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Maintaining Interest and Fuelling Motivation: Student Experiences of Active and Collaborative Learning Tasks in a Level 300 Finance Module



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1) Introduction and Rationale

- As a lecturer, one is often faced with the challenge of keeping a large classroom engaged and interested in your session.
- Over time, and after a long day, students may find it challenging to concentrate in a lecture style class.
- One proposed way in which this may be countered is through the use of active learning techniques.
- Active learning refers to a range of learning strategies that are geared towards student participation in learning, that is, 'learning-by-doing' (Scheyvens, Griffin, Jocoy, Liu and Bradford, 2010)

2a) Active vs. Passive

“What constitutes active participation is typically expressed by what it is not – students passively listening to a lecture delivered by a lecturer.” Scheyvens et al. (2010)

I see and I forget.

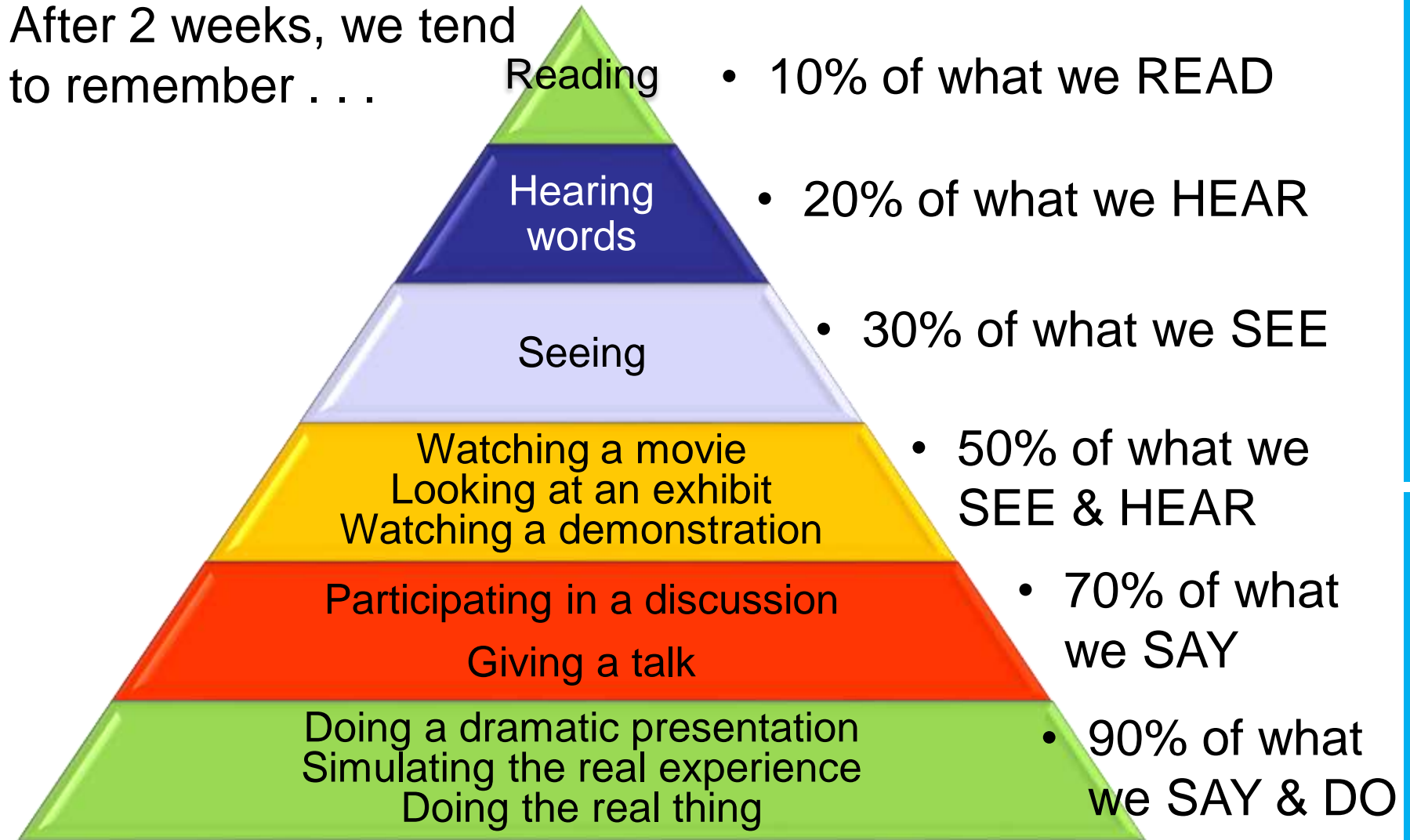
I hear and I remember.

