

# **MVPx2: A PROPOSED FEEDBACK MODEL FOR MILLENNIAL STUDENTS**

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### **ABSTRACT**

*Increasingly, today's adult online college student is a Millennial possessing high self-esteem but low self-efficacy as cognitive characteristics. This work examines research into these cognitive differences, Bandura's self-efficacy theory, and the role of instructor feedback aimed at improving self-efficacy and self-directedness among these adult students. A resulting feedback model is offered for application in online education to address these challenges and improve persistence.*

*Keywords: millennials, self-efficacy, online education, persistence, feedback*

One of the central tenets of adult education is the requirement that learners be self-directed and active participants in their own knowledge acquisition and skills development (Merriam & Caffarella, 1999; Knowles, Holton, & Swanson, 2005; Nicole & Macfarlane-Dick, 2006). Nowhere is this more evident than in online university programs that focus on working adults. Teaching practitioners in these programs strive amidst an array of challenges facing adult learners in crafting strategies aimed at motivating adult learners, improving their persistence, and helping them to become self-directed or self-regulated learners. One important strategic component involves instructor feedback, which assumes additional significance in online education in the absence of face-to-face interaction between instructor and student. As instructors, what we say and how we say it has important implications in this self-directedness formation process. One important consideration involves the premise that Millennial learners possess high self-esteem but low self-efficacy.

### **PURPOSE OF THE STUDY**

The purpose of the study is to examine the research literature on self-efficacy in human learning, cognitive characteristics of Millennial students, and required constituents of instructor feedback towards improving self-efficacy among adult Millennials in the online education environment. It seeks to explicate a specific feedback model for effective feedback that will be supportive of building self-efficacy in online college education.

### **LITERATURE REVIEW**

Three broad areas of research were examined: (1) the unique characteristics of Millennials, (2) Albert Bandura's (1976) self-efficacy theory, (3) and research into feedback and attribution to determine how specific feedback likely enhance millennial students' self-efficacy and encourage their persistence in an online environment. The paper

will focus on three areas. The first section seeks to identify the changing needs of a millennial student. The second section endeavors to explore self-efficacy as it applies to millennials. The third section attempts to identify online feedback strategies specifically as they apply to motivating millennial students and encouraging success to inform a resulting feedback model proposed by the authors.

### THE MILLENNIAL LEARNER

Variouly called Generation Y, Generation N, Nexters, the Net Generation, the “Me Generation” and others; Millennials are generally classified as those born between the years of 1981-2004 (Novotney, 2010). Using Novotney’s date range, at this writing, they would be 13-36 years of age respectively and greatly impacting adult online education in large numbers as well as comprising a sizable population of adult learners in the foreseeable future. A steady stream of education research highlights important characteristics of this group (Feiertag & Barge, 2008; Holyoke & Larson, 2009; Novotney, 2010; Oblinger, 2003; Oblinger & Oblinger, 2005; Palmer, 2015; Roberts, Newman, & Schwartzstein, 2012). While it is important to note that stereotypical characteristics attributed to Millennials may not be shared by all or shared with other generations; such stereotyping is useful in attempting to understand this segment of the population. A review of the literature reveals significant differences between Millennials and earlier generations of adult students; both social and technological.

### SOCIAL

As a group, Millennials are characterized in the literature as having been overly protected by their parents, particularly close to them and embracing their values (Oblinger & Oblinger, 2005). They are self-confident, high-achievement oriented, self-assured, and assertive (Palmer, 2015) and have been influenced by a lifetime exposure to online technology, the emergence of globalization, reoccurring wars, and the absence of heroic figures as role models (Roberts, Newman, & Schwartzstein, 2012). Because of excessive parental accommodation, Millennials have been cited as lacking a chance to develop self-efficacy through failures and thus having an over-estimation of their own self-esteem (Palmer, 2015).

### TECHNOLOGICAL

Having grown up in a digital universe, Millennials are conditioned to the instantaneous nature of technology (Feiertag & Berge, 2008, p. 458) and as multi-taskers, often have difficulty intently focusing on single tasks

(Oblinger & Oblinger, 2005, p. 2.4). They believe ‘it’s cool to be smart’ and are fascinated by recent technologies (Oblinger, 2003, p. 38).The stereotype of the Millennial therefore is of a technology-savvy students brimming with self-esteem but lacking confidence in their ability to successfully engage in college-level work (self-efficacy).

