Designing for active learning

There is of course, a wealth of literature on best practice on how to make learning engaging which we cannot even begin to do justice. Below are a few suggestions and ideas on how you can make your lessons more active.

Designing for collaboration

**Working together** – allow and design for co-operative support and group problem solving.

Other things to consider include:

- ensuring group members are competent in the concepts and skills of collaborative learning to make an effective contribution
- students should have a shared understanding of the goals, and a readiness to contribute
- there must be mutual respect and trust between students
- communication must be continuous in the sense that it is active and ongoing
- offering both formal environments for communications regarding the learning and informal environments to organize themselves
- clear lines of responsibility but no restrictive boundaries
- an acceptance that decisions do not have to be based on consensus
- physical presence is not always necessary but equally it may be a valuable part of the learning experience. Be prepared to blend face-to-face and online learning if appropriate.

**Meaningful collaboration** - design activities that will enable the students to work in small groups or pairs in a way that will enable them to see the benefits of so doing.

**Group work** - provide activities and problems to be solved that enable students to work together either off-line or in breakout groups.

**Encourage contribution** - ask questions and design activities that make students want to contribute.

Designing for support

**Coaching and scaffolding** – provide coaching at critical times and scaffolding of support with skills, strategies and resources without which the student cannot complete the task. Gradually the support can be removed until the student can stand alone.

**Provide assistance** – help students as they work through the learning, not by supplying the solution if there is one, but by giving just enough guidance to take them to the next stage.

Some ways to do this include

- providing hints
- inviting suggestions from peers
- posing critical questions to make them think about what to do next
- providing a possible diagnosis of errors and misunderstandings
- beginning with simpler problems and tasks to help build confidence and develop transferable skills. This enables the student to solve more complex challenges.

Designing for engagement

**Reflection** – allow students the opportunity to reflect on what they have learned and to form abstractions.
Articulation – provide opportunities for students to explain what they believe to be true, to stimulate debate and broaden perspectives.

Integrated assessment – where possible, assessment should be part of the learning context, not a separate and discrete activity.

Prompt reflection – avoid low-level responses that do not need discussion or the creation of a considered response.

Provide challenge – provide complex activities that can’t be solved just by looking at another part of the course.

Facilitate investigation – assist the students to carry out their own investigation to find a solution, not the solution.

Avoid a step-by-step approach – design learning which avoids step-by-step transmission of information in favour of complex, investigative open-ended learning activities.

Designing for real world learning

Authentic contexts – provide tasks that are anchored in realistic situations, cases, issues, video, and role play. An authentic context reflects the way in which the knowledge will be used in real life, without decomposing the knowledge in an artificial way. It should allow exploration and mirror the complexity of the real world.

Authentic activities – where possible students should encounter problems in a natural way that allows them to detect relevant and irrelevant material.

Expert performance – allow access to expert performances and the modelling of processes, allowing students to observe the task before it is attempted.

Multiple roles and multiple perspectives – encourage multiple modes of representation and appreciation of multiple perspectives. There is no one correct way of solving problems that is applicable to everyone.