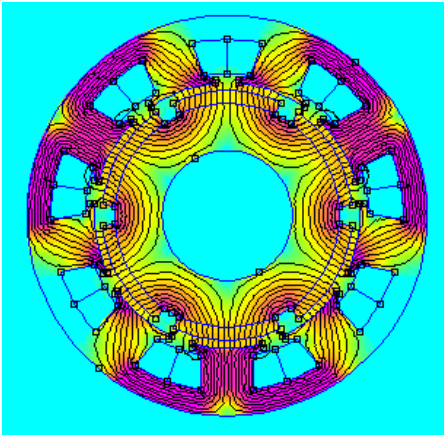


Empowering Female Engineers in Current and Emerging Engineering Roles

Work-life balance: an engineer's account



Dr Judith Apsley,
EEE



Image sources

https://en.wikipedia.org/wiki/Westland_Sea_King

Overview

- Personal history
- The challenges of work-life balance
 - Undergrad
 - Early career
 - Maternity
 - Later career
- The rewards
- My questions for you
- Questions



Image Source: 4-Navitas

Family history

Marjorie. 1887-1987

Debutante, officers wife, war work, farmer's wife.

Belinda. 1929-

Graduate, antibiotics research, 10 year career break, nursery assistant, lab technician.

Judith. 1964-

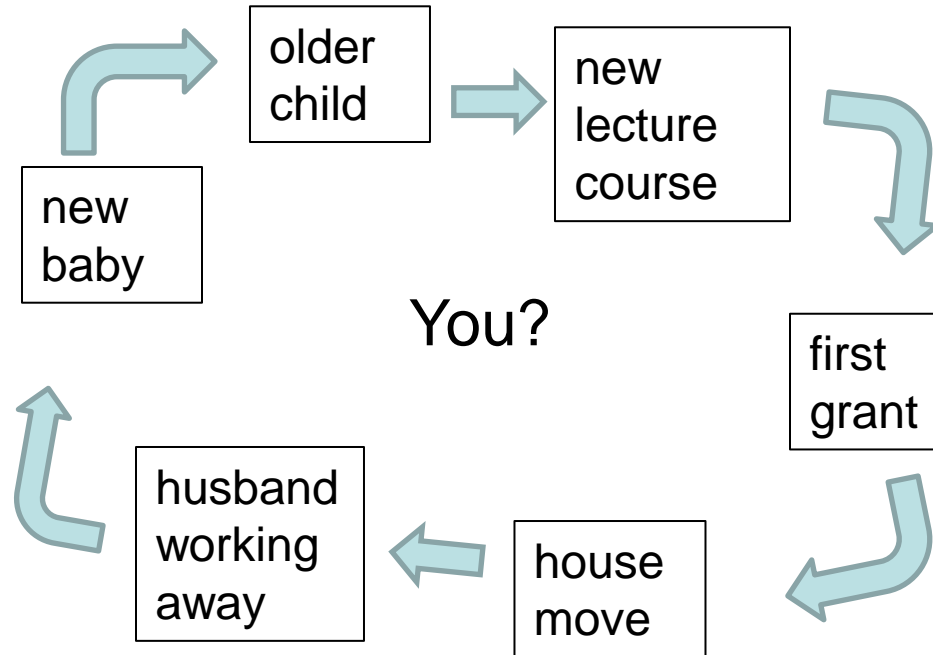
Apprenticeship, PhD, consultancy, maternity, small business, academia, 80% FTE.

Miriam & Elizabeth.

Postgrad - industrial maths
Undergrad - biochemistry.

