

# Student Retention and Success in an RN-BSN Program: Determining Variables and Methods

*Audrey Tolouian*

Clinical Associate Professor, School of Nursing, University of Texas at El Paso, United States

*Melissa Wholeben*

Assistant Professor, School of Nursing, University of Texas at El Paso, United States

*Diane Rankin*

Clinical Instructor of Nursing, School of Nursing, University of Texas at El Paso, United States

Doi:10.19044/ejes.v9no2a107

[URL:http://dx.doi.org/10.19044/ejes.v9no2a107](http://dx.doi.org/10.19044/ejes.v9no2a107)

---

Submitted: 05 April 2022

Accepted: 23 May 2022

Published: 30 June 2022

Copyright 2021 Author(s)

Under Creative Commons BY-NC-ND

4.0 OPEN ACCES

---

## **Abstract:**

### **Background**

The Online Registered Nurse to Baccalaureate Science in Nursing (RN- BSN) Program has a retention rate of close to 97.5% (UTEP, 2020). Attrition rates in nursing programs are high. The National League for Nursing (NLN) last reported a 25 % attrition rate which may double for minority students in four-year nursing programs (NLN, 2014; Elkin, 2019). As online courses in colleges and universities are growing and are predicted to become mainstream by 2025, it is essential to identify factors contributing to our retention rates. American Association of Colleges of Nursing (AACN) has made it part of its 2021-2022 policy priorities to increase access to nursing programs (AACN, 2021).

### **Objective**

The purpose of this study was to ascertain the factors affecting nursing student retention. The information was used to make changes to the existing online programs in our school and better support our students. The research question was “What factors do students identify that influenced their RN to BSN program retention?”

### **Methodology**

The participants were chosen using a convenience sampling technique. The university was a public institution located in a border town. Three types of questions were asked: (1) general demographic information, (2) nursing career, and (3) program requirements for the RN-BSN.

### **Results**

A total of 33 participants completed the RN-BSN retention program study. The findings indicated that several general factors contribute to retention and student success, including student support services, mandatory orientation programs for students and faculty, credit student success courses, remedial academic ability programs (which discuss support services, particularly computer tech support), and recognizing the importance of diversity in the classroom and at work.

## **Conclusion**

Examining the characteristics of distance education students, as well as their distinct abilities and needs, may assist schools in improving student retention. Reconsidering the characteristics and unique features of distance learning students may help schools retain students with a variety of needs, such as access to scholarships, loans, and financial incentives to continue their education.

---

**Key Words:** RN to BSN Retention, Education, On-Line

## **Introduction**

The recent changes in course delivery worldwide have added to reasons to learn methods to increase student retention in online classes (Smith, 2016). Online courses in higher education are steadily growing and are predicted to become mainstream by 2025 (Palvia, Aeron, Gupta, Mahapatra, Parida, Rosner, & Sindhi, 2018). Essential to know, those online classes continue to have lower retention rates than face-to-face classes (Brown, 2011; Jenkins, 2011; Patterson & McFadden, 2009, Seery et al., 2021; Rizkallah & Seitz, 2017). Some strategies that have been successful in retaining students have been improving technical skills in the students and providing strong tech support during the program. Online, face-to-face orientations have also been used successfully to increase student success, requiring students to build peer connections with group projects and “coffee shops,” sessions set up for building peer relationships (Brown, 2011; Heyman, 2010; Jenkins, 2011; Norwin & Wall, 2010; Seery et al. 2021; Tolouian et al., 2022). One area of interest observed in the literature is student support services. Faculty and students are typically unaware of the services provided (Grasgreen, 2012, Richardson, Sheeks, Waller, & Lemoine, 2021). This knowledge needs to be shared during student orientation.

Our program holds an online orientation for the incoming program students. This initiative lasts about two hours and introduces the students to the various aspects of the program. They have the chance to meet and chat with the faculty, learn how to communicate with the faculty, and let faculty know how best to contact them. They can meet their peers and learn the basics of what will be expected of them in the first couple of weeks. The School of Nursing policies and procedures are reviewed, as are the mentorship requirements of the program.

