**Topic 5: Technology-enhanced assessments**

**Advantages and Disadvantages**

**Advantages**

General

1. Encourages student engagement which is associated with learning success (Xu & Moloney, 2011, p. 24)

2. Interactive engagement promoted conceptual understanding more than course without interactive engagement. (Hake, 1998 – as cited in Edens, 2008, p. 163)

3. Helps engage students by providing immediate feedback (Hepplestone, Holden, Irwin, Parkin, & Thorpe, 2011, p. 123)

4. Feedback process enhances student motivation, engagement, and deeper learning. (Hartman, 2001; Hacker & Graesser, 2008 – as cited in Xu & Moloney, 2011, p. 26; de-Marcos et all, 2010, 1070; Ramsaran-Fowdar, Baguant, & Fowdar, 2011, pp. 193, 197-198)

Smartphones

5. Correlated with improved students learning (Maxwell, 2010; BlicBlau, 2006; Glass, 2007; Dermo, 2009 – as cited in Ramsaran-Fowdar, Baguant, & Fowdar, 2011, p. 193; Cochrane, 2008a, 2008b, 2009 – as cited in Backer, 2010, p. 21)

6. Convenient size and mobility (Backer, 2010, p. 24 [para 1])

7. Provides autonomy in learning and assessment (Ramsaran-Fowdar, Baguant, & Fowdar, 2011, p. 193)

Clickers

8. Helps students understand course concepts (Byrd, Coleman, & Werneth, 2004; Judson & Sawada, 2002 – as cited in Edens, 2008, p. 162)

9. Correlation with significantly higher grades (Poulis, Massen, Robens, and Gilbert, 1998 – as cited in Edens, 2008, p. 162)

10. Enables students to perform better in graded quizzes and examinations (Eagle, 2006, p. 21 – as cited in Moniz, Eshleman, Jewell, Mooney, & Tran, 2010, p. 354)

11. Holds students accountable for classroom participation (Edens, 2008, p. 164)

12. Students enjoy using them (Byrd, Coleman, & Werneth, 2004; Judson & Sawada, 2002 – as cited in Edens, 2008, p. 162)

13. Helps students to be more attentive in class (Byrd, Coleman, & Werneth, 2004; Judson & Sawada, 2002 – as cited in Edens, 2008, p. 162)

14. All students can use them with some practice (Bernard, Bros, & Midgal-Mikuli, 2011, pp. 14-15)

Interactive White Boards (SMART Boards)

15. Correlation with increased student motivation and affect. (Xu & Moloney, 2011, p. 21)

16. Intellectually stimulating (Xu & Moloney, 2011, p. 25)

17. Embraced by students (Xu & Moloney, 2011, p. 24)

**Disadvantages (pitfalls)**

General

1. Does not necessarily increase the students’ overall course grades (Harter & Harter, 2004; Azorlosa & Renner, 2006 – as cited in Ramsaran-Fowdar, Baguant, & Fowdar, 2011, p. 197)

2. Students are only concerned with grades rather than feedback (Nesbit & Burton, 2006 – as cited in Hepplestone, Holden, Irwin, Parkin, & Thorpe, 2011, p. 118)

3. Students only read evaluative comments if the grade is not what they expected (Duncan 2007 – as cited in Hepplestone, Holden, Irwin, Parkin, & Thorpe, 2011, p. 118)

4. Students only use feedback to look at the work they have already done rather than how to improve on future word (Burke, 2009, p. 41 – as cited in Hepplestone, Holden, Irwin, Parkin, & Thorpe, 2011, p. 118)

Smartphones

5. Technical problems, such as problems with software application, interface usability, and reduced screen size (Huang et all, 2008 – as cited in de-Marcos et all, 2010, 1072)

6. Difficult for some students to use (Backer, 2010, p. 26)

Clickers

7. Do not provide any significant learning advantage over paper flashcards (Lasry, 2008, pp.243-244 – as cited in Moniz, Eshleman, Jewell, Mooney, & Tran, 2010, p. 353)

8. Difficult for some students to use (Bernard, Bros, & Midgal-Mikuli, 2011, p. 14)

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