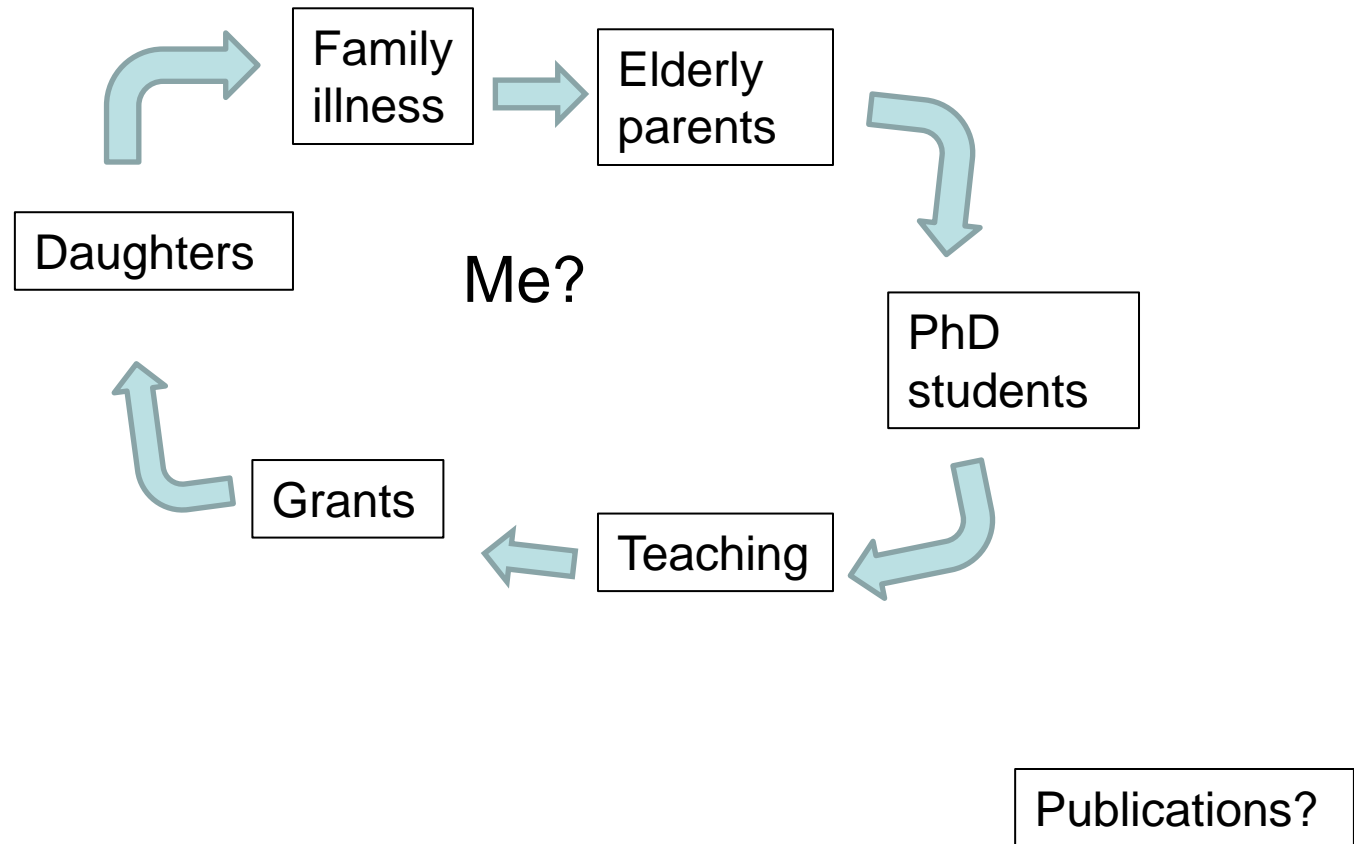
Work-life balance

- How good are you at juggling?



Work-life balance

- How good are you at juggling?