## **Background**

Our RN to BSN Program has close to 97.5% retention (UTEP, 2020). This program has a 52% Hispanic population which is considered at high risk for attrition (UTEP, 2020). The article will share both positive and negative facets of the online educational program. It was decided to re-evaluate our retention rates after a mentorship program was implemented in the program’s final year (Wholeben et al., 2021), and it was determined that the retention should be re-evaluated. This information will be used to make changes to the existing online programs in our division and better support our students. This will be ongoing casual support for students and further knowledge for our successful nursing program through “Coffee Shops” (an optional safe place for students to come hang out in a semi-structured environment) and other modalities that provide interaction between students and students and faculty and students.

Market research has shown that keeping a student is much less expensive than finding a new one. Dawkins and Reich (1990) reported that a five (5) percent increase in customer/student retention generated an increase in customer net present value of between 25 percent and 95

percent across a wide range of business environments. Keeping our students is more advantageous than losing them and searching for replacements (Deepeka & Narayanan, 2018).

Building relationships between online students is essential, and assistance needs to be offered to the students (Özbuğutu, E., 2021). More interaction between students will help retain the student population of these nursing students. Building techniques into the online program where the students have further access to others will help build friendships and peer support. Our study participants stated peer support as a positive aspect of their success. Peer support has been positively associated with college adjustment (Dennis et al., 2005; Eby et al., 2008; Swenson et al., 2008; Mishra, S, 2020). Online programs need to create methods outside of classroom activity for students to meet and bond. Similar campus activity areas like coffee meeting locations, study groups, and activities that can be inserted into the online framework with easy access - online sites for informal chat and relationship building among students.

### **Framework for our program**

Vroom, (1964) developed the Expectancy Theory. He believed that people work towards a goal and are typically motivated by a positive correlation between the amount of effort that one puts in and their performance and good performance will result in the desired outcome. That final reward will fill a need the person is looking to fill. This theory served as the framework for this study, as the study was looking to identify factors that kept the students enrolled in the nursing program during difficult times.

Improving our nursing program is a constant study. The online nursing program strives to uncover the factors that influence nursing student retention by identifying both positive and negative facets of the online educational program. The information collected is used to make changes to the existing online programs in our division and provide better support to our students.

### **Research Question**

R<sub>1</sub>: What factors do students identify that influenced their RN to BSN program retention?

### **Methods and Design**

This study uncovered the factors that influenced nursing student retention. The focus was to identify both positive and negative facets of the online educational program. The information was used to make changes to the existing online programs in our division and better support our students. All participants were asked to complete a demographic survey and answer open-ended questions related to their experience in the RN-BSN program. IRB approval for this study was obtained.

A survey was provided to volunteer students taking their last course in our online nursing program. Each participant in this study was provided with an electronic link to the consent form and surveys. The consent forms contained the study purpose and consented to participate. This was completed before the pre-survey document. All consent forms and surveys were hosted using QuestionPro, an online survey software. All consent forms and surveys were coded with a unique participant identification (PID) number.

### **Setting**

The settings included the following location: a public university in a border town school of nursing. This site is the location of the Undergraduate Baccalaureate Nursing Students.

### **Sample**

The participants were chosen using convenience sampling. The research study participants were recruited during the final course in the RN-BSN program starting Summer of 2020 to the Spring of 2021. Potential participants were given a description of the study by the Principal Investigator (PI) regarding the research study's purpose, methods, and evaluation components.

### **Data Collection Analysis and Interpretation**

De-identified data from the password-protected hard drive was exported into a file containing a comma-separated variable (CSV). A copy of the de-identified data was provided to the statistician consultant. Excel software was used to aggregate data. Statistical analysis was performed using SPSS Version 26 software programs.

## **Results**

### **Participant Demographics**

A total of 33 participants completed the RN-BSN retention program study. The participants graduated over a period of three (3) different cohorts. Questions were asked to determine the demographics of the participants. There were three categories of questions asked: (1) basic demographics, (2) nursing career, and (3) completion of the RN-BSN program requirements.