I do and I understand.

- Confucius

2a) Active vs. Passive

After 2 weeks, we tend to remember . . .



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2a) Active Learning – SA Relevance?

- Active learning part of the constructivist school of learning theory (Scheyvens *et al.*, 2010)
- Constructionists and proponents of active learning believe that a social learning environment, where peer interaction is encouraged, creates an environment that is more conducive to learning (Bitzer, 2004).
- “Social constructivist learning theories form the basis of cooperative learning... [and may be] associated with typical African and South African socio-educational thought... [as this approach] involves the idea of Ubuntu” (Bitzer, 2004).
- Further research on the use of this approach in South African universities may be of particular relevance in highlighting T&L practices that suit our environment.

Active **AND** Passive Styles

- Active learning and traditional lecturing need not be used at the exclusion of one another.
- Lecturing has an important role and used with active learning may be a perfect combination for achieving outcomes, such as developing critical thinking abilities.
- This use of a combination lecture may also help deal with some of the disadvantages of using interactive lectures, such as loss of teaching time and reduction of course content.
- Lieberg (2008) suggests lecturers may find it useful to introduce a few active learning exercise into their class(es) and then follow on from successful activities.

Towards the Lectorial

- Cavanagh's (2011) study looked at students responses to classes which encouraged a level of engagement.
 - Classes referred to as 'lectorials' (lecture and tutorial)
 - Lectorials' had two or three activities per session
 - Every person who responded to the questionnaire found that the 'lectorial' activities had helped to maintain interest and attention during class
- “providing opportunities for students to cooperate in peer learning activities during lectures supports the development of their understanding.”

What are AL Activities?

- Prince (2004) explains active learning comes in many forms. Examples include:
 - The “pause” exercise, where lecturers encourage the class to take a few minutes at regular intervals to summarise and/or clarify their notes and/or understanding with a partner
 - The “interactive window”
 - These are a relatively easily incorporated activity which can be applied to large and small classes alike
 - use short written exercises (ungraded) following any discussion point
 - Discussion is highlighted as a core active learning method
 - Case studies, debates, role playing, simulation and peer teaching are all suggested as possible avenues of including active learning to a classroom.

3) Study Design - Aims

Two aims:

1. Explore Finance 312 students' experiences of being engaged during their lectures via several active and collaborative tasks
2. Provide feedback to the practitioner on the perceived value of their teaching strategies (for use in future design of teaching strategies)

Involving:

1. A variety of active learning tasks being assigned throughout Finance 312
2. Administration of an anonymous questionnaire at the end of the semester

Active Tasks

Dear Finance 312 student,

Re: Request to participate in research by completing a brief questionnaire regarding your experience of Finance 312

As a class you have participated in a number of 'active' learning tasks during lectures for the second half of FINA312. The active learning tasks included:

1. Small group discussions
2. Solving calculations while being encouraged to talk to your peers
3. The drawing of the interest rate swap in small groups, and
4. The writing exercises we finished off the course with which included a peer parking and comment exercise related to essay skills development

These are all considered 'active' learning tasks, especially when compared to a more traditional lecture where I would talk while you listen.

The purpose of the following questions is to get some feedback regarding your thoughts on the active learning tasks mentioned above. If you consent to participate in this research, simply response to the questions on the following page and return those responses to me.

3) Study Design - Questionnaire

Question 1: Explored whether AL tasks were experienced by the student to help with **learning and understanding content.**

Question 2: Explored whether AL tasks were experienced by the student as helpful **with interest and motivation.**

