

*Strategies to Support Higher Education Learners with  
Anxiety in Digital Formats*

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**Abstract**

Higher Education students that have identified themselves as experiencing stress and/or anxiety and depression have risen. Also, with many students opting for online or digital learning opportunities, identifying and fulfilling adult learners' needs is critical. Quality instructional design aimed at enhancing their achievement and self-empowerment, specifically in a time where students are experiencing anxiety, is essential to support students in learning content, and ultimately increase graduation rates. Students with anxiety often demonstrate behaviors such as inconsistency, poor relationships, lack of engagement and motivation, and lower working memory. A connection is made between the educational behaviors of students with anxiety and specific supports that can be implemented in digital formats.

**Keywords:** Anxiety, stress, adult learners, higher education, support strategies

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There is an increase in adult learners with anxiety in higher education. The American College Health Association (2021) found that 33.7% of undergraduate college students were identified themselves as experiencing anxiety, and 42.3% of undergraduate students reported feeling stress. Hartmann (2014) stated, "anxiety is a subjective state of fear, apprehension, or tension" which "in the face of a naturally fearful or threatening situation; anxiety is a normal and understandable reaction" (p. 1). Further, the American College Health Association

found that 74.3% of students have experienced problems or challenges in three or more of these categories (academics, career, finances, procrastination, faculty, family, intimate relationships, roommate/housemate, peers, personal appearance, the health of someone close to me, death of a family member, friend, or someone close to me, bullying, cyberbullying, hazing, microaggression, and discrimination). Through student self-reported data, the American College Health Association found within a month, the overall level of stress experienced was, “1.4% No Stress, 18.5% Low, 49.2% Moderate, 30.9% High.” (p. 14).

Additionally, there may be a correlation between anxiety in higher education students, and other problems or challenges in their life, as demonstrated in the statistics above. To mitigate negative impacts which may result in a student’s inability to complete their college degree, Fischer et al (2021) found that offering online courses may help students to more efficiently complete courses, accelerate time-to-degree, and graduate college.

## **Characteristics of Higher Education Students with Anxiety**

Students with anxiety are at risk of suffering from poor academic performance and resistance to school-related activities. This may manifest as a lack of engagement in the classroom, poor relationships with peers and teachers, missing class and/or assignments, and disinterest in pursuing passions and planning for the future (International Board of Credentialing and Continuing Education Standards, 2020) Further, their learning is also affected because anxiety and depression are shown to impact working memory, making it more challenging to retain new information and recall previously learned information (The American College Health Association, 2021).

## **Supports for Higher Education Students with Anxiety in Digital Learning**

From a motivational perspective, Knowles (1984) suggests that adult learners are more motivated to learn if the content is relevant to their goals and has an immediacy of application. This connects to the barrier of students with anxiety to remain engaged in the learning content. Research supports positive outcomes when a teacher used different topics to better engage the diverse student population in the course. In a case study, the teacher discussed that topics or questions that unsettled the students also stimulated their engagement (Heliporn et al., 2021).

To engage higher education students motivated toward their future goals, faculty can have students record and discuss their learning goals for the course, and how it will support them

toward their future goals in a K-W-L chart. The K-W-L strategy, designed in a three-column format, requires students first to list what they already know about a topic (calling attention to prior knowledge); second, to write what they would like to know about a topic (tapping student interest and providing purpose for reading); and third, after reading and discussion, to list what they learned and would still like to learn (making connections between questions asked and information encountered) (Shelley et al., 2018). Throughout the course, faculty can support students by making meaningful connections on how the content can impact the students' goals, perspectives, and ultimately career outside of the higher education institution, and asking students to reflect on how the learning will positively impact their learning goals by hyperlinking back to the first reflection and have students add to their learned information.

Interaction with peers or faculty is an essential component in distance learning. Heilporn (2021) found success for students when teachers promoted student engagement by proposing active or interactive teaching and learning activities. In the asynchronous mode of digital learning, effective teaching strategies such as using supportive digital tools (e.g., commented slides, interactive videos, game-based learning applications, online quizzes, discussion forums) had a positive impact on engagement. These strategies may support the poor relationships with peers or faculty which may manifest for higher education students with anxiety.

Faculty and course designers in higher education would best support students to promptly complete coursework by having clear deadlines, an interactive calendar, and a checklist of assignments for each module or topic of students. Faculty who have clear due dates, check-in with students who are inactive, and send reminders to the whole class may provide positive support for higher education students with anxiety.

Koke and Norvele (2008) found that the teaching of learning strategies fosters the development of an approach to learning which results in the ability to reflect and analyze one's learning process. To support self-directed learning, Alotaibi (2016) suggests that clear goals and assessment standards, as well as appropriate strategies to foster learners' independence over time, should be incorporated in the instructional design. Faculty and course designers that set specific course objectives and highlight how each component of the course connects to the objective learning of the course may support learners to make connections and become motivated in the understanding and application of the course content.

In support of a student's working memory, digital formats can make connections between current learning and prior information through color-coding, linking to prior learning, and explicitly demonstrating a connection between prior knowledge or schema, and new learning. Pop-up bubbles, comments on the content page, or bolding by faculty can be utilized as working memory strategies for higher education students; students should also be privy to these features on the digital platform so they can make their connections and independently support

their working memory and learning.

## **Conclusion**

Students in higher education with anxiety may benefit from explicit supports in place when taking online courses based on their needs. These supports include utilizing engaging content, scenarios, and questions, encouraging students to recall and make connections to learning goals throughout the course, engaging in peer and faculty relationships, having clear due dates and reminders for active engagement reminders for students, and using digital tools to make connections to prior learning.

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