### SELF-EFFICACY

Cognitive psychologists have examined the perceived need for humans to exercise control over their lives through human agency and the mechanisms used to exert such influence. While various theories have been advanced over the years (Adler, 1956; Rotter, 1966) and others; Albert Bandura’s (1976) self-efficacy theory offers the most comprehensive approach to understanding and explaining the phenomenon. Bandura (1976, 1982, 1995, 1997) asserted that it is through such control mechanisms as humans, that we are able, when facing events that occur within our lives, to make these things predictable and allow us to adapt to the challenges of life (Bandura, 1995, pp. 2-3). Albert Bandura (1995) defined self-efficacy as the recognition that one possesses sufficient abilities to successfully meet the demands imposed by life situations (pp. 2-3). Such self-efficacy is a principal component of human agency, influencing human thought, feelings, motivations, and actions (pp. 2-3). Self-efficacy influences cognitive processes, motivational processes, affective processes, and selection processes (pp. 5-11) and it is task and domain specific (Artino, 2012; Bandura, 1997; Paunonen & Hong, 2010). An individual, therefore, will experience differing levels of self-efficacy across different domains and involving differing tasks. Bandura (1995) outlined four main sources for a person’s self-efficacy; mastery experiences, vicarious experiences, social persuasion, and physiological and emotional states (pp. 3-4).

### MASTERY EXPERIENCES

An individual’s own cumulative enactive successes and failures constitute their most authentic and reliable sources for the development of self-efficacy (Bandura, 1982). It is through such trials that humans acquire the necessary psychological tools to effectively manage dynamic life events (Bandura, 1995, p. 3). As part of a person’s developmental process, overcoming challenges and setbacks through persistent effort from childhood through adulthood serves to enhance self-efficacy while experiences that offer easy success via accommodation or sheltering contribute to the formation of lower self-efficacy resulting in discouragement when faced with unexpected task requirements or results (Bandura, 1995, p. 3).

## VICARIOUS (SOCIAL) EXPERIENCES

An individual's self-efficacy is partly shaped by the observed experiences of others as social models (Bandura, 1995). Observing the success of others is influential in teaching that the observer can also be similarly successful and conversely, observing the failure of others can contribute to the observer's lower self-efficacy within that domain (Bandura, 1982). Vicariously derived information also improves overall self-efficacy by providing information about the event and its predictability as well as successful strategies used by others (Bandura, 1982).

## SOCIAL PERSUASION

Social persuasion contributes to a person's self-efficacy by enhancing their beliefs that they have the capabilities required for success (Bandura, 1995, p. 4). Such persuasion has been found to increase a person's use of self-resources to overcome obstacles in sustained effort over those lacking such persuasion (Bandura, 1995, Litt, 1988). Bandura noted however that it is more difficult to increase self-efficacy through persuasion than to use persuasion to decrease self-efficacy (p. 4).

## PHYSIOLOGICAL AND EMOTIONAL STATES

Lastly, Bandura (1995) noted how a person's self-perception of their own physical and emotional responses to performance contributes to self-efficacy. People with high self-efficacy tend to equate it with high physiological energy and conversely, those with low self-efficacy tend to equate it with physiological debilitation (p. 5). Mood affects a person's self-efficacy with more positive moods correlated with higher self-efficacy and negative moods with lower self-efficacy (Kavanagh & Bower, 1985).

## INSTRUCTOR FEEDBACK STRATEGIES

A strong body of research correlates high self-efficacy with successful academic performance and low levels with unsuccessful performance (Bandura, 1993; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Schunk, 2001; Schunk & Pajares, 2002; Zimmerman, 1995; Zimmerman, & Bandura, 1994; Zimmerman, Bandura, & Martinez-Pons, 1992). Another research stream has identified low self-efficacy as a common characteristic among Millennial students (Feiertag & Barge, 2008; Holyoke & Larson, 2009; Novotney, 2010; Oblinger, 2003; Oblinger & Oblinger, 2005; Palmer, 2015; Roberts, Newman, & Schwartzstein, 2012). An emerging stream of research examines the role of instructor feedback in the self-efficacy of students (Beattie, Woodman, & Fakehy, 2016; Garner

& Wood, 2009; Lipnevich & Smith, 2009; Nease, Mudgett, & Quiñones, 1999; Nicol & Macfarlane-Dick, 2006; Owen, 2016; Wiltse, 2002). As instructors of increasing numbers of Millennial college-level adult learners in on-line education, it is instructive to consider which specific feedback approaches will likely contribute to higher self-efficacy and which are likely to contribute to lower self-efficacy among this population of students.