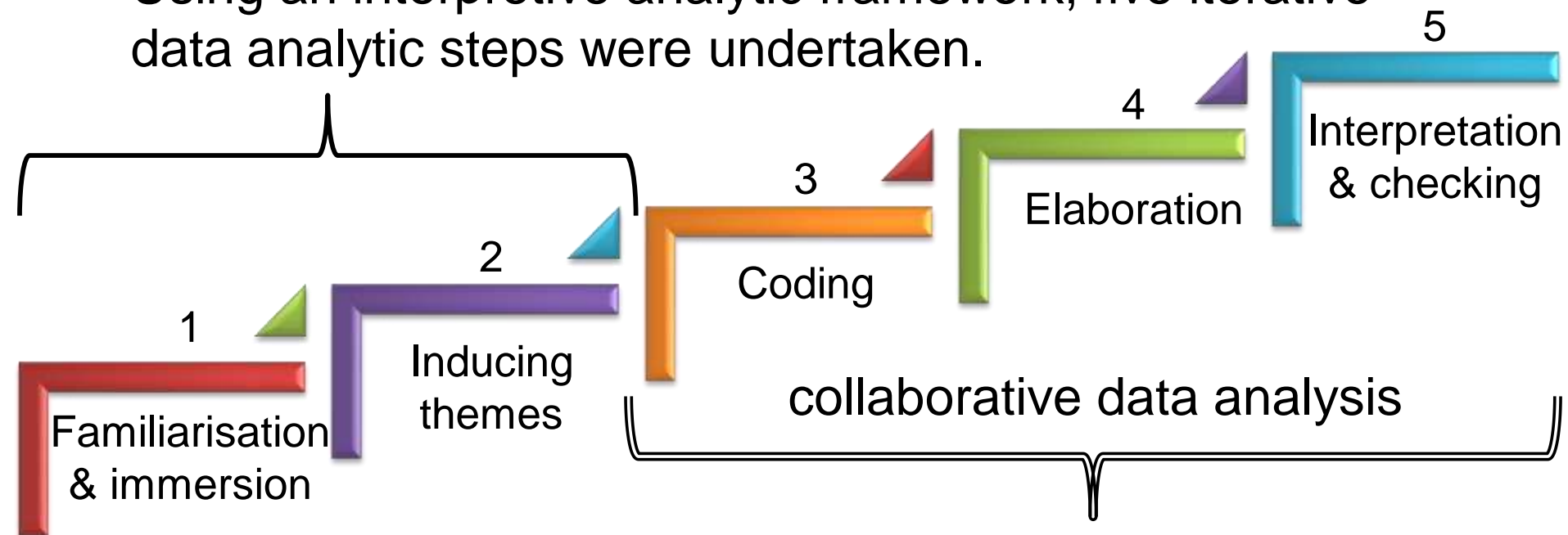
Question 3: Required students to suggest a **ratio** of AL tasks to traditional lectures.

Question 4: Asked students for suggestions regarding **additional types of AL tasks** they would like in lectures.

Question 5: Opportunity to provide any additional thoughts students had on the AL and traditional lecture styles.

3) Study Design– Data & Data Analysis

- Of the 107 students registered for Finance 312, 62 completed the questionnaire.
- These responses were captured into an Excel file, which was then imported into NVIVO.
- Using an interpretive analytic framework, five iterative data analytic steps were undertaken.



Results – Q 1 and 2

Understanding content? Maintaining motivation and interest?

- Majority felt the AL tasks did assist with learning and understanding the content of the module
- Majority felt that the AL tasks did assist with maintaining interest and motivation during the lectures

Results – Q 1 and 2

Why?

**Understanding content
Maintaining motivation and interest**

- Being able to talk and learn from **peers**
- A **conducive learning environment**
- Reinforced memorisation of content
- “Helped me to keep awake and alert in class”
- AL tasks develop enthusiasm for the module

Results – Q 1 and 2

Why
not?

Understanding content
Maintaining motivation and interest

- **Peers** interaction is distracting, and negatively affected the work that had to be done (limited constructive discussions)
- A loud and distracting **learning environment**
- “Time could be better spent in class teaching rather than waiting for the correct answer”