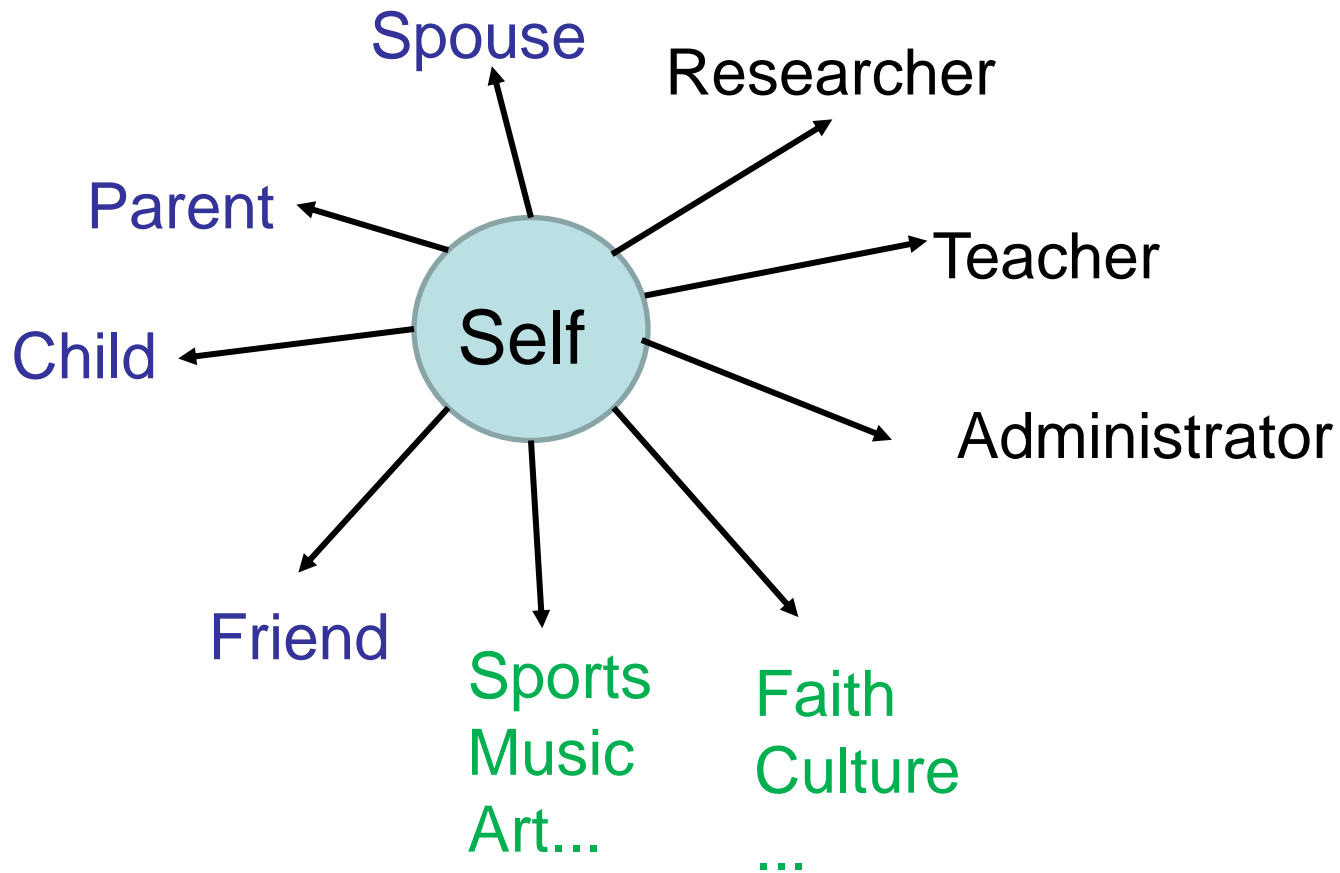
Staff survey 2017

- 70% say their immediate manager helps them find a good work-life balance,
- 9% say they have been discriminated against or bullied in the last 12 months (below the sector average)

- 66% feel they have had to put a lot of time in the last 12 months to meet the demands of their workload
- 36% are unable to handle all the conflicting demands on their time.
- 6% always, 25% frequently, 67% occasionally feel stressed at work

Source: University of Manchester, Staff Survey, 2017, Capita Solutions, available on staffnet

Identity/roles



Undergraduate

As a supervisor, problems with studies frequently relate to

- Money problems, part-time jobs
- Relationships
- Accommodation and peer groups
- Physical and mental health
- Exam pressure

Generally,

- Good peer support outweighs problems.
- Don't be worried about asking for help.

image source:

<https://nittanynewslehighvalley.com/1177/campus-life/a-day-to-remember/>



Undergraduate

At UCAS interviews, the female candidates stand out:

- Been to open days, done competitions/awards (e.g. CREST, UKMT), taster days or work experience.
- Made a positive choice for engineering

Continues into job applications, interviews, scholarships...

image source:

<https://nittanynewslehighvalley.com/1177/campus-life/a-day-to-remember/>



Early career

Academic - Short term contracts

- Keep canvassing head of school, Nancy Rothwell, etc
- Look at getting your own money – fellowships
- Build a personal network: LinkedIn, ResearchGate, conferences and workshops

Industry - not a job for life

- Keep up to date, CPD: IEEE/IET etc
- Get chartered (CEng)
- Build a personal network: LinkedIn

Everywhere I've worked has had redundancies.

I've been made redundant once

Early career

Long distance relationships: balancing 2 careers



Either

- Choose a partner with good transferrable skills (teaching, nursing, accountancy, IT, etc) who can work anywhere...

