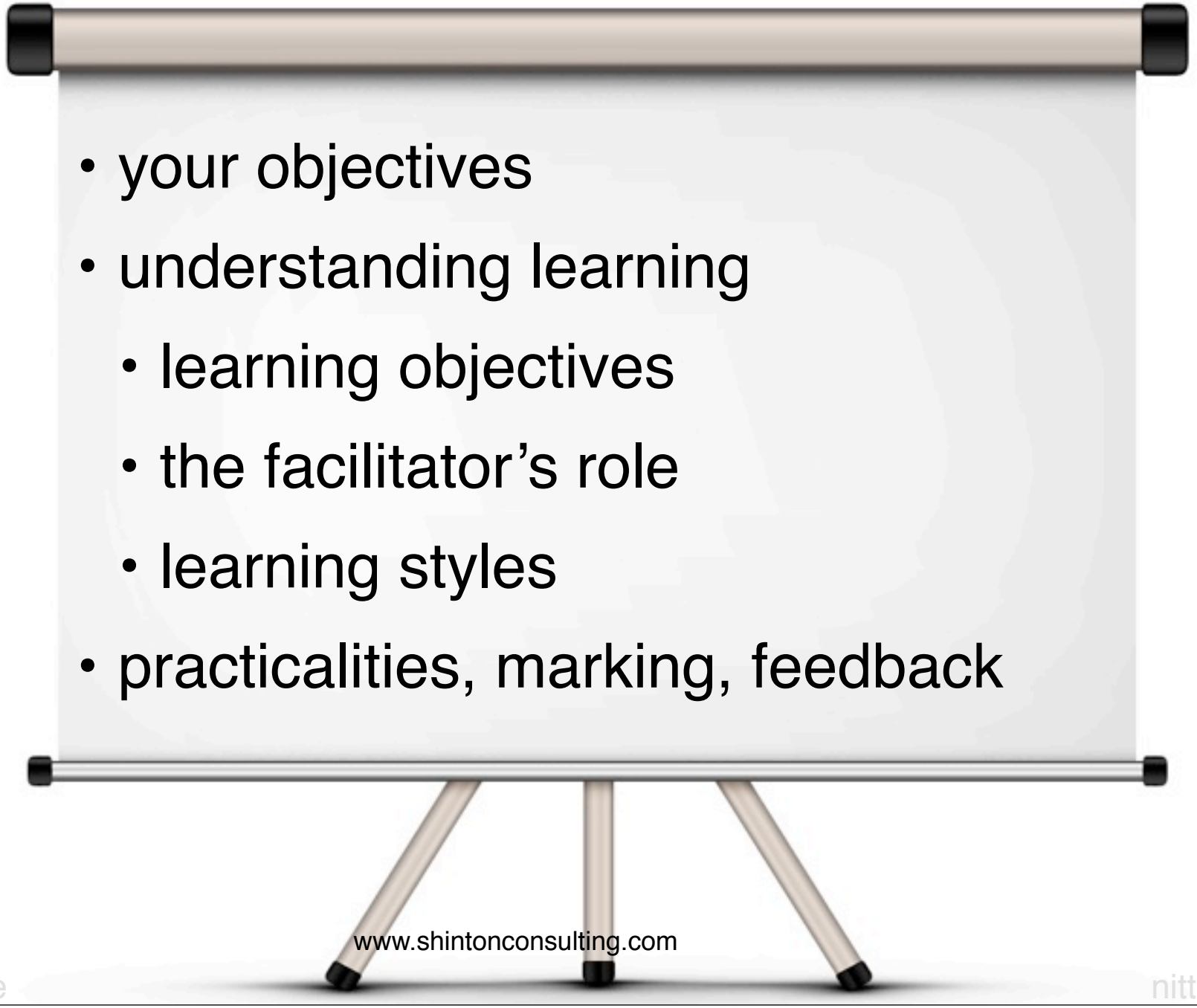
supporting learning in others: facilitation skills

Dr Sara Shinton


• your objectives
• understanding learning
• learning objectives
• the facilitator's role
• learning styles
• practicalities, marking, feedback
www.shintonconsulting.com
big picture
nitty gritty

What you'll find in this file

- The slides we worked with
- Additional slides - always have additional material in workshops ready to use if there is a small, or quiet group
- Selected flipchart shots from other sessions which add value

why are we here?

- name & research area
- where you expect to use these skills
- your principal objective today

PhD or RA ?

concerns on next slide

your concerns?

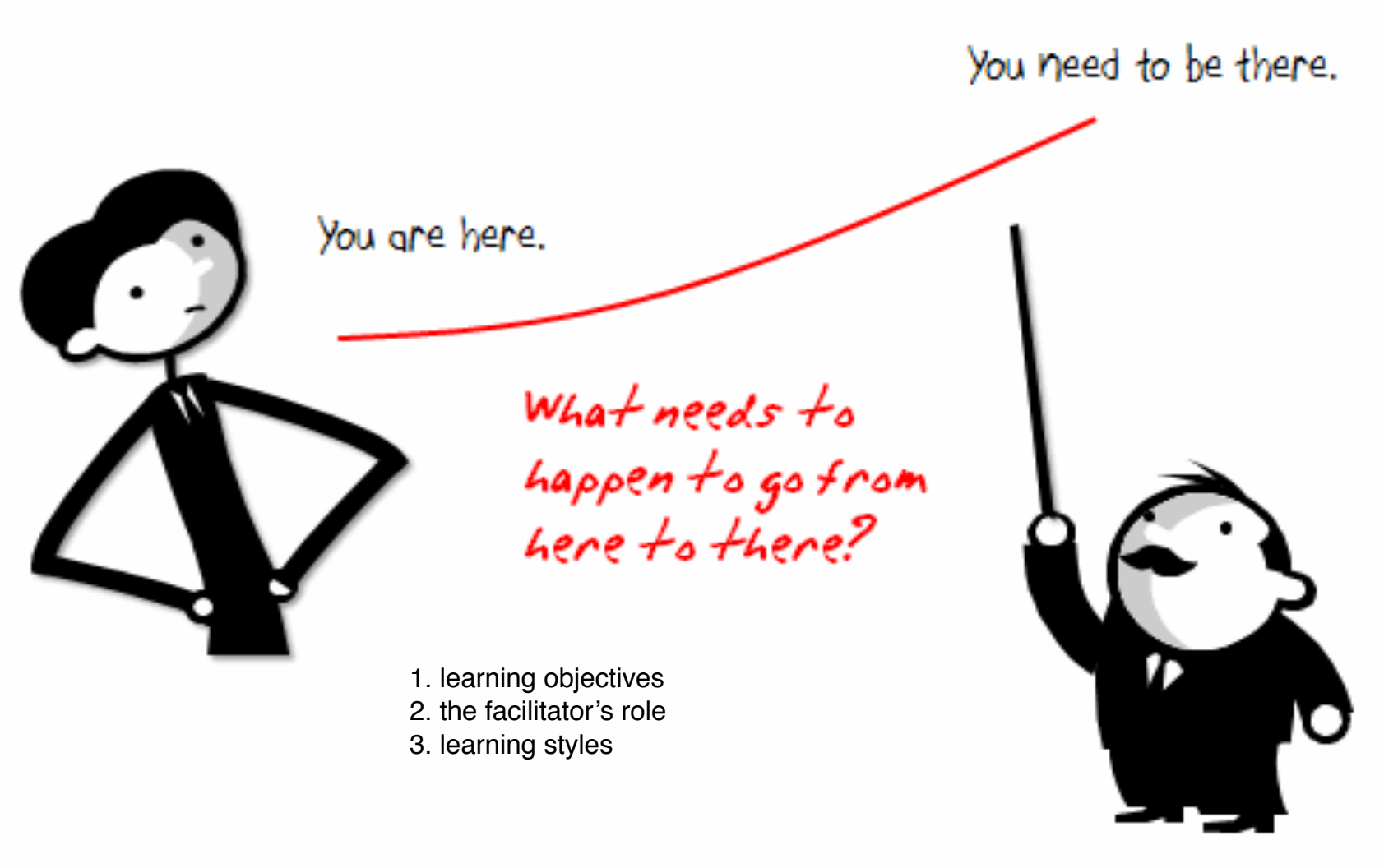
Concerns

- Conveying experience to students
  - Managing their behaviour/lack of recognition
- Marking and assessment
- Not doing it for them
- Helping students who've had difficult experiences
- Dealing with student feedback and their reaction to assessments
- Managing unstructured situations
- Engaging with the audience, when on-line

Qu. what are practical classes?

why do we have them?

Typical answers:
To build confidence and lab skills
Learn particular techniques
Work with others
Put theory into practice / develop deeper understanding
Encourage critical thinking...