Results – Q 1 and 2

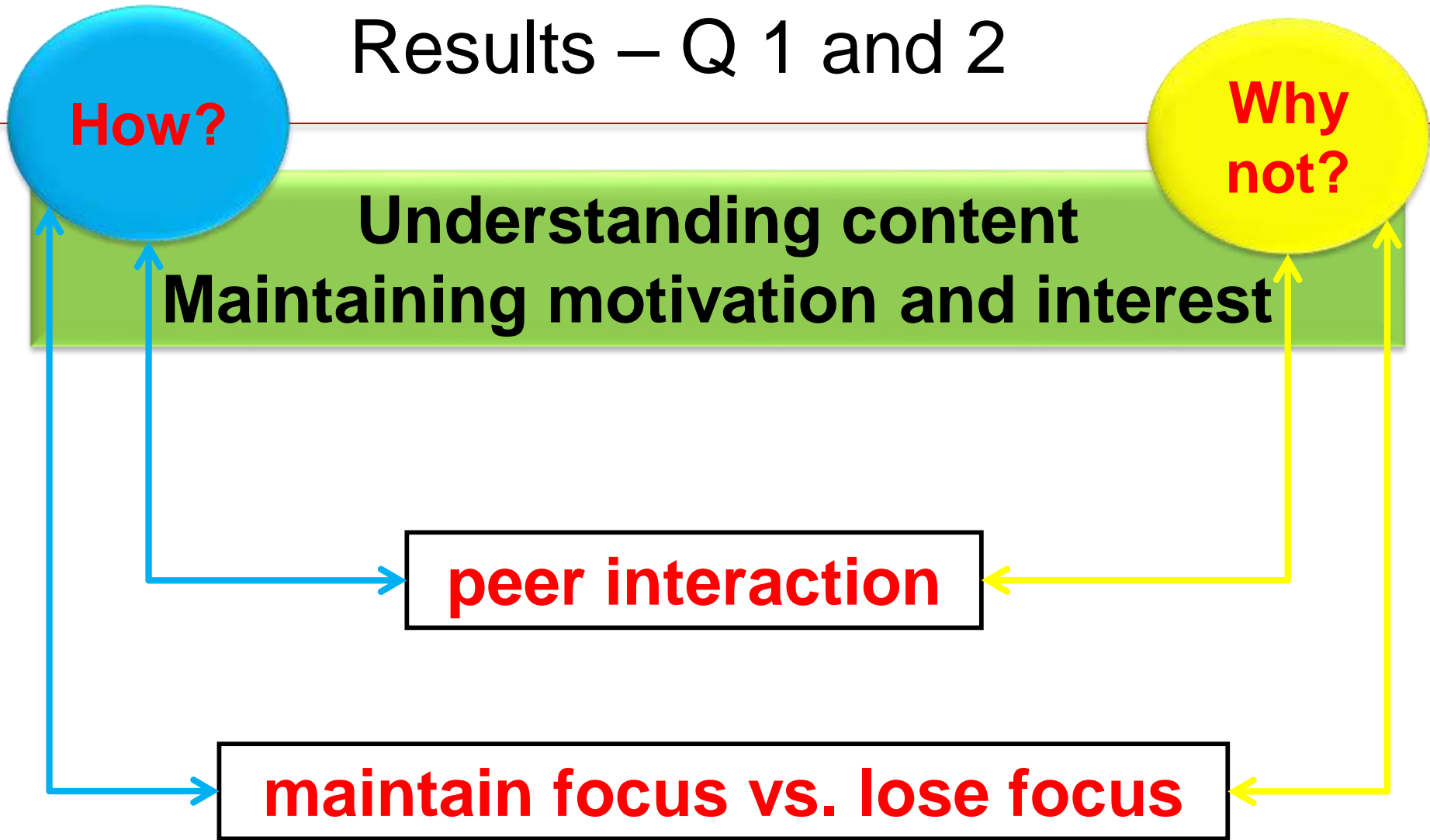
How?

Why not?

