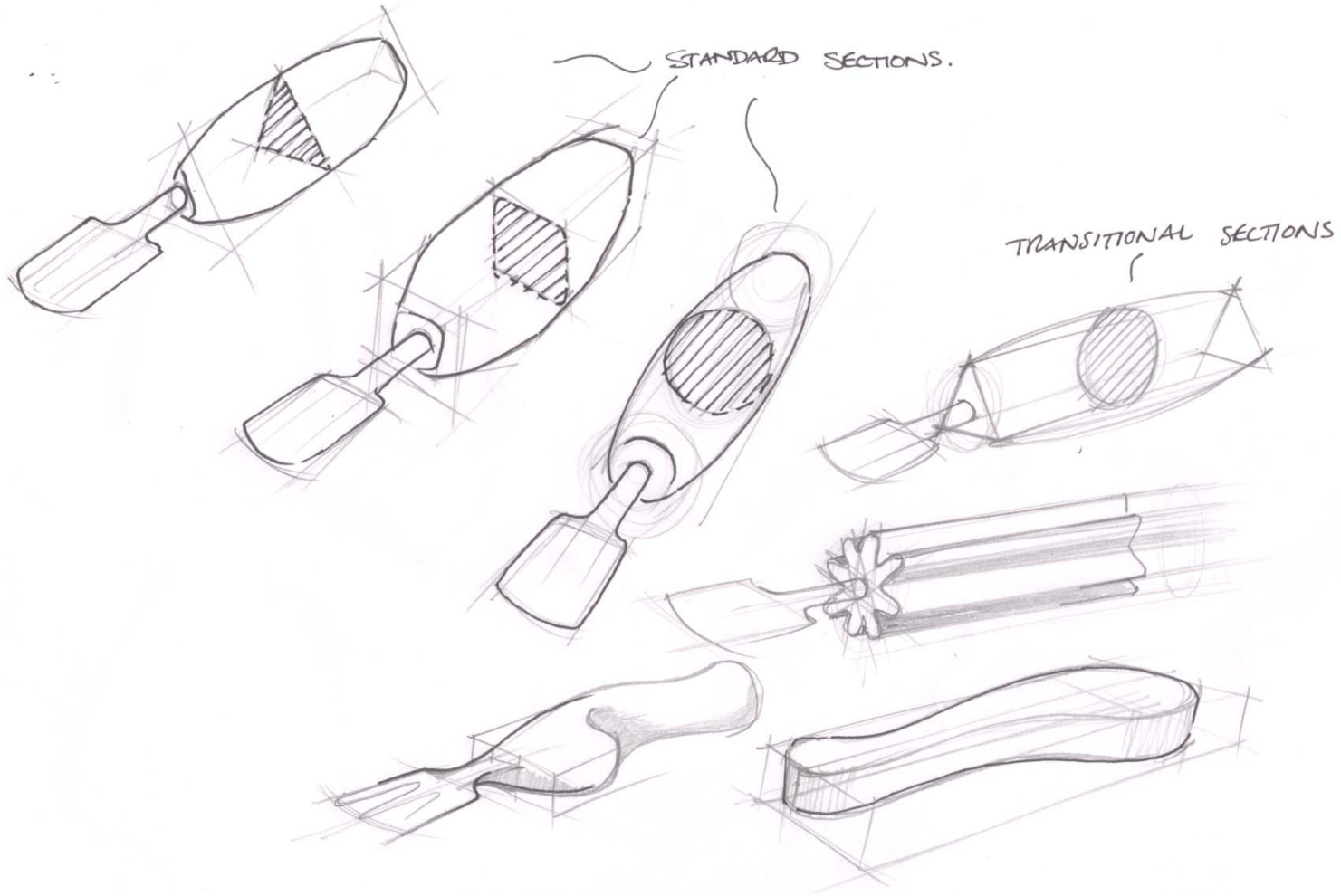