Or

- Do a lot of talking to each other and make sure the compromises are understood, appreciated, balanced.

image source:

<https://www.globe-expert.co.uk/caly-toys-maxi-globe-inflatable-globe>

Maternity

Very Challenging – but personally rewarding

- There is no best time to have a baby, but there are some less good ones:
 - over 35/40/...?
 - in a failing relationship
 - no support network
- Research council grants allow for maternity leave
- Fathers can share leave, e.g. 6 months each.

I was classed as as an 'elderly primagravida' at thirty

Engineering may be more supportive about maternity than other sectors.

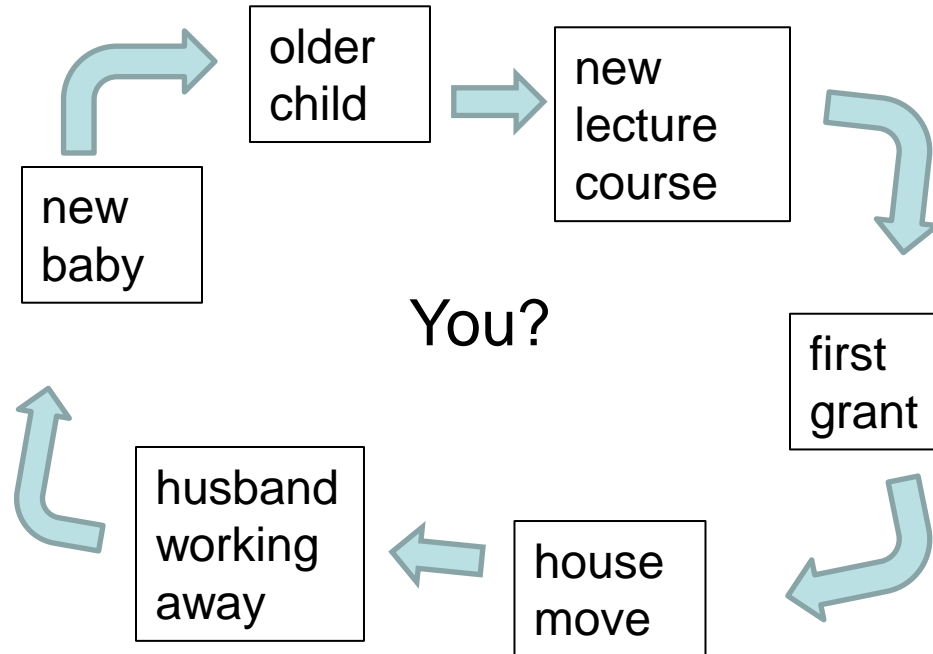
image source:

<https://www.pinterest.co.uk/pin/471118811004977506/>



Young family

- How good are you at juggling?



Young family

Even More Challenging – but a great joy

- *Your children are only young once.*
- *Don't judge, everyone does parenting differently*
- *Childcare is very expensive in the UK.*
- *Build up your support network (grandparents, school mums, childminders, babysitters, ...).*
- *Do a lot of talking to your partner and make sure the compromises are understood, appreciated, balanced.*

Conferences, working away, journal publications and 'esteem roles', become much more difficult.



Later career

Children get easier (usually), but parents take over.

- Spend time with the older generation.
- Do the hospital visits and funerals.
- Spend time with your teenage/ young adult children.



Job insecurity. A change from doing, to leading a team.

- Keep up to date, CPD
- Learn new skills
 - people
 - communication
 - finance/HR/legal
 - time management and delegation

Your
parenting
skills are an
advantage

image source: <http://www.alamy.com/stock-photo-uk-road-sign-warning-of-nursing-home-old-people-oap-oaps-seniors-disabled-30842071.html>

General tips

- Arrive and leave on time.
- Try not to send emails at evenings and weekends.
- Be aware of colleagues, when you are scheduling meetings or setting deadlines.
- Take your holidays
- Visit your family and friends.
- Do things you enjoy.

Do as I say, not
as I do.

No-one ever
wishes they'd
spent more time
with their boss.