1. learning objectives
2. the facilitator's role
3. learning styles

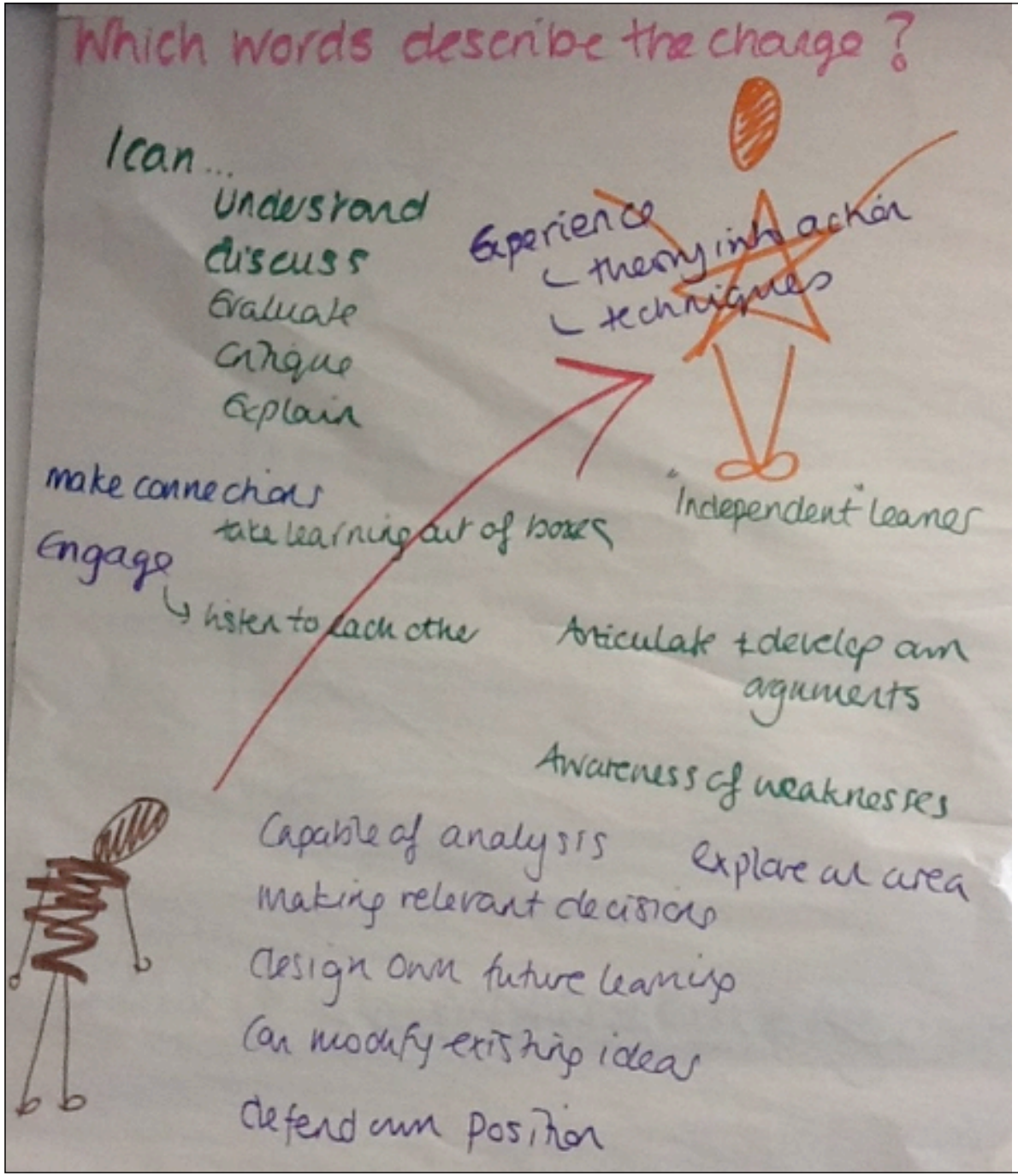
1. learning objectives

- in subject groups: what are the learning objectives for your sessions?

- the verbs describe the change you want to see in your students

or situation groups if appropriate

‘Which words describe the change’



Bloom's revised taxonomy:

creating

evaluating

analysing

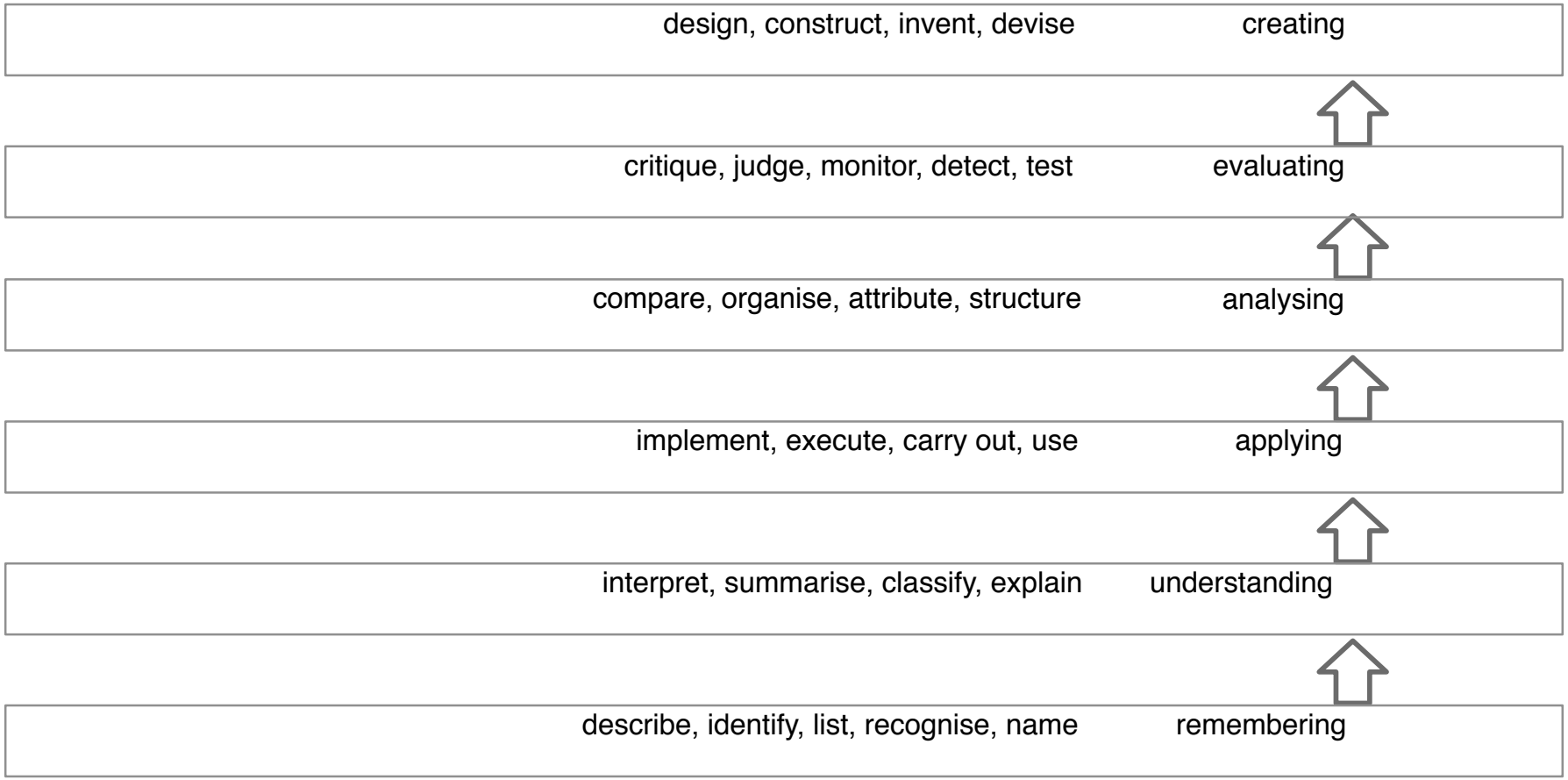
applying

understanding

remembering

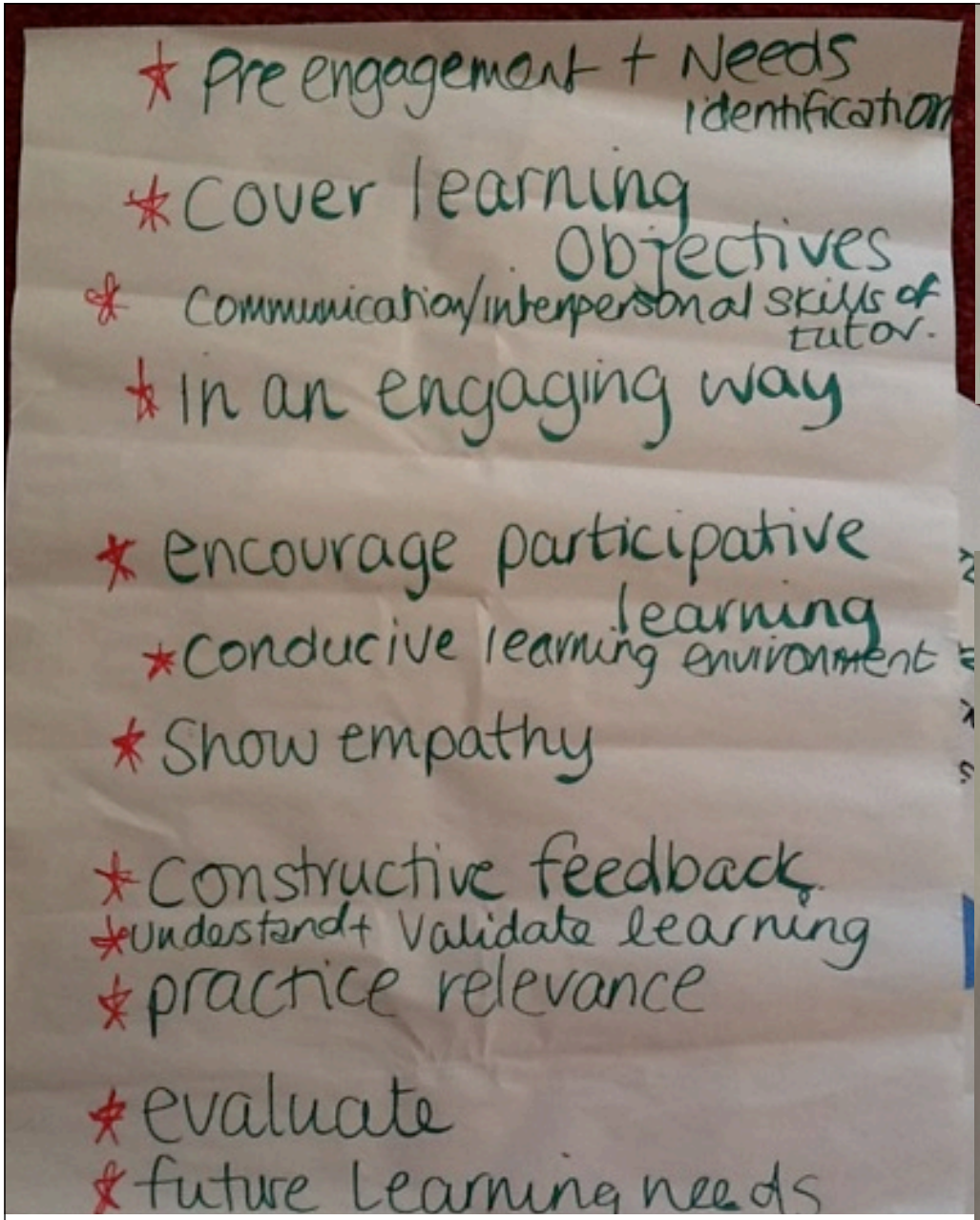
verbs that describe the change we want to see:

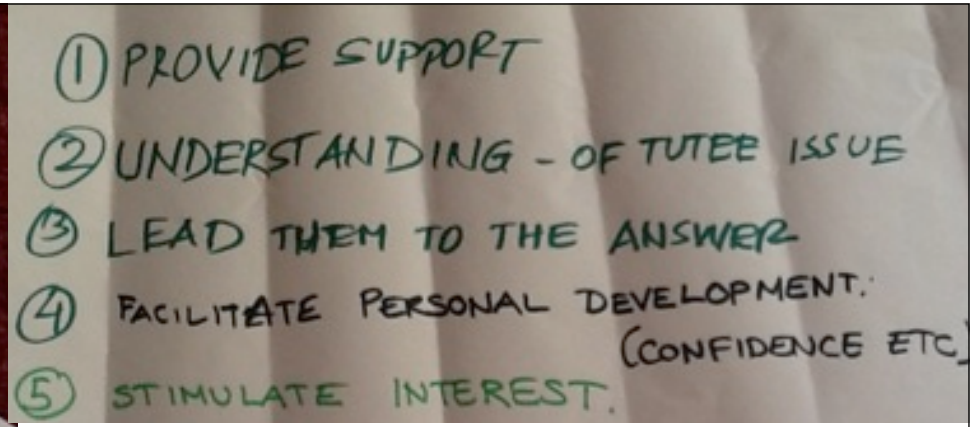
Bloom's revised taxonomy:

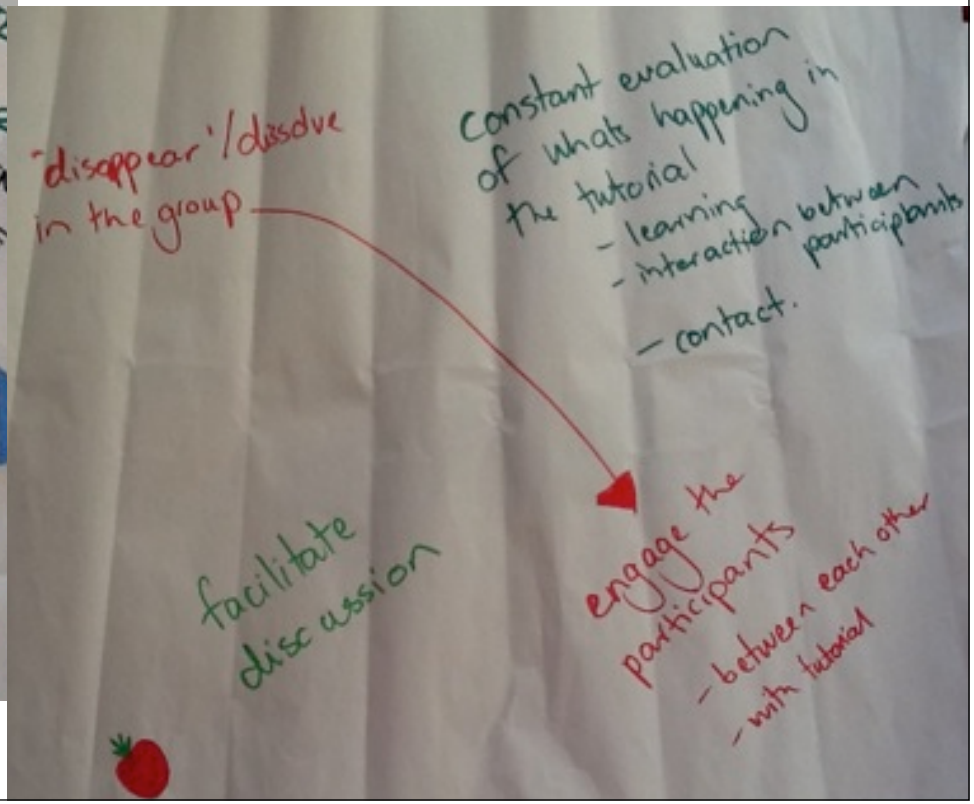


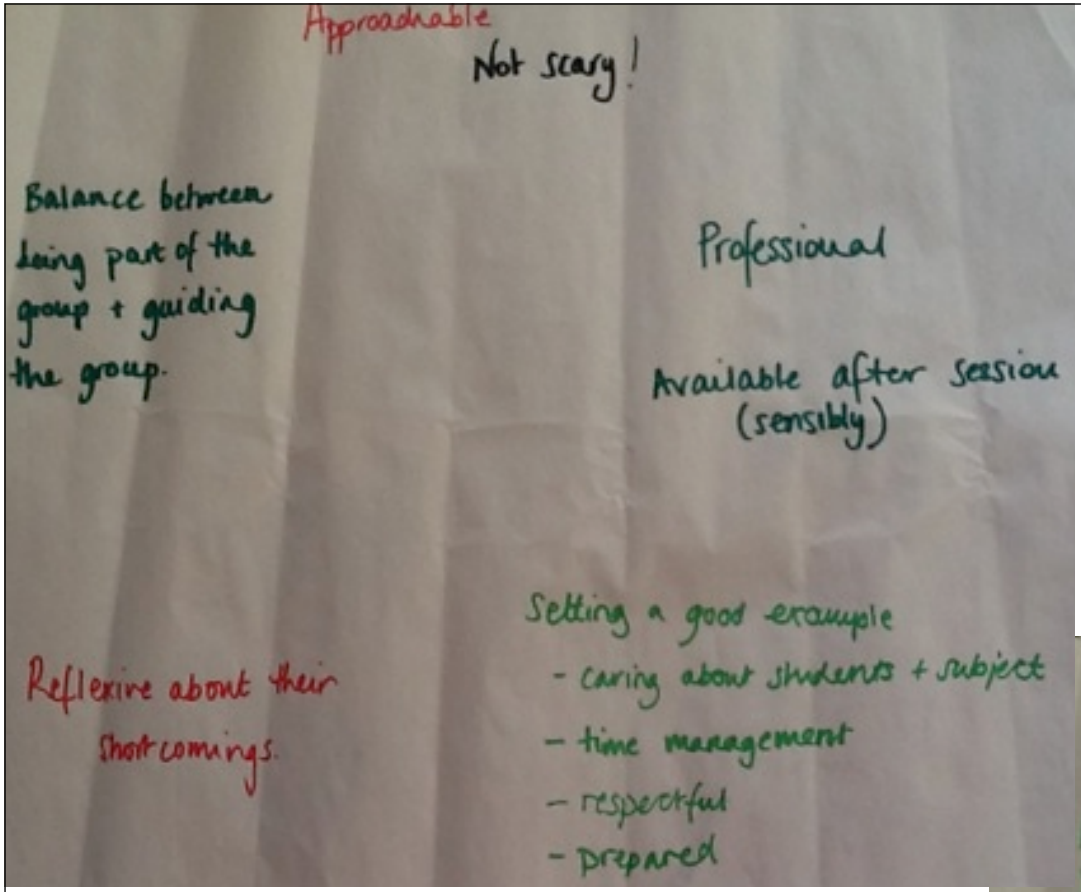
2. the facilitator's role

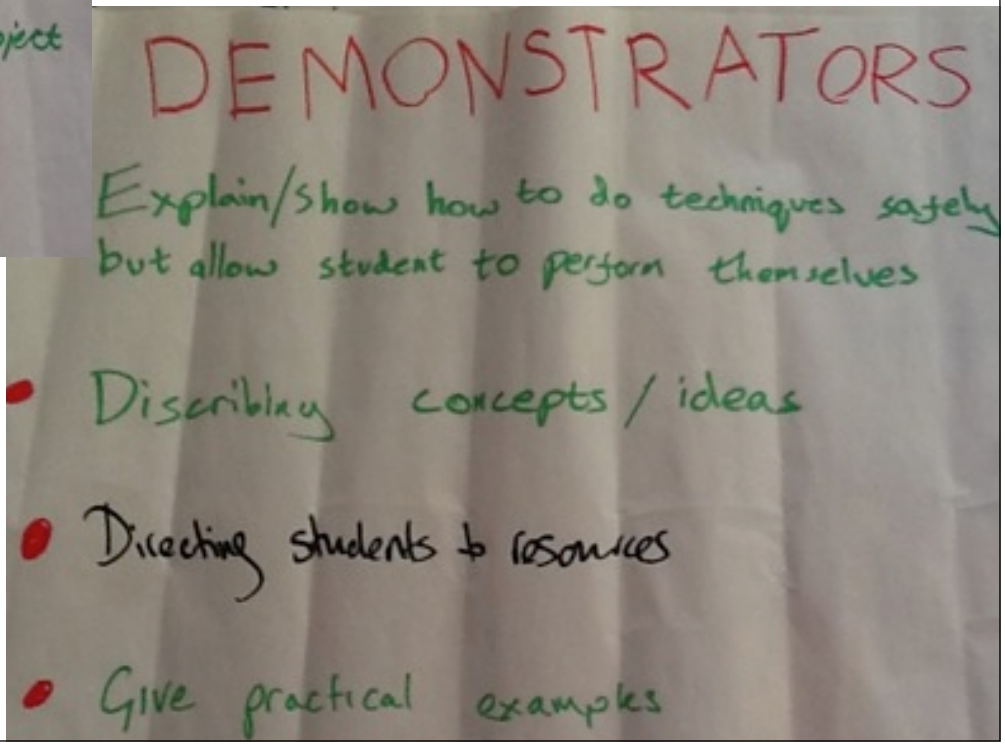
what does the ideal teaching assistant / demonstrator / tutorial leader actually do ?


* Pre engagement + Needs identification
* Cover learning objectives
* Communication/interpersonal skills of tutor.
* In an engaging way
* Encourage participative learning
* Conducive learning environment
* Show empathy
* Constructive feedback.
* Understand + Validate learning
* practice relevance
* evaluate
* future Learning needs

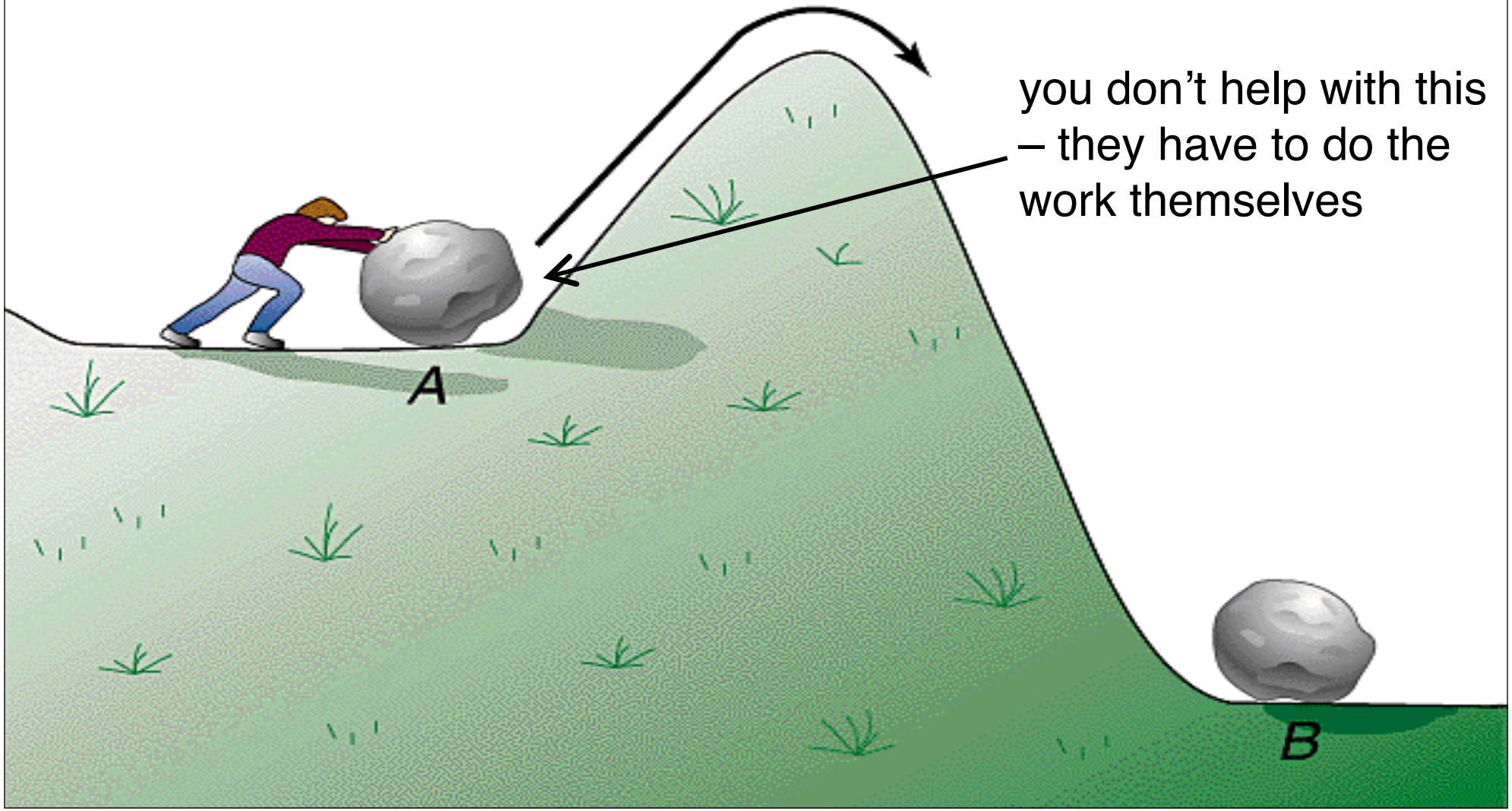

① PROVIDE SUPPORT
② UNDERSTANDING - OF TUTEE ISSUE
③ LEAD THEM TO THE ANSWER
④ FACILITATE PERSONAL DEVELOPMENT. (CONFIDENCE ETC)
⑤ STIMULATE INTEREST.


'disappear'/dissolve in the group
constant evaluation of whats happening in the tutorial
- learning
- interaction between participants
- contact.
facilitate discussion
engage the participants
- between each other
- with tutorial

