Welcome to issue six of Sharing Excellence.

This week we explore the relationship between the way we teach and our learners’ performance in summative assessment.

‘Learning in Bloom’ – using Bloom’s Taxonomy of Learning

Have you ever felt disappointed by the quality of some of your learners’ assignment or exam work?

Have you ever felt puzzled by its modest quality given the number of the lessons you taught on the topics being assessed?

If so, then give some thought to Bloom’s Taxonomy of Learning.

What is Bloom’s Taxonomy of Learning?
It sounds complex, but it is mostly academic language dressing up some simple yet highly effective ideas about learning. A taxonomy is just a system of categorisation and in 1965 a committee of academics headed by Benjamin Bloom published a categorisation or hierarchy of different types of learning. It dealt with three different domains of learning, but we can concentrate on the cognitive domain – the development of intellectual skills. For more information visit http://www.nwlink.com/~donclark/hrd/bloom.html

What did they discover?
…That some things are harder to learn than others!

This seems spectacularly obvious. Nevertheless, it is interesting because it invites us to think about the types of learning that students find difficult. Furthermore, it is precisely these difficult types of learning which are commonly asked for in summative assessments like assignments and exams. Consequently, as teachers we need to ask – “Did I teach them those hard to learn things effectively?”

The Taxonomy
Think of the taxonomy as a ladder that students have to climb up. The bottom rung is knowledge and the top rung evaluation.

Set aside your subject specialism for now. Some topics do seem to be harder for students to grasp than others, but the taxonomy is not dealing with subject content. It is about types of learning. When you re-examine those hard to learn topics later you might discover that the difficulties lie not with the content exactly, but with the type of learning demanded of learners by that content.
How far up the ladder do we teach?

One familiar model of teaching is to explain a topic to the whole class, supplement this with some questioning, and then set an individual task – for example, doing one or more questions from a worksheet or textbook. The teacher can circulate to check on progress and then lead brief feedback on the answers before repeating the cycle with a new topic.

At first glance this seems effective. There are checks on learning and space to help individuals. It also appears time efficient at ‘getting through’ the curriculum. However, learners have only climbed the first two rungs of the ladder. They have successfully completed relatively simple ‘mastery’ tasks, but there is much more that could be explored. As a result of this ‘mastery’ both teacher and learners can be misled into thinking that the class have ‘got’ that topic and are ready to move on. When it comes to summative exams or assignments, however, a different picture can emerge.

So what happens when students come to the assessment?

…they cannot climb the ladder because half the rungs are missing!

Often exams or assignments ask learners to:

- Apply their knowledge to unfamiliar settings
- Design a new product or system
- Combine different ideas and apply them to a problem
- Analyse a question and work out which of their skills they are meant to be applying
- Distinguish between fact and opinion
- Make judgements about the merits of a case or the relative value of information

In other words, problem solve by application, analysis, synthesis and evaluation.

If they have never or rarely encountered these processes in their lessons is it any wonder that they struggle to produce high quality work?
So how can we adapt our practice?
We need to design more learning activities that go beyond mastery tasks. A good rule of thumb is that every lesson should have at least one activity that challenges learners to reflect, analyse and evaluate.

• Set group tasks that call on learners to problem solve and deepen their understanding through reflection and discussion
• Design tasks that challenge learners to explain their reasoning to each other and question each other’s thinking
• Create tasks that contain layers of complexity and depth or which have multiple alternative solutions

This is not to say don’t have mastery tasks at all. After all learners still need the first two rungs of the ladder and completing mastery tasks is essential for building confidence. However, learners should be challenged to climb to the top of the ladder with each topic by solving problems and combining different concepts in unfamiliar settings.

“I haven’t got time for this kind of group work”
Sometimes we can fall into the trap of focussing on our need to ‘get through’ the syllabus rather than concentrate on our students’ learning.

It might appear that this type of teaching takes longer, but actually it saves time because it is more efficient in terms of learning! It gets our learners where we want them to be quicker – the top of the ladder. Teaching exclusively at a mastery level wastes time because it does not develop the learning our students need.

“Not with my subject” “Not with my level of learners”
Whatever the subject or level of study students will need to apply, analyse, synthesise and evaluate the content they are learning if they are truly to ‘get it’. Without it they will only develop a ‘surface’ understanding that quickly fades.

So start climbing the ladder of Bloom’s taxonomy and see your learners’ work improve!
Summary

- At least once per lesson challenge learners to apply, analyse and evaluate their learning
- Use paired or group tasks that call on learners to explain their thinking to each other and to challenge each others’ reasoning
- In any lesson blend individual mastery tasks with group activities that call for thinking at the upper end of the ladder
- Task groups with problem solving activities to promote discussion and reflection amongst learners
- Stimulate discussion and evaluation by creating tasks that have multiple alternative solutions
- Design tasks that present learners with unfamiliar scenarios and contexts to which they need to apply their learning
- Create problems that require learners to combine different concepts and ideas in reaching a solution
- Replicate the realities of assignments and exams by designing problems that require learners to work out which concepts they need to apply
- Teaching exclusively at a mastery level (especially when revisiting a topic after assessing that the class are struggling with it) is an act of misplaced optimism - doing the same thing in the same way and expecting a different result!

What Ofsted say...

These quotes are taken from a recent report on a FE College in London East

“In very good lessons, students are encouraged to think critically and to produce work of a high standard.”

“Too much teaching is unsatisfactory. In most lessons, teachers do not vary the methods they use and there are few opportunities for group work. Students learn little, or learn too slowly. For example, in the majority of mathematics lessons, teachers explain a method and then set students a series of examples. Students then try to complete these examples, working mainly on their own; they are not encouraged to collaborate or share ideas. Weaker students struggle to answer the questions accurately. Students become bored at the repetitive nature of the work and lose concentration. Teachers lack imaginative ideas to make the lessons more interesting.”

Let us know what you think

If you wish to give any feedback, make a contribution yourself or have a suggestion for topics of future issues then please contact Kit Jillings, Assistant Director Teacher Training at Kit.Jillings@lewisham.ac.uk or ext. 3271

Issue seven...

Will be in the new academic year. Have a great summer.