

Mindful of the Future: Improving Student Assessment

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Craddock and Mathias (2009) provide an insight into the myriad of stresses faced by learners when undertaking assessment, ranging from feelings of dissatisfaction with their work to being wary of written examinations. The concept of disillusionment and frustration with the process is captured by Taras (2002), whereby the perceived threat and tension embedded in a summative examination allays any 'good' attached to in-class and formative work undertaken. The nature of formative assessment may alleviate some of these concerns by offering a student centred focus and one that is seen as non-threatening. This has the added benefit of encouraging learners to delve deeper and openly discuss and explore their own learning pathways. Jenkins (2010) suggests that the notion of formative assessment should be embraced as an everyday (and indeed everyman) occurrence, that it should replace the summative processes that are there only to inform (feedback) to the student cohort. Active engagement on behalf of the learner is crucial if this is to be a success (Zepke and Leach, 2010), this is reflected in the concept of self-efficacy explored by Llorens et al (2007), where it was noted that learners belief in their own abilities and the resources to complete a given task, increased their motivation and engagement [this closely resembles the notion of self-perceived competence, as discussed by (Fazey and Fazey, 2001)] – thus it is imperative that such internal belief structures are engendered in practice through appropriate learning supports.

There is a need to map incoming students' expectations of higher education in a way that overrides the myriad of orientation perspectives that vie for a students' attention. The transition requires that the institution be involved in an open dialogue with these fledgling learners, one that captures and acts upon their perceptions and experiences of this new educational environment (Zepke and Leach, 2010).

Mindful Approaches to Assessment

Debilitating stress and anxiety related or caused by the assessment process in particular have a noted impact on both an individuals' health (physical and emotional) and upon their assessment performance (Aheneku, Nwosu, and Ahaneku 2000; Struthers, Perry, and Menec, 2000; Putwain, 2008). It is unfortunately a commonplace issue amongst students in Higher Education (Andrews and Wilding, 2004) where evidence suggests a direct link with a decrease in their cognitive functioning (McDermott and Ebmeier, 2009).

The concept of mindfulness is one in which an individual may engage in a process of focused awareness of a given experience. This is undertaken in a manner that is wholly non-judgmental. This self-regulatory mode of attentiveness involves both sustained attention and the inhibition of elaborative processing. Bishop et al (2004) have defined this as a metacognitive skill, due to its dual purpose of monitoring and control and invoking what Flavell (1979) noted as cognition upon one's cognition. In so doing they (Bishop et al) describe mindfulness as a mode of awareness and a psychological process, one that may be applied and learnt over time.

There has been a noted prevalence within the literature of mindfulness in the clinical environment as a means to treat chronic panic under the guise of MBSR (Mindfulness-Based-Stress Reduction) (Kabat-Zinn, Lipworth, and Burney, 1985), this has begun to migrate into non-clinical examples with the alleviation of stress and promotion of emotional well-being (Williams, Kolar, Reger, and Pearson, 2001) and further afield in the promotion of memory, visual processing and cognition (Zeidan et al. 2010; Cahn and Polich, 2006). It is also deployed in the work environment where it has had positive effects on working relations and adaptability. In a number of recent studies undertaken with law students (Rogers, 2009) mindfulness has been used to aid deliberation and practice, enabling students to appraise their own thoughts and directions with regard to making judgments independent of facts. In relation to mindfulness as a mode of mental training, Zeidan et al (2010) noted from their cohort (of 20 year olds) a direct correlation between the level of fatigue and anxiety and their ability to perform a series of tasks that required sustained attention and executive processing, in effect demonstrating the ability to control (self-regulate) and reduce the impact of stress. This reflects similar findings of Moore and Malinowski (2009) where the ability to regulate emotions was demonstrated as being a key to enhancing cognition.

The ability of the learner to disengage from distractors and focus upon tasks is fundamental to easing cognitive dissonance and enhancing their learning process (Teasdale, 1999). Emotive tasks such as those found in the assessment process can inevitably hinder one's performance. The act of mindfulness to disassociate the inherent anxieties attached to high stakes assessment will enable the learner to apply a level of cognitive control that leads to clarity, focus and consequently an improved performance - this is commonly referred to as decentering or non-elaborative awareness.

Narrative Inquiries and Directions for Mindfulness Practice

A pilot study was undertaken and a series of narrative inquiries were conducted to elicit the nature of academic engagement with mindfulness, and whether a perceived impact

may be discerned in the student cohort. A particular focus was upon the noted stresses related to their assessment process; whether in-class assessment for learning or more summative approaches as in the assessment of learning.

