



THE UNIVERSITY
of LIVERPOOL

The role and reason for PBL in an undergraduate curriculum

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Three types of P*L

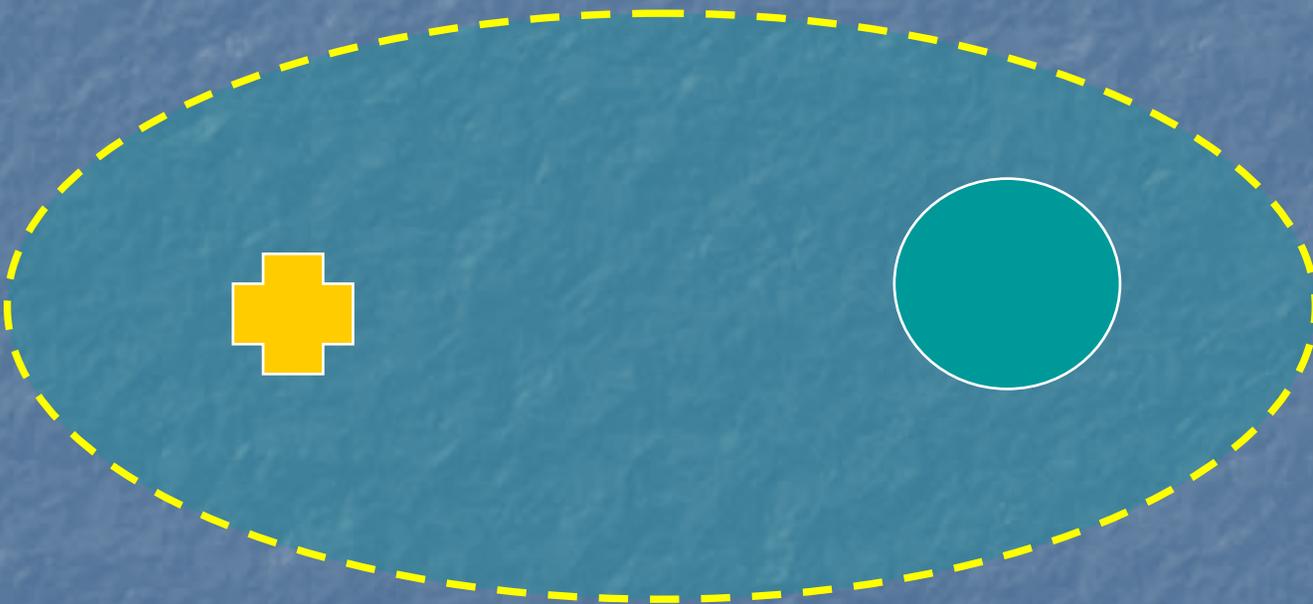
- Problem Based Learning
 - Students work wholly or partly on relevant problems
- Problem Oriented Learning
 - Content and method are selected using such problems
- Problem Solving Learning
 - Comes after “the basics” have been learnt

