

6-29-2016

## Annual Report 2015-2016

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# **Center for Teaching Innovation & Nexus Learning**

## **Annual Report 2015-2016**

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**PREPARED BY**

**JEFFREY ASHLEY, DIRECTOR**

**June 29, 2016**

## **TABLE OF CONTENTS**

<b>I. Overview of the Center for Teaching Innovation and Nexus Learning</b>	<b>Page 3</b>
<b>II. Role of the Center for Teaching Innovation and Nexus Learning</b>	<b>Page 3</b>
<b>III. Highlights in Programming, Services and New Initiative for 2015-1016</b>	<b>Page 4</b>
<b>IV. Summary of CTiNL Programming with Attendance Estimates</b>	<b>Page 17</b>
<b>V. Highlights of CTiNL Director's Fulfilled Duties &amp; Accomplishments</b>	<b>Page 17</b>
<b>VI. Self Assessment of the CTiNL and the Director's Role</b>	<b>Page 18</b>
<b>VII. CTiNL Nexus Advocates' Accomplishments</b>	<b>Page 18</b>
<b>VIII. Recommendations for 2016-17</b>	<b>Page 19</b>

### **APPENDICES**

#### **APPENDIX I – Tentative Presentations/Presenters for the 2016**

<b>Active Learning Space Symposium</b>	<b>Page 20</b>
--	----------------

<b>APPENDIX II – Assessment Report for Fall Reading Group</b>	<b>Page 27</b>
---	----------------

<b>APPENDIX III – Assessment Report for Nexus Maximus</b>	<b>Page 40</b>
---	----------------

<b>APPENDIX IV – KDEC Nexus Advocate Final Report</b>	<b>Page 52</b>
---	----------------

<b>APPENDIX V – CSHLA Nexus Advocate Final Report</b>	<b>Page 55</b>
---	----------------

<b>Appendix VI - CABE Nexus Advocate Final Report</b>	<b>Page 58</b>
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# Center for Teaching Innovation & Nexus Learning

## Annual Report 2015-2016

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### I. Overview of the Center for Teaching Innovation and Nexus Learning

The Center for Teaching Innovation and Nexus Learning (CTiNL) was created to support and enhance Philadelphia University's distinctive approaches to teaching and learning. *The mission of the CTiNL is to identify, celebrate, deepen and expand the teaching and learning methods central to our identity as an academic institution that provides a significantly different student experience – the Philadelphia University Nexus Learning experience.*

The CTiNL is the core faculty and staff development vehicle for fostering active and engaged learning, collaborative inquiry, multidisciplinary and integrative explorations, experiential and service learning, the use of real world problems, combined with the strong integration of the liberal arts and sciences with professional disciplines. Nexus Learning at Philadelphia University encompasses these approaches as the key elements of a student's engagement with intellectual challenges and personal development.

The CTiNL supports effective teaching and learning, classroom research and a strong level of scholarship through appropriate faculty and staff development. It also supports the further integration of student life and academic programs and treats teaching and pedagogical research as serious intellectual work. The overarching aim of the CTiNL is to support the vision of the University as outlined in our Strategic Plan.

### II. Role of the Center for Teaching Innovation and Nexus Learning

The Center:

- Supports and sustains a culture of teaching excellence.
- Fosters collegiality within and among faculty, professional staff, and university units.
- Advances new initiatives in teaching and learning.
- Provides recognition, incentives and rewards for excellence in teaching and learning practices.
- Supports individual faculty member's goals for professional development.
- Acts as a catalyst in the institution to support the strategic plan goals and the University's mission.
- Positions the University at the forefront of educational innovation.

The CTiNL's mission and goals are supported by the Director, Dr. Jeffrey Ashley, who reports directly to the Provost, Dr. Matt Baker, and three Nexus Advocates (Dr. Anne Bower, Dr. Chris Pastor, and Professor Dave Kratzer), all award winning (Lindback or President's Award) educators. During this past academic year (2015-16), Dr. Jeff Ashley assumed the



Director of the CTiNL, replacing the CTiNL founding director, Dr. Roydhouse, upon her retirement. This annual report details the accomplishments, reflections, and suggested future directions of the CTiNL for the 2015-16 academic year.

### **III. Highlights in CTiNL's Programming, Services, and New Initiatives for 2015-2016**

Starting before the 2015-16 academic year began and ending in late May 2016, the CTiNL produced a suite of workshops, events, and new opportunities that supported teaching innovation and Nexus Learning while raising recognition for the Center and the University, both internally and externally. The following summarizes the highlights of CTiNL's 2015-16 programming/services/new initiatives, with a brief commentary on the perceived and/or evaluated successes and limitations of each of these initiatives.

#### **1. New Faculty Orientation (August, 2015)**

The Director of CTiNL provided a 90-minute orientation and overview of the Center on August 19, 2015 for new faculty attending the New Faculty Orientation Day organized by the Office of the Provost. Each of the new faculty members were given a copy of Jose Bowen's "Teaching Naked" and were informed about the monthly New Faculty Workshops + Socials that were planned for the first Tuesday of each month throughout the academic year.

#### **2. "New Faculty Teaching Workshops + Socials" (Fall/Spring, 2015-16)**

The Director of the CTiNL provided monthly workshops (with catered lunch) and socials for new faculty members (incoming and second year faculty members) with the aim of providing guidance on professional and academic issues, and to further foster a sense of community amongst this incoming cohort.

The first Tuesday slot for most of these workshops did not seem to work for many new faculty; only a handful attended the workshops and one social event in the fall semester (many new faculty members apparently had program meetings during this time). Two of the spring workshops were cancelled because of low predicted attendance.

Faculty need to be reminded by their Executive Deans that their first year course release time should in part be spent towards taking advantage of these important and essential professional development opportunities. The Center should find a mutually good time for these workshops and also offer them to remote faculty via Adobe Connect (and record and archive them). The highest attendance observed was for the dossier preparation workshop in April 2016 (~16 faculty live and remotely); this workshop was offered live with the option of Adobe Connect (3 faculty joined remotely) and was recorded/archived (one faculty member requested viewing this).

The following were the New Faculty Workshops + Socials for this academic year:

#### **Friday, August 28, 2015**

##### **Getting to Know You – A *New Faculty* Pot-Luck Get-Together**

**Host: Jeff Ashley**

6 pm (151 East Dartmouth RD, Bala Cynwyd, PA 19004)

#### **Tuesday, September 1, 2015**

##### **Can Understanding the Profile of PhilaU Students Help You Teach Them?**

**Facilitators: Mark Pallandino, Jeff Ashley**

12:30 to 2:00 pm (KCC306)

#### **Tuesday, October 6, 2015**

##### **Fostering Active Student Learning: Getting Students Out of Passivity**

**Facilitators: Jeff Ashley**

12:30 to 2:00 pm (KCC306)

**Tuesday, November 3, 2015**

**Teaching with Technology: How to Decide What Works for You and Your Students?**

**Facilitators:** MB Kurilko, Michelle Gorenberg, Dave Kratzer, Chris Pastore

12:30 to 2:00 pm (Hay111)

**Thursday, December 10, 2015**

**"If I Only Knew That Years Ago!" - Academic Life Lessons Learned**

**Hosts:** Jeff Ashley, Sue Christofferson, Susan Frostèn, Barbara Kimmelman, Evan Laine

5:00 to 7:00 pm (Manayunk Brewing Company)



**Tuesday, Feb 2, 2016**

**"What the Heck is a *Faculty Activity Report* and How do I Complete It?"**

**Facilitators:** Susan Frostèn, Jeff Ashley

12:30 to 2 pm (KCC306)

**Friday, April 15, 2016**

**Dossier Preparation 101**

**Facilitators:** Jeff Ashley, Graig Griffen, Valerie Hanson, Susan Frostèn, Jessica Holt, Dave Rogers, Dana Scott

**Adobe Connect/Recorded and Archived**

2:00 to 3:30 pm (KCC306)

**Thursday, May 5, 2016**

**End of Spring Semester Celebration**

**Host:** Jeff Ashley

5:00 to 7:00 pm (Falls Tavern)

### **3. Creation of a [CTiNL@PhilaU.edu](mailto:CTiNL@PhilaU.edu) E-mail Account (Fall 2015)**

An email account for the Center was created and weekly "This Week @ CTiNL" emails were distributed to all faculty and staff to advertise weekly events from the Center. This method of 'getting the word out' proved to be successful, especially prior to the creation and launch of the Center's website.

### **4. Spring EduSeries (Spring 2016)**

In the spring of 2014, EduSeries (conceived by Jeff Ashley), a series of faculty and staff lead workshops, was conceived as an alternative approach to the very successful "Celebrate Teaching Week" held in previous years. Likewise, in the spring of 2016, this series was re-launched and consisted of a semester long opportunity to learn and gain inspiration from some of PhilaU's faculty and staff members who are using technology, active pedagogies, and evidence-based methodologies to increase students' knowledge, skills, enthusiasm, engagement and retention.

It was an impressive number of offerings (19 offered) but faculty were asked to check out the scheduled workshops, presentations, and discussion sessions and asked to try to participate as much as their busy schedules and interest-levels allowed. Nexus Advocates took the lead in securing faculty presenters. Weekly reminders (e.g., "This Week @ CTiNL") were sent to faculty and staff via email. Karen Albert and other librarians were instrumental in augmenting the Center's list of offerings. Every week of the spring 2016 semester saw at least one workshop on teaching and learning approaches and skills. All tolled, over 100 faculty members and staff participated in these workshops throughout the spring semester, on par with the attendance recorded for Celebrate Teaching Week event in prior years. Jeff Ashley recorded four of these sessions using iTunes or Zoom to experiment with capturing these professional development workshops.

The following were the offered workshops:

*"Considering the F: Using the Low End of the Grading Scale"* by Katie Gindlesparger  
(~4 attendees)

1/22/2016 Noon to 1 pm (KCC306)

*"A Novel Approach to Teaching Science: Using Essays and Activities to Reflect"* by Niny Rao  
(~4 attendees)

1/25/2016 Noon to 1 pm (KCC306)

*"Creating Video-Based Course Material - A Practical Guide"* by Jeffrey Klemens and Brooke Wimberly  
(~14 attendees)

1/29/2016 1 to 2 pm (KCC302)

*"Flipping a Lesson Using Zaption-Modified Videos"* by Ellen Knapp  
(~3 attendees)

2/1/2016 Noon to 1 pm (KCC306)

*"Attitudes Towards Ethics in Biology"* by Frank Wilkinson and Ryan Long  
(~4 attendees)

2/17/2016 11 am to 12 pm (KCC312)

*"Participatory Action Research: Learning Through the Lens of Change"* by Megan Fuller and Radika Bhaskar  
(~8 attendees; given at Penn Charter twice following this initial offering)

2/18/2016 1 to 2 pm (KCC312)

*"Mathalicious Active Learning"* by Kay Magee  
(~4 attendees)

2/23/2016 11 am to noon (KCC302)

*"Materials Resources at PhilaU"* by Jacquelyn Wilson, Sarah Daub  
(~5 attendees)

2/23/2016 12:30 to 2 pm (Library Instructional Space)

*"Ten Tips for Improving Student Research"* by Daniel Verbit  
(~5 attendees)

2/25/2016 2 pm to 3 pm (Library Instructional Space)

*"Statista - Statistics & Information Database Webinar"* by Courtney Tucci of Statista  
(~6 attendees)

3/8/2016 2 pm to 3 pm (Library Instructional Space)

*"Not Another New Edition! Finding Quality Free or Low Cost Learning Resources for Your Students"* by Teresa Edge and Mary Beth Kurilko  
(~5 attendees)

3/9/2016 12 pm to 1:30 pm (Library Instructional Space) LUNCH INCLUDED



*"Am I Actually Grading Students Based on Their Ability to Use Technology?" by Jack Suss*  
(~6 attendees)  
3/28/2016 1 pm to 2 pm (KCC306)

*"Collaboration with Mobile Devices" by David Kratzer*  
(~4 attendees)  
4/1/2016 12 pm to 1 pm (KCC306)

*"Sort and Sift: Helping Students Embrace Emergent Thinking" by Natalie Nixon*  
(~2 attendees; given at Penn Charter as well)  
4/5/2016 12 pm to 1 pm (DEC212)

*"Collaboration in Online Studios" by Rob Fryer*  
(~4 attendees)  
4/8/2016 1:30 pm to 2:30 pm (KCC314)

*"Digital Learning Tools to Enhance Student Learning" by Marcia Weiss*  
(~14 attendees including 2 from TJU)  
4/14/2016 12:30 pm to 1:30 pm (KCC306)

*"RefWorks (new version) for Faculty - Managing, Organizing, and Formulating your Research Papers" by Beth Reiten, ProQuest Trainer*  
(~5 attendees)  
4/20/2016 1:00 pm to 2:00 pm (Library Instructional Space)

