The land of content lost

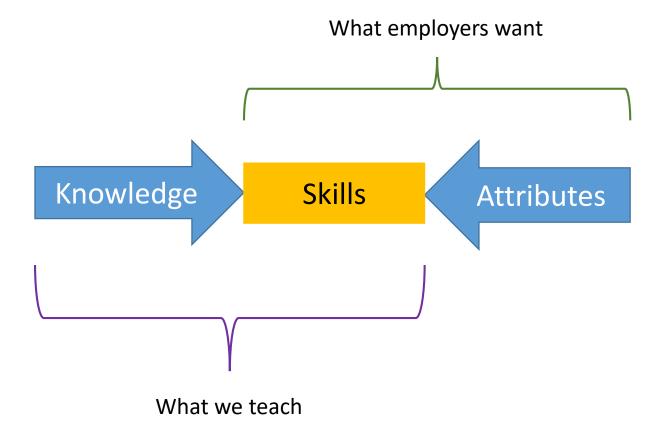
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Knowledge – Skills – Attributes





Active learning...

... is a **good thing**!

But Bonwell and Eison give four barriers:-

- The difficulty in adequately covering the assigned course content in the limited class time available;
- A possible increase in the amount of preparation time;
- The difficulty of using active learning in large classes;
- A lack of needed materials, equipment, or resources.

C Bonwell and J Eison, *Active learning: Creating excitement in the classroom*, ASHE-ERIC reports, 1991



A module's learning objectives

- Might be stated as things students can do
- But course content might be given as knowledge students should acquire
- See CS15020 for example...
- (How) do we introduce students to this knowledge?



Lectures...

- Are a way of delivering content to a large classes.
 - Effective? Perhaps not
 - Efficient? In a way
- I dare say lecture slots aren't going to be replaced any time soon
- If we interrupt lecturing for active learning, less time to deliver content
- English and creative writing people should look away now;)



The land of content lost

What are these well remembered slides
In PowerPoint™ so plain?
What of the lore I loved to teach
But may not teach again?

It is the land of content lost

To landfill or to burn

To the fire my knowledge tossed

While active students learn

With apologies to A E Housman and any English or creative writing teachers too slow to look away...



Programming for scientists

- For MSc students
 - So a small cohort
- Introduces programming using Python
- 3 contact hours a week
 - 2 "lecture"
 - 1 practical
 - but all in the same computer room
- Assessment by two practical assignments
 - No exam



Possible approach

- Don't spend (much) lecture time telling students things they can look up
- Tell them what they need to know so they can look "facts" up
- Point them at where they can look things up
- Make Panopto style podcasts available before the lecture so student have seen the material
 - We can discuss rather than present the material in class
 - So it's more like a tutorial



Questions, questions...

- Will this approach work?
 - If not, why not?
 - Will it scale up to larger cohorts?
- Can we present material in such a passive way?
 - (That's passive on our part, not the students'!)
- What approaches have you tried?
- Can (should!?) we place less stress on knowledge and more acquisition of skills?