The demographics of this population were diverse in age, race/ethnicity, and years working as a nurse. Most participants were female (70%). Ages spanned from 26 years of age to over 51 years of age, with many participants being Married/Domestic partners (57.5%). The highest percentage of participants indicated they were first-generation college students (57.5%). Half of the participants spoke English as their primary language at home (51.5%). Hispanic/Latino(a) at 51.5% was the predominant identified Ethnicity.

Most participants have been practicing nursing for under five years (36.3%) regarding their nursing career. Over half of the participants work full-time as a Registered Nurse (66.7%). Most participants have obtained their nursing licenses in the past five years (45.4%). Access to a local RN to BSN program within 50 miles is split 42.4%, with over half of the students having access to an online program at a local university (63.6%). Most participants spent 6-10 hours studying every week (36.3%), while the total length of the program's highest percentage was between 10-15 months (48.4%). (Table 1).

Table 1:  
**Demographic Results of Participants**

| Categories           | Number of Subjects (n) |
|----------------------|------------------------|
| Gender               |                        |
| Female               | 21                     |
| Male                 | 6                      |
| Choose not to answer | 6                      |

|                                  |    |
|----------------------------------|----|
| Age                              |    |
| 26-30 years                      | 6  |
| 31-35 years                      | 9  |
| 36-40 years                      | 6  |
| 41-45 years                      | 2  |
| 46-50 years                      | 3  |
| >51 years                        | 2  |
| Choose not to answer             | 5  |
| Race                             |    |
| Asian                            | 1  |
| Black or African American        | 2  |
| White                            | 21 |
| Multiracial                      | 1  |
| Prefer not to say                | 1  |
| Other                            | 2  |
| Choose not to answer             | 5  |
| Ethnicity                        |    |
| Hispanic or Latino (a)           | 17 |
| Not Hispanic or Latino (a)       | 11 |
| Choose not to answer             | 5  |
| Marital Status                   |    |
| Single, never married            | 5  |
| Married/Domestic partnership     | 19 |
| Divorced                         | 3  |
| Separated                        | 1  |
| Choose not to answer             | 5  |
| Is English your 1st Language     |    |
| Yes                              | 17 |
| No                               | 10 |
| Choose not to answer             | 6  |
| What state do you live in        |    |
| Texas                            | 25 |
| New Mexico                       | 2  |
| First-Generation College Student |    |
| Yes                              | 19 |
| No                               | 8  |
| Choose not to answer             | 6  |
| Mother's Level of Education      |    |
| Less than high school            | 11 |
| High School                      | 5  |
| Some College                     | 5  |
| Trade/Vocational/Technical       | 2  |
| Bachelors                        | 2  |
| Masters                          | 1  |
| Doctorate                        | 1  |

|                             |    |
|-----------------------------|----|
| Choose not to answer        | 6  |
| Father's Level of Education |    |
| Less than high school       | 9  |
| High School                 | 10 |
| Some College                | 3  |
| Trade/Vocational/Technical  | 1  |
| Bachelors                   | 1  |
| Masters                     | 1  |
| Doctorate                   | 2  |
| Choose not to answer        | 6  |
| Previous Degree             |    |
| Yes                         | 4  |
| No                          | 23 |

### Nursing Career

| Categories                         | Number of Subjects (n) |
|------------------------------------|------------------------|
| How many years practicing nursing? |                        |
| None                               | 0                      |
| 0-5 years                          | 12                     |
| 6-10 years                         | 7                      |
| 11-15 years                        | 4                      |
| 16-20 years                        | 2                      |
| >21 years                          | 3                      |
| Choose not to answer               | 5                      |
| Work as a Registered Nurse         |                        |
| Full-Time                          | 22                     |
| Part-Time                          | 5                      |
| Choose not to answer               | 6                      |
| Year obtained RN license           |                        |
| 1991-1995                          | 3                      |
| 1996-2000                          | 0                      |
| 2001-2005                          | 2                      |
| 2006-2010                          | 3                      |
| 2011-2015                          | 4                      |
| 2016                               | 3                      |
| 2017                               | 4                      |
| 2018                               | 3                      |
| 2019                               | 4                      |
| 2020                               | 1                      |
| Choose not to answer               | 6                      |