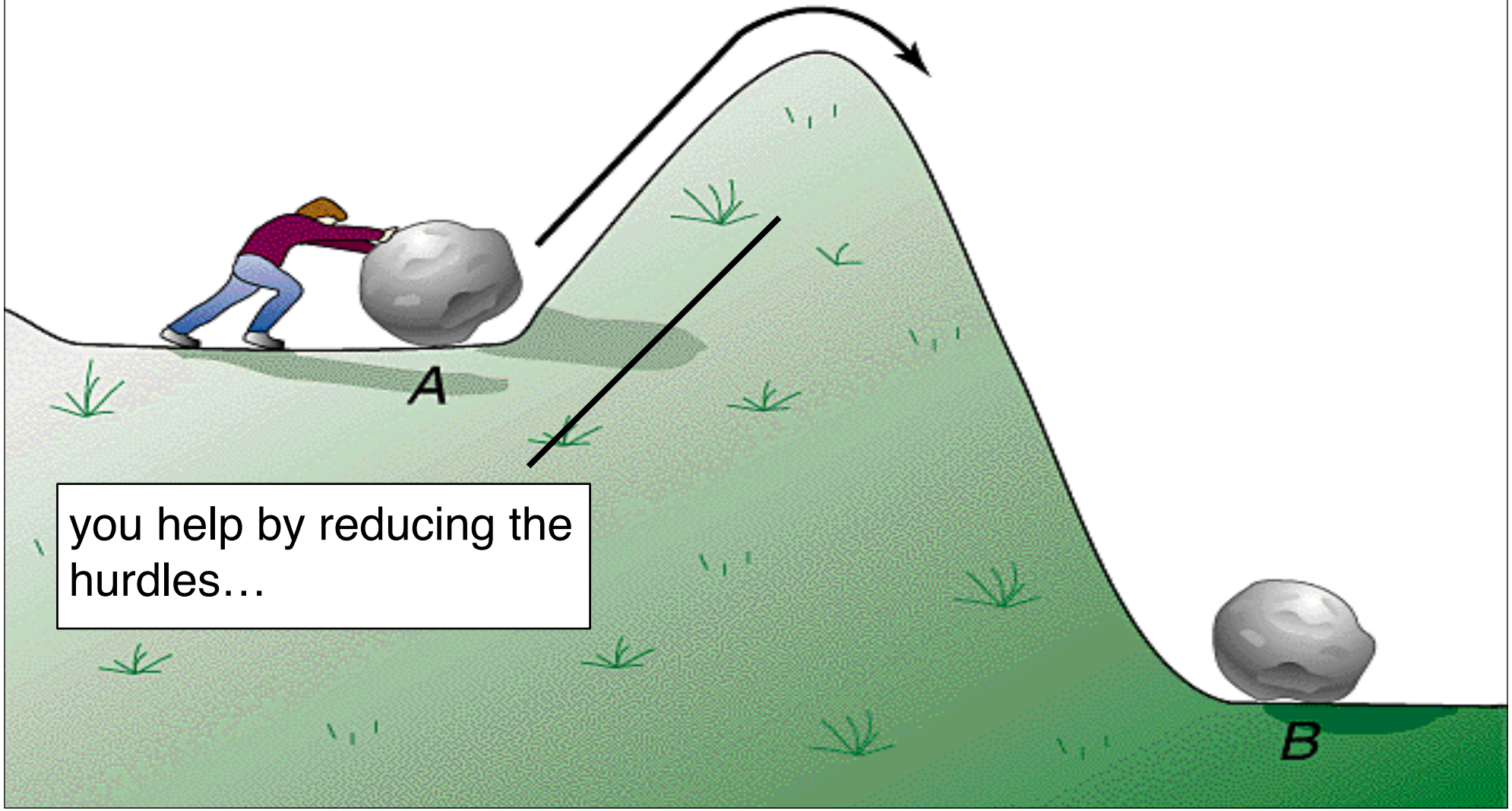

Approachable
Not scary!
Balance between being part of the group + guiding the group.
Professional
Available after session (sensibly)
Reflexive about their shortcomings.
Setting a good example
- caring about students + subject
- time management
- respectful
- prepared


DEMONSTRATORS
Explain/show how to do techniques safely but allow student to perform themselves
Describing concepts / ideas
Directing students to resources
Give practical examples

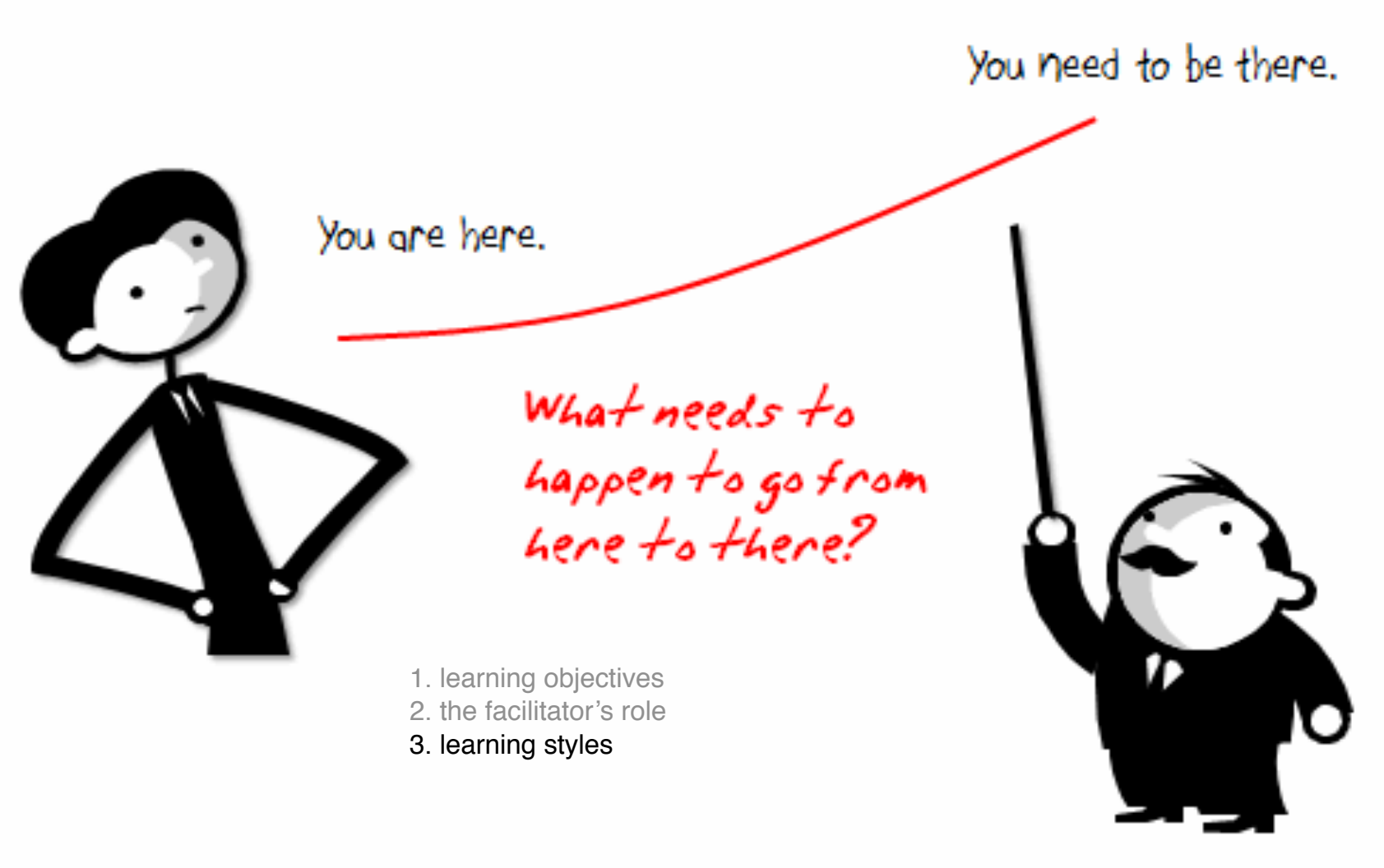
what is facilitation?



what is facilitation?



