

MULTIPLE MEASURES - BACKGROUND NOTES

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These notes offer background reading and information for users of the Multiple Measures online tool and website, www.multiplemeasures.org.au.

For further detail, or with any questions, please contact the authors, listed above.

Q 3+4: LEARNING OUTCOMES

Q3: How important is it that each student develops his/her own disciplinary practice/s through this ID activity?

(Not important > Very important)

An interdisciplinary approach fostering critical thinking and practical problem solving encourages students to develop their independent practice (Mafe & Webb, 2009). Exposure to other ways of working can allow students to develop more sophisticated responses (Bhana, 2010).

KEYWORDS: Flexibility, critical thinking, ambiguity, contextualising, complexity, independence, research skills.

Q4: How important is it that each student develops skills and abilities to work with others from different disciplines/industries through this ID activity?

(Not important > Very important)

Your responses to questions via sliders / checkboxes in the tool will filter MM exemplars. These can match your interests for the benchmarking of your own completed units / subjects and will give you a set of similar comparators to inform this. Finding contrasting examples, by using the questions to filter differently, may offer new insights useful for design and development of new teaching approaches.

Exemplars included in the Multiple Measures tool are coded according to mark allocation for assessment tasks that highlight either increasing individual / disciplinary depth of practice or improving breadth of collaborative skillsets. If the majority of marks were for individual work and demonstration of “disciplinary” skills, then “more flexible thinking and practice/s” was considered of greater importance than skills for interdisciplinary engagement. If marks were allocated evenly then equal weighting for disciplinary depth and interdisciplinary skills was given. This was also informed by interview data collected for each unit/course/subject.

Notes

In questions 3 + 4 we focus our expectations on students' learning through interdisciplinary activities and assessment tasks. AQF Level 7 highlights the value of such activities stating that students graduating from a Bachelor's degree are expected to have a "broad and coherent theoretical and technical knowledge with depth in one or more disciplines or areas of practice" (Australian Qualifications Framework, 2013, p. 47).

The attainment of such learning aims to value the development of the "T-shaped individual", whereby graduates "have deep knowledge of one subject (the down stroke of the 'T') and broad experience and understanding of other disciplines (the cross-stroke)" (Leonard-Barton, 1995 in Bailey, 2010).

The appropriate balance between depth and breadth is contingent on the students' stage of learning and personal development (see question 1). At the early stages of an undergraduate degree it may be more appropriate to be focusing on developing skills that will enable students to increase disciplinary depth, such as research skills, and the use of technologies appropriate to the discipline (de la Harpe & Peterson, 2008; Mafe & Webb, 2009). Those interdisciplinary studies highlighting disciplinary depth may be more suitable at such a stage.

Interdisciplinary engagement allows students to acquire sets of skills and knowledge that can be applied to all successive learning, contributing to the development of disciplinary depth. Disciplinary depth helps to form the cognitive maps ('paradigms') and vocabularies necessary to both disciplinary and interdisciplinary studies (Davies & Devlin, 2010). Confidence in one's disciplinary grounding, is also important for further successful interdisciplinary engagement (Bailey, 2010; Boix Mansilla, 2005).

By Master's level, graduates are expected to have already developed depth, or "expert, specialised cognitive and technical skills in a body of knowledge or practice" (*Australian Qualifications Framework*, 2013, p. 59). At this level, developing skills for interdisciplinary engagement may be motivated by goals of increasing students' employability – skills such as communication, teamwork and problem-solving (see <http://www.assuringgraduatecapabilities.com/> for examples of graduate capabilities and their support and encouragement according to discipline).

This pair of questions asks the designer of an interdisciplinary course to consider the balance of emphasis between **disciplinary depth** and **interdisciplinary breadth**. Are the learning outcomes from the course going to help the students perform better in their own disciplinary practice (depth)? Or is the emphasis on gaining skills and knowledge that will enable further interdisciplinary engagement (breadth)? Most courses will be aiming to foster a mix of these outcomes, but will reflect a stronger desire to achieve one or the other.

Useful References

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