

The Impact of Simulation-Based Learning in Aircraft Design on Aerospace Student  
Preparedness for Engineering Practice: A Mixed Methods Approach

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Dissertation submitted to the faculty of  
Virginia Polytechnic Institute and State University  
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

In

Engineering Education

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May 2, 2012

Blacksburg, Virginia

Keywords: aerospace, design, engineering education, simulation

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Permission letter for the use of Virginia Tech Aerospace and Ocean Engineering Aerospace Design class slides (Figures A6 through A12 in Appendix A) from Mason, W.H.

## William Butler

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**From:** William H. Mason  
**Sent:** Thursday, May 03, 2012 7:33 AM  
**To:** William M. Butler  
**Subject:** Re: Dissertation Figures - WMB

Those charts aren't copyrighted, but you can just credit me when I made them. whm

Copyright permission letters for the use of the Design Conception Survey (Appendix B) from Adams, R.S. and Atman, C.J.

## William Butler

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**From:** Cindy Atman  
**Sent:** Thursday, August 18, 2011 6:36 PM  
**To:** W.M. Butler  
**Cc:** Cindy Atman; Ken Yasuhara  
**Subject:** RE: Permission Request to Use Survey Instrument from Previous Research - WMB

Hello –

Thanks for your interest – from what I remember this was a version of a survey instrument that we call the Most Important Design Activities survey. And sure it would be great if you would like to use it. We have used it in several other studies in work that was funded under the Center for the Advancement of Engineering Education – the Academic Pathways Study.

You can see more info on CAEE at: <http://www.engr.washington.edu/caee/>.

Thanks  
cindy

## William Butler

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**From:** Adams, Robin S.  
**Sent:** Saturday, August 27, 2011 11:24 PM  
**To:** W.M. Butler  
**Subject:** Re: Permission Request to Use Survey Instrument from Previous Research - WMB  
**Attachments:** FIE-2010.pdf; ATT00001.htm

Hello,

You are more than welcome to use the survey - is it the one with 23 design activities and people rank the 6 most and least important?

You will want to keep the history intact - this was based on work by Newstetter and McCracken (in the references of that paper) - and it is also being used as part of the Academic Pathways Study out of the Center for the Advancement for Engineering Education (PI, Cindy Atman at U Washington).

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Copyright permission letter for the use of a modified version of the TIDEE Design Rubrics (Appendix C) from Davis, D.C.

## William Butler

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**From:** Davis, Denny C  
**Sent:** Monday, April 16, 2012 9:47 AM  
**To:** William M. Butler  
**Subject:** RE: Permission Request to use the TIDEE Capstone Design Rubrics in Engineering Education PhD Research

William,

Thank you for your interest in the assessments we have developed for capstone engineering design. Your request to use the published rubrics, modified as you described, is granted. If you have questions regarding the rubrics or related issues, please contact me again.

All the best to you in your research.

Denny Davis

Denny C. Davis, PhD, PE  
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