

## BULLET BACKGROUND PAPER

### ON

#### THE INTANGIBLE BENEFITS AND DRAWBACKS OF BLENDED LEARNING PME

##### PURPOSE

- The purpose of this paper is to provide senior Air Force leadership with a CGO perspective on the challenges and considerations of a blended learning experience for officer professional military education.
- In this study, we seek to uncover the intangible benefits and drawbacks of attending PME in residence that should be accounted for when designing a distance- or blended-learning PME curriculum in accordance with the Learning Air Force (Air Education and Training Command, 2012).

##### BACKGROUND

- In a resource constrained environment, there are creative ways of approaching PME. Blended learning (30-79% accomplished in a distance format) will provide significant cost savings.
  - 60-day SOS cost ~\$5.7K/student with a fixed travel cost of \$1.3K/student (Klucking, 2013)
  - If SOS is reduced to a 30-day “top-off”, the yearly cost drops from \$21M to \$13M
  - If the number of students to attend SOS doubled from FY12, total TDY cost would be \$25M
- Research identifies several “truths” about learning, distance- and blended-learning
- Collaborative learning is more effective and more enjoyable
  - “Cooperative learning results in greater transfer of what is learned, ...greater transfer of what is learned in one situation to another, ...and more time on task than is achieved with competitive or individualistic learning” (Johnson, 2006, 507).
- If learning is fun and applicable, students will want to learn
  - ‘What is wrong with a great deal of higher education for men and for women in America is that it is simply boring, and irrelevant to the use and enjoyment of life’” (Williamson, 1957, p. 427)
- Motivating students must be done through creative means
  - Competitive market in courses will drive institutions of higher learning to accept courses from any accredited institution (Howard, Schenk and Discenza, 2004, p.6).
  - Students are significantly more motivated to participate in a meaningful way when their fellow students can view their contributions. (Howard, Schenk and Discenza, 2004, p.4)
- Leadership must be learned through experience (virtual or reality)

- Online leadership courses must thrust members into leadership roles

## RESULTS/DISCUSSION

### - Sample Frame and Data Collection

- We used an open-ended online questionnaire to solicit data and demographics for analysis
  - From a career development perspective, what are the advantages of an in-residence vs. correspondence PME course? I.e., what are the intangible benefits of in-residence PME attendance?
  - From a career development perspective, what are the disadvantages of in-residence vs. correspondence PME course? I.e., what sacrifices might one make to attend in-residence PME?
- The target population consists of Captains currently attending in-residence PME.
- Online survey invites sent via e-mail invitations and Blackboard

### - Content Analysis and Results

- MAXQDA, a qualitative data analysis package, was used to organize, recall, code, and analyze the data. Analysis will further identified themes and repetition of the categorized data.
- We adopted a grounded theory approach to extracting relevant themes from the data. Grounded theory takes into account pragmatic ideas proffered by participants to generate a theoretical framework from the collected data (Glaser and Strauss 1967; Charmaz 2006).
- The team of five members met on two occasions to code the entire dataset together. This allowed for perfect agreement among coders, as any discrepancies were discussed in-person. These themes, their operational definitions, and the count of how many times each theme was mentioned are reported.

## DISCUSSION:

- The primary intangible benefits identified were: networking, time for learning practical application of materials, rich discussion, prestige and use of facilities. The primary intangible drawbacks identified were: time away from primary duties and family, lost career opportunities, and a lack of specialized curriculum.
- Ways to retain benefits and allay drawbacks are found via technology/educational frameworks
- Two emerging technologies provide alternatives to in-residence PME coursework
  - Mobile devices are already in use for education today
    - Devices used are carried everywhere, regarded as friendly and personal devices, cheap and easy to use, and constantly used in a variety of different settings (Fuegen citing Yousef, p.117).

- 55% of universities have mobile apps (as of 2011) (Flosi, 2012). iTunes University already allows access to free curriculum via PDF, e-book, and video (Apple, 2013).
- Limitations include usability, physical limitations (weight, battery life), software limitations, dependence on available networks and speeds. (Keugen citing Park, 2012, P. 51)
- Online gaming can be utilized to teach complex leadership and critical thinking skills
  - Storylines and competition drive attachment to subject matter and re-create a group dynamic similar to FLEX and Project X
  - Game developers are already marketing for educational purposes. Examples include: the Army's Dismounted Soldier Training System and Portal 2 (Biron, 2013) (Valve Software, 2013)
- Technology of any form should be available via rapid procurement, similar to the Big Safari program. This will account for the quick pace of technology and keep curriculum relevant.
- Blended and distance learning "menu" available to AF CGOs
  - Consider establishing civilian partnerships with other universities to draw students with a variety of backgrounds and to enhance the education of AF members
  - Many courses could be contracted to accredited schools or create partnerships to allow credits to qualify for civilian degrees. Courses could be available with unique perspectives in each of the five Areas of Learning (leadership studies, the profession of arms, communication studies, international security studies and warfare).
  - Streamline PME with advanced academic degrees to respect the time of our Airman.
  - Just as co-pilots are developed into aircraft commanders and eventually instructor pilots, a similar model may be applied to PME students. Graduates may develop valuable leadership experience by returning the virtual classroom as instructors. This will replace some of the experience lost from an in-residence program and reinforce a higher level of learning (Bloom, 1956) (Krathwohl, 2002).
- Air Force leadership should show a commitment to a culture of lifelong learning. Time should be set aside (perhaps in the form of permissive/non-chargeable leave) from primary duties to accomplish PME.

