### It's Hard, But It's Worth It:

### Teachers' and Students' Perceptions of the Benefits and Challenges

### of Design-Based Learning in a Middle School Classroom

Teri Wagner

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

> Doctor of Philosophy In Curriculum and Instruction (Instructional Design and Technology)

> > Katherine Cennamo, Chair Jennifer Brill John Burton Ken Potter

> > > March 24, 2014 Blacksburg, VA

Keywords: design-based learning, instructional design, middle school, pedagogy, design thinking, case study, student perceptions, teacher perceptions

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Expected completion date	Mar 2014
Expected size (number of	150
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Janet

On Feb 11, 2014, at 9:42 AM, Teri Wagner wrote:

Dear Professor Kolodner,

I am a Ph.D. candidate at Virginia Tech in the Instructional Design and Technology program. My research is related to design-based learning in K-12 learning environments - in particular, a middle school classroom. The Learning by Design model of instruction an your related publications have been of great importance to me in my literature review, and I write to ask for permission to reproduce your model of the Learning by Design Cycle in my dissertation. I have attached a copy of that figure for your reference.

My final dissertation is due to my committee on March 3, so I would greatly appreciate any help you might be able to offer me in obtaining permission to use this figure. If you have any questions, of course feel free to contact me.

Kind Regards,

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Abbie Steinbacher <abbie\_steinbacher@wgbh.org> To: Teri Wagner <teri.wagner@vt.edu> Tue, Feb 11, 2014 at 10:43 AM

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Abbie

> On Feb 11, 2014, at 6:24 AM, "Teri Wagner" <teri.wagner@vt.edu> wrote:

>

> Abbie,

>

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Alana Zawojski Ippolito <azawojski@ideo.com> To: Ali Guichard <aguichard@ideo.com> Cc: Teri Wagner <teri.wagner@vt.edu> Wed, Feb 26, 2014 at 4:46 PM

Hi Teri,

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Thanks, Alana

Alana Ippolito / IDEO / Marketing + Communications / alana@ideo.com / 650.289.3754 w / 650.815.8581 m

On Fri, Feb 21, 2014 at 2:38 PM, Ali Guichard <aguichard@ideo.com> wrote: Hi Teri,

Thanks so much for getting in touch with us about your reproducing the image of the design model in your dissertation.

We'll be in touch with you early next week with the approved image file and wording we typically ask you use.

Kind regards, Ali

> ------ Forwarded message ------From: **Teri Wagner** <teri.wagner@vt.edu> Date: Saturday, February 15, 2014 Subject: Permission to reproduce figure in my dissertation To: Nadia Walker <nwalker@ideo.com>

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All the best,

Teri Wagner

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Ali Guichard IDEO | ali@ideo.com



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**dschool info** <info@dschool.stanford.edu> To: Teri Wagner <teri.wagner@vt.edu> Wed, Feb 5, 2014 at 5:33 PM

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Hello,

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Regards,

Teri Wagner

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