*"Connecting Creative Students Online: A Guide to Commenting Remotely on Graphic, As Well As Written, Work" by Lisa Phillips*  
(~8 attendees)  
4/22/2016 12:30 pm to 1:30 pm (Common Thread Fishbowl)

*"Engaging Students in a Career Search" by Anne Bower*  
(~5 attendees)  
4/26/2016 11 am to 12 pm (KCC302)

## **5. Active Learning Space Initiative – Year 2 (Fall/Spring 2015-2016)**

The Director of the Center assumed the responsibilities of the Active Learning Space Coordinator (previously stipend-supported by then faculty member Jeff Ashley) with the assistance of Ms. Sally Dankner, Graduate Assistant for Active Learning Space from fall 2014 to spring 2016. The duties included (but were not limited to):



- Working with Tim Smalarz in the Registrar's office to accommodate faculty's requests for Nexus Learning Hubs each semester
- Planning and conducting workshops for technology and pedagogy training for faculty assigned a Nexus Learning Hub
- One-on-one faculty training sessions for technology and training for faculty assigned a Nexus Learning Hub
- Administration of a spring 2016 technology use survey to assess the reasons for use and non-use of technology in the Nexus Learning Hubs

- Creation of technology 'how to' videos with Jeff Klemens' students (e.g., Use of the Epson Smart Board, Furniture and Space Considerations of the Nexus Learning Hubs)
- Giving tours of Nexus Learning Hubs to visitors (e.g., University of the Sciences, TJU, PADLA)
- Planning and presenting at the PADLA/Philly Tech Week on-campus event
- Visiting other campus' active learning spaces to gain knowledge and inspiration
- Presenting our success story of active learning spaces externally at various conferences
- Attending conferences related to learning spaces (e.g., Next Generation Learning Spaces in Atlanta, Learning Space Collaboratory meeting at GWU, etc)
- Planning 'scale up – scale out' initiatives for the next academic year (Bucks County overhaul of learning spaces and library instruction space)
- White board additions to the second floor of Tuttleman (summer 2016) – working primarily with Victor Blanco in Physical Plant
- View-Sonic "Tech-Assisted Technology" Drop-In Social during the spring of 2016 to pilot new interactive displays/monitors
- Creation of a website for Nexus Learning Hubs
- Creation of the "Nexus Learning Hubs – Year 1" e-report and posting it on the website: <http://www.philau.edu/ebooks/annualreport/> (work-study student Shannon Gahagan was instrumental in creating a professional looking report; Strada offered her a summer internship because of this work)
- Uploading images and specifications of our Nexus Learning Hubs onto FlexSpace.org, a clearinghouse for innovative learning spaces
- Trouble shooting with tech-suppliers and resolving issues in collaboration with OIR

#### **6. Professional Development through External Experts/Conferences (Fall/Spring 2015-2016)**

The CTiNL funded institutional access for all PhilaU faculty and staff to the "Transforming the Teaching and Learning Environment: The 2016 Virtual Conference" presented by Pennsylvania's State System of Higher Education. For the past six years, Pennsylvania's State System of Higher Education has presented *Transforming the Teaching & Learning Environment*, a totally virtual conference. Starting on February 15, 2016 and running for two weeks, the virtual conference consisted of 60 one-hour live and interactive sessions (from 9 am to 3 pm every weekday). Our faculty/staff had the opportunity to engage virtually with education professionals from all over the world (*including PhilaU's Susan Frostèn, Sally Dankner, and Jeff Ashley on 2/25*) from their offices or homes. Topics ranged from gamification to academic integrity to new technologies to many more. Sessions were recorded and were accessible for viewing months after the event.

Though it was not known how many sessions were viewed by PhilaU faculty/staff, the Center will continue to offer this 2-week event virtually. It is a great professional development opportunity and very economical. More strategic promotion of the incredible breadth and depth of topics presented virtually is needed next year.

#### **7. Planning the Inaugural Active Learning Space Symposium Conference**

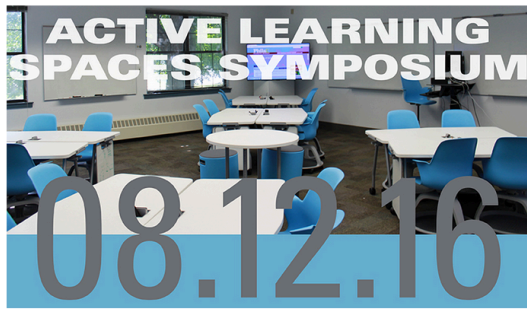
The spring 2016 semester marked the conclusion of year 2 of the active learning space initiative which saw the creation and opening of 2 addition Nexus Learning Hubs in the fall of 2015 (Downs 2 and Tuttleman 209). To celebrate the success of our exploration into mindfully designed active learning spaces that optimize Nexus Learning, Jeff Ashley began to plan a regional symposium gathering thought-leaders on these spaces on our campus. The event will take place on August 12 and will showcase not only PhilaU's success with these spaces but those of institutions nationwide wide. The tentative presentation/presenter list appears in Appendix I.

Planning for this symposium, while still on-going, involved:

- Working with Shannon Gahagan to construct promotional artefacts including a site dedicated to the symposium (<http://www.philau.edu/ctinl/Symposium.html>)
- Creation of a Google Form for electronic submissions of presentation abstracts



## Active Learning Spaces Symposium



### Purpose of Symposium

The **Active Learning Space Symposium** features presentations that highlight evidence-based and experimental processes in the design, implementation and assessment of active learning spaces. The forum provides an excellent opportunity to share experiences and thoughts about the way the built environment and technologies can support, nurture, and optimize active learning pedagogies.

As a participant, you will:

- Learn best practices to optimize engagement and buy-in from all stakeholders in the design and implementation of active learning spaces
- Garner tips and lessons learned in the assessment process of space, furniture and technology
- Gain valuable insight into the ways in which active learning spaces and technologies foster active, collaborative, and real world pedagogies and skills
- Take a glimpse into the future of active learning spaces
- Network with knowledgeable folks who have implemented active learning space initiatives

### LINKS

- » About the Center
- » Programs
- » Services
- » Active Learning Space Initiative
- » Staff List
- » Active Learning Spaces Symposium

WHAT IS NEXUS LEARNING? →

- Working with Fintan Moloney in PR to create a EventBrite registration form for participants
  - Constructing targeted email list to gain involvement (e.g., presenters, attendees) in the symposium
    - Working with Steelcase, Corporate Interiors, ViewSonic, Strada, Teknion and other tech/furniture/design vendors/firms for their participation
    - Working closely with Marisa Sergnese from Steelcase Education to solicit/target presenters
    - Logistics (reserving buildings/rooms, signage, parking, food, hotel arrangements, etc)

## 8. Addition of Instructional Design Consultations as CTINL/OIR's Services (Spring 2016)

In early spring of 2016, Jeff Cepull created a new position, the director of instructional design and academic technology, and hired Sherri Place in that role. The Center advertised Sherri services as a joint OIR/CTiNL service. On the CTiNL website, a new Center service was added as follows:

*"The instructional design team is your teaching partner and can collaborate with you to:*

- *Develop course content that scaffolds learning*
- *Build activities that engage learners*
- *Organize learning materials to help students stay focused*
- *Transform learning using technology tools*
- *Create courses that can be delivered online or in a hybrid format*
- *Use tools, such as Blackboard, more effectively*

*Instructional design team members at PhilaU have a solid foundation in instructional and learning theories and have experience teaching in multiple formats. We also spend time evaluating and implementing a wide range of tools that support teaching and learning."*

Sherri, and her recent assistant Ms. May Truong-Meritt, have greatly expanded the services to our faculty for pedagogically-sound use of technology that supports Nexus Learning. Their contributions have been greatly received by faculty. Sherri Place and Andrea Brown created a series of technology workshops to support effective active and collaborative pedagogies for the summer of 2016.

## 9. 2016-17 Nexus Learning and Nexus Online Grants (Spring 2016)

The Director advertised the availability of the grants (through numerous emails and meetings), recruited faculty, and held one-on-one grant writing meetings with faculty members to discuss novel ideas that could potentially result in competitive proposals for these grant monies. Six faculty members came to the Center to discuss their ideas.

Once again, faculty members of the UARC were asked to review the proposals. Susan Frostèn lead the construction of a Dropbox site to post proposals and rubrics, arrange meeting times, and moderated the review discussions. Jeff Ashley asked that the Nexus Advocates to not be included in the review process as there was a potential conflict of interest as some of the Advocates had assisted faculty with the formation of proposal ideas and assisted in the pre-review of proposals. Jeff modified the Policy and Procedures manual of the UARC to reflect this change. The review committee did a superb job with reviewing the proposals in an unbiased and thorough manner. Jeff Ashley summarized the discussions, added his own comments, and submitted the recommendations to Provost Matt Baker.

Of the 12 proposals submitted, the Center for Teaching Innovation and Nexus Learning funded 4 of those proposals while DR Widder, through the Nexus Online Grants, funded an additional 2 grants. Three grants were fully or partially funded by their Colleges, while three were not funded. The following summarizes these submissions and the funding that supported them (if given):

#### **2016-17 Nexus Learning Grant Recipients**

Kasey Wagoner, Assistant Professor of Physics, in collaboration with Edward Santilli, Assistant Professor of Physics, College of Health, Science, and the Liberal Arts.

##### **Promoting Physical Intuition through Experiment-Based Learning**

Wendy Wachter-Schutz, Associate Professor of Occupational Therapy, in collaboration with Bridget Trivinia, Assistant Professor of Occupational Therapy, College of Health, Science, and the Liberal Arts.

##### **Interprofessional Collaboration: Proving Physical and Occupational Therapy Services at a Student Run Pro-Bono Clinic**

Stephen DiDonato, Assistant Professor in Community and Trauma Counseling, in collaboration with Richard Hass, Assistant Professor of Psychology, Amy Baker, Associate Professor in Physician Assistant Studies, and Michelle Gorenberg, Associate Professor in Physician Assistant Studies, College of Health, Science and the Liberal Arts

##### **Trauma-Informed Inter-Professional Education among Health Science Graduate Programs**

Robert Fleming, Associate Professor of Sustainable Design, in collaboration with Christopher Pastore, Professor of Engineering, College of Architecture and the Built Environment

##### **Game Based Learning**

#### **2016-17 Nexus Online Learning Grant Recipients**

Erin Lucas, Assistant Director of Writing Services, Academic Success Center

##### **Developing Synchronous Online Writing Assistance for Distance Graduate Students**

Lloyd Russow, Professor, College of Design, Commerce and Engineering – School of Business Administration

##### **Writing of Electronic Textbook Which Would Provide the Basic Principles of International Marketing**

#### **Proposals That Were NOT Funded by Nexus or Nexus Online Grants (2016-17)**

##### **Project Funded Through CABE**

Gulbin Ozcan-Deniz, Assistant Professor of Construction Management, College of Architecture and the Built Environment

Innovative Nexus Learning Capstone Experience for Construction Management Students

##### **Project Fully Funded Through Provost/CHSLA**

Niny Rao, Assistant Professor of Mathematics, in collaboration with Catherine Magee, visiting Adjunct

Professor of Mathematics, Sarah Strick, Adjunct Professor of Mathematics, College of Health, Science and the Liberal Arts, and Ellen Knapp, Assistant Director of Mather Services at the Academic Success Center. Re-design, Implementation, and Assessment of MATH099

**Project Partially Funded Through CHSLA**

Radika Bhaskar, Assistant Professor of in collaboration with Megan Fuller, Assistant Professor of Chemistry, College of Science, Health and the Liberal Arts

**Transdisciplinary Social Learning to Improve Quantitative Literacy and Build Problem-Solving Capacity: Innovative Climate Change Education**

**Not Funded (2016-17)**

Paul Braff, Adjunct Assistant Professor, in collaboration with Tom Schrand, Professor of History and Valerie Hanson, Associate Professor of Writing, College of Health, Science and the Liberal Arts  
**A New Course: What Does it Mean to be Healthy?: Defining and Promoting Health in the U.S.**

Jeffrey Klemens, Assistant Professor, in collaboration with Kathryn Mickle, Assistant Professor, College of Health, Science and the Liberal Arts **Setting our Cites on Information Literacy: Improving Student Use of Citations in the Biology Curriculum**

Frank Wilkinson, Associate Professor of Biochemistry, in collaboration with Ryan Long, Assistant Professor of Philosophy, College of Science, Health and the Liberal Arts  
**Evaluation of Change in Attitudes in Response to a Personal Genetic Information Exercise**

**10. Teaching Portfolio 3-Day Workshop (Spring 2016)**

In early January 2014, Peter Seldin and Beth Miller held a 3.5-day workshop for 10 faculty members on the construction of a teaching portfolio. All participants gained much from this workshop. The comments and recommendations of participants were collated and evaluated. The consensus was that although the process with Seldin/Miller was great, the process of teaching portfolio mentoring and construction may be accomplished by those who had gone through this process. Since that time, Susan Frostèn has lead the planning and implementation of subsequent Teaching Portfolio workshops, with the assistance of the CTiNL and faculty mentors (including the Director of the CTiNL). This academic year, only two faculty expressed interest in the January offering of the workshop. Because of this low interest level, Susan and Jeff decided to offer only one 3-day workshop in May 2016. Fifteen faculty members enrolled and completed the workshop in mid May, all of which were first year faculty members. The workshop was a great success. A survey will be administered in June of 2016 to collect detailed thoughts on how to improve this already successful professional development opportunity and to more formally incorporate this experience into the first year faculty member's requirements.