you help by reducing the hurdles…



1. learning objectives
2. the facilitator's role
3. learning styles

3. learning styles

we'll look at: different ways of learning

what students expect from us

what else they experience

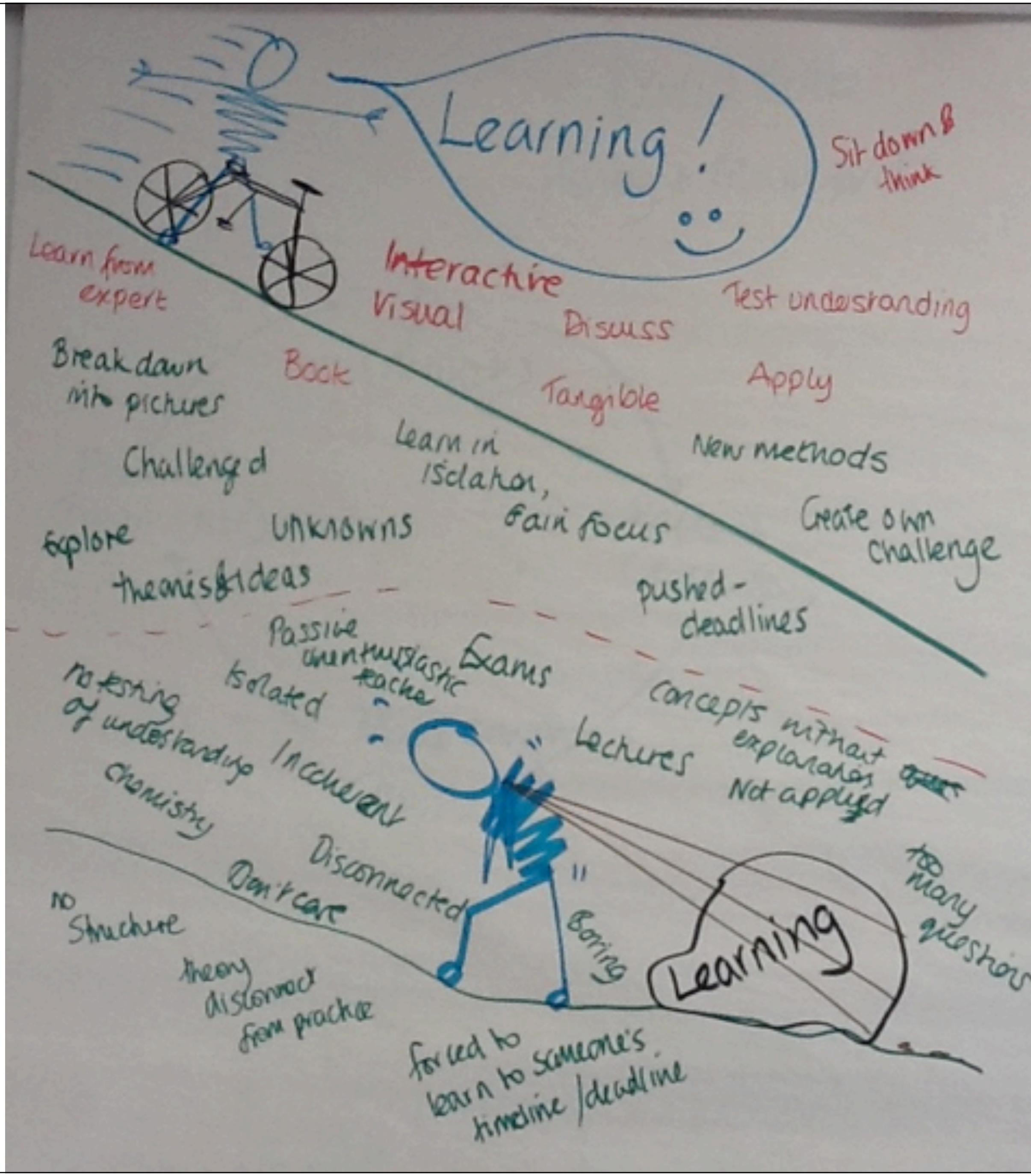
a card sort

- start with our own learning…
- different learning statements and situations

Lecture	Discussion group	Book based, independent	Trial and error	Coaching – being guided at own pace
Time to explore wider links and associations	Practical application of knowledge – can implement	Carry out detailed research	Can think and observe before acting	Get thrown in at deep end
Work as a team	Work independently	Produce detailed reports	Interesting theories and concepts, but not immediately relevant	Watching video/listening to podcasts
Lots of images and pictures	Lots of text	Need variety and fast pace	Need consistent, steady pace	Find own solutions
Credibility of presenter critical	Credibility of ideas critical	Action learning – define own problem and find own solution	Structured learning –clear process through information,always working with the “known”	Hands-on, learn by doing

a card sort

- choose the cards which describe easier learning for you
- then choose the ones which “turn you off” learning
- compare with others, then feedback...


Learning!
Sit down & think
Learn from expert
Interactive
Visual
Discuss
Test understanding
Break down into pictures
Book
Tangible
Apply
Challenged
Learn in isolation, gain focus
New methods
Explore theories & ideas
Unknowns
Create own challenge
pushed - deadlines
Passive
unenthusiastic teacher
Exams
Isolated
no testing of understanding
concepts without explanations
Not applied
Lectures
Incoherent
Chemistry
Disconnected
Don't care
Boring
no Structure
theory disconnect from practice
Learning
too many questions
forced to learn to someone's timeline /deadline

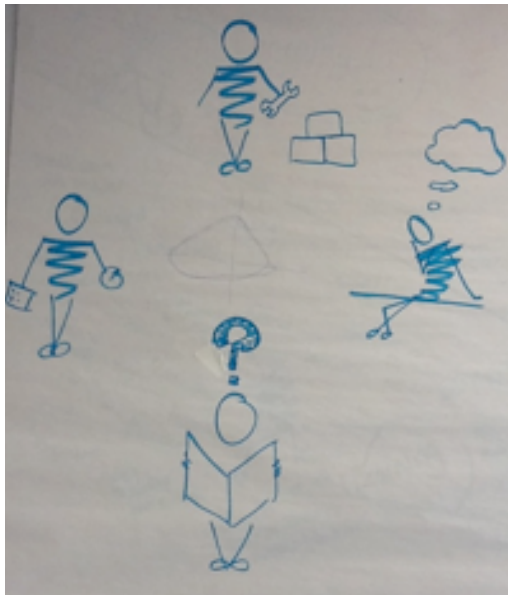
learning theory

- many different theories
- only give part of the story
- You can ask me for the questionnaire if you haven’t had it already

learning cycle

David Kolb,
then Honey &
Mumford

learning styles



David Kolb,
then Honey &
Mumford

activists – “have a go” learners

learn best when

- involved in new physical experiences, problems and opportunities
- working with others in gregarious teams
- thrown in to the deep end with a difficult task
- chairing meetings, leading discussions

but can be bored by implementation

reflectors – “stop & think” learners

learn best when

- able to stand back and observe others at work
- given opportunity to ponder and analyse experiences
- given time to think about what they have learned
- they can delay voicing an opinion or reaching a conclusion

but can feel challenged by tight deadlines

theorists – “what does it mean?” learners

learn best when:

- they have to use their own logic and knowledge
- they are in rational situations with a clear purpose
- they are offered interesting ideas or concepts to assimilate even if they are not immediately relevant
- they have the chance to challenge and probe ideas

but can be skeptical and reject apparent subjectivity or flippancy

pragmatists – “how do I use it?” learners

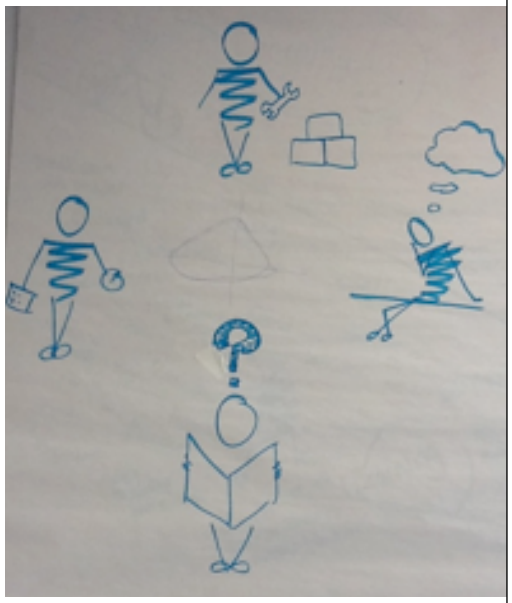
learn best when

- there is an obvious link between topic and application
- shown techniques with direct feedback or obvious real world value e.g. saving time
- they can problem solve and make decisions quickly
- shown a model they can copy or adapt e.g. from a video or a respected demonstrator

but can be bored by long discussions

your challenge

working in pairs, suggest one or two ways to accommodate all these differences



accommodating differences

Encourage students to discuss practical amongst themselves

Let them play to strengths at start

Mix up students into fresh groups -help them see each other's approaches

Give reflection/reading time at start

Be clear about timings & resources

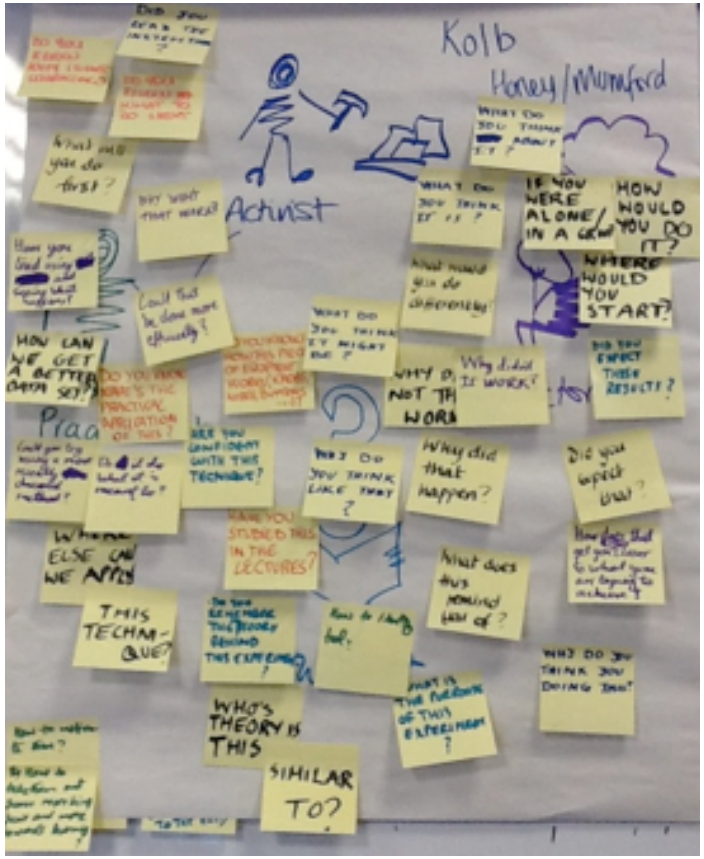
your challenge

working in pairs, suggest one or two ways to accommodate all these differences

now devise questions that will
work with the different styles to:
(a)engage
(b)challenge

Post-its !