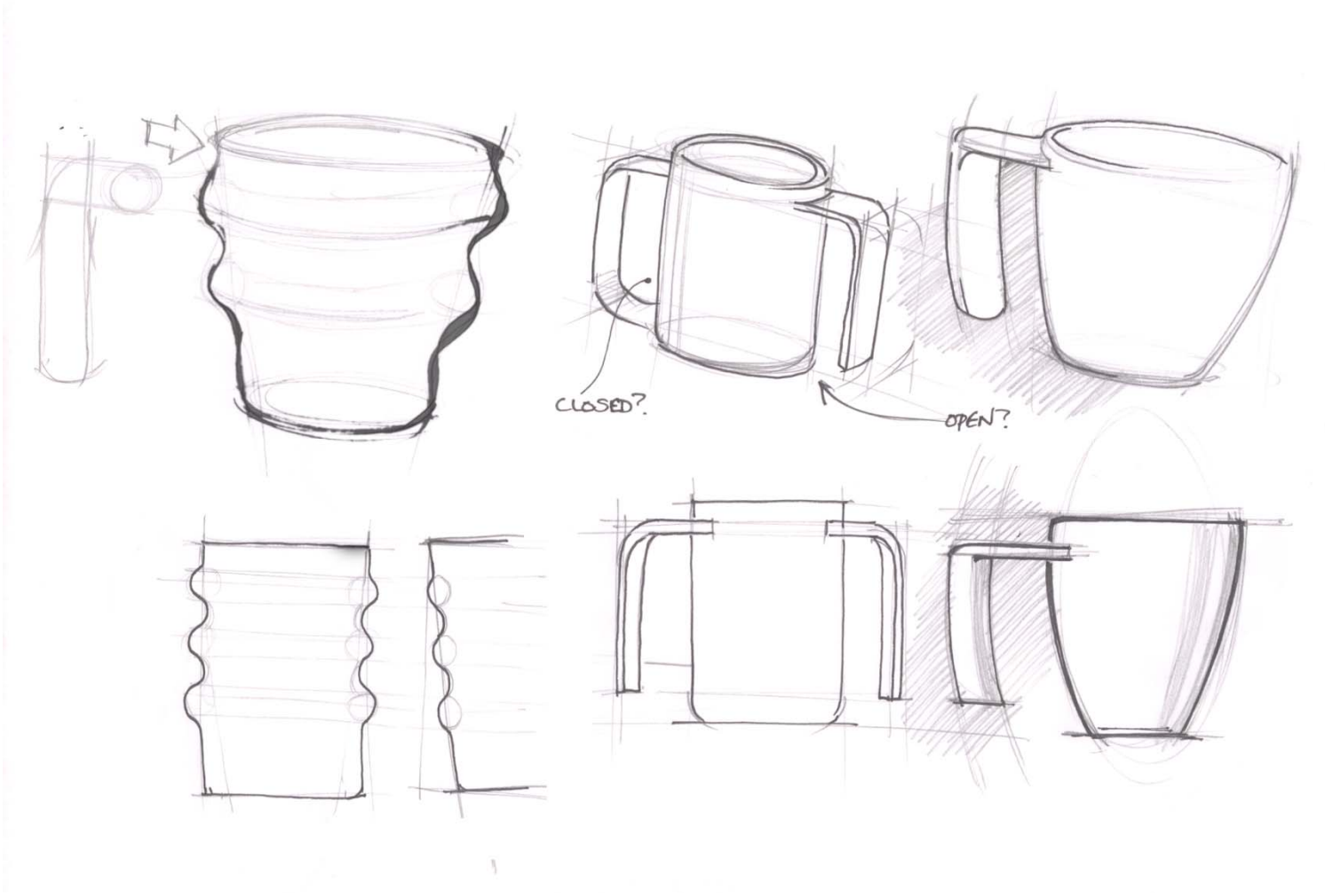


