#### **Embry-Riddle Aeronautical University**

#### From the SelectedWorks of John Griffith

October 14, 2014

#### What Our Faculty and Students Are Telling Us

John C. Griffith, *Embry-Riddle Aeronautical University* Rene Herron, *Embry-Riddle Aeronautical University* 



Available at: https://works.bepress.com/john\_griffith/15/



- Introduction
- Literature
- Methodology
- Findings
- Conclusions
- Recommendations
- References



#### **Faculty and Student Perceptions**

- learning mode preference
- Instructor competence
- Impact of VA tuition reimbursement policy



#### – QSR NVivo 10 used to identify trends



#### Literature

- Social presence
- Learning environment
- Resistance to change



Synchronous Video Learning Environment

- Research on equivalency of learning modes
- Previous ERAU Research
  - Dunn (2013)
  - Griffith & Schultz (2014)



#### **Previous ERAU Research**

- Dunn (2013) n=1,398
- Preference order
  - Classroom
  - Online
  - Synchronous Video Learning
- Student satisfaction
  - "No significant relationship between learning mode and quality of instruction (p=.695) or course content (p=.9998).



#### 2014 ERAU Quantitative Study (n=2,400)

- Classroom, Online, EV-H, EV-C (p=.000)
- For those with EV Experience, EV-H was second, online was third (F p=.0007, S p= .000)
- Faculty and students believed instructors were technically competent (p=.000)

(Griffith & Schultz, 2014)



#### 2014 ERAU Quantitative Study (n=2,400)

- EV-H more effective than EV-C (F p=.0001, S p=.000)
- Use of blended was effective (p=0.000)
- VA students would choose EV-C over EV-H due to increased VA benefits
  - (Undergraduate p=.0358, Graduate p=.0001)

(Griffith & Schultz, 2014)



# Methodology

- Cross sectional, descriptive research model

- Confidential survey Nov 2013 Jan 2014
- Distributed using E-mail/Survey Monkey
- Treatment of Data
  - NVivo 10
  - Let themes emerge



#### Findings - Faculty Responses (n=228)

		-	_		
A	Name	2	Sources	References	
0	Prefer face to face		1	45	
0	Need better EV equipment and software		1	28	
0	Prefer Blended		1	19	
0	Variety of modalities good for student learning		1	18	
0	Expand EV Home		1	18	
0	EV Classroom issues		1	18	
0	Mode dependent on student and subject taught		1	11	content ducation
0	Prefer Online		1	11	training tra
0	Dislike EV		1	9	work eagle CIASSvision modes environment effective imectual entropy bing
0	Modes not equal		1	8	rigernnm
0	Suggestions		1	8	
0	Dislike Online		1	6	
0	EV training process suggestions		1	6	helieves online
0	Math Courses not good for EV or blended		1	4	taught starting taught
0	Blended - Contact time		1	3	<b>blended</b>
0	Faculty Skills		1	3	Backboard Country Sizeussion



#### **Prefer Face to Face – Traditional classroom**

- Interaction
- Education quality

### "F2F offers the live interaction that is lost over other modalities."





#### **EV Equipment and Software**

- Internet speed
- Disruptions to classes

"When EV is running well, education booms ahead. When there's 'technical difficulties,' [sic] everything grinds to a halt."





#### **Expand EV Home**

- Interaction
- Social presence
- Flexibility

"F2F offers the live interaction that is lost over other modalities."





#### **EV Classroom Issues**

- Interaction issues
- Small picture of remote classrooms
- VA funding?

"EV classroom makes it hard to get one on one with (remote) students."

"If it were not for the VA student in search of a housing stipend, EV/C would not exist."



#### **Prefer Blended – Variety of Modalities**

- 4 hours and 45 minutes
- New skills to collaborate and learn
- Applications to the workplace

"All classes should utilize online content to some extent."

"Blended EVH seems to be a winner..."



#### **Mode Dependent on Student/Subject**

"The further away from the classroom the method of teaching becomes, the more dedicated and mature the student must be to match the learning level of equivalent lecture students and the more effort an instructor must provide to ensure the students are grasping the material and are benefiting from the delivery method."



#### Online

- Flexibility
- Concerns about interaction

"If you consider students' personal needs for flexibility, geographic mobility, etc what is 'best' for that student may be online."