**11. Development and Launch of the CTiNL Website (Fall 2015)**

For several years, Marion Roydhouse carefully planned the layout, content and intentions of a website for the CTiNL. Jeff Ashley took these thoughts and content pages and worked with Stef Anderko in PR to construct a basic website that would act to inform faculty of the services and programs of the CTiNL, but would also build an external presence and understanding of the Center, and Nexus Learning in general.





## Center for Teaching Innovation and Nexus Learning

The **Center for Teaching Innovation and Nexus Learning** is the core faculty and staff development vehicle for fostering:

- Active and engaged learning
- Collaborative inquiry
- The use of real world problems and experiences
- The strong integration of the liberal arts and sciences with professional disciplines

### UPCOMING EVENTS

- |   |   |             |
|---|---|-------------|
|  | <b>2016 Active Learning Spaces Symposium Registration</b> | Jun 15 12am |
| Location: Philadelphia University   |   |             |
|  | <b>2016 Active Learning Spaces Symposium Registration</b> | Jun 16 12am |
| Location: Philadelphia University   |   |             |
|  | <b>2016 Active Learning Spaces Symposium Registration</b> | Jun 17 12am |
| Location: Philadelphia University   |   |             |
|  | <b>2016 Active Learning Spaces Symposium Registration</b> | Jun 18 12am |
| Location: Philadelphia University   |   |             |

[Full Calendar](#)

**Nexus Learning** at Philadelphia University encompasses the above four tenets of teaching and learning. These are the key elements of engagement with course content and skills that catalyze intellectual growth and personal development for our students, as well as our faculty.

The mission of Philadelphia University's Center for Teaching Innovation and Nexus Learning is to support faculty members' experimentation and innovation in teaching to deepen student learning (through workshops, grants, guidance and celebration).

It provides the forum where teachers can find companionship in the journey of teaching and a community of scholars with whom to share pedagogical research. We treat teaching and pedagogical research as serious intellectual work. To support classroom research and effective teaching, we offer a strong level of support and commitment including annual grant opportunities to facilitate faculty and staff explorations into Nexus Learning practices and strategies.

### LINKS

- » [About the Center](#)
- » [Programs](#)
- » [Services](#)
- » [Active Learning Space Initiative](#)
- » [Staff List](#)
- » [Active Learning Spaces Symposium](#)

**WHAT IS NEXUS LEARNING?**



## 12. Disseminating Pedagogical Research

In the fall 2015 semester, the Director of CTINL sent an email to faculty and staff to encourage them to submit an abstract to present a poster presentation highlighting their innovative pedagogies at Temple University's Center for Teaching & Learning "14<sup>th</sup> Annual Faculty Conference on Teaching Excellence" on Friday, January 22 (2016) from 9 am to 5 pm. In addition to disseminating their pedagogical work to a wider off-campus community, they had the opportunity engage in all the conference events, including a keynote address by 2012 U.S. Professor of the Year, Dr. Christy Price.

Eight of our faculty members presented an astonishing 5 out of the 18 posters at this year's conference where abstracts were accepted based on peer-review by a panel of pedagogical experts from Temple University.

The posters and presenters were:

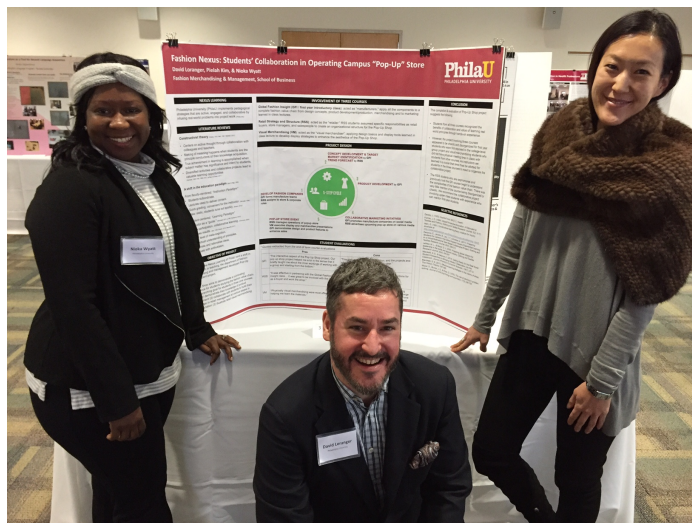
Fashion Nexus: Students' Collaboration in Operating Campus "Pop-Up" Store  
David Loranger, Pielah Kim, and Nioka Wyatt (KDEC)

Innovative Techniques to Improve Live, Simultaneous Collaboration in an Online Studio Course  
Rob Fryer and Rob Fleming (CABE)

Engaging Students in Career Development for the Health Professions Fosters Learning  
Anne Bower (CSHLA)

Contrasting Faculty and Student Expectations in Flipped Classroom Video Lectures  
Jeffrey Klemens (CSHLA)

Quantitative Assessment of Qualitative Practices  
Dana Scott (KDEC)



Dr. Jeffrey Klemens' research poster was awarded the 1<sup>st</sup> Place prize that included a ChromeBook laptop. Jeff's research, funded by a Nexus Learning Grant in 2013-2014, contrasted student and faculty perceptions of a variety of videos (from voice-over PowerPoints to animated videos created by Klemens and his student team) that were intended to 'flip' content out of the classroom to allow more student-centric collaborative learning methods within the face-to-face class time.

## 13. Talking Teaching Weekly Gatherings " (Fall/Spring, 2015-16)

Conceived by Chris Pastore two years ago, Talking Teaching is a weekly informal gathering of faculty and staff to discuss aspects of teaching and learning. This year, two Talking Teaching sessions were offered every week. Discussions were seeded by short articles dealing with academic concerns and issues on Thursdays (Topical Thursdays – lead by Dave Kratzer) while on Wednesdays, there is no agenda (lead by Chris Pastore). These events garnered a significant following of dedicated staff and faculty (between 2 and 10 participants, on average). It was noted that even if faculty members were not able to attend, email





distributions of the short, timely, teaching-related articles were appreciated by some faculty members. Talking Teaching weekly gatherings represent one of the most popular programming events the CTiNL offers.

#### 14. Reading Groups " (Fall/Spring, 2015-16)

Lead/facilitated by Anne Bower, a group of ~15 faculty members and staff congregated over free lunch to discuss Ambrose et al's **How Learning Works: Seven Research-Based Principles for Smart Teaching** in the fall semester and Ken Bain's **What the Best College Teachers Do** in the spring semester. The fall semester's reading group's success was measured by a comprehensive survey of "participants learning gains" created by Jeff Ashley (Appendix II). In the spring semester, participants were also encouraged to implement teaching and learning strategies in their current courses and report back to the group regarding observations and outcomes. Anne Bower and Michelle Gorenberg are aiming to write a manuscript documenting this successful model for building faculty learning communities.

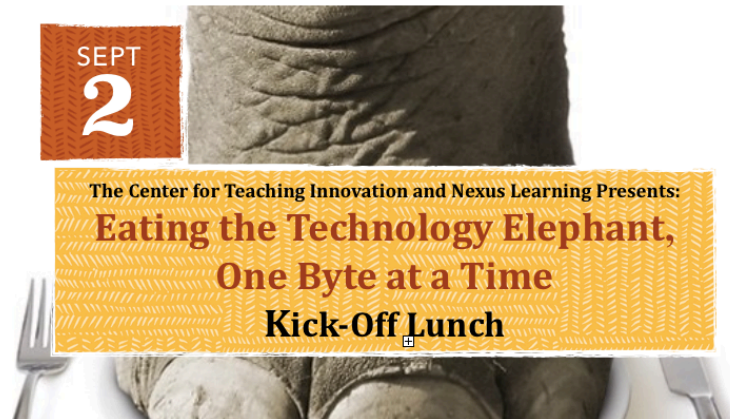


In the spring semester, lead and facilitated by Susan Frostèn (and funded by the Office of the Provost), a group of ~10 faculty and staff members delved into the research and conclusions on stereotyping and identity threat issues through weekly chapter-by-chapter readings/discussions of social psychologist Claude Steele's **Whistling Vivaldi: How Stereotypes Affect Us and What We Can Do**. As with previous reading groups, this opportunity was very successful in allowing a deep dive, semester-long exploration of teaching and learning related content. Participants were surveyed and results will be summarized in the summer of 2016.

Reading groups are very successful as they create a community of learners and foster pedagogical exploration and discussion. They are perhaps the most impactful programming the CTiNL offers and should be continued and expanded. Weekly free lunch and books were provided to participants.

#### 15. "Eating the Elephant: One Byte at a Time" Semester Long Guided Explorations (Fall 2015)

The director of CTiNL noticed that while workshops are helpful in disseminating novel pedagogical and technological tools, the enthusiasm for these tools quickly wanes as faculty return to their busy daily activities after these workshops. A sustained effort, with constant guidance and mentoring from experts, was needed; that is, on that goes beyond a workshop and builds concepts/skills throughout a semester. Jeff Ashley and Mary Beth Kurilko conceived a semester long approach to faculty development. The result was the creation of the "Eating the Elephant: One Byte at a Time" group.



Do a Google search for “overwhelmed by technology” and you’ll get north of 37M hits. We know technologies can solve pedagogical problems, but who has time find them and work them into your course? Taking a cue from the flipped classroom, a small group of faculty members spent the semester working together to each solve a problem in one of their courses using a technological tool (aka tech-assisted teaching). A small group of faculty members in the fall of 2015 met every 3<sup>rd</sup> week to first identify a problem they had in a course and then, with pedagogical and

technological experts (from CTiNL and OIR), devised an implementable tech-assisted solution to that problem. The program was very successful for those that participated fully and resulted in faculty exploring novel tech-assisted methods to improve student learning. MB Kurilko lead the sessions with the assistance of Jeff Cepull, Andrea Brown, and Jeff Ashley. MB Kurilko and Kay Magee presented their tech-assisted journey at the Annual RECAP (Resources for the Electronic Classroom: A Faculty-Student Partnership) conference at West Chester University on May 12, 2016.

#### **16. Shared Programming with William Pen Charter’s Center for Teaching and Learning " (Fall/Spring, 2015-16)**

Penn Charter's Teaching and Learning Center invited PhilaU’s faculty and staff to weekly workshops centered on easily accessible and meaningful professional development. Penn Charter’s faculty members were invited to participate in any of the CTiNL programming (e.g., reading groups, EduSeries, Talking Teaching). They did and the discussions were robust and deep.

#### **17. CTiNL Places as Finalist for Award at International Conference**

The Center for Teaching Innovation and Nexus Learning was named one of two finalists for the Jack A. Chambers Exemplary Teaching and Learning Center Award at the 27th International Conference on College Teaching and Learning in Jacksonville, FL. The Peace and Justice Institute at Valencia College received the award. At the same conference, Jeffrey Klemens received the Award for Innovative Excellence in Teaching, Learning and Technology

#### **18. Preliminary Assessment of Nexus Maximus**

In August of 2015, Jeff Ashley customized the Student Assessment of Learning Gains (SALG) survey (which uses both quantitative and qualitative measures) to gauge the degree of effectiveness of Nexus methodologies employed in the 4-day campus wide sprint project. All students who enrolled in the experience were emailed a survey and asked to complete it. A \$100 gift certificate was used to entice students to complete the survey. Unfortunately, only 16 students responded the the survey. However, the results from these students were greatly insightful (See full analysis in Appendix III) and showed enhanced gains in some of the indices targeted. The qualitative comments were especially insightful.

This summer, Rick Haas has volunteered to coordinate an additional assessment procedure (with pre and post surveys) for participants in the upcoming 2016 Nexus Maximus event. Susan Frostèn and Jeff Ashley have met with Rick and are particularly impressed and excited about his involvement which will be conducted using research-grade assessments (suitable for peer review publications).