### RNBSN Program

| Categories | Number of Subjects (n) |
|------------|------------------------|
|------------|------------------------|

|   |    |
|---|----|
| Face-to-Face RN to BSN program in your area (within 50 miles) |    |
| Yes   | 14 |
| No  | 13 |
| Choose not to answer  | 6  |
| Access to an online program at a local university             |    |
| Yes   | 21 |
| No  | 6  |
| Choose not to answer  | 6  |
| Hours spent in a typical 7-day week studying                  |    |
| 1-5 hours   | 2  |
| 6-10 hours  | 12 |
| 11-15 hours   | 8  |
| 16 + hours  | 4  |
| Choose not to answer  | 7  |
| Length (in months) to complete RNBSN program at UTEP          |    |
| 7-9 months  | 4  |
| 10-12 months  | 8  |
| 13-15 months  | 8  |
| 16-18 months  | 1  |
| 19-21 months  | 1  |
| 22-24 months  | 3  |
| Choose not to answer  | 8  |

### Open-Ended Questions

#### What are your reasons for seeking a BSN degree?

The main reason that the students were in the program was that it has been their goal to continue on to a master's degree. The main theme that emerged was that students had a goal and wanted to achieve it. For most it was higher education and the rest it was a personal goal.

*“Because I am a minority and a woman, I do not want to be seen as a stereotype. I am much more than that. I am an educated, intelligent individual who does not submit to stereotypes. Instead, I prove them wrong.”*

*“It’s a dream that I wanted to accomplish.”*

#### What were your reasons for choosing the UTEP RNBSN program?

The main theme that arose from this question for reasons to attend the University were the reputation of the university with its close community and faculty support. The students spoke about the location of the university being part of the community in their area. The ease in which they could access the campus was very important to them.

*“Close community and instructors are friendly and guide the students.”*

*“It was an outstanding reputation, and it is also local in the event that I may have needed to come onto campus for anything.”*

### **What do you enjoy about the online educational experience?**

Accessibility, flexibility, and faculty communication were the main themes that came out. The students really wanted to be able to work at their own time, so that they could maintain family relationships as well as work their odd hours. They were also very appreciative of the timely and open communication with the faculty that made this happen.

*“Accessibility, Can still have a family life, connection with teachers and fast response”*

*“Easy to follow along and able to communicate with professors promptly.”*

### **What difficulties if any have you had with the virtual classroom experience?**

Though the majority of the students stated that there were “no major difficulties”, one of the concerns with the students was the balance of schoolwork with their home lives. Finding time to figure out time management and stay motivated through the program.

*“Load of work, but I just have to make time to accomplish what is due. Its all about time management. Also, kids in the home. I am home so they seek my attention, even though they know I am busy.”*

### **What would be your suggestions to improving the online educational experience?**

Students were in agreement that spreading out the work more across the term would be helpful. Their opinion was that much of the work was front loaded, with the last week or two feeling much less busy. Another theme that arose was having a Video conference at the start of the semester to help explain the layout of the course, to make finding items a bit easier.

*“It would be nice to have an initial orientation with the instructor on zoom where the students are shown where to look for what on blackboard.*

*They introduce themselves and we see them and they see us the students.”*

### **What were some of the challenges (personal professional environmental) that you encountered that made it difficult to complete the program?**

Because this study ran for the last year, COVID 19 was the major theme as to making things difficult. Setting up interviews due to people working from home was a challenge, family members becoming ill, and being mandated to work overtime were many of the challenges faced. But just about every student mentioned “COVID”.

