

FACEBOOK AS AN ASYNCHRONOUS LEARNING ENVIRONMENT FOR STUDENTS IN AN ASSOCIATE-DEGREE NURSING PROGRAM



Jessica Belnap, MSN, RN, DNP Student (jsbelnap@king.edu)

Abstract



Characteristics of college students has shifted in recent years from traditional (18-24, single, financially dependent) to nontraditional (25+, have dependents, and employed full-time).

Research has shown that adult learners (non-traditional student) have a high level of self-directed learning. There is a positive relationship between information retrieval, self-directed learning and academic performance.

Research has demonstrated that students prefer communication via Facebook over email, wiki, or the telephone. Facebook is the most used social media site currently.

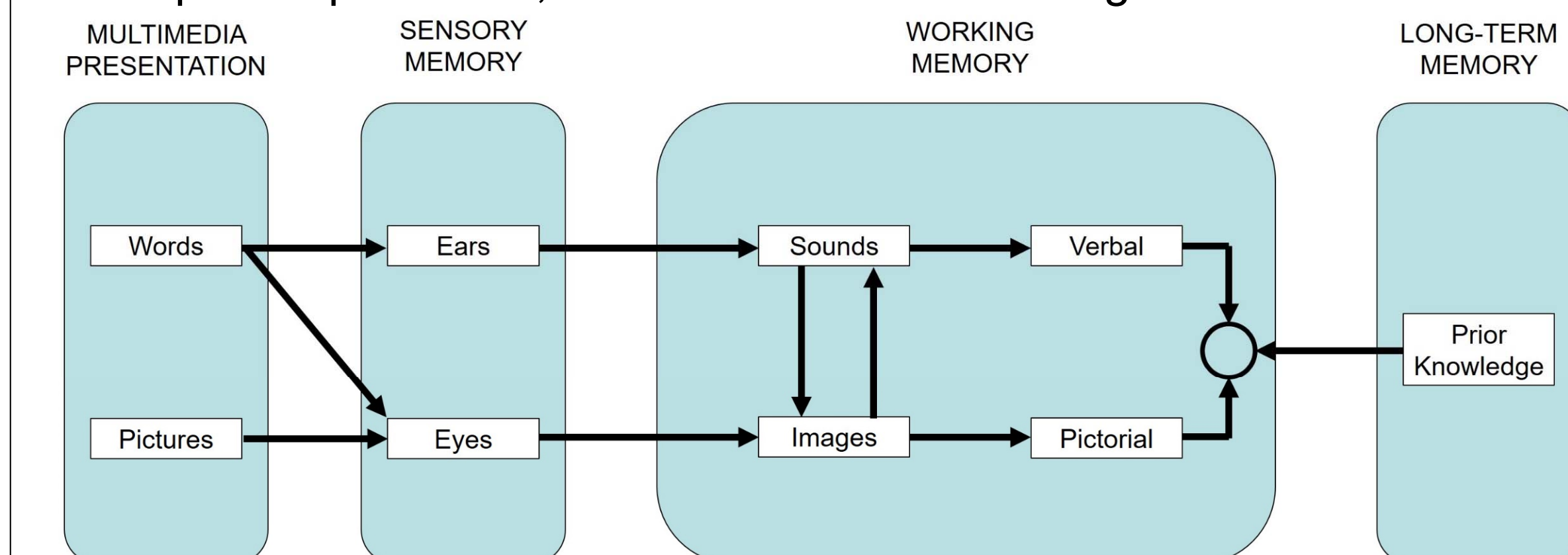
Educators need additional avenues in which to communicate with multiple students in a timely, efficient manner due to increased time constraints of the non-traditional student.

The purpose of this project was to determine if the use of a web-based technology, Facebook, provided learning and networking opportunities to students, and if it could meet the needs of students (traditional and non-traditional) attending an Associate of Nursing Degree program.