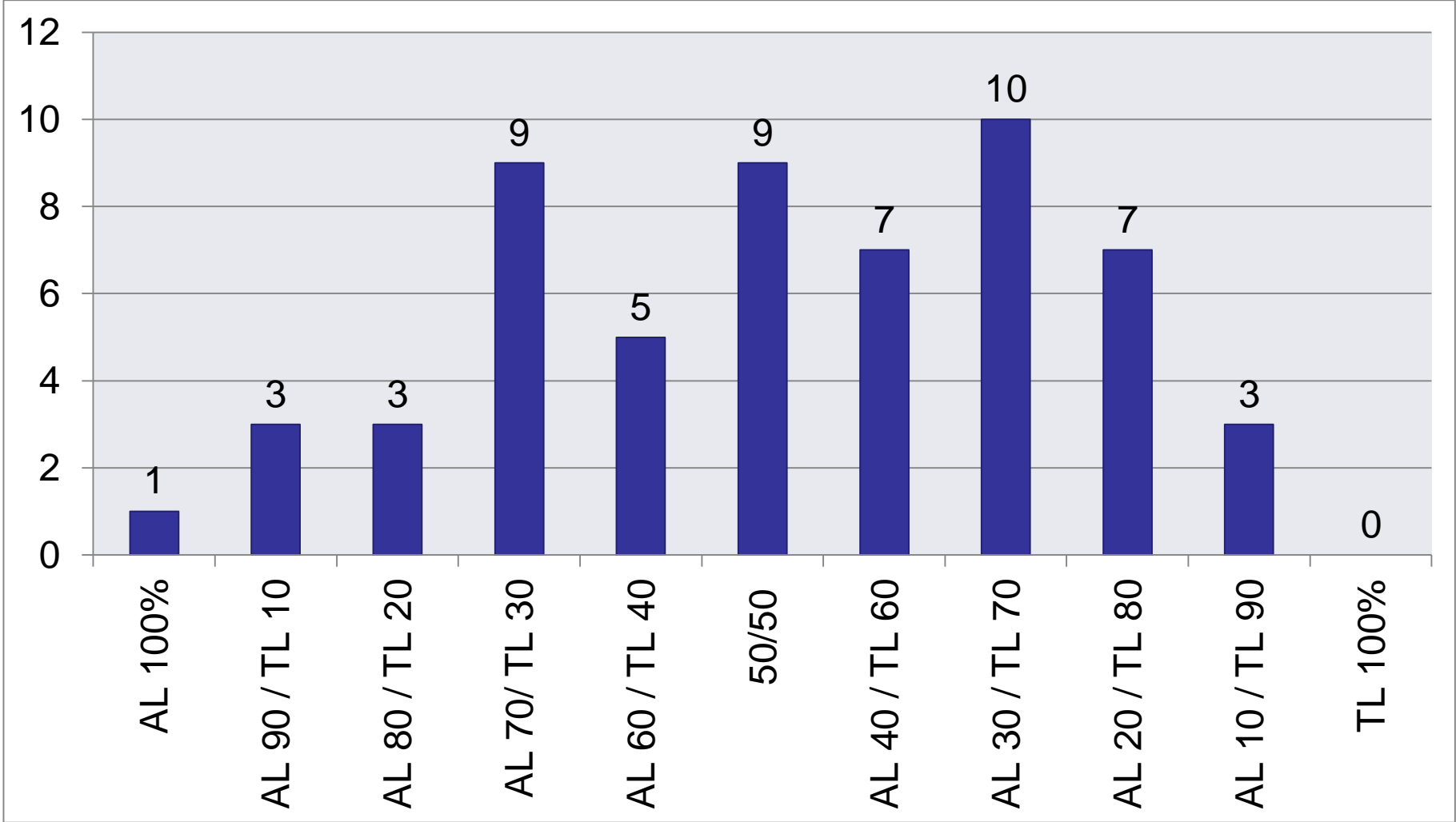
Understanding content
Maintaining motivation and interest

peer interaction

maintain focus vs. lose focus



Results – Q3 – Ratio AL/TL



Results – Ratio AL/TL

- 47% preferred traditional style classes.
 - Overall respondents felt comfortable with TL classes & felt some, but not too many, active classes would have value.
 - One indicated a TL preference due to the fact “[I] don’t like to participate.” Another that “[I am still] adapting to the active approach.”
 - AL was appreciated when it involved practice calculations.
- 37% preferred active learning classes:
 - “it helps with practical understanding rather than just learning what you have been taught without knowing why.”
 - “active learning was interesting and required us to be involved, I preferred it to traditional lectures.”
 - The combination was “less monotonous.”

Results – Ratio AL/TL (50/50)

- 16% asked for a 50/50 split between AL & TL
 - “I think a 50/50 ratio is best. Students can learn through the traditional way and show their understanding of the content through active learning.”
 - “the active makes you realise your problem areas there and then.”

Range of 30/70 through to 70/30:
70% of the class indicated that they wanted a combination of active and passive tasks.

Range of 20/80 through to 80/20:
88% of the class indicated that they wanted a combination of active and passive tasks.

Results – other suggested AL tasks?