## 19. External Presentations/Panel Discussions

It was a major goal of the CTiNL Director to build a stronger external appreciation of Nexus Learning and Nexus Learning Hubs through dissemination of our institution's successes at local, regional, national, and international conferences and other high visibility events. The first presentation was made last academic year (May 2015) at the prestigious Lilly Conference in Bethesda MD and garnered some interest because of the novelty of the collaborative approach to designing and implementing the first iterations of the Nexus Learning Hubs in the fall of 2014. This academic year, three additional abstracts (highlighting the process PhilaU followed for the design, implementation and assessment of active learning spaces) were submitted and accepted for presentations at conferences. An additional abstract is being reviewed and considered for presentation at the fall annual meeting of EduCause, the premier venue for dissemination of tech and space assisted pedagogical approaches.

The following summarizes these presentations:

### **The Design, Implementation and Assessment of Active Learning Spaces to Facilitate Active and Collaboration Teaching and Learning**

Jeffrey Ashley, Susan Frostèn and Sally Dankner.

Transforming the Teaching & Learning Environment: A Virtual Conference (Feb 2016)



### **Education and Design Community Panel Discussion**

Jeff Ashley (Invited Panelist) and other thought-leaders in learning space design and implementation

(Moderated by George Athens)

Teknion Showroom, Washington, DC (March 2016)

### **Engaging All Institutional Stakeholders Before Engaging Students: Planning Active Learning Spaces To Support Everyone's Goals**

Jeffrey Ashley, Susan Frostèn, Jeffrey Cepull, Jeffrey Klemens, and Tom Becker.

27<sup>th</sup> International Conference on College Teaching

and Learning. Jacksonville, FL (April 2016)

### **Lessons Learned from Planning & Implementing Active Learning Spaces**

Jeffrey Ashley, Jeff Cepull, Jeff Klemens, Tom Becker, and Susan Frostèn

Presentation and campus tour as part of PA Distance Learning Association (PADLA) + Philly Tech Week (May 2016)

### **Getting the Right People in the Room, Before You Build the Room: Lessons Learned from Planning Campus-Wide Transformations of Active Learning Spaces**

Jeffrey Ashley, Susan Frostèn and Jeff Cepull.

Submitted abstract in Jan for consideration for the EduCause Conference in Anaheim, CA (Oct 2016)

### **Focusing on the Future of Planning Learning Spaces: A Learning Space Collaboratory Forum**

Jeffrey Ashley (Invited Participant)

George Washington University, June 2016

#### IV. Summary of CTiNL Programming with Attendance Estimates

The following table summarizes the major workshops and programming offered by CTiNL and collaborators (e.g., OIR, Gutman Library, Temple University) and provides best estimates of number of faculty and staff who attended.

Event/Workshops/Conferences	Period Offered/Attended	Number of Workshops	Number of Attendees at all Workshops
New Faculty Orientation	August 2015	1	~15
	Fall 2015/Spring		
New Faculty Workshops + Socials	2016	6	~25
Papal Visit = Snow Day Workshop	Fall Semester, 2015	1	~10
EduSeries Workshops	Spring 2016	19	~100
PSSHE Virtual Conference	Spring 2016	60	?
Dossier Preparation Workshop	April, 2016	1	~15
Teaching Portfolio Workshop – CtiNL	May, 2016	3 Day Workshop	15
Temple University Teaching Conference	January, 2016	~4	8
Talking Teaching	Fall/Spring	~50	~200
TJU Faculty Days	June, 2016	~11	12
<b>Total Workshops/Events</b>		<b>154</b>	
<b>Total Attendees</b>		<b>400</b>	

#### V. Highlights of CTiNL Director's Fulfilled Duties & Accomplishments

- o Attended all UARC meetings including all sub-committee meetings pertaining to the review of faculty scholarship grant proposals, Nexus learning and Nexus Online learning grant proposals.
- o Did not attend AOOC meetings because UTLA and UARC conflict with it; at least one Nexus Advocate was at every AOOC meeting for both semesters
- o Conducted one formative evaluation for junior faculty member
- o Participated in Anne Bower's weekly reading group both semesters and Susan Frostén's weekly reading group in spring 2016
- o Attended a 3-day long workshop on Problem Based Learning at UDel (January 2016)
- o Attended the 3-day POD Conference for Teaching and Learning Center Administrators (November 2015, San Francisco)
- o Attended and presented at the three day 27<sup>th</sup> International Conference on College Teaching and Learning (April 2016, Jacksonville, FL)
- o Attended the Next Generation Learning Spaces Conferences (February, Atlanta, GA)
- o Attended Temple University's Center for Teaching & Learning "2016 Faculty Conference on Teaching Excellence" (January 2016)
- o Contributing member of the University Teaching, Learning and Assessment committee. Provided guidance to program directors, with other UTLA members, as they mapped and assessed Nexus learning within their programs during two workshops (fall and spring semesters)

- Taught CHEM103 (Chemistry I) in the fall 2015 semester
- Supervised the Nexus Learning Advocates
- Supervised the Research Advocates
- Committee member for the planning of “Nexus Maximus”, a collaborative 4 day event being planned for September 2016. Role is to assess the Nexus Learning of this event as well as more clearly articulate how faculty members can involve students (particularly CSHLA) in this event
- Maintain the CTiNL website
- Participated in “Conversion Yield Event” for CSHLA – Outbreak at PhilaU
- Trained (e.g., Cascade, Ad Astra, etc) a work study (Shannon Gahagan) during her two semester term within the CTiNL
- Co lead the TJU-PhilaU committee on “Teaching & Learning, Library, and Learning Spaces” with Tony Frisby (TJU Director of the Center for Teaching and Learning) to build a committee of faculty and staff to construct “Early Wins” for merger.

## VI. Self Assessment of the CTiNL and the Interim Director’s Role

The Director feels that the CTiNL further increased its reputation at providing professional development and support to faculty and staff through a wealth of workshops, awards, informal tête-à-têtes, and presentations this year. The spring semester’s offerings were well received. It was the intention to provide as much breadth and depth as possible. Even if only a few persons came to a workshop, it was measured as successful for that person will hopefully share new approaches with his/her students, and colleagues. Our faculty have great skills in using innovative, Nexus approaches and allowing them to share their knowledge and experiences through these Spring EduSeries workshops created a feeling of value and worth amongst these them, assisted others in ramping up their competencies and confidence to try new approaches, and created a feeling of scholarship of teaching and learning among our campus.

One of the biggest success stories of this year may be the continued advancement in the active learning space initiative. The CTiNL’s role in its development, implementation and assessment is vital. The CTiNL is poised to strategically align its Nexus approaches to teaching and learning with its built classroom, studio and lab environments.

Another great success was the continuation of reading groups which have morphed into effective and productive faculty learning communities that encourage the scholarship of teaching and learning. Talking Teaching events are considered a get-way to these discussions and were also highly effective in bringing together faculty and staff to discuss novel approaches to teaching and learning.

## VII. CTiNL Nexus Advocates’ Accomplishments

The CTiNL has three *Nexus Learning Advocates* who represent each of the university’s three Colleges: Science, Health and the Liberal Arts (Dr. Anne Bower), Architecture and the Built Environment (Prof. Dave Kratzer), and Design, Engineering and Commerce (Dr. Chris Pastore). Each advocate had a course release for each semester (or stipend), was appointed for a 3-year term, and acted as the key conduit for spreading the Nexus Learning mantra/tenets and innovative teaching and learning approaches into the College’s programs and majors. This year marked Anne Bower’s first year as Advocate, while Chris and Dave completed their second year with the Center.

The Advocates and the Director meet periodically to discuss, plan, and implement various priorities. More rigor in assigning deliverables would be helpful to keep all on track and divide the workload. Advocates recognized that the workload associated with being a Nexus Advocate was equivalent to a 3 credit course, though some weeks were more effortful than others.

It is the Director’s opinion that the Advocates worked very well together and with the Director. They were instrumental in designing and leading workshops, reading groups, and Talking Teaching sessions. They were devoted to reporting to their College’s faculty members Nexus issues, or reporting back to the CTiNL needs of

faculty. Because DEC does not have monthly meetings where the CTiNL programming or others issues may be disseminated, Chris found it difficult to communicate and garner information representative from the entire DEC faculty members. The Advocates carved niches and developed agendas to pursue willingly. The Nexus Advocates' reports appear in Appendices IV to VI.

## **VIII. Recommendations for 2016-17**

Based in observations this year, the Director poses the following recommendations for the upcoming academic year:

- Expand Faculty Support for Active Learning Spaces: With the learning space initiative, provide an ever increasing range of professional development opportunities for willing faculty members to be nurtured and supported in their attempts to implement innovative pedagogies. This may mean more creative means to administer training and coaching sessions (online offerings, recorded training sessions). One-on-one training sessions are common but taxing to the Director's time.
- Further Scaling up the Learning Space Initiative: Maintain an advisory committee to work with the CTiNL to ensure that all considerations are addressed in this upcoming year's use of the new spaces, and a planned notion of how this will be scaled up across the campus and embedded into the culture of teaching and learning on our campus. Continue to assess these learning spaces. This is time consuming and was the Active Learning Spaces Initiative's Coordinator's role in the past; it has now been rolled into the Director's role.
- Instilling and Promoting a Sense of Faculty Worth and Value: Through grants, awards, and other recognition avenues, commend those for establishing best practices in Nexus learning approaches in courses and extra-curricular student experiences. Recognize that we have leading members in pedagogy, especially in the online realm, and to use these individuals as valued and respected resources. Encourage and coach these faculty members to pursue presentations and publications, and value them for their contributions to the scholarship of teaching and learning.
- Student Perspectives: Include more student-centric perspectives of Nexus learning approaches (e.g., an anthology of student perspectives of how Nexus learning shaped their academic experiences).
- Nexus Teaching and Learning in the Online Realm: Holistically and thoughtfully develop a conceptual notion and framework for what Nexus learning is within the online realm.
- New Faculty Training: "Require" new faculty to attend workshops during their year of residency. Develop a culture of pedagogical excellence and support this idea with mentoring, nurturing, and valuing new faculty evolution through the process of becoming excellent educators. Develop a course for new faculty members that guides them through the process of developing pedagogical expertise (this could largely be online with face-to-face monthly meetings to create a sense of cohort community).
- E-Portfolios and Meta-Cognition: Provide training and support for faculty and staff to understand methods to hone meta-cognitive and self-reflection skills in our students. It was clear during the Teaching Portfolio workshop that self-reflection is a painful, honest, and thoughtful process needed to process an authentic evaluation of one's teaching skills, successes, and weaknesses. The same process will be asked of our students as they learn to reflect upon how they learn, as part of the e-portfolio process.
- Assessment of Nexus Learning in the Programs and on an Institutional Level: The UTLA has made progress in requiring program directors to include statements on where, when, and how Nexus learning is taking place in their programs. The next step is to provide more formal assessment techniques (e.g., rubric, surveys, etc) to allow instructors and program director to more successfully and quantitatively assess Nexus learning student gains.
- Institutionalizing the Teaching Portfolios as means of Self-Reflection: Through teaching portfolio workshops, create a community of faculty members who regularly self-assess with the goal of evolving their teaching skills.
- Website Expansion: Greatly expand the website to include resources for faculty to better understand the processes involved in Nexus Learning and provide examples, success stories, implementable strategies and pedagogies, etc



## **APPENDIX I**

### **Tentative Presentations/Presenters for the Active Learning Space Symposium 2016**

#### ***Learning Space Design for the Ethnically Diverse Undergraduate Classroom (45 min workshop)***

*James Determan, Dr. Mary Anne Akers, Dr. Christine Hohmann, Dr. Catherine Martin-Dunlop, Isaac Williams*

*(Determan) Hord Coplan Macht and (all others) Morgan State University*

Research has shown the design of active learning classrooms contributes to enhanced learning outcomes. But will the American demographic change impact this? According to the U.S. Census Bureau, Americans under age 18 will be majority non-white by 2018 - this condition already exists in ten states. If the success of active learning classrooms is rooted in peer-to-peer learning what happens when we change the peers? This session will present findings from ground breaking research, funded by an AIA Upjohn research grant. The study examined to what extent the design of the physical learning space contributes to enhanced learning outcomes in an undergraduate active learning class of ethnically diverse students. The findings are based on data collected from two classrooms where the course content, instructor, pedagogy, and diverse student demographic characteristics were held constant while the physical design of each space varied – one was a traditional, desks-in-rows classroom and the other an active learning, technology-enhanced classroom. Data were collected by monitoring student activity via videotaped analysis of behavioral characteristics in the classroom as well as through student surveys, focus group interviews and instructor interviews. The research team included the Dean of School of Architecture and Planning, a Neuroscientist and Biology Professor, a Science Education educator, the course instructor and an architect. Morgan State University, a historically black institution, was the study site. The School of Architecture and Planning is a very ethnically diverse group of students who served as study subjects. This research provides designers and users of learning spaces evidence that will improve performance of the future ethnically mixed American classroom.