- Results analysed using Nvivo



"can I sit in a corner so no one can see me?"


STANDARD SECTIONS.
TRANSITIONAL SECTIONS


CLOSED?
OPEN?

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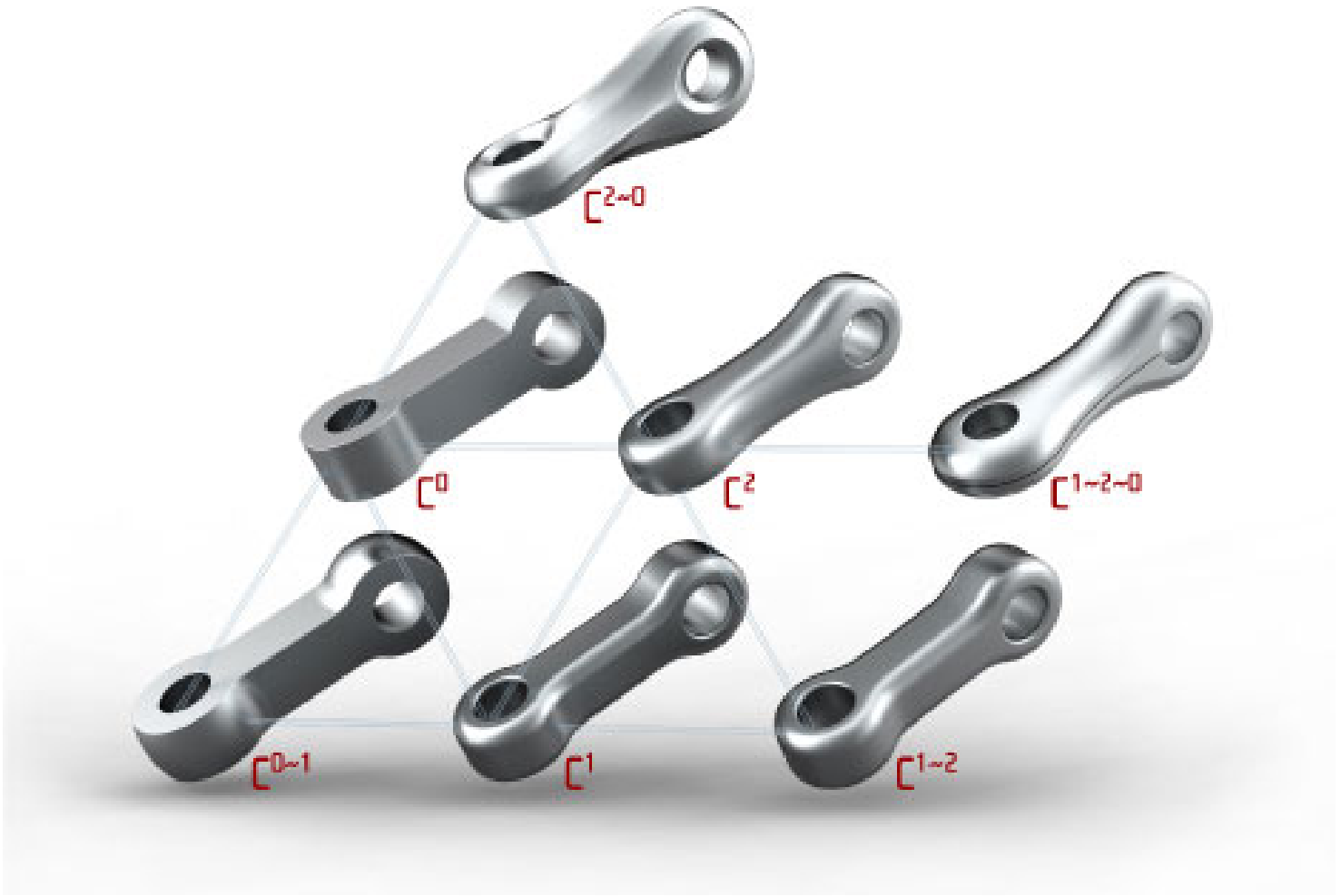

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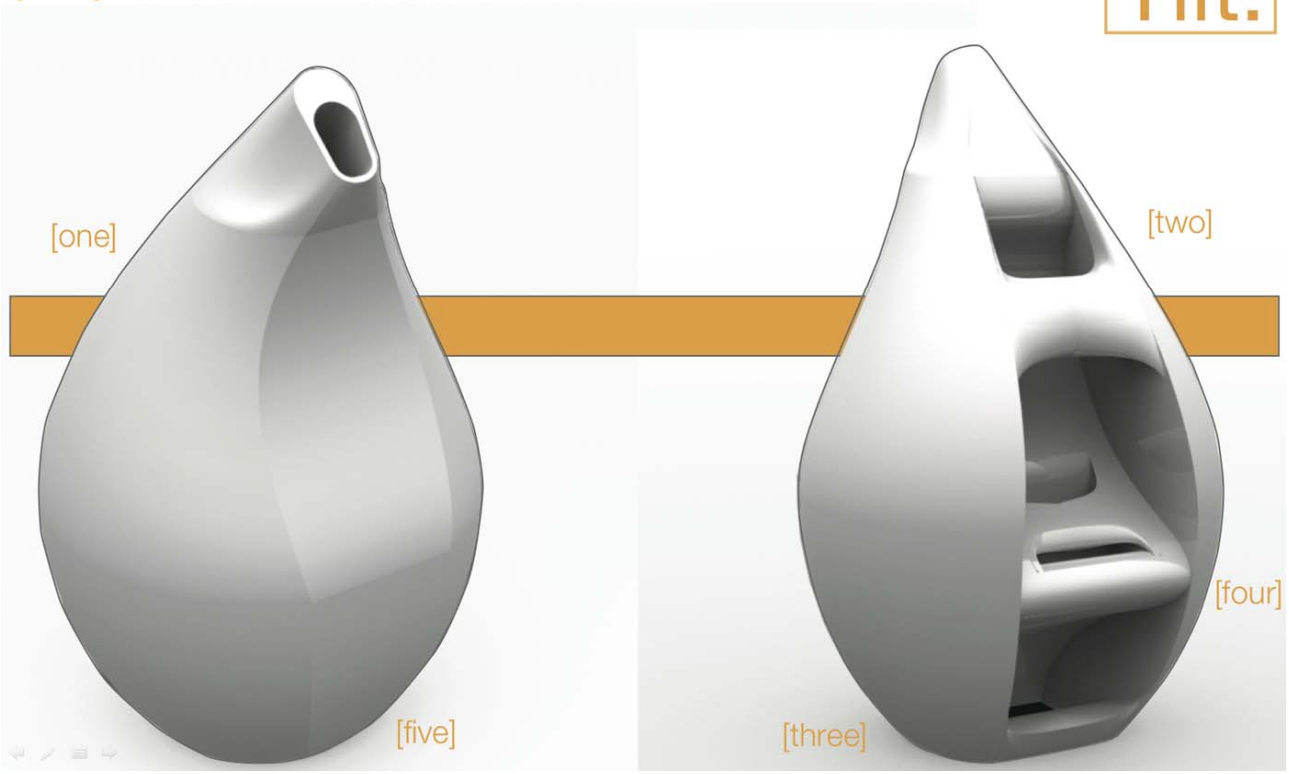
[one] slip-cast ceramic body
[two] thermal ceramic insulated top handle
[three] thermal ceramic insulated lower handle
[four] easy pull tea infuser
[five] flat frount for stable tipping

