Chapter 1
"Talk to Me!": Empowering Students With a Vision Impairment Through Audio E-Assessment Feedback

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ABSTRACT

As educators, we aim for students to seek, identify, and utilize a range of feedback to gain an understanding of their present performance in relation to learning goals, and ultimately to identify and use tools to close the gap between present and desired performance. We strive for all students to be their "own first assessors"—intelligent deciders—and develop the independence to self-assess the quality of their own work when they leave higher education institutions and enter the workforce. For students with a print disability such as vision impairment or blindness, traditional forms of feedback may not be successful in providing the information they need to close the gap. The most important issue for these students is access to feedback and agency in the feedback conversation. It is incumbent on higher education educators to find ways to provide equity of access to the provision and reception of feedback for all students. As such, this chapter explores ways for providing feedback to students with a vision impairment to ensure they are able to contextualize and utilize the feedback to improve learning outcomes. This is achieved by aligning the use of mobile technologies and audio feedback with the key principles of connectivism—autonomy, connectedness, diversity, and openness—to provide educators with recommendations.

INTRODUCTION

The role of feeding up, feeding back, and feeding forward in higher education student achievement (commonly recognized as the feedback 'loop') has been well documented and rationalized over the past 15 years (Sadler 2010, 2013, 2015; Nicol & Macfarlane-Dick, 2006; Wiggins 2012; Harks, Rakoczy,

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Hattie, Besser, & Klieme, 2014). Feedback is "the lynchpin to students' effective decision-making, and the basis of improved learning outcomes" (Henderson, Boud, Molloy, Dawson, Phillips, Ryan & Mahoney, 2018, p. 1). The feedback debate revolves around the qualities of good feedback, including the form, timing, and mode of such feedback. Additionally, the role of tacit knowledge in students acquiring an implied understanding of quality, as compared to goals and standards, and the impact of motivation and self-regulation in students' independent learning and progression, is important to becoming their own 'first marker'. As the use of e-learning and the use of mobile technologies increases in the higher education space, the design and delivery of feedback to students about the progression of their learning continues to evolve. This evolution is building evaluative data, upon which educators can evaluate the effectiveness of their teaching.

The age of e-learning has resulted in advances in higher education accessibility and removal of traditional barriers of access to print for students who are blind or have a severe vision impairment (Harpur & Loudoun, 2011; Akcil, 2018). Mobile learning promises more equitable access to education and social participation through the use of tools such as voice recognition, screen reading, voice recording, podcasts, e-books, speech-based interaction with mobile phones, digital pens for electronic note taking, optical character recognition, and digital braille devices (Boris, 2013; Buzzi, Buzzi, & Leporini, 2012; Hullen, 2012). This form of learning connection to a range of online information sources and knowledge sharing embodies the constructivist learning theory of 'connectivism'; "a new learning theory for a digital age", characterized by four key principles: autonomy, connectedness, diversity, and openness (Tschofen & Mackness, 2012, p. 124).

Despite these advances, full accessibility through a connectivist model is not yet a reality. The research of Payne, Kirkpatrick, Goodacre, and McClean (2006) reports that students and disability practitioners in higher education "frequently reported difficulties in timely access to course materials in accessible formats" (p. 5). In addition, most university staff "do not consider themselves experts with technology and thus rely on disability liaison services and IT support when making pedagogical adjustments" (Payne et al., 2006, p. 5). When entering university, those who are braille dependent (for example) require content to be formatted in 'word', rather than PDF, to ensure accessibility for digital braille devices. Similarly, digital accessibility may be provided through screen-reading software such as 'Non-Visual Desktop Access' (NVDA). If NVDA access is hindered students are often unable to 'read' their assessments, marking criteria, and feedback due to inaccessible formats in use. Character recognition software "may fail to correctly include footnotes, and page numbers often are not easily identifiable on pages of flowing texts, including tables, graphs or other graphical representations" (Harpur & Loudoun 2011, p. 156).

It is critically important that students with print disabilities (such as blindness, dyslexia, and motor disabilities) have the same opportunities to succeed academically and achieve their goals as their peers. 92 countries including Australia are signatories to the Salamanca Statement and Framework for Action on Special Needs Education (United Nations Educational, Scientific and Cultural Organization, UNESCO, 1994) and are therefore legally bound to recognize and respond to diverse needs of all students making accommodations and adjustments to suit different learning styles and rates. Harpur & Suzor (2013) note that the inability of people with print disabilities to access knowledge in all its forms in higher education institutions has "great flow-on effects in hindering their full participation in society" (p. 748). According to the Disability Discrimination Act (Commonwealth of Australia, 1992) indirect discrimination is, "the application of facially non-discriminatory policies which do not have the intent of discriminating but have a discriminatory effect in practice" (Harpur & Loudoun, 2011, p. 155). This may occur when