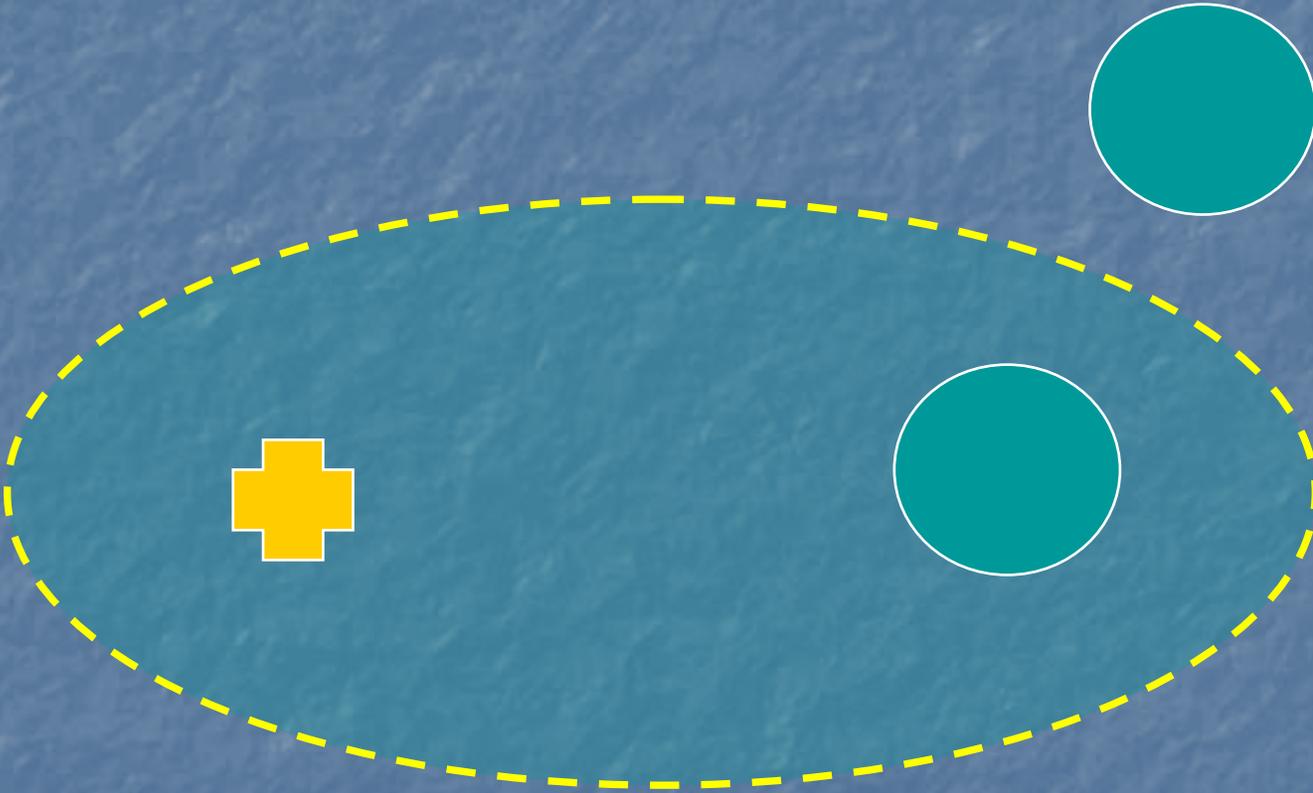
A good theoretical paper

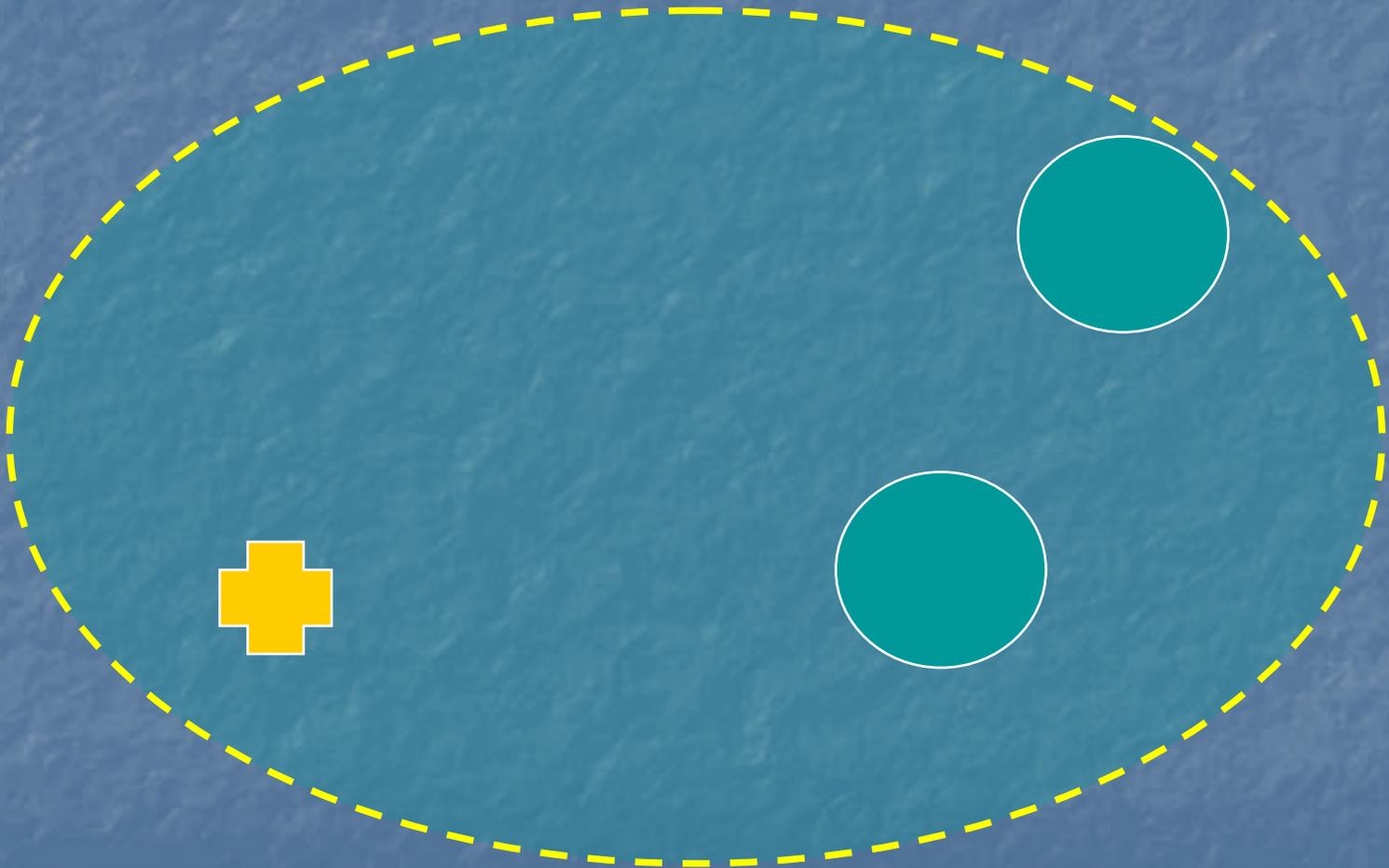
- Do we all mean the same thing by “Problem-based Learning”? A review of the concepts and a formulation of the ground rules.
 - Gillian Maudsley (1999) *Academic Medicine* 74:178-185