*“Lost my job in the middle of COVID didn’t know if I was able to complete if due to lack of income. Another thing was trying to get interviews set up for assignments not a lot of places let you in due to COVID”*

### **What types of supports did you encounter that made it possible for you to stay with the program? Both at home and from the University.**

Family and faculty support were the main themes that arose here. Many students spoke about the appreciation of family members helping with their children during busy times. And almost all spoke of the support given to them by faculty with being understanding and flexible during the program.

*“The only support that made it possible to stay in the program, at least this last*

*semester, was your staff. I was unexpectedly thrust into a job I would never have been involved in while taking any classes. Had it not been for your staff, and their understanding of the situation, I would have quit. I even asked about the best way to go about it. Wait till I was actually missing several assignments, or jump ship while still doing well. They talked me off the ledge, and I stayed and did the best I could.”*

*“Teacher support/communication Family (husband, children, my mom; sometimes they would take the kids out to walking or outside) My employer allowed me to switch from Full-time to Part-time during Fall 2020 and this made it easier for me to focus on both work and school.”*

### **What were some of the challenges that you encountered that made it difficult to complete your mentorship experience?**

The main concern again in this area was the pandemic, though communication also played a role. The students had a challenge finding mentors as the pandemic had changed the roles and locations of many of the mentors. Once the mentors were identified, many of them were working from home or at other locations, making communication more difficult.

*“Because of the pandemic it was difficult to get a hold of administration/leadership for the interviews.”*

*“Just the communication and getting both of us at a time that worked well for us.”*

### **How has your mentorship experience helped your career trajectory?**

The students were encouraged that they had become more well-rounded as nurses. They were exposed to new parts of care that they had not been previously. This has opened new opportunities and many of them have now considered continuing their education. Another major theme that emerged was confidence, as they were speaking to the leaders of their facilities. This has also made them more aware of the different points of view while caring for patients.

*“I have been able to chat with a lot of leadership in my facility and meet some good people. One of the local resources that I found online for my interview, worked at a sister facility of ours. She use to come to my facility. I was able to get information and resources and hopefully, she will be able to return for her classes.”*

*“I have learned to see nursing as a research experience. You will never know everything. As a nurse one must always be researching and keeping up with current events.”*

### **Discussion**

Student success and degree completion are important for the long-term success of students, as well as the long-term success of institutions (Shaw et al., 2016). Our study identified that faculty and family support are two of the main factors that students identified as helping them stay in the program. In the past, academic success was solely the student’s responsibility. Now, academic success is considered a shared responsibility. A large body of literature proposes that recruiting more competent and motivated students is the main condition to increase retention (Chang et al., 2016). Others suggest the overall institutional commitment and student support and support at the student’s residence are key factors influencing retention.

This study identified that effective assessment procedures; offering feedback promptly, and thoroughly, encouraging cognitive engagement, and connecting curriculum to past experiences and future learning goals were common course development strategies that helped to maintain retention. Roksa and Kinsley noted that family support offers emotional and financial reassurance to the students, thus enhancing retention (2019). Our study also showed that family support was one of the major influencers of retention for the RN to BSN students. Table 1 depicts some support categories and strategies the nurse educator can utilize to promote student success as identified by Seery et al (2021) from their systematic review, that also coincided with our results see Table 2:

**Table 2**

| Seery et al, 2021               | Our Findings  |
|---------------------------------|---|
| Course Development Strategies   | The development of a course design that may involve students with different learning modes and specific demands might motivate students to continue their studies. Our students often need back up plans due to work issues. The mentorship classes offer multiple modes for content delivery.  |
| Student Success Support         | Our study found that quick reliable answers to questions were very important and technical support was fast and advising needs were quickly met.  |
| Faculty Involvement Strategies  | Enhancing faculty training and support, developing a lecturers' online presence, encouraging the quality of faculty and student interactions, and providing opportunities for collaborative engagement support faculty involvement. We have started an online orientation program to offer more face-to-face contact via virtual meeting platforms.   |
| Social Engagement Strategies    | Providing opportunities for social interaction (blogs, chat rooms, wikis, and forums), building community, creating a sense of belonging, and establishing trust help satisfy the need for social engagement. We have tried to introduce some casual virtual sessions for the students to interact, a few students have attended, but seems better suited for scheduled classes, due to the work schedules of the RN to BSN students. |
| Emotional Engagement Strategies | Managing expectations, articulating   |

|  |   |
|--|---|
|  | assumptions, recognizing motivations, committing to learning, and student self-discipline influence emotional engagement. The faculty make themselves available during non-class hours to try and match the student schedules, encouraging students to call, and make themselves accessible both with time and resources. |
|--|---|

