



## IDT 693F Design and Development Research

Fall 2012 Monday, 4.00 – 6.50 pm 510 Allen Hall 88192

**Description.** An overview of the [Design and Development Research](#) methodology used in the Instructional Design and Technology, or IDT field. Reactions to key readings, a developmental history of an educational intervention designed by others, and a research proposal are the primary activities. This course will prepare doctoral students to implement a developmental research study for doctoral dissertation work. Primarily a doctoral-level course, which can be used as the elective in the College's Research Core.

**Definition.** Design & Development Research is a major research methodology in the academic IDT field. The approach studies the development of any educational intervention (product, tools, teaching approach) over time using a repeated cycle of design, implementation, and evaluation. Sound familiar? Instructional design uses the same major phases (incorporating analysis/needs assessment as a front-end activity).

**Prior Knowledge.** useful to have had a prior research methods course, such as *EDP 612 Introduction to Research*, and exposure to design and development models, such as *EDP 640 Instructional Design* (see page xv of Richey & Klein text), as the methodology follows the ID process.

### **Course Research Questions**

1. How have others used design and development research? – **45% of grade - Reaction Papers of Readings, Your Developmental History of an Educational Intervention**
2. How can I use this method to study educational interventions? – **45% - Developmental Research Proposal**
3. How can design and development research be taught? **10% - Formative Evaluation of this Course**

### **Course Resources**

- Instructor: Dr. Neal Shambaugh. [neal.shambaugh@mail.wvu.edu](mailto:neal.shambaugh@mail.wvu.edu).
- Instructor Media archive (primarily papers): [www.drneal.org](http://www.drneal.org)
- IDT Research blog: <http://idtresearch.wordpress.com/>
- PDF Readings (6): distributed digitally by email to your MIX and archived on eCampus.
- Text: Richey, R. R., & Klein, J. D. (2007). *Design and development research*. Mahwah, NJ: Erlbaum. 180 pp.
- All written work uses APA, 6<sup>th</sup> edition guidelines for reference citing. See <http://www.apastyle.org/>
- All work is posted digitally on eCampus <https://ecampus.wvu.edu/>

### **Instructional Approach**

- Instruction consists of in-class instructor briefings on course topics and student briefings discussing the assigned readings and proposal tasks. The readings from journal articles and the IDT handbooks provide an overview of what is known about design and development research. The Richey and Klein (2007) text covers the process.
- Having you produce a developmental history will give you direct evidence of how someone/some firm developed an educational product, tool, or teaching model.
- What you learn is applied in a design and developmental research proposal.

### **Developmental History of This Course**

I use research questions to frame this course; in effect, I'm using the D&D process to study it! The course is being pilot tested as a possible replacement for *IDT740 Design Studio*. The design and development process was envisioned as the major methodology approach within the *Design Studio* course and then applied in the *IDT 750 Prototype Studio*. This course focuses on the D&D methodology, to be used in the IDT 750 course and possibly in your dissertation research. This course is also my topic at a roundtable session accepted for the AECT 2012 Conference in Louisville, October 30-November 3, 2012. I will be



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sharing the teaching approach and soliciting suggestions from others who have taught this course. (see [www.aect.org](http://www.aect.org)). AECT is the national IDT organization and conference.

## *Learning Outcomes and Assessment*

RQ and Learning outcomes	Assessment
<b>RQ1: How have others used design and development research?</b>	<b>45% Knowledge Base - how the method has been used</b>
Summarize the Design and Development Research process	<b>20% KB1. Reaction papers to articles:</b> 1=Reeves 2000, 2005; 2=Brown, 2002/Collins, 2002; 3=Anderson & Shatluck, 2012; 4=Shambaugh & Magliaro, 2001/Huang et al, 2010 (5% each)
Summarize examples of D&D studies from AECT Handbook, 2 <sup>nd</sup> edition Summarize your inquiry of an educational intervention	<b>10% KB2. Research summary handout, in-class briefing</b> selected from AECT 2 <sup>nd</sup> edition; Richey & Klein, 2005, is a short version of the handbook chapter but without specific project details <b>15% KB3. Developmental history</b> of an educational product, tool, or teaching approach.
<b>RQ2: How can I use this method to study educational interventions?</b>	<b>45% Proposal - using the method</b>
Develop a research proposal using the D&D process to study the development of an educational product, tool, or model	<b>05% P1. Areas of Interest, Key Informant</b> <b>10% P2. Focus of Study, Users, What is known</b> <b>10% P3. Research questions and data sources</b> <b>05% P4. Data collection procedures</b> <b>10% P5. Data analysis procedures</b> <b>05% P6. Complete Document, Revised</b>
<b>RQ3: How can Design and Development research be taught?</b>	<b>10% Self-Study of course</b>
How do I view and perform on course activities and what can be improved?	<b>05% SS1. Reflective questions</b> in activities and comments to instructor blog postings
What did I learn in this course? What are my suggestions on improving course activities?	<b>05% SS2. Summary of course experiences</b>

- (2) Task guideline documents will be distributed/archived: Knowledge Base (KB1-3) and Proposal (P1-6)  
 (3) ALL WORK IS TO BE EMAILED TO ME BY THE SUNDAY BEFORE THE CLASS MEETING.