## THE ROLE OF CAUSAL ATTRIBUTION

Attributional variables are an important source of a person's self-efficacy information and therefore form a causal link between instructor feedback and student self-efficacy (Heider, 1958; Schunk, 1983). Attribution theories propose that individuals ascribe their achievement outcomes to competence, persistence, level of task difficulty, or luck (Schunk, 1983, p. 848). Further, individuals form their perceptions of future successes upon their past outcomes (p. 848). Within online education therefore, the inferences drawn from feedback are central to students' self-efficacy.

## EFFECTIVE AND EFFICIENT FEEDBACK

In reviewing the extant literature on feedback, several themes emerge. Some address the goals for good feedback and what it should accomplish while others attempt to address the process itself within the context of existing constraints and possibilities. A useful construct to differentiate between how well feedback meets the student's recognized learning needs is effectiveness while a useful construct to describe how well the feedback process itself functions is efficiency. We posit that in practice, good feedback should be both effective and efficient.

Within the sub-stream of self-efficacy feedback research for Millennials, several constituents for effective feedback to support the self-efficacy of these learners emerged from our research. It is important however to recognize that a disconnect often exists between instructor and learner perceptions of feedback – When a gap exists between the learning experience expected by the learner and expected and delivered by the instructor, it can negatively impact the learner's self-efficacy (Carless, 2006; Zimmerman, Schmidt, Becker, Peterson, Nyland, & Surdick, 2014).

A central tenant of feedback literature is that feedback should promote self-regulated learning and should support the learner's development of cognitive skills to set goals, devise strategies to meet them, and to manage their cognitive resources used in the process (Nicol & Macfarlane-Dick, 2006).

Building on earlier the work of Hounsell (2007), Carless, Salter, Yang, and Lam (2011) defined sustainable feedback as “Dialogic processes and activities which can support and inform the student on the current task, whilst also developing the ability to self-regulate performance on future tasks.” (p. 397). Effective feedback should, therefore, support such dialogue between instructor and learner since it enables the learner to incorporate incremental gains into the overall learning process (Carless, et al., 2011, p. 397). Sadler (1989) noted that the only way for instructors to know the effectiveness of their feedback is to facilitate a way for the student to communicate this in a two-way communicative process (Sadler, 1989).

Nicol and Macfarlane-Dick (2006) proposed, through metacognition research, a broad seven-step feedback model to support such self-regulation. Under their model, feedback should define desired performance; support the learner’s own self-assessment; convey useful, quality, information; support dialogue between instructor and learner; be motivational; leave avenues open to address any gaps; and be useful in improving teaching (p. 203).

Gibbs and Simpson (2004) proposed that effective feedback be “regular, quite specific, centered on contents and not on the student’s personal characteristics and facilitated in time in order to be applied in further learning” (Gibbs & Simpson, 2004 as cited in Plana-Erta, Moya, & Simo, 2016, p. 199).

### **A PROPOSED FEEDBACK MODEL**

To effectively and efficiently address low self-efficacy among Millennial online college students, we propose that instructor feedback should meet the following:

#### **GOAL ORIENTATION AND COMMUNICATION**

Feedback should specifically address performance on assignments in which the instructor’s task goals have been clearly communicated and modeled for the learner such that the learner has had an opportunity for self-goal setting. Goals should challenge but not exceed the learner’s capabilities (Artino, 2012, p. 81). Feedback offering corrective advice should communicate to the student the instructor’s experience with the work in a non-authoritarian manner rather than judgmental comments (Nicol & Macfarlane-Dick, 2006, p. 209). Care should always be taken to communicate to the learner that it is the work performance that is being evaluated in the feedback and not the person (Lipnevich & Smith, 2008; Nicol & Macfarlane-Dick, 2006, p. 212).