Tilt.



With thanks to Dan Perkins £rd
Year BA Design Student

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BRITAIN'S Missing TOP MODEL

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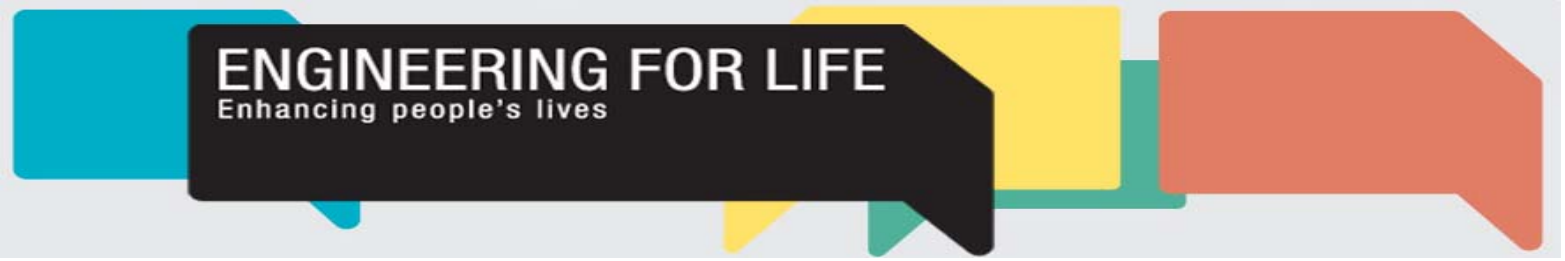

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The EfL experience

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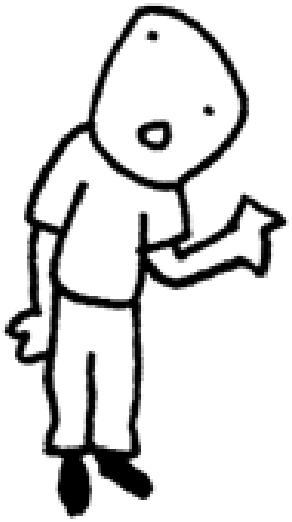
the united kingdom vs the united states:

CULTURE CLASH!!!

I'll learn how to play cricket if you'll learn how to drink watered down beer



DEAL

- I can't get meetings
- Jennie can't get timesheets
- Vesna doesn't get info for meetings
- Etc

- Things work with people we know and have built rapport with
- Otherwise they often fall apart or take longer and we have no mechanisms to deal with it