About the blog: <http://idtresearch.wordpress.com/>

*I will be posting comments and resources dealing with IDT research and doctoral work in general. The blog gives us another way of sharing information and ideas, as well as asking questions. There's usually an overflow of resources that I can't get to in a course. I will set up categories on the blog to make the postings easier to browse. I will add your email address to the blog's site, which alerts you through email when I have posted. You are not required to comment on all of my postings, but I do want you to comment your reactions or*



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*questions, as well as provide your own resources, when you can. I believe the blog will help you in this course as well as your doctoral program.*



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### ***University Policies***

#### *Social Justice Policy*

West Virginia University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color or national origin. Any suggestions as to how to further a positive and open environment in this class will be appreciated and given serious consideration. The College of Human Resources and Education regularly convenes a Cultural Diversity committee to increase awareness of its students to cultural issues.

#### *Disability*

If you have a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with Disability Services (293-6700).

#### *Academic Integrity Statement*

The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Therefore, I will enforce rigorous standards of academic integrity in all aspects and assignments of this course. For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see the Student Conduct Code at [http://studentlife.wvu.edu/office\\_of\\_student\\_conduct/student\\_conduct\\_code](http://studentlife.wvu.edu/office_of_student_conduct/student_conduct_code)

#### *Student Evaluation of Instruction Statement (SEI)*

Effective teaching is a primary mission of West Virginia University. Student evaluation of instruction provides the university and the instructor with feedback about your experiences in the course for review and course improvement. Your participation in the evaluation of course instruction is both strongly encouraged and highly valued. Results are strictly confidential, anonymous, and not available to the instructor until after final grades are released by Admissions and Records. Information about how you can complete this evaluation will be provided later.

### ***Course Policies***

#### *Syllabus*

I reserve the right to modify the syllabus and schedule to adjust for changing conditions and student needs. Updates will be emailed and posted on the eCampus site.

#### *Due Date*

All work to be emailed/attachment.doc to me by the end of Sunday the day before our F2F class session.

#### *Late Work*

Late work earns 50% of the allocated percentage. You should email me promptly to keep me informed of any personal issues you may have.



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All work due to my email by the end of Sunday prior to our F2F session

Date-Mon	Readings	Richey & Klein Text	In-Class	What's due
1 Aug 20			Academic careers Doing doctoral work	Your Backgrounds and Aspirations
2 Aug 27	Reeves (2005)	Ch1 Overview Ch9 Status and Future	Issues of D&D research, Terminology differences <a href="#">Areas of interest</a>	KB1-Reaction paper to Reeves and Ch 1/9 <a href="#">P1-Interests, Key Informant</a>
3 Sep 3	<b>LABOR DAY</b>			
4 Sep 10	Brown (1992) Collins (1992)		Design experiments	KB1-Major ideas from Brown, Collins
5 Sep 17	Anderson & Shatluck (2012)	Ch2 Identifying D&D problems Ch 3 D&D Methodology	Design-Based Research <a href="#">Proposal Focus</a> Developmental history guidelines-KB3	KB1-Questions on Anderson & Shatluck <a href="#">P2 SHORT-Outline of Study Focus, Intended Users, Lit Review Outline</a>
6 Sep 24	Richey & Klein, 2005, AECT Handbook Chapter, 2 <sup>nd</sup>	Ch4 Products & Tools	Research Types <a href="#">Doing a lit review</a> KB2 Summaries	KB2-Research summary handout and in-class briefing
7 Oct 1	Shambaugh & Magliaro (2001)	Ch5 Models	Q&A on Shambaugh & Magliaro article Studying teaching	KB1-Reaction paper to Shambaugh & Magliaro
8 Oct 8		Ch6 Participants & Settings	Your histories <a href="#">P2 Workshop</a>	KB3-Developmental History of an Educational Intervention
9 Oct 15			<a href="#">RQ Workshop</a>	<a href="#">P2-DETAILED Study Focus, Users, Lit Review</a>
10 Oct 22		Ch 7 Data collection	<a href="#">RQ Review</a> <a href="#">Data collection</a>	<a href="#">P3-Research questions</a>
11 Oct 29	<b>AECT Conference</b>	National IDT Conf.	Louisville, KY	
12 Nov 5			<a href="#">Data collection issues</a>	<a href="#">P4-Data collection procedures</a>
13 Nov 12		Ch8 Data analysis		
<b>THANKSGIVING</b>				
14 Nov 26			<a href="#">Data analysis issues</a>	<a href="#">P5-Data analysis procedures</a>
15 Dec 3	AECT Handbook chapter, 3 <sup>rd ed</sup>		Where the field is Your next steps Closure, SEI	SS2-Course Feedback
Dec 10				<a href="#">P6-Full revised proposal DUE 12-10 midnight</a>