#### **TIMELINESS**

Feedback should be offered in time for the learner to apply it. Timeliness of feedback was found to support self-efficacy among learners while delay in such feedback created ambiguity among Millennials resulting in lower self-efficacy (Bettie, Woodman, Fakehy, & Dempsey, 2016; Planar & Moya, 2016.)

#### **FRAMING**

The ways in which feedback comments are framed have important implications for the learner’s self-efficacy. Bandura (1995) noted persuasion from others as a source of self-efficacy but cautioned that it had to be realistic to contribute to self-change; if not, it could diminish the recipient’s self-efficacy beliefs (Artino, 2012, p. 3). Research into valence or how the feedback is framed positively or negatively concluded that positively-framed feedback increased self-efficacy while negatively-framed feedback reduced it (van de Ridder, et al., 2015, p. 810). Praising the learner’s effort and required actions has been found to improve the learner’s performance over praising the learner’s abilities (Nicol & Macfarlane-Dick, 2006, p. 212).

#### **OPPORTUNITIES AND CHALLENGES POSED BY ONLINE EDUCATION**

Much of the existing research is situated within traditional face-to-face environments and thus ignores specific constraints as well as opportunities presented by the online mode. While constraints exist within many online models including open enrollments, large class sizes, compressed time-frames, and pre-developed teaching materials; opportunities for efficient feedback abound within an online technologically-driven environment. For example, to assist the student’s mastery experiences, samples of exemplary work can be posted as online learning resources to enable learners to goal-set before the assignment. Detailed grading rubrics can likewise be made available to the learner in advance of the task to facilitate goal-setting as well as to open an avenue for two-way discourse between instructor and learner. Online exams and quizzes can be supplemented by computerized feedback to lessen the negative self-efficacy effects of scores lacking such feedback (Lipnevich & Smith, 2009).

Online learning lends itself naturally to the timeliness construct by using technology both asynchronously and synchronously to deliver feedback instantaneously, limited only by the instructor’s ability to create it.

Offering feedback incorporating technology regularly used by Millennials including audio and video provides

students opportunities for feedback contextualized across the full spectrum of learning styles possessed by Millennials – verbal, through written feedback; visual, through pictures and models; aural, through listening to feedback; tactile, by having the student follow instructions they have created and by making personal connections with the material; and kinesthetic, through personal demonstration to themselves or others.

### **MVPx2: AN APPLIED MODEL TO PROMOTE SELF-EFFICACY IN THE ONLINE CLASSROOM**

Three specific components present in some form within most online college-level programs were examined for practical ways in which the environment and instructor feedback can be structured to specifically address low self-efficacy among Millennial learners – class discussions, written assignments, and class seminars.

#### **CLASS DISCUSSIONS**

Class discussions are usually asynchronous opportunities for students to discuss specific topic questions to demonstrate their understanding of the topic and interact with instructor and peers. As such, these offer important opportunities for the instructor to address the student's self-efficacy in each of Bandura's (1997) sources.

Mastery experiences (M). The class discussion is an activity wherein students can increase their self-efficacy and promote mastery experiences by interacting with their peers in a positive and confident manner. The instructor can promote this by posting exemplary models of potential posts that will help illustrate high-level expectations while encouraging students by being interactive and collaborative within the discussion. Real-world experiences and scenarios can connect with students' past experiences that build upon new activities. The students are then able to transfer their increased confidence level by utilizing mastery experiences to tackle similar activities going forward (Beattie, Woodman, Fakehy, & Dempsey, 2016), thus reinforcing previous successes.

Vicarious experiences (V). Class discussions also offer students rich sources of vicarious reinforcement for self-efficacy. When learners observe that others can successfully complete a specific task, it raises their self-efficacy regarding that task (Bandura, 1982). Cognitively, such modeling is important in adult education since it allows the adult observer to identify salient features of the task; acquire both regulatory and non-regulatory cues regarding the task; identify specific strategies to be applied or avoided; and the level of coping likely required for successful completion of the task. The instructor can facilitate

this by posting initial postings modeling the desired task performance in advance to provide students with a useful vicarious learning model. The discussion questions or points should be clearly stated such that students understand what is being sought and in evaluative feedback, the instructor should objectively inform students, in a timely manner, of any deficiencies in their work with specific examples of remediation. The instructor should deliberately respond publicly to exemplary work by students pointing out desired features. Discussion responses can likewise be modeled in advance such that students can be given advance guidelines regarding response expectations and these can discourage superficial complements and encourage substantive dialog.