- This leads to frustration, and or illness

- Not least late and poor delivery of research output

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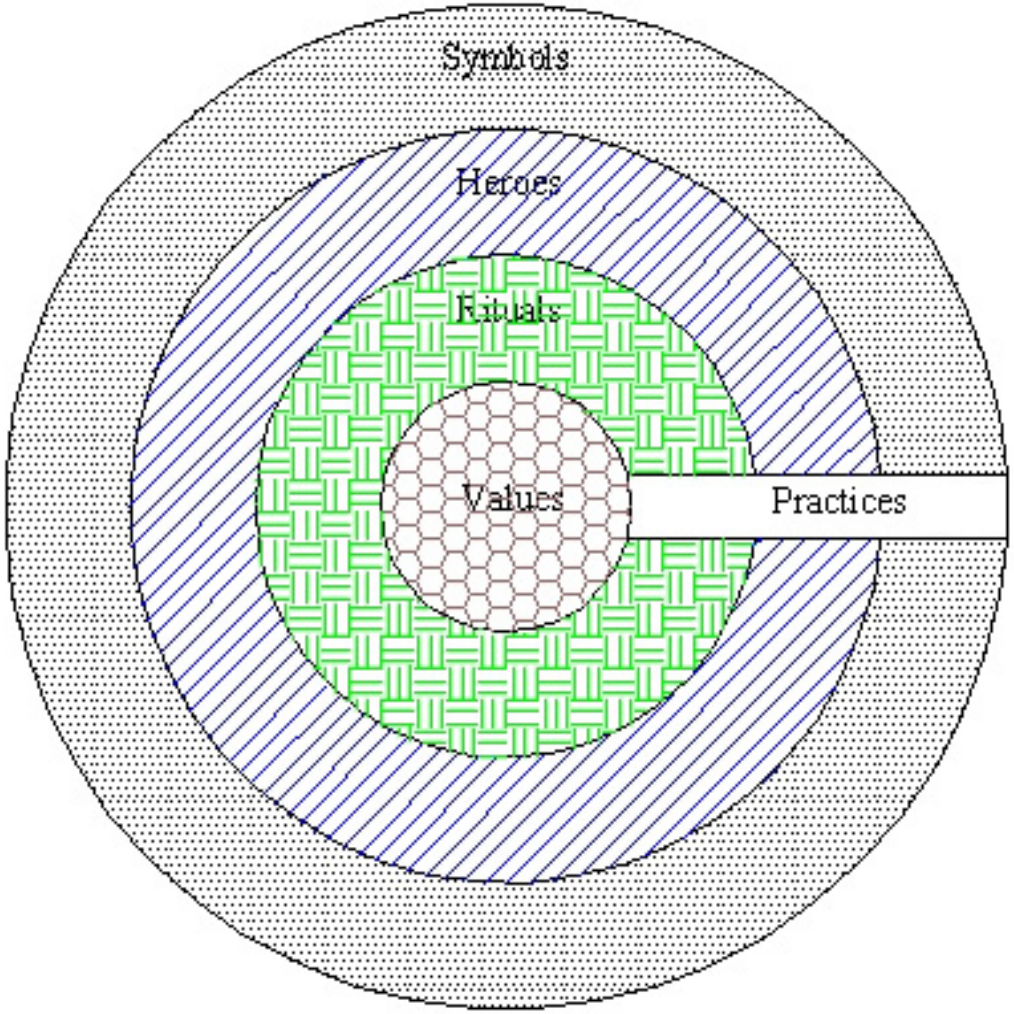
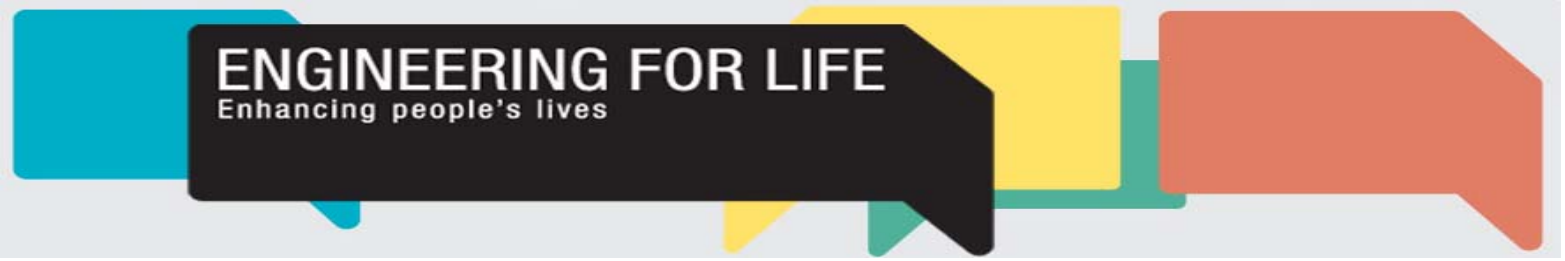
- I believe Efl despite having support mechanisms is typical of peer academic behaviour

- What motivate people is a complex issue


Symbols
Heroes
Rituals
Values
Practices



Thank you

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