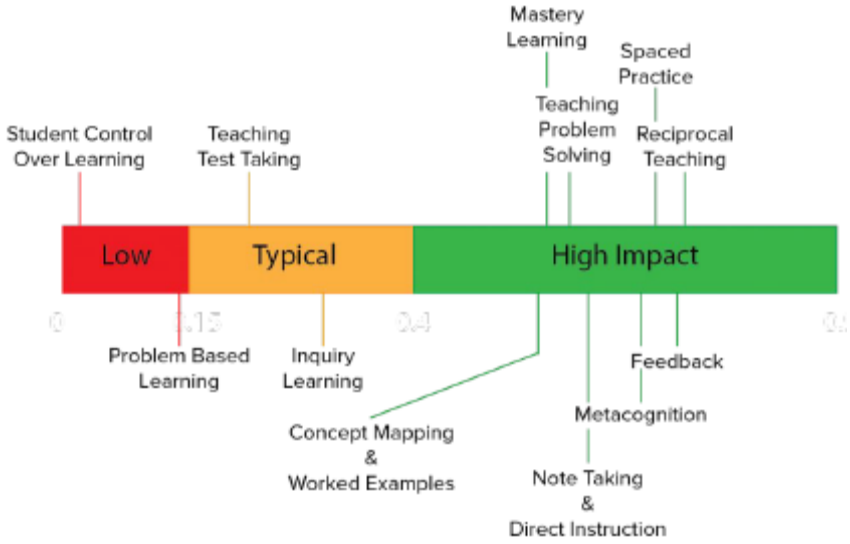
WEEK 1 - INTRO

- ->Design->implement->evaluate->analyze->
- What makes it hard to create usable interfaces that provide a delightful user experience?
    - Hard for designers to think like users
        - May need to understand **domain**
        - **Context** of use
        - **What the user knows**
        - What they have **experienced**
        - How they will interpret the interface elements, what they will **see**
    - Challenges of creating **specifications**
    - Some interfaces need to support complex processes
    - Design is a matter of trade-offs
    - Evolution of purposes...and of software
    - Legal IP issues may restrict options
    - Existing how-to theories and guidelines are weak
- User experience - UX
    - Usability - ISO standard till recently
        - Learnability --> How easy is it for users to accomplish basic tasks the first time they encounter the design
        - Efficiency --> Once users have learned the design, how quickly can they perform tasks
        - Memorability --> When users return to the design after a period of not using it, how easily can they re-establish proficiency
        - Errors--> How many errors do users make, how severe are these errors, and how easily can they recover from the errors
        - Satisfaction --> how pleasant is the design
    - **Definition** Usefulness = usability + utility
        - **Definition** Utility = whether it provides the features you need
        - **Definition** Usability = how easy and pleasant these features are to use
            - "usability and utility are equally important and together determine whether something is useful"
            - Relevant to regular ongoing use, learning, infrequent use
            - Use by people with the widest range of capabilities
            - Important for development, procurement, review or comparison and marketing and market research
            - *Misconceptions include*
                - *Usability as an after-thought at the end in terms of testing only or adding some glitz*
                - *Usability as only about colours and visual effect...artistic aspects as opposed to enabling people to complete the tasks*
                - *Expect to learn some rigid rules, like the syntax of a programming language and follow them to create usable interfaces*
    - Affect, satisfaction, emotional impact, fun
    - UX is about moving "user satisfaction" to the centre
        - Emotional and visceral response
        - Fun(hedonic response), exciting
        - Artistic appeal
        - Match to fashions and user expectations (or not): surprising, boring
        - Gestalt (Overall feeling)
    - **Recent definition - 2018 ISO standard - Usability is the extent to which a system, product, or service can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.**
    - Usability is relevant to
        - **Regular ongoing use** to enable users to achieve their goals effectively, efficiently and with satisfaction
        - **Learning** to enable new users to be effective efficient and satisfied when starting to use a system, product or service
        - **Infrequent use** to enable users to be effective efficient and satisfied with the system on each reuse
        - Use by people with the wildest **range of capabilities**
        - Minimalizing the risk and the undesirable consequences of use **errors**
        - Maintenance, in that it enables maintenance tasks to be completed effectively, efficiently and with satisfaction
    - Usability is relevant when designing or evaluating interactions with a system, product or service for the purpose of (development, procurement, review or comparison; and marketing and market research)
- Concept mapping
    - **Definition - is a way to show your understanding, showing the key ideas relevant to a focus question**

- Contains concepts and propositions (define - contain two or more concepts connected using linking words or phrases to form a meaningful statement.
- How
    - Identify key concept first and write them in a list
    - Put the most general/central concept at the top
    - Use vertical position to show level of detail (general at the top, detailed at the bottom)
    - Similar things should be placed near each other
    - Draw linking lines, each with a label to form propositions

WEEK 2 – AFFORDANCE



- IMPORTANT TERMS
  - Goal - something a person wants to do
  - Abstract task - we use this as a synonym for goal
  - Goal/task hierarchy - subtasks (e.g how many steps walked, how active, how inactive)
  - Concrete task - something you can ask a person to do, (e.g for a particular dataset how many steps did i walk each day of the last week)
- Analysis report
  - Detailed notes from research study of people's current use of smartphone physical activity data and how they believe it could be useful to them
  - Study of the literature tools and resources about using physical data
  - Summary and conclusions
- Properties of good concrete tasks
  - They are **concrete**
    - A user understands what to do after reading them
  - You can **judge success**
    - There should be a clear start and a clear end at which point you can assess whether the user was able to do the task successfully
  - They **do not lead** the user
    - Tell WHAT to do, not HOW to do
  - They are **relevant**
    - Users of your real system would be expected to do them
  - The set of tasks gives **good coverage**
    - **Frugal**, each task tests different things
    - **Effective**, each task covers an important aspect
  - They are the **right level of difficulty**
    - Start with easy tasks, Time the test and tell the user ahead of time an estimate of the duration
  - They are **respectful** and **avoid offending** the user
    - Humour is dangerous
- Example of concrete task
  - Suppose you want to work out, how many kilojoules you should be eating for a healthy weight
- How to determine **abstract** tasks people ought to be able to do at the interface you aim to build?
  - 1.study users and what they do, 2.ask them what they would like to be able to do, 3.find out what others have already done to discover 1 and 2