Verbal persuasion and physiological cues (Px2). Verbal persuasion and physiological cues are yet two more factors that can positively impact online students' self-efficacy (Bandura, 1997). Ongoing and encouraging communication as well as consistent emotional stimulation can serve to reassure students that they have what it takes to be successful and that they have ongoing support and guidance from the instructor. Online instructors should conscientiously try to utilize as many different avenues of communication and emotional stimulation as practical and strive to promote a positive, supportive mood by carefully crafting comments that reinforce a can-do attitude, thus reducing the stress and anxiety that many online students experience thereby increasing the likelihood of success. In class discussion forums, for example, the instructor can maintain a positive, productive approach by genuinely praising student comments, offering thoughtful guidance when necessary, and carefully redirecting students when they begin to veer off track. They can also help to promote a feeling of collaboration and connectivity by posting comments that assure students that the entire class is working together to build meaning and create new discoveries.

#### **WRITTEN ASSIGNMENTS**

Written assignments offer instructors an opportunity to provide both quantitative and qualitative feedback on students' written work and assignment feedback can be effectively used to improve students' self-efficacy across all of Bandura's (1997) sources.

Mastery experiences (M). Instant self-efficacy reinforcement occurs when students receive positive feedback on assignments within the online environment. Feedback should be timely and appropriate to the task at hand. Positive but objective comments and observations will encourage the students to push themselves to a higher level on their next assignment, promoting mastery experiences

and higher self-efficacy. Constructive feedback should be positive in nature and focus on the specific task being assessed and not effort expended. Offering samples and examples of problem areas is a positive way to keep the motivation active and moving forward.

Vicarious experiences (V). Carefully prepared example papers (that do not lend themselves to copying) can be placed in advance into each class library or document sharing area to serve as exemplary models of expected performance. This could include such things as APA template papers, EXCEL spreadsheet examples, disguised outstanding work of prior students, or fictitious work created by the instructor. Timely feedback of assignment work should clearly communicate elements in the work that did not meet performance standards, where it did, along with ways to meet these going forward.

Verbal persuasion and psychological cues (Px2). Grading feedback offers yet another opportunity for online instructors to guide and motivate students. As instructors craft comments, they can focus on positive performance elements as well as pinpointing areas for improvement. This will motivate students to continue to pull from their strengths while also focusing on making ongoing improvements in their weaker areas. It will also encourage students not to fear constructive criticism but to see it as more of an opportunity to learn to build a better product.

Class Seminars: Class seminars and other such synchronous activities present excellent opportunities for enhancing students' self-efficacy in each of Bandura's (1997) sources.

Mastery experiences (M). Such synchronous exchanges where online students can shine and communicate their knowledge and expertise offer rich sources for mastery experiences. Instructors can create the atmosphere of camaraderie by interacting with students in a professional manner and by creating an environment where students feel that they can safely leverage their own knowledge and experience in participation. Calling students by name, commenting on their posts, allowing students to respond without fear of negativity or disapproval will encourage students to offer their thoughts and ideas that promote their self-confidence and increase their self-efficacy.

Vicarious experiences (V). Seminars present opportunities for experience sharing within the context of specific tasks. This sharing can be initiated by the instructor or elicited from the participants by the instructor. The goal in each of these approaches is to increase students' self-directed learning thereby enhancing self-efficacy by learning from others.

Verbal persuasion and physiological cues (Px2). Live seminar sessions offer online instructors an extremely powerful

avenue of communication and physiological stimulation where they can use voice tone in audio formats or other non-verbal cues in the case of video formats to promote feelings of security, encouragement and even excitement. Seminars also provide a forum where instructors can verbally assure students that they possess the capabilities to succeed and to overcome any obstacles they might face.

## CONCLUSION

An examination of the extant literature paints a picture of today's Millennial adult online college student as possessing high self-esteem but low self-efficacy. This work examined these differences through the lens of Bandura's self-efficacy theory and the role of instructor feedback in improving self-efficacy and self-directedness among these adult students. Finally, an applied instructor feedback model – MVPx2 was proposed as effective and efficient in addressing low self-efficacy among online Millennial students.

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