### An extract from “Aligning teaching and assessing to course objectives” by John Biggs.

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When we teach we should have a clear idea of what we want our students to learn. More specifically, on a topic by topic basis, we should be able to stipulate how well each topic needs to be understood. First, we need to distinguish between declarative knowledge and functioning knowledge.

Declarative knowledge is knowledge that can be ‘declared’: we tell people about it, orally or in writing. Declarative is usually second hand knowledge, it is about what has been discovered.

Knowledge of academic disciplines is declarative and our students need to understand it selectively. Declarative knowledge is however only the first part of the story.

We don’t acquire knowledge only so that we can tell other people about it; more specifically, so that our students can tell us – in their own words – what we have recently been telling them. Our students need to put that knowledge to work, to make it function. To really understand something you see the world differently, and behave differently towards that part of the world.

Accordingly, we have to state our objectives in terms that require them to perform their understanding not just simply tell us about in in invigilated exams. The first step in designing the curriculum objectives, then, is to make clear what levels of understanding we want from our students in what topics, and what performances of understanding would give us this knowledge.

It is helpful to think in terms of appropriate verbs. Generic high level verbs include: Reflect, hypothesise solve unseen complex problems generate new alternatives.

Low level verbs include: Describe, identify, memorise, and so on. Each discipline and topic will of course have its own appropriate verbs that reflect different levels of understanding the topic content being the objects the verbs take.

Incorporating verbs in our intended learning outcomes gives us markers through the system. The same verbs need to be embedded in the teaching/learning activities, and in the assessment tasks. They keep us on track.

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### Activity

Look at the examples of outcomes in the two MGI module outlines that you have been given.

1. Which of the outcomes are low level, requiring declarative knowledge?
2. Which of the outcomes require the demonstration of functioning knowledge?