

8-3-2016

Book Review: Competency-Based Education in Aviation: Exploring Alternate Training Pathways

Scott Burgess

Embry-Riddle Aeronautical University – Worldwide, burgesco@erau.edu

Follow this and additional works at: <https://commons.erau.edu/ijaaa>

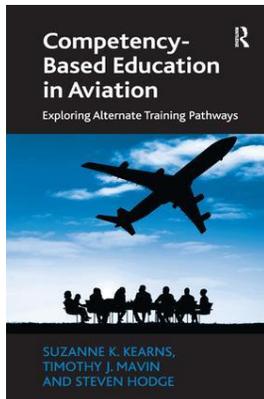


Part of the [Curriculum and Instruction Commons](#)

Scholarly Commons Citation

Burgess, S. (2016). Book Review: Competency-Based Education in Aviation: Exploring Alternate Training Pathways. *International Journal of Aviation, Aeronautics, and Aerospace*, 3(3). <https://doi.org/10.15394/ijaaa.2016.1139>

This Book Review is brought to you for free and open access by the Journals at Scholarly Commons. It has been accepted for inclusion in International Journal of Aviation, Aeronautics, and Aerospace by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu, wolfe309@erau.edu.



Book: *Competency-Based Education in Aviation: Exploring Alternative Training Pathways*

Authors: Suzanne K. Kearns, Timothy J. Mavin, and Steven Hodge

Publisher: Ashgate Publishing Ltd

Year: 2016

Book Price: \$99.95

eBook Price: N/A

Length: 248 pages

Read Time: 9 hours

Read Rating: 3 – Average

Book Rating: 4.5 – Excellent

This team of colleagues in higher aviation education approach a well-developed educational theory and apply it to learning for several disciplines in aviation. As CBE is not necessarily implemented broadly, the authors do a fine job in rendering the theoretical background of CBE in aviation. This text is broken into four parts. The first two parts impart a basic understanding of the complexities of competency-based education (CBE) and into its use in the disciplines of air traffic, pilot crew, cabin crew, and maintenance disciplines. The third part of this text delves into practice and implementation of CBE in aviation. This logical flow helps to then complete the text with the potential future of CBE in aviation. There is a deep discussion of the integration of technology and instructional design.

There is a focused approach to professional training in aviation for these disciplines by answering a series of questions relating to responsibilities, historic approaches and how training is done now, and how CBE is integrated. It would have been beneficial to assertively differentiate between education and training as the authors seemingly focus at the professional level. There are more institutions of higher education engaging in aviation education and training as opposed to standard flight schools centering their products on flight certifications only.

One large challenge in the aviation industry has always been the cost of doing business. Competency has for many years been defined largely by experience (flight hours) and to a large extent, mastery of training tasks. The authors lay this out and contrast it with CBE to show the benefits of taking on such a transition. In a future edition, it would be good to step further into the challenges of integrating CBE into institutional versus organizational elements. Generally speaking, flight training organizations do not invest as deeply as educational institutions and this distinction could broaden the applicability of the text.

This topic is addressed in a timely manner. The conflict at present is impending worldwide pilot and mechanic shortages and concern for safety which is directly related to training and education of these disciplines. Changes in regulation to attain a certain level of proficiency drives a need to develop efficient programs that produce quality professionals.

The utility of this document appears clear. The aviation industry, both academically and professionally, benefits tremendously with a clearly articulated discussion of CBE for aviation. Additionally, regulatory entities would be well placed to use this text in formulating regulation governing aviation training and knowledge standards. This research would be elemental for entities considering CBE over traditional approaches for aviation training. In an academic realm, this text would support graduate level coursework in aviation education theory and practice.