We thought about how to guide students through the learning cycle by asking questions



Do you know what to do next?
What will you do first?
Why won't that work?
Have you tried it to see what happens?
How can we get a better data set?
Could that be done more effectively?
Do you know how this equipment works (buttons/knobs/wires)?
Does it do what it is meant to?
Could you try a more recently discovered method?
Are you confident with this technique?
Where else can we apply this technique?
What do you think it is?
How would you do it differently?
How would you do it if you were in a group?
Where would you start?
Did you expect these results?
Why didn't it work?
Did you expect that?
How does this get you closer to what you are trying to achieve?
Why do you think you are doing this?
Why did that happen?
What does this remind you of?
What is the practical application of this?
Why do you think that?
How would you identify a tool to explain or understand this?
Have you studied this in your lectures?
What is the purpose of this experiment?
Which theory would explain this?
Can you remember the theory behind this?

questions to stimulate learning

activist

why not try ‘xyz’ and see what happens?
what are you going to do next?
how would that work in a different context?
how would you do this if you were in a group?
what would that look like / sound like / feel like?
how would you deal with...?
what would happen if...?
have you thought about...? (➔ reflector)
how would you apply this concept? (➔ pragmatist)

questions to stimulate learning

reflector

what has gone well?
what has gone badly?
what could you have done better / differently?
what does this figure represent? (➔ theorist)
what are your conclusions? (➔ theorist)
why have you chosen this method? (➔ pragmatist)
how does this fit with the wider picture? (➔ theorist)
how will this help you with...? (➔ pragmatist)
what did you learn from what 'x' said?
how did the group work together? (➔ activist)
does it work? (➔ pragmatist)

questions to stimulate learning

theorist

what could explain this?
what is your goal? (➔ reflector and pragmatist)
why did this happen?
where are the holes in this theory?
how will you test your hypothesis?
what does this remind you of?
do you know how this experiment works?
how does this connect with what you've learnt before?
how can we challenge it?
how does this relate to the... science, field, work of...?
how can you apply this in a practice? (➔ pragmatist)

questions to stimulate learning

pragmatist

why do you consider this irrelevant?
why do you think you are doing this? (➔ theorist)
what is your perception about...? (➔ reflector)
when could you use this knowledge?
why learn this?
how does "real life" correspond with this model?
does implementation of this model support the theory?
(➔ theorist)

take home message

your questions create learning:

- deepen knowledge and understanding
- promote exploration and problem solving
- develop communication skills
- make it clear what university is all about...

but remember other people may think in very different ways to you...!

practicalities of supporting learning in others

- understanding the learning process
- managing the environment
- marking and feedback
- supervising project students
- pastoral care

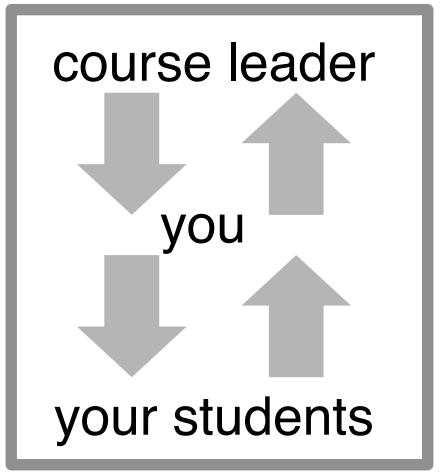
only if time, from concerns list

managing yourself and the environment

- prepare in advance – objectives?
- be aware of fire / first aid procedures

- don’t worry about nerves – they are normal
- liaise closely with all other staff

- be pro-active with students



Don’t forget technicians !

questions you can’t answer

- you only know what you know !
- no shame in following up after session
- in tutorials - clarify and repeat

practicalities of supporting learning in others

- understanding the learning process
- managing the environment
- marking and feedback
- supervising project students
- pastoral care

advice for marking

appreciate time it takes

be consistent...

- use available marking schemes*

(or make one up?)

*Essays?

ASSIGNMENT ATTACHMENTS: AN EXAMPLE [10]

Energy and Life Systems

Student's name: Assignment grade:

Itemised Rating Scale
(ticked when applicable)

STRUCTURE		
Essay relevant to topic	☐ ☐ ☐ ☐	Essay has little relevance
Topic covered in depth	☐ ☐ ☐ ☐	Superficial treatment of topic
ARGUMENT		
Accurate presentation of evidence	☐ ☐ ☐ ☐	Much evidence inaccurate or questionable
Logically developed argument	☐ ☐ ☐ ☐	Essay rambles and lacks continuity
Original and creative thought	☐ ☐ ☐ ☐	Little evidence of originality
STYLE		
Fluent piece of writing	☐ ☐ ☐ ☐	Clumsily written
Succinct writing	☐ ☐ ☐ ☐	Unnecessarily repetitive
PRESENTATION		
Legible and well set out work	☐ ☐ ☐ ☐	Untidy and difficult to read
Reasonable length	☐ ☐ ☐ ☐	Over/under length
SOURCES		
Adequate acknowledgement of sources	☐ ☐ ☐ ☐	Inadequate acknowledgement of sources
Correct citation of references	☐ ☐ ☐ ☐	Incorrect referencing
MECHANICS		
Grammatical sentences	☐ ☐ ☐ ☐	Several ungrammatical sentences
Correct spelling throughout	☐ ☐ ☐ ☐	Much incorrect spelling
Effective use of figures and tables	☐ ☐ ☐ ☐	Figures and tables add little to argument
Correct use of units and quantitites	☐ ☐ ☐ ☐	Some units incorrect

Explanation and Comments

Tutor:

Figure 9

example from “teaching and demonstrating: a handbook”

www.ed.ac.uk/schools-departments/institute-academic-development/learning-teaching/tutors-demonstrators/resources/handbook

advice for marking

appreciate time it takes

be consistent...

- use available marking schemes*
  (or make one up?)
- liaise with other markers
- be careful to keep accurate records
- for formative assessment give good feedback...

feedback

requires skill and tact

- ensure comments are balanced
- start with a personal, clear, specific positive

  “Louise, I thought your essay was both original and valid.”
- then impersonal, kind, constructive criticisms

  “The explanation of xyz lacks focus, see Bloggs et al.”

  specific, constructive is kind, but to just say “poor” is cruel
- finish with positive note of encouragement

  “I can see you are getting to grips with this topic”

supervising project students

- a very special case of facilitation
- more contact over a longer time period...

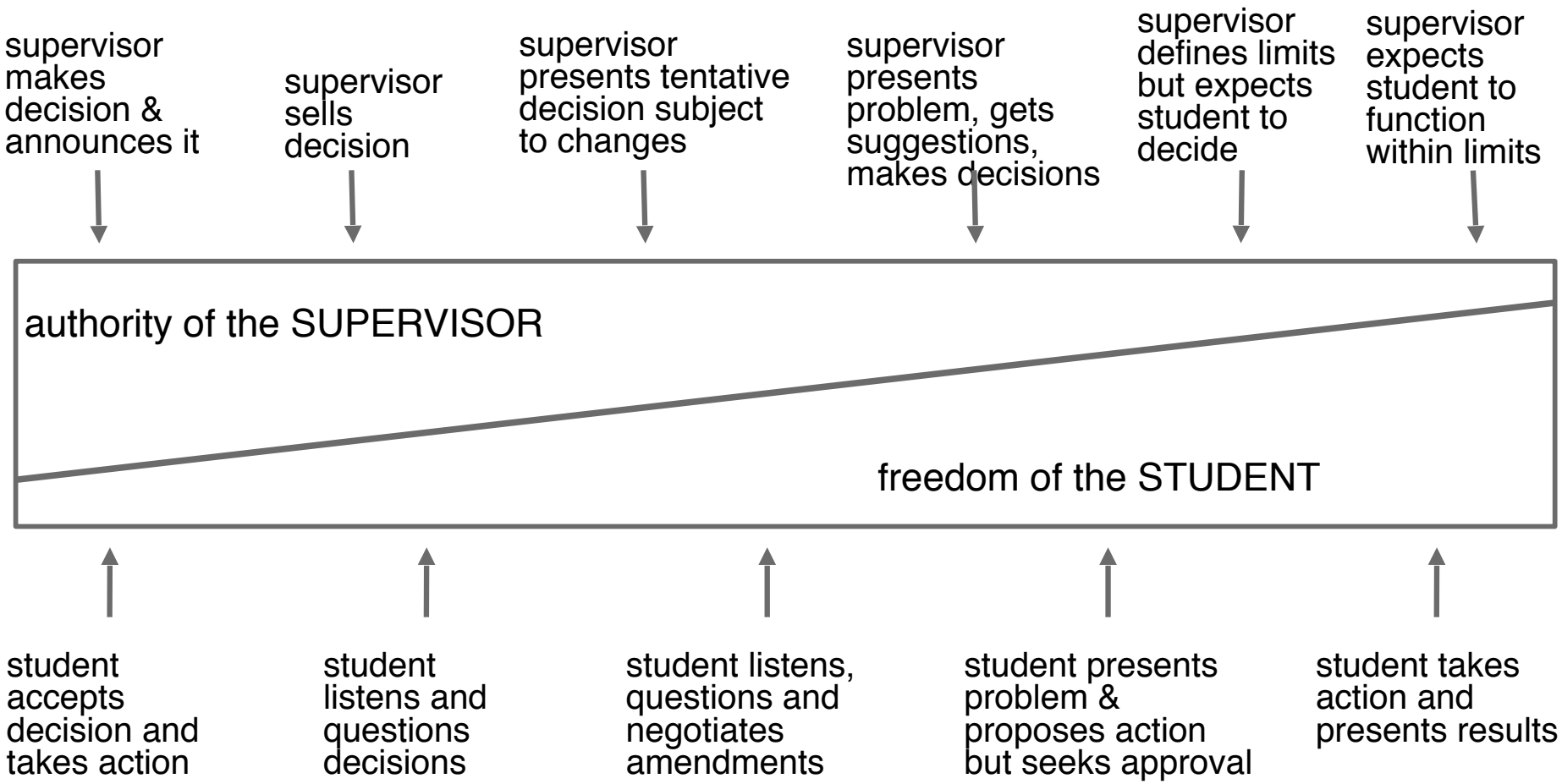
your final challenge

- what are the 7 (or so!) ages of a project student
- what can we do at each stage to facilitate their learning and development ?