#### ***Active Learning in Content-heavy Foundational Courses: Using Active Learning Spaces to Facilitate Knowledge Construction(45 min workshop)***

*Dr. Jeff Klemens*

*Philadelphia University*

Active learning approaches have been shown to benefit student learning and increase retention of students in STEM fields. Despite this fact, content-heavy foundational courses are often viewed by faculty as being inappropriate for active learning pedagogy. Such courses present two challenges for active learning: the volume of content to be covered and course material that is foundational to further learning, meaning that the material establishes common terms and concepts critical to further advancement. Because of these constraints, any approach that achieves depth by trading off against breadth of material covered – such as case-study or inquiry-based approaches – will fail to cover the breadth of material required by many introductory STEM courses. One escape from the dilemma is the use of active learning approaches that focus on knowledge construction by

students. Although the content that will be covered is instructor determined, these approaches can still be student-driven. Rather than allowing student interest to drive topic selection this approach challenges students to create organizing structures around content that has been presented to them. This approach is as a form of models-based science teaching. It emphasizes the mental models that students create to organize content and activities in which students make those models explicit and present them to peers and instructors. I discuss how active learning spaces contribute to this teaching style by providing: • a decentralized instructor • collaborative activity spaces • display spaces for student work • a geometry that facilitates sustained attention • moderated access to technology • customizable space for model creation and display in diverse modes I discuss the application of these techniques in the context of a college-level general biology course that was taught in one semester in an active learning space and one semester in a typical classroom, with an emphasis on the specific opportunities that were afforded by the active learning space.

***Class, May I Have Your Attention? (45 min workshop)***

*Andrew Kim*

*WorkSpace Futures Research, Steelcase Education*

Are colleges and universities adequately preparing students to be successful in the creative economy? This issue heated up again when a Gallup poll showed that only a third of executives believe colleges do a good job of graduating students with the skills businesses need. Another third say college doesn't do a good job at it, and one-third is neutral. Educators counter with historical data that shows the long-term financial advantages for college versus high school graduates. Part of the disconnect stems from the unique and daunting task that is education. Students are not raw materials; they are human being with diverse backgrounds, skills, hopes and dreams. Preparing students for the moving target of a creative economy, and jobs often don't even exist yet, is no small feat. The work is harder because students don't seem to be engaged in the effort. According to Gallup research, student engagement scores decline steadily from the 5th grade well into high school. "A big problem is that traditional learning experiences are not aligned with how the brain works, particularly as it relates to attention. This is a critical factor because engagement begins with attention," says Andrew Kim, a Steelcase education researcher. Kim says, "Visit college classrooms and observe students' behaviors and you'll see students everywhere in the world are often more scattered than attentive. There are more things vying for student attention today and that makes it harder to obtain the attention that leads to engagement." Building student attention begins with understanding the science behind it and applying those insights to the classroom. Our presentation will share the seven research-based insights about paying attention and learning that Andrew Kim's team uncovered.

***Partnering for Success: How Small Groups Working Together Can Make Significant Strides Towards Creating More Active Learning Spaces (45 min workshop)***

*Adrian Peterson, Dr. George Spilich, John Anderson*

*Washington College*

Washington College is a small, private, liberal arts institution. Two groups at the college, Library and Academic Technology (LAT), and the Center for Teaching and Learning (CTL), have partnered together under a shared vision

to see learning spaces on campus transformed into places that support active learning and collaboration. Since the first pilot space opened in the spring of 2015, major changes and renovations have occurred in 4 classrooms and a new academic building is set to open this fall. This is the first space designed from the ground up with the principles of active learning and student-teacher collaboration in mind. With updates to furniture and audio/visual equipment, as well as workshops offered on active learning, LAT and CTL have made the beginning attempts to move Washington College teaching spaces and teaching mindsets into the 21st century. Assessment has been done each step of the way to evaluate the effect of transforming these spaces into places that are designed to encourage and support active learning. Through discussions with students and faculty, it is clear that these changes are both welcomed and exciting. The demand for the active learning spaces has been felt by the Registrar's Office and the request to update more spaces has come in from all three major departments on campus. Faculty are beginning to see the value in these changes and are experimenting with new ways of teaching. No longer is the furniture or technology a barrier to engagement. The presentation will wrap up with a "what's next" discussion and our hopes for the second phase of our new academic building, set to open before 2020.

***Preparing Instructors to Use Group Work in Active Learning Spaces (45 min workshop)***

*Julie McGurk & Emily Elliot*

*University of Pennsylvania Center for Teaching and Learning*

Facilitating group work is a particularly challenging aspect of the active learning format, especially for new instructors: each group has a different dynamic and therefore different needs. Additionally, instructors often are unsure of how to work with groups in ways that will help those groups through the process of solving problems. However, for many instructors, thinking about the process of learning is central to their goals for students and the reason why these instructors are interested in adopting active learning in the first place. To prepare new instructors to reach these goals, the Center for Teaching and Learning (CTL) at the University of Pennsylvania offers a five-session training course for new TAs teaching in Structured Active In-class Learning (SAIL) courses. These five sessions spend a great deal of time helping new TAs reflect on how to effectively facilitate group work through group discussion, role-play and mock class activities. This proposed workshop will highlight this work and will feature the videos and role playing activities that Penn's CTL created to prepare new TAs for guiding group work and allow participants in this workshop to think about ways to create scenarios of their own and lead discussions of those scenarios. In addition, participants in this session will discuss interactive formats for preparation, particularly peer to peer discussion, that Penn's CTL has used to get instructors to problem-solve and reflect on their own practices. We would like to conclude the workshop by presenting ways that we have used the videos and the feedback that we have received.

***Not Just for STEM: Creating a Space and Planning Classes that Encourage Active Learning in Humanities and Qualitative Social Science Classes (45 min workshop)***

*Catrice Barrett & Catherine Turner*

*University of Pennsylvania Center for Teaching and Learning*

The current interest in active learning grew out of STEM fields like physics and mathematics and often is limited to those fields where classes focus on problem solving. Instructors in the humanities and qualitative social sciences,

on the other hand, often feel alienated from current discussions about active learning. They claim, first, that their field's classes, which take place around a seminar table with all students in conversation with each other, have always been active. Second, they feel that the humanities and qualitative social sciences are not structured around problems in the same way STEM fields are. However, Penn Library's Collaborative Classroom, located on the first floor of Van Pelt Library, has become a place where faculty in the humanities have started revamping how they run their classes, giving students textual and analytical problems to solve and using the white boards and technology to encourage students to interact with each other and to create new ideas, texts and images. These classes engage students in the same way active STEM classes do, by giving students challenging problems to solve in groups, but they also work with different materials and in different ways. In this session, representatives of Penn's Van Pelt Library and Center for Teaching and Learning will help participants consider how to re-design group work in humanities and qualitative social science classes to get students fully engaged and to take advantage of active learning spaces. Finally, the session will end with how best to encourage faculty to rethink what they are doing in their classes.

***The Flipped Lab: reimagining science education with blended next-generation virtual laboratories (45 min workshop)***

*Maaroof Fakhri*

***Labster***

Today there is an increasing need of thinking big and thinking smart when designing the future curriculum and course work, and in many cases adopting innovative technological practices will greatly help achieve this. Now, Imagine if your students could have unlimited access to multi-million dollar world-class laboratory facilities anywhere in the world, anytime. Labster (featured at TED.com) has developed virtual laboratory simulations to increase student learning, knowledge retention and motivation when blended with traditional teaching methods. We show what technology can provide to enhance the learning experience - incorporating 3D-molecular animations, case-based narrative, advanced equipment and self-paced enquiry-based problems, which encourage students to use their critical thinking and reflect on the experiments they perform. Furthermore, Labster is currently doing extensive research within the use of Virtual reality and adaptive learning to incorporate those technologies into the curriculum in order to provide an even richer learning experience for the students. As part of our research (Nature Biotechnology, 2014) we conducted a study investigating effects on motivation and learning. When combining these next-generation of simulations with traditional teaching, students' learning improved by over 76%, and indicated strong gains in motivation. A further study published in the BMC Medical Education journal found major gains in learning and self-efficacy in under-performing students. This blended approach could revitalize STEM undergraduate courses, but also provide the much needed support for faculty facing ever-increasing enrolment numbers and bottle-necked lab courses, allowing them to provide a more enriching student experience.

***The Good, The Bad, and the Ugly: Active Learning through Drawing (45 min workshop)***

*Andrew Hart*

*Philadelphia University College of Architecture and the Built Environment*

Before the written word, before texting, before any formal education drawing is one of the first and most natural explorations human use to communicate ideas. Doubtless we have all in our day doodled, sketched, and drawn – to learn, to listen, to abstract (or distract) ourselves – parents’ notebooks and refrigerator doors are a testament to the ease of access and useful – and universal - ability of drawing to communicate, experiment, and promote learning. Drawing is one of the most natural forms of communication. A good drawing conveys both an idea and a process – a form and a formulation that constructed that form, shapes and a means of understanding how those shapes are created. A drawing communicates a learning process, freely tests experimental approaches, documents a learning methodology, organizes and presents ideas, and democratically shares ideas. Then why do most of us professionals and educators hesitate when asked to draw? Because we ‘are no good at it’? Because we are not artists? Not architects? Not designers Because it is ‘hard’? Because they are ‘good’ or ‘bad’ or ‘ugly’? This paper, and workshop, explores the power, means, and methods to leverage the first active learning we were introduced to as children – drawing. There are no good, bad, or ugly drawings – rather these are means of communication and learning. Participants will be introduced to a variety drawings and drawing methods, and introduced to some group activities that are useful to drawing in any setting – not just art and design based disciplines.

***Redefining Learning Spaces – 1 Year Later (45 min workshop)***

*Randy Hall, Senior Facilitator, Educational Technology*

*LHRIC - Lower Hudson Regional Information Center*

The LHRIC’s Active Learning Center is one-year old and fulfilling its mission to enhance the LHRIC’s adult professional development programs and serve as a hub of active learning exploration for its 72 local school districts in Westchester, Rockland, and Putnam counties of New York State. Learn about the LHRIC at [www.lhric.org](http://www.lhric.org) and the LHRIC Active Learning Center at <http://alc.lhric.org>. In this session, the LHRIC team will share their experiences and provide concrete and practical advice for teachers and administrators seeking to implement flexible learning spaces in their communities and service agency leaders of reform and innovation. Participants will leave with: – example design schematics for three common models of flexible learning spaces. – checklists and planning guides for conceiving, designing, implementing and utilizing flexible learning spaces in their school/district. – highlights of key principles and practices for designing instruction for active learning classrooms. Attendees at this session interested in creating flexible learning spaces (or active learning classrooms) as innovative "powerful places of learning" will gain practical insights and strategies for creating a shared vision for active learning in their community, review critical design principles to consider, and understand key planning aspects crucial to success in instructional design, space, and technology.

***Tazo for the Classroom: Pick your blend; Designing for Ease or Energy (45 min workshop)***

*Susan Hauck; Arnold DiBlasi; Steven Davis; Nadya Day*

*Community College of Philadelphia*

Two factors recently converged to create a variety of Active Learning Classrooms at Community College of Philadelphia: funding available for classroom renovations and buy-in from both administration and faculty. As a

large urban community college with high aspirations but very constrained resources, CCP needs to be both careful and smart about technology and facilities decisions. A faculty survey showed that teachers increasingly request flexible classrooms for engaging students in innovative learning experiences, and reports on the assessment of improved student learning outcomes and retention were able to convince both groups. As faculty engage students through “real world” problems such as service and project-based learning at CCP, they require new environments for engaging students in collaborative learning experiences that teach 21st-century skills. A rich but assorted blend of Fellowships in CCP’s Faculty Center for Teaching and Learning this year suggests the need for flexibility and variation in ALC classroom design, which is reinforced by one of the strategic themes for the institution’s mission to provide “world-class” facilities and support innovative programs. This presentation will both look at the process and tools we used to collaborate across various constituencies in order to meet a wide range of innovative teaching practices and disciplines as well as engage participants in an active learning experience. By examining resources, images, and specific technology tools used to implement two different ALC room designs, one “high-flex” and the other “high tech”, participants will gain perspective on design and implementation decisions they might face in similar circumstances.

***Educator "Rocks and Rolls" to Active Learning (45 min workshop)***

*Dr. Julie Marshall*

*Saluda Trail Middle School Rock Hill, SC*

*Winthrop University, Rock Hill, SC*

The 21st Century Learner Profile emphasizes world-class knowledge through rigorous application in ALL content areas. Equally important are life/career readiness skills: creativity, innovation, critical thinking, problem solving, teamwork, self-direction, and knowing how to learn.