## SUMMARY

- We recommend that, regardless of the format of future PME, senior leadership ensure that the benefits of in-residence PME are not lost. PME, according to General Welsh should be have a "personalized, career-long building block approach" in order to return "valuable time to our Airmen" (Welsh, 2013). We hope the ideas presented will offer senior leadership a menu of options that will enhance the value of PME to the Air Force and its constituents.

## Bibliography

- Air Education and Training Command, *White Paper: Learning Air Force Vision*, Maxwell Air Force Base, AL: Air University Press, 2012.
- Apple. *iTunes University*. <http://www.apple.com/education/itunes-u> (20 January 2013).
- Biron, Lauren. *Immersive Training Hasn't Reached the Holodeck*. Defense News. <http://www.defensenews.com/apps/pbcs.dll/article?AID=2012306120012> (28 January 2013).
- Blodgett, Henry. 2012. Actually, the US Smartphone Revolution Has Entered the Late Innings. *Business Insider*: Retrieved from <http://www.businessinsider.com/us-smartphone-market-2012-9> (accessed January 22, 2013).
- Bloom, Benjamin. *Taxonomy of Educational Objectives, Handbook 1: The Cognitive Domain*, New York: David McKay, 1956.
- Charmaz, K. 2006. *Constructing grounded theory*. London: Sage Publications.
- Flosi, Stephanie. 2012. comScore Reports September 2012 U.S. Mobile Subscriber Market Share. *ComScore*. Retrieved from [http://www.comscore.com/Insights/Press\\_Releases/2012/11/comScore\\_Reports\\_September\\_2012\\_U.S.\\_Mobile\\_Subscriber\\_Market\\_Share](http://www.comscore.com/Insights/Press_Releases/2012/11/comScore_Reports_September_2012_U.S._Mobile_Subscriber_Market_Share) (accessed January 22, 2013).
- Fuegen, Shauna'h. 2012. The Impact of Mobile Technologies on Distance Education. *Techtrends: Linking Research & Practice to Improve Learning* 56, no. 6, 49-53. Retrieved from <http://www.ebscohost.com> (accessed January 22, 2013).
- General Welsh III., Mark A. *A Vision for the United States Air Force*. <http://www.af.mil/shared/media/document/AFD-130110-114.pdf> (5 February 2013).
- Glaser, B. G., and A. L. Strauss. 1967. *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine Publishing Company.
- Howard, C., Schenk, K., & Discenza, R. (2004). *Distance Learning and University Effectiveness: Changing Educational Paradigms for Online Learning*. Information Science Publishing.
- Johnson, Leona M. "Elementary School Students' Learning Preferences and the Classroom Learning Environment: Implication for Educational Practice and Policy." In *The Journal of Negro Education*. Vol. 75, No.3. Hampton, VA: Hampton University, 2006.
- Klucking, Tony. *Distance Learning Cost Savings* (16 January 2013).
- Krathwohl, David. "A Revision of Bloom's Taxonomy: An Overview," *Theory Into Practice* 41, no. 4, 2002: 212-8.

- Krippendorff, Klaus. 2004. *Content Analysis: An Introduction to Its Methodology*. 2nd ed. Thousand Oaks, CA: Sage Publications.
- Neuman, Lawrence W. 2006. *Social Research Methods: Qualitative and Quantitative Approaches*. 6th ed. Boston, MA: Pearson.
- Örtenblad, Anders. "Teaching an Online Experience-based Leadership Course." *eLearn Magazine*, July 2009. Association for Computing Machinery. Retrieved from <http://elearnmag.acm.org/featured.cfm?aid=1595452>
- Roman, Gregory A. "The Command or Control Dilemma." Air War College Air University, 1997. Retrieved from <http://www.dtic.mil/dtic/tr/fulltext/u2/a418465.pdf>
- Smith, Aaron. 2012. Nearly Half of American Adults Are Smartphone Owners. *Pew Internet*. Retrieved from <http://pewinternet.org/Reports/2012/Smartphone-Update-2012.aspx> (accessed January 22, 2013).
- Valve Software. <http://www.valvesoftware.com/games/portal2.html> (28 January 2013).
- Williamson, E. G. "Learning versus Fun in College." In *The Journal of Higher Education*. Vol. 28, No. 8. Columbus, OH: Ohio State University Press, 1957.
- Yousuf, M.I. 2007. Effectiveness of mobile learning in distance education. *The Turkish Online Journal of Distance Education*, 8(4), 114 – 124. Retrieved from <http://www.ebscohost.com>. (accessed January 22, 2013).