### **Conclusion**

Our program currently has an orientation for incoming students, based on the feedback from our students, the program will invite currently enrolled students to the orientations to offer guidance and help with peer support. The orientation is a virtual platform, allowing the current students to ask questions, maintain their peer network as well as be involved in some school activities. By building a peer network for new students, a casual mentoring program will evolve. This will give the incoming students additional upperclassman peer support at the school, to build up a sense of community on a virtual platform.

Student success is based on various university components working together to deliver the greatest possible learning environment. It is important that Academia Administration and Educators gather data on their students to obtain a better knowledge of the factors that influence retention. Some factors that lead to student success are providing student services, providing student support, making mandatory orientation programs, creating student success courses, strengthening academic abilities, and acknowledging the importance of the diversity each student brings to the classroom. Rethinking the characteristics of distance learning students and their unique qualities might help schools retain students with a variety of needs, such as access to scholarships, loans, and financial incentives to continue their education.

Universities have an obligation to students to identify the factors that are keeping the students in the program and build on those. Once the university can identify the strengths, they can help to increase those, and lessen the items that are preventing the students from completing their degrees. Speaking directly to the students is the best way to identify the areas that they feel are supportive. The students can then identify the opportunities, and drawbacks of the system, and the university can pass the information down to the specific programs and faculty. The university can then help the specific programs implement the changes that are supportive for the students.

This activity gives the opportunity to develop creative innovations that the students, as well as the faculty, can enjoy. As discovered, many of the positive influences were free, and just take a little bit of time. When all work together, the needs of each party can be met, and the creation of a symbiotic relationship can foster better outcomes.

**Conflict of Interest:** None

**Funding Sources:** No external funding

This article does not contain any studies with human participants performed by any of the authors.

This article does not contain any studies with animals performed by any of the authors.

***Conflicts of interest.***

The authors of this paper certify that they have NO affiliations with or involvement in any organization or entity with any financial or non-financial interest (such as honoraria; educational grants; membership, employment; affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