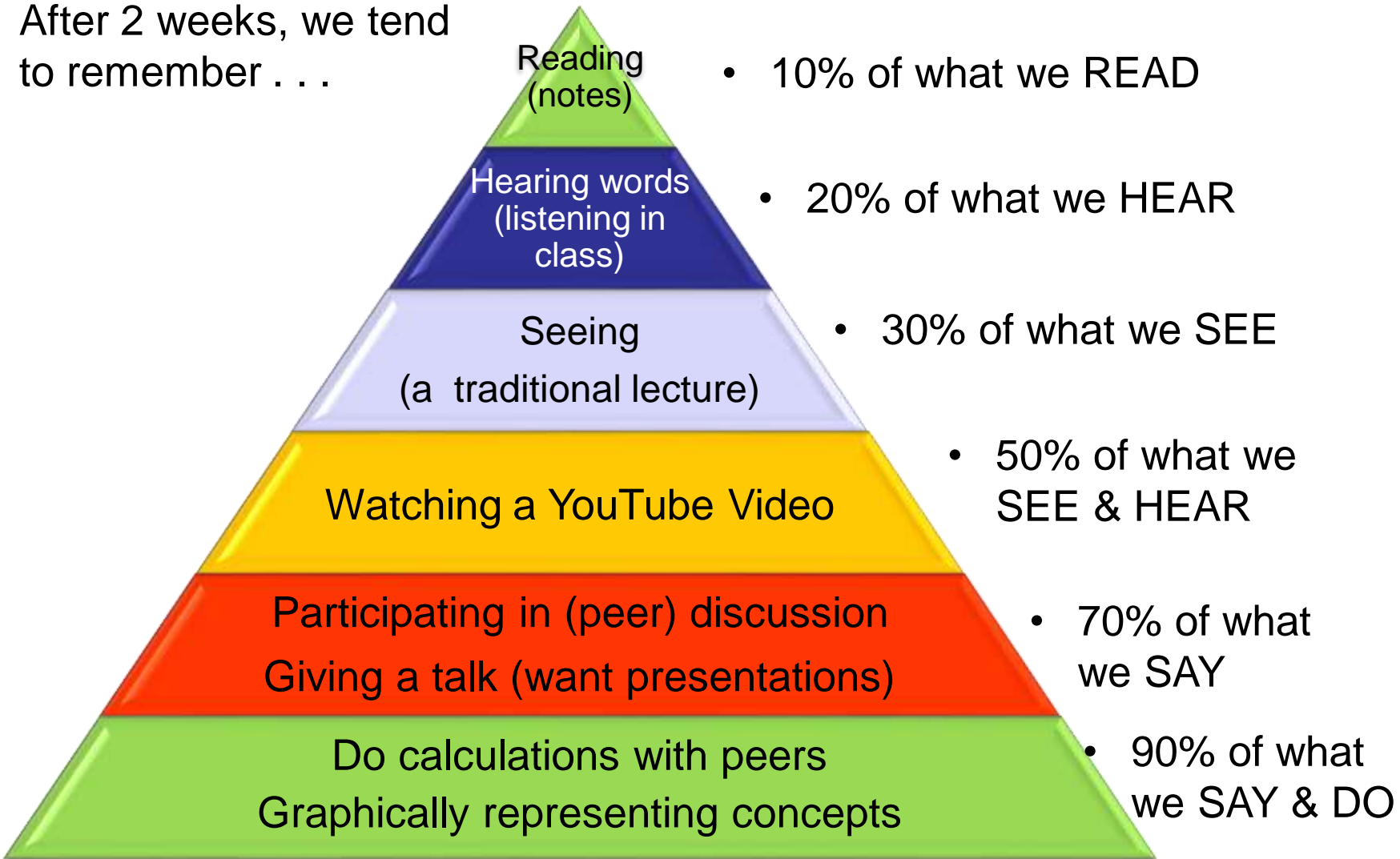
- Class presentations
- Visual learning material (e.g. YouTube)
- Quizzes with prizes (competitive learning environment)
- Going through examples in class

Most popular AL request

Other comments: enjoyable, fun, helpful...
With request to please allow prep time / sufficient theory coverage before AL is used.

Revisiting the Framework

After 2 weeks, we tend to remember . . .



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Conclusions

- SA has a **unique group of students** and so HE should be looking at ways to best address their needs.
- The cognitive benefits of active learning are addressed in literature, but less available on the **student experience**.
- Our results indicate that students perceive these active exercises as **increasing their motivation**, and making class more interesting.
- Recommendation is that a **combination of AL & TL lectures** are used.
- Encouraging participation and interaction has additional benefits of **developing graduate** skills and **ability to interact in groups**.
- Peer to peer interaction could be used to facilitate a better **learning environment** for our students.