Philosophically

- Knowledge acquisition is
 - Active
 - Iterative
 - Self directed
- Acquiring new knowledge is not the starting point for learning







Philosophically

- Knowledge acquisition is
 - Active
 - Iterative
 - Self directed
- Acquiring new knowledge is not the starting point for learning
- Don't undermine the process

Whatever happens

- The students can not be left to “teach themselves” in a vacuum.
- The emphasis has to be on a scaffolded approach.
- This in turn leads to three problems –
 - How much scaffolding
 - When and
 - How to remove it

Three considerations

- P^*L
- What are the cases for?
 - To help the student decide what the syllabus is?
 - To guide the student through the syllabus?
 - To provide experience in problem solving?
- What is the tutor/facilitator for?

Start from the basics

- The first question to ask is “Why?”
- If you want your students
 - to acquire knowledge in context
 - to be able to articulate and apply what they know
 - to be able to integrate information from several different disciplines
 - to develop critical thinking
 - and to acquire the habit of Life Long Learning

Then PBL might be right for
your students

And you

But remember

- PBL will not enable them to learn everything (skills etc.,)
- PBL will only be part of the curriculum
- PBL is resource intensive

and

- It is possible to derail PBL by
 - Not giving enough time to it
 - Not giving the students responsibility for their learning
 - Not providing enough support material (plenaries, practicals, skills classes, clinical experience)

The course is only as good as
the cases you use

And

- You must train
 - Staff and students
- And evaluate
 - Staff and students

The basic process

- Clarify terms
- What do you want to find out
 - (after further study)
- Activate *and articulate* prior knowledge
- Think and talk around the problem
 - Use a mind map
- Identify precise learning objectives

And

Report back without notes

And, at every session,

Evaluate

How it works in Liverpool

- New case scenario every two weeks
- Three PBL meetings every two weeks
- Each session lasts 2 hours
- Facilitated by a PBL tutor
 - Each of whom is an expert in their own field
 - And is trained as a PBL facilitator
- Monday, Monday, Friday (or similar)
- Compulsory, punctual attendance

PBL groups do it
together

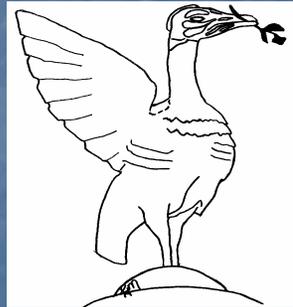
Say *what* you know
not *that* you know

Are we doing it right?

Liverpool PBL sessions:

- *Look for phenomena requiring explanation*
- *Investigate prior knowledge and experience*
- *Volunteer shared learning objectives*
- *Explain the essence of the case scenario*
- *Reflect and evaluate*

...pool



Maudsley G...

British Medical Journal 1999; 318: 657-661.

What subject areas?

- All

Resources

- Time
- Space
- Facilitators with time....
- Books etc.,
- Vision

What is the key to success?

- Knowing why
- Facilitators who understand the process
- And who are interested in how students learn
- Being able to give the students responsibility for their own learning