Upon entering Dr. Julie Marshall’s seventh grade classroom a visitor will hear, “Ready to Rock? YES! Ready to Roll? YES! Roll Out!” Immediately chairs roll, tables/easels move, and excited students with white board/markers, and iPads move.

THIS is a classroom without walls. Students share/discuss their concerns, ask questions, and search for solutions. Here, students own their learning. They take responsibility for their actions and hold each other accountable. Limits are self-imposed. Holistic assessments are conducted through reflective protocol and rubrics. Students evaluate each other and themselves while the teacher, as facilitator, asks guiding questions, leading them to the realization that maybe this is truly not “quality work”. Through the rigorous process, students choose to redo and resubmit work for final scoring.

Marshall’s success is not limited to her middle school classroom. She credits the use of this model to student success in her university level classes also. Anchored in true constructivist theory, this classroom emulates Saluda Trail’s motto “Real Learning. Real Life.” Marshall carries that same practice to Winthrop University: knowledge

acquired through self- discovery; guided questions anchored by Bloom's verbs directing paths to knowledge; and free movement facilitating freedom to think, research, create, revise, design and present findings.

Collaboration can be seen everywhere as students work cooperatively, not competitively. Cheers ring out periodically when students have ideas or a writer's block is 'unstuck'. Work pods become offices and students no longer see work as useless, mindless activity. It is now filled with purpose and they develop pride from the ownership of the product. This is learning at its finest. THIS is active learning.

***Creating Active Learning Environments: The Architect's Perspective (45 min workshop)***

*Robert McCauley*

*Strada Architecture (Design firm), Society of College and University Planning (member and presenter)*

Creating active learning environments is a collaborative engagement with faculty, students and designers to enhance both structured and non-structured social learning interactions whether in classrooms, labs or common spaces.

I have various documents for presentation consideration - case studies, power point presentations and video presentations of relevant active learning centers which I can share if and when that is desirable.

***Methods for Active Learning in a Survey Course (20 min overview)***

*Alysha Friesen Meloche*

*Philadelphia University, Community College of Philadelphia, Delaware County Community College*

Survey, Introductory level, or 100 classes, whatever the content, usually share in common a lecture-centric, passive learning environment. In these classes, the idea of "flipping" course material can seem a monumental task, the burden of which falls on the instructor and the benefits of which remain debated in the field of education. Additionally, the amount of information that is put forth as part of the curriculum can leave precious little class time available for time-consuming active learning. The needs of introductory classroom learning spaces are historically conventional, hierarchical and familiar to most of the student population. However, the decorous and often ceremonial lecture class does not need to exempt itself of the extraordinary benefits of active learning spaces. This operative and informative discussion will give a brief overview of methods for engaging students with class material in a survey-style lecture course. Some have been designed specifically while others have been modified for use in an active learning space. Emphasis will be placed on the review and reinforcement of curriculum but also included will be methods for introducing new material in the classroom. All of the activities will explore the technologies, both digital and non-digital, of an active learning space as congenial agents for student-teacher reciprocity. Finally, these methods are designed to be easy to implement for instructors who have previously taught their respective courses as well as encourage a variety of student learning styles.

***Nexus Learning Hubs Improve Biology Student Learning Experience (Poster)***

*Beena. G. Patel Adjunct Biology Faculty, College of Science, Health and the Liberal Arts Frank Wilkinson Biology Program Director, College of Science, Health and the Liberal Arts Marianne Dahl Program Director Occupational Therapy Assistant Program Philadelphia University*

Philadelphia University has remodeled traditional classroom space into four Nexus learning hubs in the last two years. Nexus Learning Hubs are equipped with movable tables and chairs, small personal sized white boards, flat panel display projectors, and instructor stations. The goals for these learning spaces were to enhance active learning and to encourage collaborative learning in undergraduate, graduate, and professional studies students of all disciplines. In 2015- 2016, two sections of Bio 101-Current topics in Biology (School of Continuing and Professional Studies), one section of BioL 103-Biology I, and one section of BioL 104-Biology II ( College of Sciences, Health and the Liberal Arts) were taught at least once in Nexus learning space HH 211. BioL 101 had ( $12 \pm 2$ ), and BioL I and II had ( $22 \pm 2$ ) students. BioL 101 typically met 4 hours once per week, while BioL I and II met 75 minutes twice per week. For four-hour classes, I started with lecture, group work, and a quiz or exam. Thereafter, the students performed laboratory exercises. The 75-minute class was structured as lecture, group work, and internet-based search. Students in all four sections were assessed using the same 5 questions on the Nexus Learning space. The response rate for student questionnaire was 100% ( $n=78$ ). The majority of students gave positive responses in terms of collaborative work, space, cleanliness, comfort, and technology. As an Instructor, I found the movable furniture and small, removable white boards as helpful during lectures. I felt closer to my students. Several white boards across the classroom helped me to write down several topics of the day and summarize at the end to keep all students on the same page. Overall, I enjoyed teaching in the Nexus learning space and I hope that I can have additional opportunities to use this space in the future.



## APPENDIX II

### FALL 2015 – Assessment of “Learning Gains” of Reading Group Participants

#### OVERVIEW

In the fall of 2015, 12 faculty members took part in a semester long ‘reading/discussion’ group of *How Learning Works: Seven Research Principles for Smart Teaching*. The participants were provided with a copy of the book, a free weekly lunch, and 1 hour every week to discuss a chapter per week. The group was lead by Dr. Anne Bower (Nexus Advocate for the College of Science, Health and Liberal Arts) who started each discussion with an overview of the chapter and asked for comments or questions regarding the chapter’s ‘take home’ messages. Discussions often included personal narratives of successes and challenges centered on teaching strategies, skills, students’ learning, etc.

At the end of the semester, the “Student Assessment of Learning Gains” survey was modified by Dr. Jeff Ashley (Director of the Center for Teaching Innovation and Nexus Learning) to reflect and quantify the potential learning gains of the participants of the reading group. Below are the summaries from the “SALG” post survey (~70% response rate). This report was created by Ms. Sally Dankner (MS Interior Design ‘18), Graduate Assistant for the Active Learning Spaces Initiative at Philadelphia University. Each section has a summary which provides an overview of the quantitative ‘scores’ of learning gains from the quantitative part of the survey. Open ended questions were also asked and the verbatim responses appear below those questions.

#### Your Understanding of Class Content

##### **1.0. As a result of your work in this class, what GAINS DID YOU MAKE in your UNDERSTANDING of each of the following?**

Questions	No gains	A little gain	Moderate gain	Good gain	Great gain	Not applicable
1.1 How students' prior knowledge affects their learning	0%	0%	25%	62%	12%	0%
1.2 How the way students organize knowledge affects their learning	0%	12%	0%	75%	12%	0%
1.3 What factors motivate students to learn	0%	0%	12%	38%	50%	0%
1.4 How students develop mastery	0%	0%	12%	50%	38%	0%
1.5 What kinds of practice and feedback enhance learning	0%	0%	12%	25%	62%	0%

1.6 The importance of student development and course climate for student learning	0%	0%	25%	62%	12%	0%
1.7 How students become self-directed learners	0%	12%	0%	38%	50%	0%

**Summary:** Although a few participants found little gain in their understanding of “how students become self-directed learners” and “how the way students organize knowledge affects their learning”, most participants found that they gained quite a bit of new understanding from this reading/discussion group. Many found that their understanding of “what factors motivate students to learn” and “what kinds of practice and feedback enhance learning” were particularly increased. The results show predominately “good” or “great” gain.

### **1.8. What was the most significant knowledge gain made through this reading/discussion group and why?**

**Summary:** There was no one thing that every participant found to be the most significant part of the group. Each participant is taking away something different to use in their future classrooms. There seems to be a general understanding that in order to achieve mastery and knowledge transfer for students, professors must find out what motivates students and implement methods that capture student attention and interest in order to attain results.

#### **Comments:**

“Combining the concepts of mastery and knowledge transfer. Also thinking more carefully about cognitive load.”

“I felt like it was all new and very relevant knowledge for me.”

“How important it is to get regular feedback from students about how they are approaching their learning.”

“I appreciated and learned from my colleagues particularly in classroom applications of these concepts.”

“Having the collective group of students actively participate in group learning with the teacher/professor acting more as a moderator.”

“I think one of the main things that I will take away from this group is that students have different factors that affect their motivation, so it's important to try to identify why a particular student is unmotivated, as well as consider how to design a course to increase the likelihood that all students will be more motivated to learn. I think if I can work on that aspect of my teaching, then my endeavors to provide my students with targeted practice & feedback, etc. will be more fruitful.”

### **Increases in Your Skills**

## 2.0. As a result of your work in this class, what GAINS DID YOU MAKE in the following SKILLS?

Questions	No gains	A little gain	Moderate gain	Good gain	Great gain	Not applicable
2.1 Crafting rubrics to assess student learning	12%	38%	38%	0%	12%	0%
2.2 Use of wrappers to enhance students' metacognition	0%	25%	25%	38%	12%	0%
2.3 Use of concept maps to enhance learning	12%	38%	25%	12%	12%	0%
2.4 Employing skills to enhance your classroom's environment to enhance learning	0%	12%	38%	38%	12%	0%
2.5 Use of technology to engage and enhance learning	12%	25%	12%	38%	12%	0%
2.6 Integrating the use of multiple, frequent feedback to optimize student learning	12%	0%	25%	25%	38%	0%
2.7 Gaining skills from your peers (not the book) on teaching and learning strategies	0%	0%	12%	38%	50%	0%

**Summary:**  
Relatively moderate gains were made in the use of rubrics, wrappers, concept maps, technology to

improve the classroom; however, developing skills related to integrating frequent feedback from students and gaining skills from peers improved due to this reading/discussion group.

## 2.8. Please list the top 2 skills that you learned from engaging in the reading/discussion:

**Summary:** Two of the most important skills developed due to this reading/discussion group were the integration of informal student feedback and the implementation of “low-stakes work,” which allowed teachers to test students on more difficult content without students worrying about their grades.

### Comments:

“Use of mid-term check in for formative assessment and use of required but ungraded learning activities to provide a place for students to risk and learn.”

“I used cognitive wrappers this semester, based on the book, and it reinforced my commitment to rubrics.”

“Use of exam wrappers and use of feedback from students.”

“I learned lots about how to incorporate low stakes “practice” for complicated course material. I learned more about how to recenter and make safe again a situation in class or in discussion following student comments that might have been perceived as disrespectful, ignorant, or misguided.”

“Crafting rubrics and the use of wrappers.”

“One of the skills I learned is how to weave in frequent opportunities for students to do low-stakes work and receive feedback throughout the semester. I also learned how to use Blackboard more fully to facilitate student learning & participation.”

### **Class Impact on Your Attitudes**

#### **3.0. As a result of your work in this class, what GAINS DID YOU MAKE in the following?**

Questions	No gains	A little gain	Moderate gain	Good gain	Great gain	Not applicable
3.1 Enthusiasm for reading and discussing teaching and learning related topics	0%	0%	25%	38%	38%	0%
3.2 Interest in discussing teaching and learning topics with peers	0%	12%	12%	25%	50%	0%
3.3 Sympathy/empathy towards students navigating the learning process	0%	0%	12%	38%	50%	0%
3.4 Confidence to understand and implement strategies that will enhance student learning	0%	0%	25%	25%	50%	0%
3.5 Your comfort level with implementing teaching and learning strategies discussed in the book	0%	12%	0%	75%	12%	0%
3.6 Your comfort level in discussing evidence-based teaching and learning topics	0%	12%	12%	50%	25%	0%
3.7 Willingness to seek help or advice from your peers regarding your teaching strategies and goals	0%	12%	12%	25%	50%	0%
3.8 Comfort level with discussing your own teaching and learning experiences with your peers	0%	12%	12%	50%	25%	0%

**Summary:** Over 75% of participants made “good” or “great” gains when it came to their comfort, enthusiasm, and willingness to learn about, discuss, and implement new teaching methods. Participants became more empathetic/sympathetic toward students struggling to learn and found themselves more comfortable with the idea researching and discussing new teaching methods as a means to help students who struggle to learn material in a traditional way.

#### **3.9. Please comment on how this experience has CHANGED YOUR ATTITUDES toward "how learning works":**

**Summary:** All participants who commented, reflected on an improved, more informed attitude toward the process of learning. Many felt a renewed understanding of what it is like to be a student and commented on the ways they have or intend to change their classroom in order to better support their students' needs.

**Comments:**

"The readings and discussions helped me to revise parts of my teaching, help other faculty in my department with areas they were frustrated with in their courses, and consider other teaching perspectives (very rewarding!)"

"I feel much better informed now and a little sheepish about what I didn't know!"

"I have more of a commitment to engage students examining their approach to learning."

"I am reminded and in some situations newly conscious of how difficult learning can be in classroom and university situations. More forbearance for students"

"My attitude has changed to more self-directed approach where we put out the "guided discovery" and let the student start self-directed learning with the benefit of group discussion and behavior."