The preliminary findings indicate that structured activities based on the concept of mindfulness support learners in focusing upon task orientated activities; providing clarity of thought, action and enhancing performance. The practice of mindful techniques in session provided an additional toolset to the academic, where used it was noted to have a visible impact on engagement and dialogue with the student cohort.

In conclusion it is recommended that mindfulness as a metacognitive skill should be promoted and encouraged to develop self-regulation of attention and non-elaborative awareness – which in turn will aid insight and clarity for student learners, and aid them in improving their own assessment and engagement approaches.

References:

Aheneku, J.E, Nwosu, C.M. and Ahaneku, G.I. (2000). Academic stress and cardiovascular health. *Academic Medicine* 75(6): 567–8.

Andrews, B., and Wilding, J. M. (2004). The relation of depression and anxiety to life-stress and achievement in students. *British Journal of Psychology*, 95, 509–521.

Bishop, S.R, Lau, M, Shapiro, S, Carlson, L, Anderson, N.D, Carmody, J, Segal, Z.V, Abbey, S, Speca, M, Velting, D, and Devins, G (2004). Operational Definition Of Mindfulness. *Clinical Psychology: Science and Practice*, 11(3): 230-241. American Psychological Association.

Biggs. J. (2003). *Teaching for Quality Learning at University – What the Student Does*. 2nd Edition SRHE / Open University Press, Buckingham.

Cahn, B.R., and Polich, J. (2006). Meditation states and traits: EEG, ERP, and neuroimaging studies. *Psychological Bulletin*, 132, 180–211.

Craddock, D. and Mathias, H (2009). Assessment options in higher education, *Assessment & Evaluation in Higher Education*, 34:2, 127-140

Fazey D and Fazey J (2001). The potential for autonomy in learning: Perceptions of competence, motivation and locus of control in first-year undergraduate students, *Studies in Higher Education* 26(3): 345–61.

Flavell, J. H. (1979). Metacognition and metacognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34, 906–911.

Hamdorf, J.M., and Hall. J.C. (2001). Surgical education. *Australian and New Zealand Journal of Surgery* 71: 178–83.

Jenkins, J.O. (2010). A multi- faceted formative assessment approach: better recognising the learning needs of students. *Assessment & Evaluation in Higher Education*, 35:5, 565-576.

Kabat-Zinn, J, Lipworth, L, and Burney, R. (1985). The clinical use of mindfulness meditation for the self-regulation of chronic pain. *Journal of Behavioral Medicine*, 8, 163–190.

Llorens S, Schaufeli W, Bakker A and Salanova M (2007) Does a positive gain spiral of resources, efficacy beliefs and engagement exist? *Computers in Human Behavior* 23: 825–41

McDermott, L. M., and Ebmeier, K. P. (2009). A meta-analysis of depression severity and cognitive function. *Journal of Affective Disorders*, 119, 1–8.

Moore, A., and Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and Cognition*, 18(1), 176–186.

Putwain D.W. (2008). Supporting assessment stress in key stage 4 students. *Educational Studies*, 34:2, 83-95,

Rogers, S.L. (2009). *Mindfulness for Law Students*. Miami, Mindful Living Press.

Struthers, C.W, Perry, R.P. and Menec V.H. (2000). An examination of the relationships between academic stress, coping motivation and performance in college. *Research in Higher Education* 41(5): 581–92.

Taras, M. (2002). Using assessment for learning and learning from assessment. *Assessment & Evaluation in Higher Education* 27: 501–10

Teasdale, J. D. (1999). Metacognition, mindfulness, and the modification of mood disorders. *Clinical Psychology and Psychotherapy*, 6, 146–155.

Trotter, E. (2006). Student perceptions of continuous summative assessment. *Assessment & Evaluation in Higher Education* 31: 505–21

Williams, K. A., Kolar, M. M., Reger, B. E., and Pearson, J. C. (2001). Evaluation of a wellness-based mindfulness stress reduction intervention: A controlled trial. *American Journal of Health Promotion*, 15(6), 422–432.

Zeidan F, Johnson S. K, Diamond B. J, David Z and Goolkasian, P. (2010). Mindfulness meditation improves cognition: Evidence of brief mental training. *Consciousness and Cognition* 19, 597–605.

Zepke, N. and Leach, L. (2010) Improving student engagement: Ten proposals for action. *Active Learning in Higher Education* 11(3): 167-177