Theoretical Framework

Mayer's Cognitive Theory of Multimedia Learning

- ❖ Learning occurs through two channels, auditory and visual.
- ❖ Once overloaded, a channel cannot process more information.
- ❖ Concepts of: dual-processing, limited capacity, and active learning.
- ❖ Information moves between the two channels, combines the information with past experiences, and creates active learning.



PICOT Question

Does the use of Facebook enhance and clarify traditional learning through scenario based situations and interprofessional communication among nursing students and faculty in an Associate Degree program compared to not using Facebook within three months?

Participants

LPN to RN Bridge students in a South-Eastern community college, in their first semester, Summer 2015. $n = 20$

Design and Methods

- ❖ Students voluntarily joined a closed Facebook page that was facilitated by faculty.
- ❖ Scenarios, videos, questions, discussion, etc. were provided throughout the semester.
- ❖ Pre and post-quizzes regarding lecture content was given via another platform to ascertain if conversation on Facebook continued learning that was first taught in the classroom.
- ❖ A survey containing 4 fill-in the blank, 13 questions with Likert-scale responses, 2 qualitative questions, and 4 questions regarding demographics was given at the end of the semester.
- ❖ Factor analysis, Cronbach's alpha, Wilcoxon, and repeated-measures t-tests were used.

Quantitative Analysis

Analysis of Survey Questions

Factor Questions	Median	Interquartile Range
My instructor encourages students to ask questions in class	5.00	0.00
My instructor relates course content to broader applications on Facebook	5.00	0.25
I discussed content with classmates at school	5.00	1.00
Quizzes and discussions on Facebook are connected to material covered in lecture	5.00	0.25
My instructor displays an interest in my learning and overall success	5.00	0.00

Principal Component Analysis 45.45%

Cronbach's Alpha 0.95

Paired Samples Test

Pre-test Total – Post-test Total * $p < .001$

	Mean	Standard Deviation
Pre-test Total	24.87	3.82
Post-test Total	30.01	3.92*

Qualitative Analysis

Emerging themes from the Qualitative data:

- ❖ *Ability to communicate* with others and faculty was a major theme with *feedback* and *study groups* noted as sub-themes.
- ❖ *Communication* was a major theme and *opinions*, *sharing*, and *connected* were noted as sub-themes.



Conclusion

- ❖ Overall increase in learning course content.
- ❖ Students appreciated asynchronous learning through faculty-facilitated Facebook page.

Implications

- ❖ Improved communication among faculty and students.
- ❖ Increased use of technology in the classroom setting.
- ❖ Replication of findings in other student populations and in other courses.

Limitations

- ❖ Time limitations
- ❖ Small sample size of students

References

- ❖ Din, N., Yahya, S., & Haron, S. (2012). Information retrieval and academic performance among Facebook users. *Procedia-Social and Behavioral Sciences*, 68, 258-268. <http://dx.doi.org/10.1016/j.sbspro.2012.12.225>
- ❖ Drake, M., & Leander, S. A. (2013, July/August). Nursing students and Ning: Using social networking to teach public health/community nursing in 11 Baccalaureate nursing programs. *Nursing Education Perspectives*, 34(4), 270-272. Retrieved from www.nlnjournal.org
- ❖ Ferrara-Love, R. (2013). *Does Facebook have a role in helping "high-risk" nursing students in a diploma program? A pilot study* (Doctoral dissertation, Carlow University). Retrieved from http://media.proquest.com/media/pq/classic/doc/3106726051/fmt/ai/rep/NPDF?_s=rNKAkqk3zwsbQjBBUAFQCJeQOPs%3D
- ❖ Mayer, R. E. (2009). *Multi-media learning* (2nd ed.). New York, NY: Cambridge University Press.
- ❖ Tower, M., Latimer, S., & Hewitt, J. (2014, June). Social networking as a learning tool: Nursing students' perception of efficacy. *Nurse Education Today*, 34(6), 1012-7. <http://dx.doi.org/http://dx.doi.org.ezproxy.king.edu/10.1016/j.nedt.2013.11.006>