



PEER ASSISTED TEACHING SCHEME (PATS)

Teachers Helping Teachers

Building Quality in Higher Education Units

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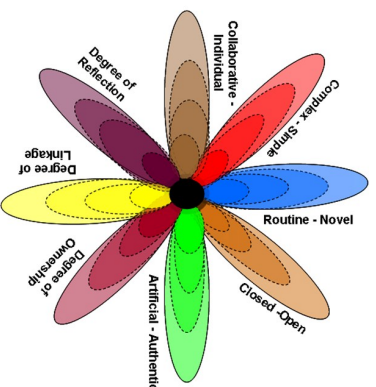
Office for Learning & Teaching

Challenging the type of activity

Many lecturers provide students with activities to complete inside the tutorial or lab room or for homework. A recent analysis of qualitative student feedback from unit evaluation data (Carbone et al. 2013, Carbone & Ceddia 2013, Carbone & Ceddia 2012) suggests that one aspect of the course that could be challenged is the type of activity provided in both tutorials and labs. These studies thematically analysed responses to open-ended questions. Within the educational focus areas of tutorials and labs, the type of activity used was the most common area flagged for concern by students. A study by Mitchell and Carbone (2011) found that classes with a variety of different activities were more engaging for the students and encouraged students to adopt good learning behaviours (Baird & Mitchell 1991; White & Mitchell 1994).

As a way of describing different activities Mitchell and Carbone (2011) developed a typology for activities. They described activities along nine dimensions:

- ⇒ Routine–Novel
- ⇒ Closed–Open
- ⇒ Artificial–Authentic
- ⇒ Degree of Ownership
- ⇒ Degree of Linkage
- ⇒ Degree of Reflection
- ⇒ Individual–Collaborative
- ⇒ Simple–Complex



The typology acts as a universal framework in which activities in general, across all disciplines, can be discussed. An activity may have multiple characteristics, so an activity might be described, for example, as novel, open and complex. As disciplines vary, there may be variations between activities on a particular dimension, highlighting their different characteristics. When looking at the totality of activities in a unit, activities may map onto only a few of the characteristics.

References

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What types of activities do you give your students?

The following describes the nine different dimensions of activities, each of which can be expressed along a continuum. Each dimension is divided into four regions represented by the dashed petals.

Complex → Simple

Complexity has been defined in a number of ways by various researchers and many factors are seen as contributing to it. It can be determined by the number of steps that an activity requires, but other factors need to be taken into account. When activity forms are complex, students may attend disproportionately to aspects of the activity that are irrelevant to achieving the intended learning outcomes. The more complexity the student can cope with the better, but too much complexity can be damaging.

Collaborative → Individual

With collaborative endeavours, members of the team might be expected to have similar skills, or alternatively to have different skills and levels of expertise. In the latter case, the level of interdependence is expected to be high. Typically, activities of this kind cannot be done individually. Some individual activities are worthwhile, but when good collaboration is achieved it is always beneficial.

Degree of Reflection

Reflection is a widely used but elusive term: it is impossible to sharply distinguish reflection from related forms of thinking such as analysis and linking. More reflection allows learners to gain more insights from undertaking an activity. Student learning is enhanced when students pay attention to, and reflect on their own learning.

Routine → Novel

In the Routine–Novel dimension, it is the novelty of the activity, not its content that is represented. Routine types of activities are the most common in classrooms. Where activities differ from those that typically alienate or bore the students because of their routine nature, they can be very successful at engaging the student. Cognitive engagement is more likely to be observed when students work with peers on novel activities that have personal meaning.

Closed → Open

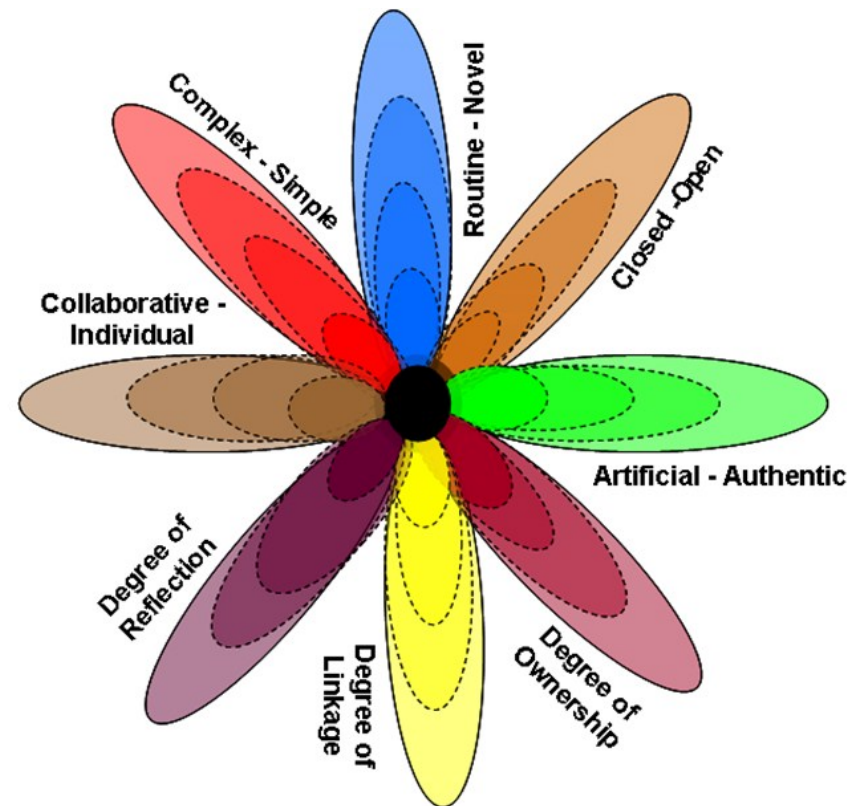
Open activities are described as giving students choices to make, whereas closed activities do not. Open activities can be considered open in two respects: the approach taken and the outcome generated. These two aspects of openness are independent. One benefit of open activities is that by giving students genuine choice it allows students the opportunity to be creative.

Artificial → Authentic

Artificial activities are ones that students perceive as constructed largely (or entirely) for the classroom. Authentic activities are those that students will perceive as either what professionals in the domain will do in their working lives or might be doing in their later life. Studies show that authentic and challenging activities are associated with high levels of engagement.

Degree of Ownership

At one end of the continuum, the student has no input into any aspect of the activity, at an intermediate point, the problem is a teacher-posed problem but students control some parameters of the activity, and in the case of high ownership, the activity is devised in response to a problem that the students have put forward. The construct of shared intellectual control is a key source of student interest.



Degree of Linkage

Linkage refers to the mental connections students make between their class work and other aspects of their lives. Learning is always better if students are linking as richly as possible. However, activities with a very high number of linkages can result in excessively complex activities, which can cause students to disengage.