early to mid stages

- be realistic...
- don’t assume extensive background knowledge
- check understanding - get them to explain back

then consider student / supervisor relationship



Developed by University of Leeds

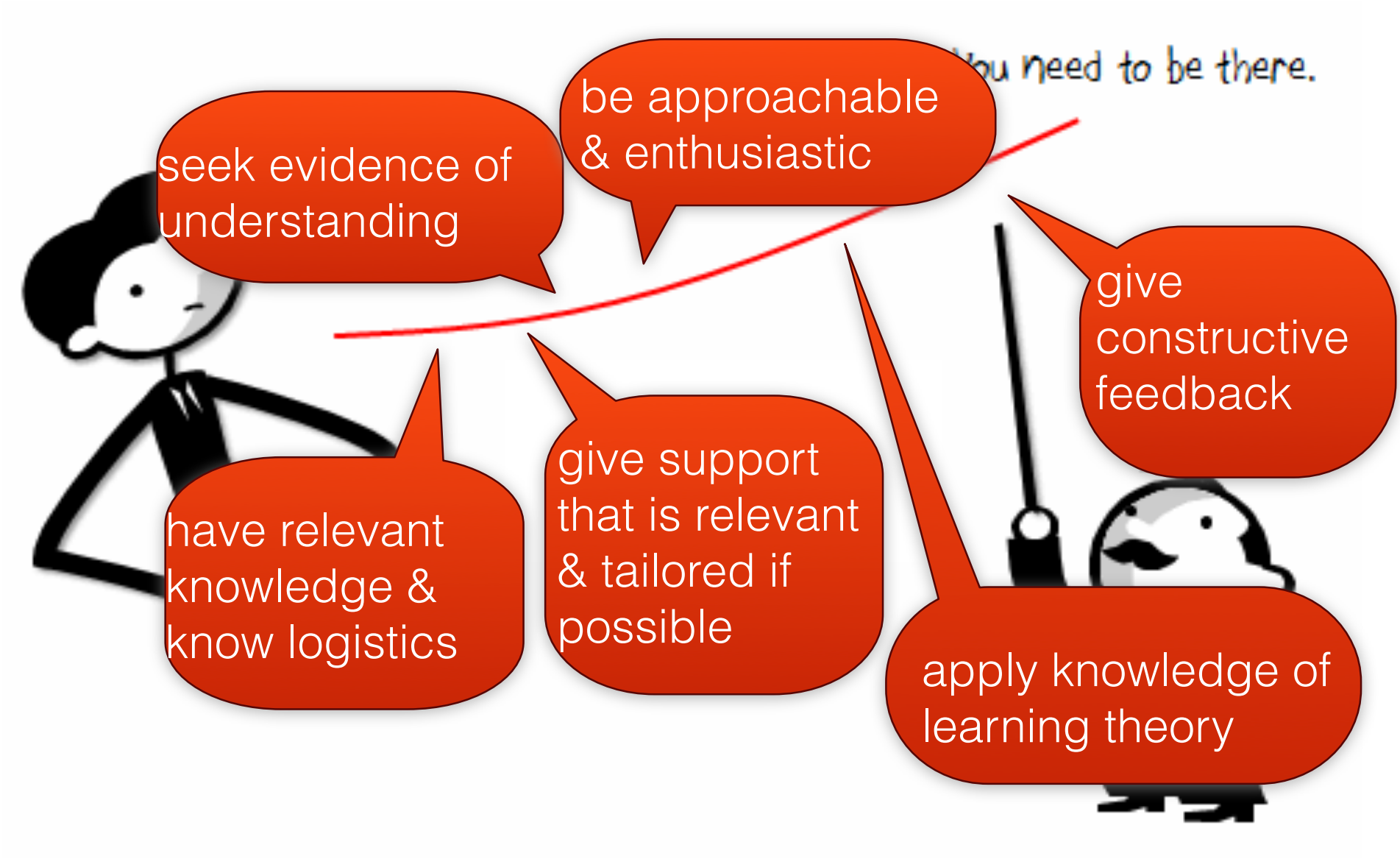
pastoral care

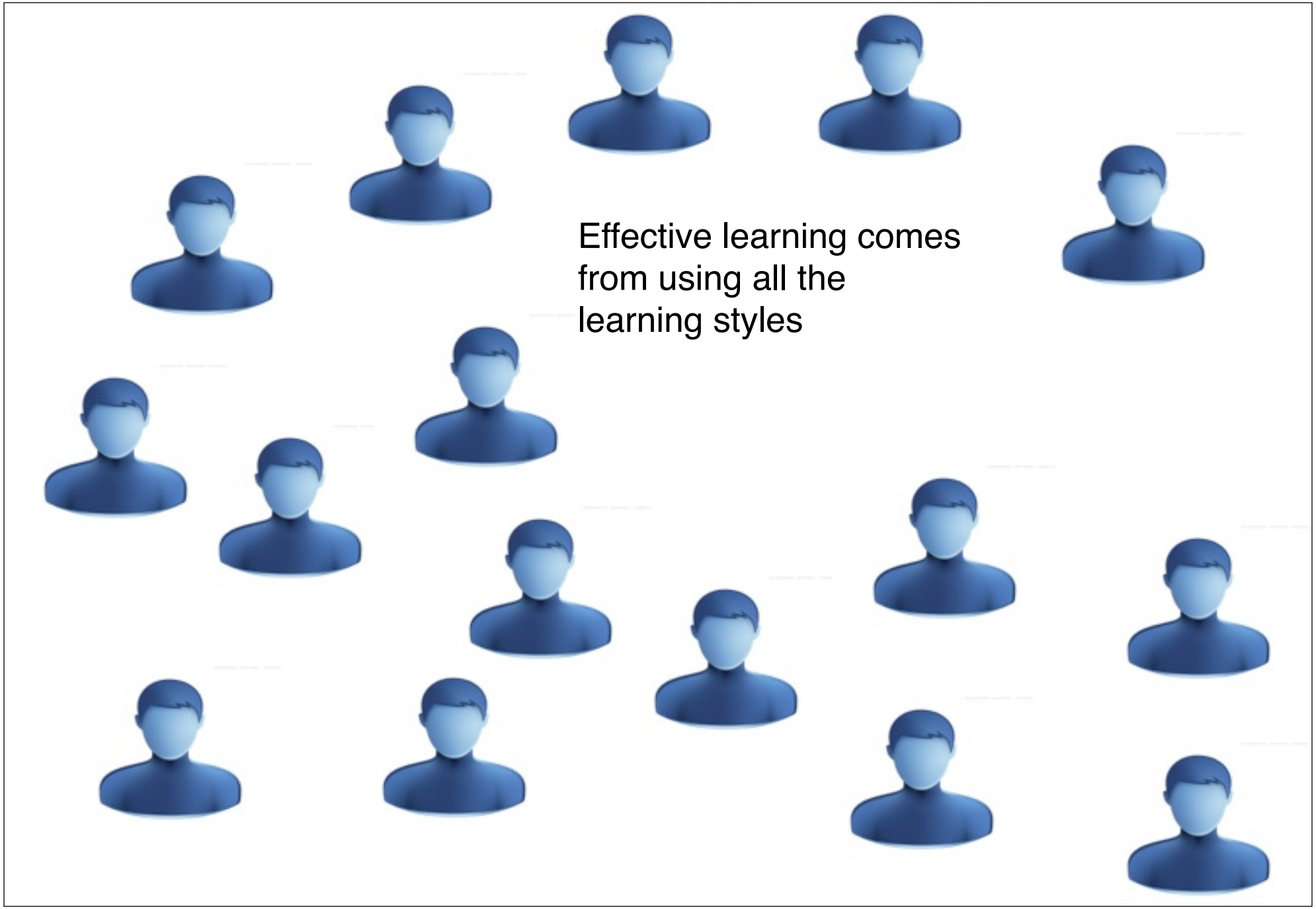
you provide a safe, positive environment...

...but there are limits to your responsibility

- encourage students to talk to their Director of Studies (or equivalent)
- respect their confidentiality
- know where counseling, health, careers or disability advice is available in your institution

eg special circumstances in assessment


ou need to be there.
seek evidence of understanding
be approachable & enthusiastic
give constructive feedback
have relevant knowledge & know logistics
give support that is relevant & tailored if possible
apply knowledge of learning theory


Effective learning comes
from using all the
learning styles