

# Using Multimedia Feedback to Enhance Learning



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### Research Goals & Background

 Gain a better understanding of learner experiences, attitudes, and perceptions of receiving assessment feedback in digital multimedia format







Graduate research

## What is good feedback?



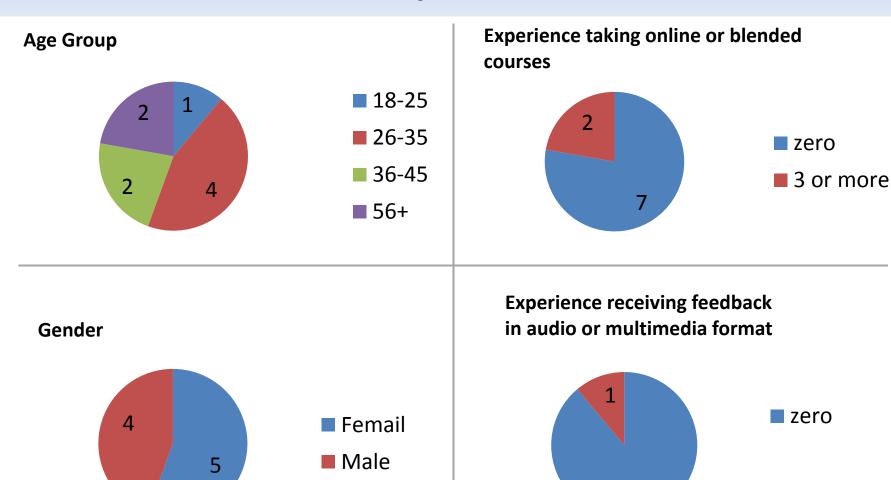
### 8 Principles of Effective Feedback

- 1. Provide positive comments in addition to corrections.
- 2. Focus feedback on course, program, or discipline specific outcomes and competencies.
- Identify patterns of weakness, errors, or strengths rather than focusing on every error.
- 4. Provide feedback in a timely manner.
- 5. Personalize the feedback.
- 6. Ensure feedback is legible and/or audible.
- 7. Do not focus on the mark.
- 8. Two-stage or multi-stage feedback works better than one-stage feedback

#### **Context**

- McMaster University
  - Hamilton, Ontario, Canada
- Centre for Continuing Education
- Web Design & Development Program
- Building a Web Site Course
  - Pre-requisite to all other course in the program
  - Lab environment
  - 10 to 21 students

### Research Participants



#### Feedback Process - Overview

1. Collect assignments asynchronously online



2. Record feedback

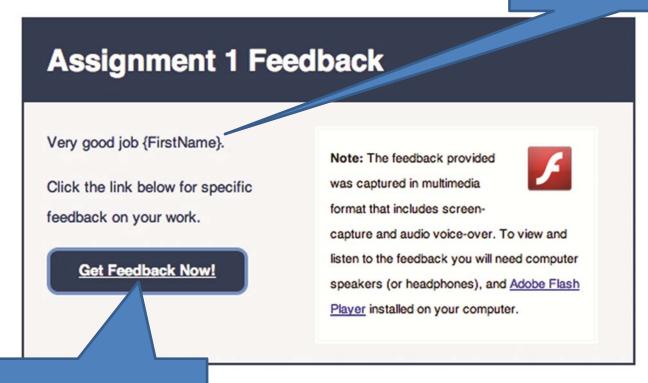


3. Distribute feedback and grades to learners asynchronously online



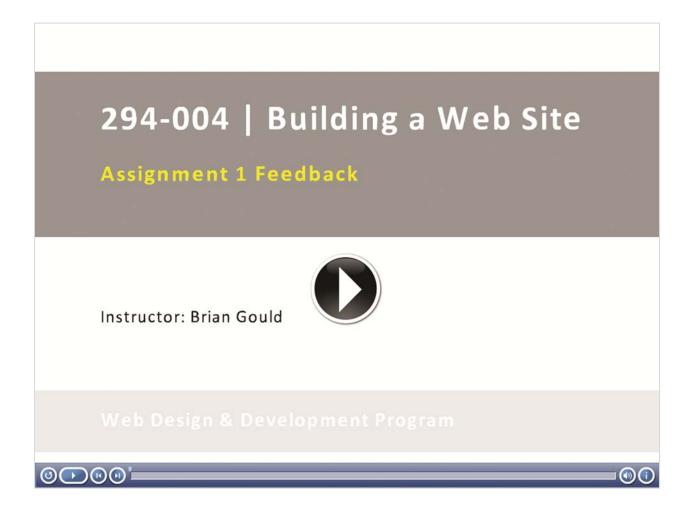
#### **Dropbox Folder View**

Replace String adds student name for you.



"Get Feedback Now" button Opens multimedia feedback

#### Multimedia Feedback



### Data Collection & Analysis

- Pre- and Post-Course Surveys
- Post course interviews
- Mann Whitney U Test
- Conceptual Ordering Framework (Owen, 1984)



### Assessment *for* Learning

"Being graded this way allowed me to see exactly where I made my mistakes and fix them"

"The feedback helped me go back and fix the mistakes I made"

### Just In Time Teaching (JiTT)

 Specific and individualized demonstrations based on the immediate needs of learners (Marrs and Novak, 2004)

"I thought it was awesome, because on my first assignment I had done a couple of things that were a little bit complicatedly wrong and it was just so immediately clear to me what exactly I need to do to fix the problem."

### Cognitive Apprenticeship

 "learning is understood as a blend of product and process" (Pratt and Associates, 1998, p. 86).

"it's possible to **see what you were thinking** when you were marking"

"I think it definitely got your point across and helped me understand what I did wrong in my assignments and helped me think about ways in which I could improve."

#### Student-Faculty Interactions

 "Frequent student - faculty contact in and out of classes is the most important factor in student motivation and involvement" (Chickering & Gamson, 1987, p. 3).

"it's almost like another way of getting to know you so that as the course progressed and I felt more comfortable approaching you with questions"

"it felt like you were talking to me personally and so when I saw you in class it felt like OK you understand what my project is and I can really talk to you"

#### Motivation

 Mayer's (2003 & 2008) Personalization Principle of multimedia learning posits that conversation style within text and narration promotes learner engagement and motivation.

"it encourages you to try more and you end up taking more out of the course when you know that your instructor is giving more into the course."

"it really helped me feel motivated that you really cared about my learning so the effort that I put in was more important because I wanted to show you that I was also willing to put in the effort to the course material."

### **Final Thoughts**

"Feedback affects student learning more than any other variable, including the teaching" (TESTA, n.d., para. 9).

"Providing feedback on assignments is one of the most time-consuming things tutors do" (Gibbs, n.d., p. 1).



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