#### Faculty Responses



# **Overall Summary**

- Interaction is extremely important
- Technical issues noted with EV, none online
- Faculty use different skills for different modes
- 228 compelled to comment in open response area



#### Findings: Student Responses (n=659)

Nodes			Nodes		
🖈 Name	/ 🔊 Sources	References	🔨 Name 🦯	Sources	Reference
⊒- 🔾 EV - Sat	1	42	no experience with online	1	14
- O course	1	5	not sure what was asked	1	42
🔘 general	1	10	tech issues	0	0
instructor	1	11	term lengths	1	7
🔘 tech issues	1	7	— O time work	0	0
ime work	1	9	VA benefits	1	61
🛛 🔵 EV - Unsat	1	118	Online - Sat	1	106
🔾 course	1	18	- O course	1	8
🔘 general	1	19	general	1	2
instructor	1	41		1	5
🔘 tech issues	1	34	tech issues	0	0
🔾 time work	1	1	ime work	1	91
Other	1	269	🖻 🔘 Online - Unsat	1	117
Challenge exams	1	2	- O course	1	58
🔘 classroom	1	93	<ul> <li>instructor</li> </ul>	1	59
O course	0	0	- O tech issues	0	0 1
instructor	0	0	time work	0	O without fin
miscellaneous	1	9			taking education
no comments	1	10			material other think of the second se
no experience EV	1	31			realing to the second s







#### EVC & EVH

#### Dissatisfied

- Technical issues
- Ignoring of classroom

"....I have to say that I think this method (EVC) ...is less effective ...a lot of classmates take the chance that the teacher is not watching to carry (engage in) side conversations...causing distractions. All 3 classes I had ended up having the same issues."





#### EVC & EVH

#### **Satisfied**

- Interaction
- Flexibility

"EV home method of learning was very interesting and I wish I could take the rest of my classes this way."





#### Online

#### **Dissatisfied**

- Workload
- Impersonal

"Online...overcompensates for not having you in the classroom by giving you assignments every week...makes the course more exhausting...instead of bombarding the student with papers and all sorts of assignments...provide more media...visual presentations."





## Online

#### **Satisfied**

- Flexibility
- Course Layout

"Online classes ...assist student in developing critical thinking skills and mastery of the subject matter. Forcing a student to critically analyze a topic using peer reviewed material helps with retention of material."

#### **Student Responses**



#### **Outliers**

• F2F

"...I notice ERAU is moving away from this (classroom) but I am convinced it will diminish the overall quality of educational experience."

• VA Benefits

"...In my area taking an online course cuts my REAL BENEFITS by over half. \$714.50 for online courses, \$2193 for Andrews AFB and \$1575 at Pax (sic) River."

#### **Student Responses**



# **Overall Summary**

- Strong feelings regarding modalities
- Technical issues all EV, none online
- Disconnect between faculty and students
- 659 compelled to answer survey

"We have two ears and one mouth so that we can Listen twice as much as we speak." -Epictetus



- Conclusions
  - Interaction is key to a good experience
  - EV-C courses should benefit from pilot project
  - Good Faculty Training, Strong faculty commitment to EV
  - Online courses Flexibility but high workload
  - VA funded students select EV-C for higher reimbursement
  - ERAU-W multiple awards, not typical setting



- Recommendations for Further Research
  - Continue to monitor faculty and student perceptions to determine "why"
  - Measure student performance and mode preferences as new technology allows for different types of distributed learning
  - Studies should include both quantitative and qualitative measures in assessing stakeholder perceptions

#### References

Allen, I.E., & Seaman, J. (2006). Making the grade: Online education in the United States, 2006. US: Sloan-C. Retrieved May 31, 2007 from: http://www.sloanc.org/publications/survey/pdf/making\_the\_grade.pdf

Bernard, R. M., Abrami, P. C., Lou, Y., Borokhovski, E. (2004). How does distance education compare with classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research*, *74*(3), 379-439. Retrieved from http://search.proquest.com.ezproxy.libproxy.db.erau.edu/docview/214115057?accountid= 27203

Business Wire. (2007, July 18). Embry-Riddle Aeronautical University launches EagleVision, an interactive collaborative, virtual classroom using Saba Centra. Business Wire. Retrieved from: http://search.

proquest.com.ezproxy.libproxy.db.erau.edu/docview/445006945?accountid=27203

Carpenter, C. R., Greenhill, L. P. (1955). An Investigation of Closed-Circuit Television for Teaching University Courses. (Report 1). The Pennsylvania State University.



- Carpenter, C.R., & Greenhill, L.P. (1958). An Investigation of Closed-Circuit Television for Teaching University Courses. (Report 2).Pennsylvania State University.
- Causin, G. F. G., PhD., Robertson, L. J., EdD., & Ryan, B. (2008). Courseware components and features: Preferences of faculty in the human sciences. *Journal of Family and Consumer Sciences, 100*(2), 12-16. Retrieved from

http://search.proquest.com.ezproxy.libproxy.db.erau.edu/docview/218160318?accountid= 27203

- Chea, T. (2013). Calif. Launches Low-Cost Online Courses for Credit. *Community College Week*, 25(13), 14.
- Dunn, L. (2013). A study to compare and contrast student grades and satisfaction levels of traditional classroom and distance learning environments at Embry-Riddle Aeronautical University Worldwide Campus. (Unpublished master's degree Graduate Capstone Project). Embry-Riddle Aeronautical University, Worldwide Campus, Daytona Beach FL.