## References

- American Association of Colleges of Nursing. (2021). 2021-2022 *Policy priorities*. <https://www.aacnursing.org/Policy-Advocacy/Federal-Policy-Agenda/FPA-2021>
- Brown, R. (2011, July 18th). Community-college students perform worse online than face to face. *The Chronicle of Higher Education*.
- Chang, J. M., Buonora, P., Stevens, L., & Kwon, C. (2016). Strategies to recruit and retain students in physical sciences and mathematics on a diverse college campus. *Journal of College Science Teaching*, 45(3), 14-22.
- Dawkins, P.M., and Reichheld, F.F., (1990) "Customer retention as a competitive weapon", *Directors and Board*,14, Summer, pp. 42-7.
- Deepeka, S. P., & Narayanan, M. B. (2018). Strategies adopted by serviced apartments for customer attraction and retention in emerging market. *International Journal of Pure and Applied Mathematics*, 118(20), 759-769.
- Dennis, J.M., Phinney, J.S> and Chuateco,L. (2005), The role of motivation, parental support, peer support in the academic success of ethnic minority first generation students. *Journal of College Student Development*, 43, 223-236. <https://doi: 10.1353/csd.2005>
- Eby, L.T., Allen, T.D., Evans, S., and Mg, T.D. (2008) Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior*, 72, pp. 254-267
- Elkins, N. (2019). Failure to complete BSN nursing programs: Students' views. *Journal for the Advancement of Educational Research International Association for the Advancement of Educational Research International Achieving Excellence*, 13(1), 110
- Grasgreen, A. (2012, Oct. 30th). Colleges don't always help with mental health issues, 27 student survey shows. *Inside Higher Education*. Online. Retrieved from: <http://www.insidehighered.com/news/2012/10/30/colleges-dont-always-help-mentalhealth-issues-student-survey-shows>.
- Heyman, E. (2010). Overcoming student retention issues in higher education online programs. *Online Journal of Distance Education Learning Administration*, 13 (4). University of West Georgia: Distance Education Center. Retrieved from: <http://www.westga.edu/~distance/ojdla/winter/134/heyman134.html>
- Jenkins, R. (2011). Why are so many students still failing online? *The Chronicle of Higher Education*. Retrieved from: <http://chronicle.com/article/Why-Are-So-Many-Students-Still/127584/>
- Mishra, S. (2020). Social networks, social capital, social support and academic success in higher education: A systematic review with a special focus on 'underrepresented' students, *Educational Research Review*, 29,100307. <https://doi.org/10.1016/j.edurev.2019.100307>.
- National League for Nursing (2014). *Annual Survey of Schools of Nursing, Academic Year 2013-2014*
- Norwin, L. & Wall, T. (2010, Jan. 18th). Best practices in online teaching: Don't assume. Faculty Focus. Retrieved from: <http://www.facultyfocus.com/articles/onlineeducation/best-practices-in-online-teaching-dont-assume/>
- Neuman, W. L. (2006). Social research methods qualitative and quantitative approach (6th ed.). *Upper Saddle River: Pearson*.
- Özbuğutu, E. (2021). Determination of the Opinions of prospective science teachers about biology lessons taught through distance education . *European Journal of Educational Sciences*, 8(2). <http://dx.doi.org/10.19044/ejes.v8no2a1>

- Palvia, S., Aeron, P., Gupta, P., Mahapatra, D., Parida, R., Rosner, R. & Sindhi, S. (2018). Online education: Worldwide status, challenges, trends, and implications. *Journal of Global Information Technology Management* 21(4), 233-241. <https://doi.org/10.1080/1097198X.2018.1542262>
- Richardson, M. D., Sheeks, G., Waller, R. E., & Lemoine, P. A. (2021). Pursuit of online services for online students. In *Research Anthology on Developing Effective Online Learning Courses* (pp. 1850-1880). IGI Global.
- Roksa, J., Kinsley, P. (2019). The role of family support in facilitating academic success of low-income students. *Res High Educ* 60, 437 (2019). <https://doi.org/10.1007/s11162-018-9525-z>
- Swenson, L., Nordstrom, A. and Hiester, M. (2008). The role of peer relationship in adjustment to college. *Journal of College Student Development*, 49, pp. 551-567
- Seery, K., Barreda, A. A., Hein, S. G., & Hiller, J. L. (2021). Retention strategies for online students: A systematic literature review. *Journal of Global Education and Research*, 5(1), 72-84. <https://doi.org/10.5038/2577-509X.5.1.1105>
- Sorić, I., Penezić, Z., & Burić, I. (2017). The Big Five personality traits, goal orientations, and academic achievement. *Learning and Individual Differences*, 54, 126–134. <https://doi.org/10.1016/j.lindif.2017.01.024>
- Tolouian, A., Wholeben, M., & Rankin, D. (2022). Teaching mindfulness to mitigate burnout in a pandemic. *Journal of Trauma Nursing*, 29(1), 51-54. <https://doi.org/10.1097/JTN.0000000000000631>
- University of Texas at El Paso (2020). Enrollment and Graduation - RN to Baccalaureate Enrollment Statistics. Retrieved from [www.utep.edu](http://www.utep.edu)
- Vroom, V. (1964). *Motivation and work*. New York: Wiley.
- Wholeben, M., McKee, G., Tolouian, A., & Rankin, D. (2021). The development of an innovative mentorship experience for an online RN-to-BSN program. *Journal of Nursing Education and Practice*. 11(3): 57-62. DOI: 10.5430/jnep.v11n3p57