"I've always been interested in study best teaching practices, but I've primarily focused on research published in my field. It was very helpful to gain knowledge about some of the cross-disciplinary principles of learning that can inform teaching practices not just in my classes, but my colleagues' as well."

**3.10. Please comment on how has this experience has CHANGED YOUR ATTITUDES towards sharing your experiences of teaching and learning with your peers:**

**Summary:** Some participants felt that their attitude had not changed due to this experience as they had always been open to sharing and collaborating with their peers. However, for some, it was a great opportunity for self-evaluation and reflection in a non-judgmental setting where the goal was to encourage and learn from one another.

**Comments:**

"It was a highlight of my week and time to discuss what we really do here at PhilaU. As a faculty with substantial administrative responsibilities, it was wonderful to take an hour each week to focus only on teaching and learning."

"I've always been open to this, so it didn't really change much."

"I do not think that it has."

"It increased my commitment to sharing with colleagues in this particular institutional context. My peers are wonderful"

"I feel more comfortable doing a self-evaluation with peers where there is an open and non-threatening forum to discuss teaching styles and changing the paradigm(s)."

"This experience has made me more comfortable with sharing teaching experiences with and learning from more experienced peers--previously I had mostly discussed my teaching with other people in my field and with similar levels of experience."

## **Integration of Your Learning**

### **4.0. As a result of your work in this class, what GAINS DID YOU MAKE IN INTEGRATING the following?**

Questions	No gains	A little gain	Moderate gain	Good gain	Great gain	Not applicable
4.1 Connecting key ideas from this experience's theme with prior knowledge you brought into the experience	0%	0%	38%	38%	25%	0%
4.2 Applying what I learned in this experience to other future situations	0%	0%	25%	38%	25%	12%
4.3 Using a critical approach to analyze data, information and arguments (evidence) to support adoption of a teaching/learning strategy	0%	12%	25%	50%	12%	0%

**Summary:** Over 60% of participants feel that they are able to connect and apply the things they learned in this reading/discussion group to future situations and nearly 100% feel they have at least made a moderate gain in this area.

### **4.4 What will you CARRY WITH YOU that you gained from this experience into your classes or other aspects of your life?**

**Summary:** Participants seem to be a little bit less decisive on their gains in this section because this is where it comes down to actually implementing this new knowledge into future courses and re-developing existing curriculum. Participants mention that the course was a “great mix of theory and practice” and that in future it will be important “to question the usual way of approaching a situation” and look beyond personal preferences in teaching to “what has been shown to actually help students.”

#### **Comments:**

“I will design future learning activities differently and structure the pace of learning differently in the future. The book and discussions were a great mix of theory and practice.”

“More of a tendency to question the usual way of approaching a situation.”

“A profound re-realization (profound for me) that pedagogy and developmental learning needs to be more explicitly discussed and part of the assessment process.”

“To continue to work on “teaching with your mouth shut” and letting students get maximum development from teaching each other.”

“I found it helpful to be reminded in this reading group that just because I like/dislike something doesn't mean it's an effective or ineffective teaching practice. Of course, my feelings/preferences matter, but at

the same time I need to base major curricular decisions primarily on what has been shown to actually help students.”

### **The Class Overall**

#### **5.0. HOW MUCH did the following aspects of the class HELP YOUR LEARNING?**

Questions	No gains	A little gain	Moderate gain	Good gain	Great gain	Not applicable
5.1 Reading the book	0%	25%	0%	25%	50%	0%
5.2 Group discussion of book material	0%	0%	0%	38%	62%	0%
5.3 The frequency (weekly) of the experience	0%	0%	0%	25%	75%	0%

**Summary:** While most participants found reading the book to be helpful, all agreed that the group discussion and its weekly meeting were “good” or “great” when it came to helping their learning.

#### **5.4 How has this experience CHANGED THE WAYS YOU APPROACH SOLUTIONS TO A TEACHING/STUDENT PROBLEM?**

**Summary:** Participants found several things through this reading/discussion group that has influenced how they will approach solutions to teaching/student problems. Many found that the book will be a helpful resource in the future. Others were introduced to new terms and vocabulary, which have opened them up to other books and research on the subjects. Still others find that the group itself has encouraged them to consider the connections between the issue at hand and the student's educational and personal background that may be affecting the way they learn and perform.

#### **Comments:**

“I feel like I have some new vocabulary that will help me to find resources beyond the book as a result of both the book and discussion.”

“I'll use the book as a resource in future semesters.”

“I am more likely consider connections of the presenting problem to a student's past experiences when crafting a solution.”

“Not sure that it has but I have grown in confidence.”

“I am more empathetic to the student's personal issues and how that impacts their behavior, learning and performance.”

“It has helped me realize that there's a lot of great material out there already, both in terms of research on best practices and specific strategies for implementation. Although it can be helpful for me to spend the time inventing new approaches, often it's better for both me and my students if I first try to draw on what other people have found to be effective.”

## **Class Activities**

### **6.0. HOW MUCH did each of the following aspects of the class HELP YOUR LEARNING?**

Questions	No gains	A little gain	Moderate gain	Good gain	Great gain	Not applicable
6.1 Free food!	0%	50%	25%	12%	12%	0%
6.2 Participating in discussions with your peers	0%	0%	12%	38%	50%	0%
6.3 Seeking additional information on your own after discussions	0%	12%	25%	38%	25%	0%

**Summary:** 88% of participants agreed that the most influential aspect of the reading/discussion group was the discussions. Over 60% also found “good” or “great” gain from additional information found outside of discussion. Few found the food to be an influential part of their experience.

### **6.4. Please comment on how the format of the learning experience (read + discuss) helped your learning:**

**Summary:** Participants found that the format of “read then discuss” encouraged them to be accountable for doing the reading and reflecting personally before discussing as a group. The reading allowed all participants to be on the same page as far as terminology and topic, which guided the discussion and allowed everyone to learn from each other more easily. Participants found that lunch time discussions worked well with their busy schedules.

### **Comments:**

“It was helpful to have time to reflect on the reading and my teaching prior to the discussion. Listening to other faculty talk about their own concerns, solutions, and triumphs was helpful - I felt more connected to a group.”

“Having lunch made attending the sessions easier in terms of the scheduling/logistics of my day. It was multitasking!”

“It was useful for me to feel as if I "had to" do the reading for the class, and think about it in a way that would give me something to contribute.”



“Great conducive format-worthwhile in terms of learning from my very accomplished peers!”

“It is an open forum of peers who are very dedicated and highly motivated.”

“I think the main way the discussion was helpful was that it gave me insight into different ways the book could be implemented. I appreciated that we all read the chapters before the meeting so that we could talk using the same terms and avoid just relying on lore or anecdotes from our own experiences. And the meal helped motivate me to sign up & keep going even when I became busier.”

### **Assignments, Graded Activities, and Tests**

#### **7.0. HOW MUCH did each of the following aspects of the class HELP YOUR LEARNING?**

Questions	No gains	A little gain	Moderate gain	Good gain	Great gain	Not applicable
7.1 Getting recommendations on strategies from a peer during discussions	0%	0%	0%	50%	50%	0%

**Summary:** 100% of participants agreed that “getting recommendations on strategies from a peer during the discussions” was a “good” or “great” means of learning in this discussion group.

### **Class Resources**

#### **8.0. HOW MUCH did each of the following aspects of the class HELP YOUR LEARNING?**

Questions	No gains	A little gain	Moderate gain	Good gain	Great gain	Not applicable
8.1 Online material that I found myself	0%	38%	50%	0%	12%	0%

**Summary:** Few participants found that material they found online outside of the reading/discussion group was influential in helping them learn.

#### **8.2. Please comment on what and how additional RESOURCES could be used to enhance the learning experience of this reading group:**

**Summary:** 88% of participants noted moderate to little gain from material they found by themselves; however, from the comments it seems to be from a lack of investment in finding additional resources. Several commented that they intend to continue seeking for resources that are “outside the box.”

### Comments:

"More examples of things like test wrappers, tools like zaption, and discussion."

"I need to be more proactive in seeking out additional resources."

"Continue to search out resources that are "outside the box" and have the potential "change the paradigm."

"I don't know if we need to bring in a lot of outside resources--typically the resources I did look up were specific activities or strategies that were mostly applicable to my field."

### The Information You were Given

#### 9.0. HOW MUCH did each of the following aspects of the class HELP YOUR LEARNING?

Questions	No gains	A little gain	Moderate gain	Good gain	Great gain	Not applicable
9.1 Explanation of the goals of this experience	0%	25%	50%	12%	12%	0%

**Summary:**  
The

"explanation of the goals of this experience" had moderate to little impact on the learning in this reading/discussion group.

### Support for You as an Individual Learner

#### 10.0. HOW MUCH did each of the following aspects of the class HELP YOUR LEARNING?

Questions	No gains	A little gain	Moderate gain	Good gain	Great gain	Not applicable
10.1 Working with my peers during allotted lunch gatherings	0%	0%	25%	25%	50%	0%
10.2 working/discussions with others not from the reading group	12%	25%	25%	12%	25%	0%

**Summary:** While answers varied greatly in regards to working/discussing outside of the discussion group (some found no gain, while some found great gain), over 75% agreed that there was "good" or "great" gain from working with peers during the group discussions.

#### 10.3. Please comment on how the SUPPORT YOU RECEIVED FROM OTHERS helped your learning in this reading group:

**Summary:** Thinking out loud allowed participants to connect and learn from other participants from different disciplines. These discussions reminded participants that they are "not the only one who

struggles with various aspects of teaching” and put an emphasis on “teaching methods” that could apply to all disciplines. One participant mentioned that as a result of this, they were able to bring “back concepts from the weekly discussion to faculty meetings for [their own] department and it furthered the discussion in a discipline specific way.”

**Comments:**

“I brought back concepts from the weekly discussion to faculty meetings for my department and it furthered the discussion in a discipline specific way.”

“I loved how open everyone was.”

“I appreciated the range of experiences of the members of the group and learned from their own think-aloud approach. (this is a meta-cognitive strategy)”

“It was an open discussion with most participating and the emphasis was on the teaching methods and not the course content.”

“Awesome! Inspiring! Good 'kick-in-the-butt!'”

“This group helped remind me that I'm not the only one who struggles with various aspects of teaching, gave me concrete new strategies to try out, helped me think more about how my course fits into the curriculum as a whole, and encouraged me through seeing that other people care about student learning and take it seriously.”

**10.4. If you were to give a testimonial/promo for this experience, what would it be (no more than three sentences - preferably one!)?**

**Summary:** Participants found that actively contributing to this group invigorated their teaching. Many found new teaching strategies, new relationships, and renewed satisfaction in their work. The mix of “explicit instruction” from the book and “tremendous support and application advice and assistance” from their colleagues gave participants a new outlook on teaching and their future courses.

**Comments:**

“I found connection, camaraderie, and realistic strategies to improve my teaching, and my satisfaction with my work.”

“Reading and discussing this book made me feel like I've been committing malpractice in my prior years of teaching! There was so much absolutely vital information that I didn't have before.”

“I found it very useful to talk about both actual research and individual experiences in analyzing my own philosophy and approach to teaching.”

“I received explicit instruction from a reading while gaining tremendous support and application advice and assistance from my sharing colleagues while munching yummy salads!”

“Highly recommended if you want to reach your full potential as a very effective teacher (Professor).”

“I am a better teacher from the experience of meeting with this thoughtful, enthusiastic, and motivating group!”

“This group will help you feel more energized to teach, equip you with new strategies to enhance your students' learning, and encourage you to be more thoughtful regarding why you take certain approaches to teaching and not others.”

### APPENDIX III

#### FALL 2015 – Assessment of Nexus Maximus II

## **Nexus Maximus II – Assessment of Student Learning Goals**

Report Written by Sally Dankner, Graduate Assistant for Active Learning Space Initiative  
Survey Created by Jeff Ashley, Director of the Center for Teaching Innovation and Nexus Learning,  
through modification of the Student Assessment of Learning Gains ([www.salgsite.org](http://www.salgsite.org)) survey

October 15, 2015

### **Overall Summary of the Participants' Experience in Nexus Maximus**

*Based on the results of this post Nexus Maximus survey (n=16), the overall experience of partaking in Nexus Maximus was a positive one for participants. New understanding and skills were learned, not only in regards to childhood and adolescent health and wellness, prototyping, and presentations, but also in regards to the importance of working as part of a team and learning from people who have different experiences and perspectives. The multi-disciplinary aspect of this experience was perhaps the most important takeaway from this experience, based on survey results. Students had mixed opinions on some of the organizational components of the event (e.g., group participation, orientation, and evaluation).*

The survey was divided into multiple sections with the aim of gaining insight in the self-reported gains across a number of parameters, highlighted below:

### **Students' Understanding of Nexus Maximus Content:**

As a result of this experience, participants generally had an increased understanding of childhood and adolescent health and wellness. Some students studying fields such as industrial design and architecture felt as though this experience gave them a lot of new information and understanding, while other students felt they learned more about collaborative work than the actual topic. The survey reveals that participants felt they now have a better understanding of how these ideas can be applied to future projects and how research and design can have a true impact on real world issues. In general, this was a positive learning experience from an “understanding of content” point of view.