Embry-Riddle Aeronautical University. (2012) Embry-Riddle Aeronautical University-Worldwide recognized by online education leader for excellence. Retrieved from http://worldwide.erau.edu/newsroom/press-releases/embry-riddle-aeronautical-universityworldwide-recognized-by-online-education-leader-for-excellence.html



- Embry-Riddle Aeronautical University. (2013a). EagleVision students. Retrieved from https://ernie.erau.edu/portal/page/portal/it/eaglevision/students
- Embry-Riddle Aeronautical University. (2013b). *Presidential report 2013*. Daytona Beach FL: Embry-Riddle Aeronautical University.
- Embry-Riddle Aeronautical University. (2014). Technology for the modern student. Retrieved from http://worldwide.erau.edu/about-worldwide/technology-modern-student/
- Gay, L. R., Mills, G. E., & Airasian, P. W. (2006). Educational Research: Competencies for analysis and applications. (8<sup>th</sup> ed.). Upper Saddle River, New Jersey: Pearson Education, Inc.
- Griffith, J., C., & Schultz, M., C. (2014). Perceptions of instructors and students with regard to synchronous video learning. *Journal of American Academy of Business, Cambridge*, 20(1), 50-58.
- Hoag, C. (2013, February 4). Cal grant rules disqualify many for profit schools. *Community College Week*, p. 14. Retrieved from HTTP://www.ccweek.com



Hrastinski, S. (2008). Asynchronous & synchronous e-learning. *Educause Quarterly*, (4), 51-55.
Jenkins, R. (2013, July 24). Who is driving the online locomotive. *The Chronicle of Higher Education*, pp. 1-6. Retrieved from: HTTP://www.chronicle.com/article/Who-Is-Driving-the-Online/140505/

Ko, C. (2012). A case study of language learners' social presence in synchronous CMC. *ReCALL* : *The Journal of EUROCALL*,24(1), 66-84.

doi:http://dx.doi.org/10.1017/S0958344011000292

Locatis, C., Berner, E., Hammack, G., Smith, S., Maisiak, R., and Ackerman, M. (2010). An exploratory study of co-location as a factor in synchronous, collaborative medical informatics distance education. BMC Research Notes 2010. doi: 10.1186/1756-0500-3-30

Lou, Y., Bernard, R. M., & Abrami, P. C. (2006). Media and pedagogy in undergraduate distance education: A theory-based meta-analysis of empirical literature. *Educational Technology, Research and Development*, 54(2), 141-176. Retrieved from http://search.proquest.com.ezproxy.libproxy.db.erau.edu/docview/218053857?accountid= 27203

Mitchell, B., & Geva-May, I. (2009). Attitudes affecting online learning implementation in higher education institutions. *Journal of Distance Education (Online)*, 23(1), 71-88.
Retrieved from http://search.proquest.com.ezproxy.libproxy.db.erau.edu/docview/868055340?accountid=

27203



Sekaran, U., & Bougie, R. (2013) Research methods for business: A skill building approach.

(6<sup>th</sup>. Ed.). Chichester, United Kingdom: Wiley.

- Short, J., Williams, E., & Christie, B. (1976) *The social psychology of telecommunications*. London: John Wiley & Sons.
- Skylar, A. A. (2009). A comparison of asynchronous online text-based lectures and synchronous interactive web conferencing lectures. *Issues in Teacher Education*, 18(2), 69-84.
  Retrieved from

http://search.proquest.com.ezproxy.libproxy.db.erau.edu/docview/233320705?accountid= 27203

U.S. Department of Veterans Affairs (2013). Education and Training: Post 9/11 GI Bill (Chapter 33) Payment Rates for 2013 Academic Year (Aug 1, 2013-July 31, 2014). Retrieved from

http://www.benefits.va.gov/gibill/resources/benefits\_resources/rates/ch33/Ch33rates0801 13.asp

- U.S. News and World Report. (2014). Best online bachelor's programs. Retrieved from http://www.usnews.com/education/online-education/bachelors/rankings?int=a39209
- Webb, E., Jones, A., Barker, P. & Van Schaik, P., (2004). Using e-learning dialogues in higher education. *Innovations in Education and Teaching International* 2(1), 93-103.



# Questions?

#### Acknowledgements

The authors would like to thank the 2013 ERAU research award committee, B/R Symposium committee, Dr. Jim Schultz, Dr. Ron Wakeham, MK Gorman, Jenni Heslop, Lorraine Dunn, Karen Doolittle, Sonja Griffith and all of the faculty and students who completed the survey.