Rewards

Not fame or fortune. My personal career choices haven't put me high up the career ladder. But rewards are

- SANITY
- Self-respect
- Satisfaction
- Relationships

My children are the most rewarding project I have ever worked on...and sometimes the most challenging



My Questions

1. Why do teenage girls choose to drop science subjects at age 13-16? What would change this?
2. Are female undergrads and postgrads getting the support they need in FSE?
3. How do we encourage more girls to come to Manchester?
4. What is the impact of a career break or a non-conventional career? How should it be evaluated, e.g. in promotion?

Your Questions?

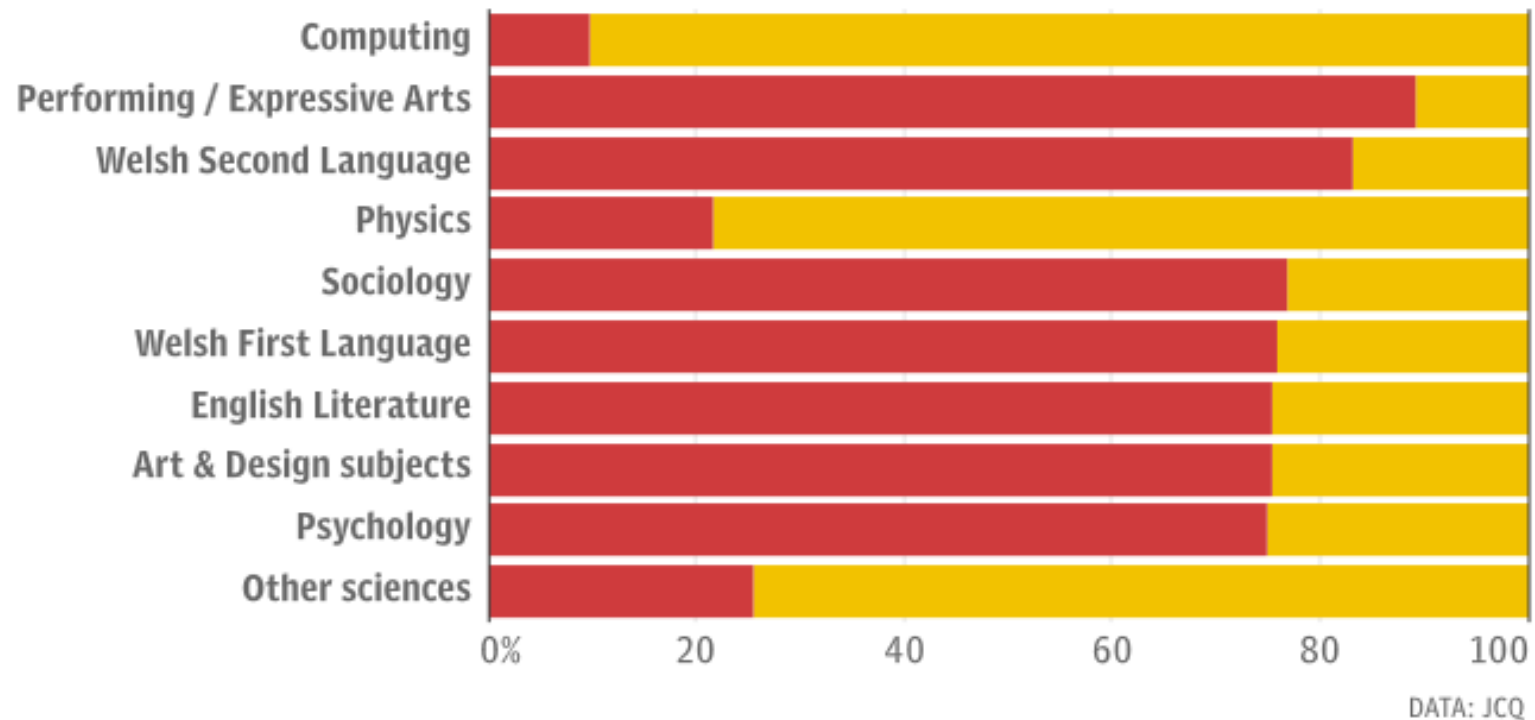
Before university

The biggest gender challenges happen before university

The largest gender gaps in A level subjects

Proportion of males and females taking each subject (%)

◆ Female ◆ Male



Source: [Camilla Turner](#), Education Editor [Ashley Kirk](#) 17 August 2017 • 3:07pm, The Daily Telegraph, <http://www.telegraph.co.uk/education/2017/08/17/a-level-results-2017-first-rise-top-grades-six-years-despite/>