

Chapter 17

FeedForward With Screencasts

Rui Alberto Jesus

 <https://orcid.org/0000-0003-4224-1526>

Cooperativa de Ensino Superior Politécnico e Universitário, Portugal

ABSTRACT

Feedforward is an educational strategy in which a professor gives orientations to students, prior to a certain task or assessment, in order to show them how to perform well in that upcoming task. This chapter explores the contribution of screencasts as one possible solution to providing feedforward. A screencast is a digital recording of computer screen output, including audio voiceover. If well planned and recorded, screencasts can expose students to the common errors in a certain field, as well as to the best practices that avoid or correct those mistakes. This chapter tests the following hypothesis: students who were exposed to feedforward with screencasts (experimental group) had better grades than those who did not see these common mistakes screencasts (control group). The students were Portuguese undergraduates of physiotherapy, taking a course of Inferential Statistics. The results show that the 48 students in the experimental group achieved an average of 11.64 (in a scale of 0 to 20), significantly higher than the average of 9.96 of the 41 students in the control group.

INTRODUCTION

One of the ways a student has to learn is through the feedback that the professor gives him, in relation to some activity that he has performed. If this activity is not a final assessment, the student can take advantage of feedback not only to learn but also to improve his or her grading in future assessments. However, if the evaluation is a final one, there will be no time to receive feedback from the professor, and the opportunity to correct poorly assimilated learning is lost.

This is where FeedForward comes in, as a strategy that the professor can use not only to comment on the past and present behavior of the student, but mainly to anticipate his future one. In other words, what the student should do and avoid in the evaluation to come, in order to approach the behavior of an expert in that area of knowledge. Here the emphasis is on trying to avoid the common mistakes that learners usually make when they are learning a new area of knowledge, that is, when they are trying to model the behavior of an expert in that area.

DOI: 10.4018/978-1-7998-3476-2.ch017

Feedback allows you to treat mistakes as learning opportunities, rather than just failures. Feedforward also allows you to treat (common) errors as opportunities to get a better grade in the next assessment.

In this chapter, the author explores the contribution of screencasts as one possible solution to providing feedforward. A screencast is a digital recording of computer screen output, including mouse movements and clicks. Also known as a video screen capture, screencasts can include audio narration to explain the process that is being documented by the screencast. If well planned and recorded, screencasts can expose students to the common errors in a certain field, as well as to the best practices that avoid or correct those mistakes. Due to its multimedia nature and flexibility, screencasts are a much richer way of providing feedforward than the written form.

BACKGROUND

FeedBack and FeedForward

In the simplest form, feedback consists of a teacher who corrects errors in students' performance and gives advice on how they can improve performance in similar future situations (Hendry, White, & Herbert, 2016). Although this definition is understandable, it is far from being all-inclusive. There are other agents, besides teachers, who can give feedback; and there is more to feedback than just correcting errors.

Thus, as researched by Hattie and Timperley (2007) in their meta-analyses compilation, feedback is defined as any kind of information provided by an agent (e.g., teacher, peer, book, parent, self, video) regarding aspects of one's performance or comprehension. A teacher or parent can provide corrective information, a peer can provide an alternative strategy, a book or video can provide information to clarify ideas, and a learner can look up the answer to evaluate the correctness of a response. Feedback thus is a "consequence" of performance and its purpose is to confirm, expand, overwrite, or restructure the students' knowledge or performance.

Except when it confirms a student's outcome (because it is correct), feedback aims to fill the gap between what is understood and done by the student, and what he should be understanding and doing (the desired goal) (Koen, Bitzer, & Beets, 2012).

To close that gap, Hattie and Timperley (2007) claim that effective feedback should answer these three questions:

1. Where am I going? (What are the goals?)
2. How am I doing? (What is right and wrong?)
3. Where to next? (What should I change?)

The same authors named each of the above questions as Feed Up, Feed Back, and Feed Forward, respectively.

Learning goals must be SMART (Specific, Measurable, Attainable, Realistic, Timely), i.e., they cannot be vague to the extent that the student (and the teacher) does not know if he/she have reached them or not. Feedback will tell you whether the success criteria of these goals have been met or not. Nevertheless, sometimes feedback is diverted from these goals (e.g., the purpose is to write an interesting story, but feedback only points out spelling errors).

11 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/feedforward-with-screencasts/258775

Related Content

Edmodo in an Institute of Teacher Education: A Platform for Blended Learning

Quinie Ong Kooi Looand Kathleen Dass (2019). *Redesigning Higher Education Initiatives for Industry 4.0* (pp. 123-143).

www.irma-international.org/chapter/edmodo-in-an-institute-of-teacher-education/224211

Investigating the Experiences of Mathematics Teacher Technology Integration in the Selected Rural Primary Schools in Namibia

Clement Simujaand Hilya Shikesho (2024). *International Journal of Technology-Enhanced Education* (pp. 1-15).

www.irma-international.org/article/investigating-the-experiences-of-mathematics-teacher-technology-integration-in-the-selected-rural-primary-schools-in-namibia/340028

Empirical Study Outcome of Augmented Reality Technology for Solving Engineering Problems in UNITEN

(2020). *Advanced Technology-Assisted Problem Solving in Engineering Education: Emerging Research and Opportunities* (pp. 170-193).

www.irma-international.org/chapter/empirical-study-outcome-of-augmented-reality-technology-for-solving-engineering-problems-in-uniten/239824

Investigating Students' Perceptions of DingTalk System Features Based on the Technology Acceptance Model

Danhua Peng (2023). *International Journal of Technology-Enhanced Education* (pp. 1-17).

www.irma-international.org/article/investigating-students-perceptions-of-dingtalk-system-features-based-on-the-technology-acceptance-model/325001

Social Media, Cyberculture, Blockchains, and Education: A New Strategy for Brazilian Higher Education

Matheus Batalha Moreira Nery, Magno Oliveira Macambira, Marlton Fontes Motaand Izabella Cristine Oliveira Rezende (2020). *Blockchain Technology Applications in Education* (pp. 242-259).

www.irma-international.org/chapter/social-media-cyberculture-blockchains-and-education/249894