### **Students' Increase in Skills:**

Participants found that although the 3 day period was not necessarily long enough to improve their skills in critical reading, or preparing/giving oral presentations, the experience did increase their skills in many

other areas. The most important skills participants gained during this process all involved working in teams. Results from the survey showed high ratings in: Appreciation of multi-disciplinary perspectives; Identifying different problem-solving and decision-making styles; working effectively with others; and gaining insights from people, their behaviors, and cultural practices to inform a project. These skills are exceptionally relevant in the real world and epitomize what Nexus Learning is about.

#### **Impact on Students' Attitudes:**

Although participants were not necessarily more interested in the issue of childhood and adolescent health and wellness after this experience, they did feel that they had a greater understanding of the issues and therefore a greater respect and empathy for those who are suffering from health issues. This understanding also lead many participants to feel confident that they would be capable of investigating and proposing possible solutions for this issue and others. Again, this part of the survey reveals that many participants felt they grew in their ability to work in groups and ask for assistance and support when needed.

#### **Integration of Students' Learning:**

This entire section of the survey was scored high (in comparison to other sections): participants felt that they were able to apply things they already knew through this experience and producing a product. They also felt strongly that skills and knowledge they gained during this experience could be applied to future situations. Most participants felt their ability to critically and systematically attack the problem at hand improved through this experience.

#### **Students' Ratings Regarding the Experience Overall:**

Participants' answers were in the middle to low range for this entire section of questions. They felt as if the information and skills presented in the seminars, as well as the fast pace, and instructional approach were neither poor nor great in helping their learning.

#### **Nexus Maximus Activities:**

Participants seemed to find that the active part of this project was the most effective in helping their learning. Participants reported high scores for all questions regarding discussion and collaborations with their team members regarding their projects and in regards to hands-on work in the creation of a product. Participants also found seminars and assistance from faculty to be useful but getting to work in teams was by far the best learning atmosphere (based on comparisons of scores).

#### **Students' Ranking the Project Deliverable:**

While participants found feedback from faculty mentors to be an important part of learning in this experience, they were 'in the middle' regarding the way the expectations for the sprint project were presented and the way the final presentations were evaluated.

#### **Students' Use of Resources:**

Seminars were the main resource presented to the participants—those who went to the seminars agreed that on average, they were helpful. The most helpful seminar was the seminar specific to topics surrounding childhood and adolescent health and wellness, rather than those centered on the collaborative design process or presentation skills. Learning about the topic first provided a helpful foundation for research and producing a product. The other seminars were also helpful but not as highly rated.

#### **Students' Feeling on the "Information" They Were Given:**

The information given to participants regarding what to expect from the four day experience, how they should approach it, and what the goals were was not as good as it could have been (based on comparison of scores). It seems as though participants did not feel prepared for what they were about to do.

#### **Students' Feelings on the Support for an Individual Learner:**

On a whole, participants felt that they were very supported and encouraged by their teammates. Ideas flowed freely and for the most part were respected and considered: this can be seen in the scores and open responses within the survey. Because of the short amount of time, support and assistance outside the group was not as helpful or accessible.

**Below is a summary (and actual comments from the survey) for the "open ended" questions asked on the survey**

#### **Question 1.4: Please comment on HOW YOUR UNDERSTANDING OF THE SUBJECT OF HEALTH AND WELLNESS HAS CHANGED as a result of this experience**

**Summary:** On a whole, there was a positive increase in the understanding of health and wellness among participants. Although some stated that their understanding had not changed, they qualified that by adding that their "knowledge and awareness had increased." Many participants found this experience to be a positive supplement to their education. One student commented that, "Many of the seminars and workshops were very informative on the subject, where someone in [his] field of industrial design might not be familiar."

#### **Comments:**

"Doing a little research into the biggest surrounding health at specific age groups, some problems that I thought only adults or the elderly could get actually start early as kids same vice versa."

"I knew these issues already stood, I just did not know all the details."

"I can now see how it is possible to create something to help health and wellness."

"I gained more insight into health and wellness. This was a good change because the courses I have taken throughout my time at PhilaU has never touched on this subject because it does not relate to my major."

"I would say I am much more conscious of it. I never knew that it was so serious."

"I don't believe that my understanding has changed, I believe that my knowledge and awareness has increased."

"Many of the seminars and workshops were very informative on the subject, where someone in my field of industrial design might not be familiar with."

"My knowledge of health topics was broadened because I did not know how many different types of health related topics and issues there could be."

"I got some [information] about this topic."

"One of the things I learned the most about was how ACES can affect the physical health of an adult. That was very surprising to me. Now I'm always thinking about how to minimize the ACES children experience."

#### **Question 2.11: Please comment on what SKILLS you have gained as a result of this experience**

**Summary:** Although there were mixed responses regarding whether or not participants could gain skills during a three day challenge, many participants agreed that working with students from different disciplines and cultures gave them experience in team work and collaboration. Given the time constraints of the project, participants developed time management skills and in some cases the reality of "picking up [the] slack" when some members were unable to give as much as they needed to, to complete the project on time.

#### **Comments:**

"This year I think the only skill I may have gained was being able to manage time for a group for when research and brain storming should finished. Also being able to reword or re-sketch something a student said so that another student can understand."

"Since the charrette was only 3 days I would not say that I nor any other team gained any research skill. There was no time to learn any new skills what my team did was share knowledge we already knew with others on the team. It was very beneficial to have a team with varying undergrad degrees it allowed for us to think of our problem from varying perspectives. For example the I.D. students thought small and the B.Arch students thought big."

"I used skills I already had for the nexus project, so I did not really gain any skills."

"This project was a largely collaborative project that gave me experience of working with different types of people, even some from different countries."



"I have learned how to fix problems when they arise when working with a group, such as picking up slack when group members don't put in effort (or even show up)."

"The skills I have gained from this experience would definitely be in respecting others majors (multidisciplinary work)."

"I'm not sure what skills I've gained. I believe that I've gained knowledge on presenting things for the consumer/customer."

"It was interesting to see so many different majors come together, some never even met before, and work as a team to develop something that could help the greater community. I learned how to work better with others and communicate and adjust to new situations."

"I was forced to work outside my comfort zone and gained a lot of knowledge on some computer program."

"A lot of issues"

"This project really helped me to understand how to work with people not only from different majors, but different cultures. I had a French student on my team and we found a lot of cultural differences while developing our ideas."

**Question 3.9: Please comment on how this experience has CHANGED YOUR ATTITUDES toward the issues surrounding childhood and adolescent health and wellness**

**Summary:** For the most part, participants found that this experience has changed their attitude toward the issue surrounding childhood and adolescent health and wellness for the better. Many expressed either gaining more awareness or better understanding of the issue via this experience and therefore their attitude has gone from not thinking this issue is severe or important to thinking that it is something that needs to be addressed and that students can make an impact on.

**Comments:**

"I've always had an interest in health so being able to do research and come up with ideas to help solve those problems is really something that I find special."

"I just learned more about the issue, so I am more educated about the facts and the severity."

"I am now more aware of the different types of issues and what we, even as students, can do to change this."

"It gave me more awareness about the issues that are currently facing our society."

"I always just blamed the individual, which in some cases is to be blamed, but my attitude changed in the fact that some individuals can't get out due to multiple reasons."

"My attitude towards the issue has gotten better."

"Nothing has changed; I saw this as a pressing, complex, multi-faceted problem before this project and I will continue to see it that way."

"see differently now"

"Has informed me about this topic"

"I am not a health major, so I found it interesting that I could care so much about something that I didn't really have a lot of knowledge about before."

**Question 3.10: Please comment on how has this experience has CHANGED YOUR ATTITUDES towards the process of collaboration with people not in your field of study**

**Summary:** Generally, students felt that working in multidisciplinary groups was positive and brought varying perspectives that helped them to solve the issue at hand. One student noted, "Being the "team leader" I really learned to appreciate each major present skills and experiences." While most participants felt that working in multidisciplinary groups increase positive attitudes toward collaboration with people not in their field of study, several people had issues connecting with their group. It seems as though these issues were more personality based that discipline based.

**Comments:**

"Collaboration this year was a train wreck. We had one person who believed her ideas was best and would take no other critique from others and would argue, invalidly, how great her idea was. And trying to utilize communication skills I've learn from working with groups in the past didn't even work so it was just bad."

"It has been and always will be important for multidisciplinary groups to work together. However I still felt that Nexus Maximus was still a little to exclusive, we should get the engineering students on board."

"It has not changed my attitudes towards collaboration"

"It showed me how valuable it is to talk to people of different fields of study to get a different perspective."

"It was great to see how different minds work through a problem to come up with a solution. Each group member had a different take on the project and it was interesting to see that reflected through their personality and major."

"Being the "team leader" I really learned to appreciate each major present skills and experiences."

"My attitude towards the process of solving an issue has increased. I find this experience less limiting."

"Please let me work with only Industrial/Graphic designers! When it comes to these kinds of projects, they have the skills and knowledge of the design process. I think other disciplines learn a lot from working with designers, but it's probably a loss for them. I don't think they gain anything from this process that they don't already know."

"Yes, a lot"

"Well since I almost did everything alone with one guy there was no real team"

"I have always worked with people from other majors as a student in DEC. But this positively influenced the way I feel about working with other students from different majors."

**Question 4.5: What will you CARRY WITH YOU that you gained from this experience into other classes or other aspects of your life?**

**Summary:** Although some of the answers to this question were similar, the take away from this experience was different for every student, here are some highlights:

- Persuasive argument,
- Analyzing issues
- Communicating ideas with group members
- Allowing time for research to create understanding before trying to solve an issue
- Executing plans with limited time
- Refining design process
- Working with people you don't know can be fun and interesting
- Staying open-minded and pushing out of your comfort zone can create amazing results even with limited time

**Comments:**

"Working on different approaches to be able to convey ideas correctly to and get people to understand what ideas are good and not and being able to explain to them why."

"Analyzing issues with facts and communicating ideas with group members."

"Making sure I do a sufficient amount of research and looking at all aspects of the problem."

"Executing plans in a short period of time with people who are different."

"I will carry with me a better refined design process. Being able to look at a problem, find a goal, then find a solution to that goal."

"design thinking for the user."

"Working in a group of people you don't know can be fun and interesting."

"I feel like I have a better understand of what I'm capable of under pressure."

"Interaction with students from different fields"

"I will always take with me the fact that we its possible to accomplish amazing things in just one weekend. And that to be able to do so, you need to push past your first ideas and be open-minded."

**Question 5.4: Please comment on how the INSTRUCTIONAL APPROACH to this experience will help your learning in other courses, experience or in your career**

**Summary:** There was a mixed response regarding how the instructional approach to this experience will help learning in future courses or careers. Some students were dissatisfied with the quality and quantity of the feedback they received; however, many found it helpful to hear lectures and be able to immediately turn around and use the information. One student learned that by asking the right questions can improve the knowledge of a design and be integral part of designing.

**Comments:**

"Any critiques from professors were just bad because the idea was bad and I knew that so it was expected so it just to me seemed like a waste of time."

"It did not really help me or change anything for me."

"I will now take into consideration some things they said, such as "what if there is another solution that is cheaper?""

"The seminars were great and very informative. However, my group attended only one faculty read out session because we got absolutely no feedback from the first one that occurred on Friday evening."

"I think being taught super applicable topics and then being able to apply them immediately was really helpful. There wasn't a loss of knowledge between the classroom and the whiteboard."

"It will help my learning by asking questions for the bettering of my knowledge when designing."

"The lectures were really helpful."

"Good."

**Question 5.5: How has this experience CHANGED THE WAYS YOU APPROACH SOLUTIONS TO A PROBLEM**

**Summary:** Many students seemed to feel that this experience has not changed the way they approach solutions to a problem; however, there were plenty of positive responses. Several students felt that listening to different "opinions and critiques [is] valuable to a product." Others suggested that it is important to keep an open mind because even though you may start with a plan, you have to be willing to adjust as the project evolves.

**Comments:**

"It hasn't. I just think this was a bad time"

"It hasn't changed the way I approach solutions."

"I now appreciate how people's opinions and critiques are valuable to a product."

"It shows that you can't rely on one set plan because there is a very high chance that path will change."

"I guess not having as much of a "I have to innovate" approach and relying on the process to innovate."

"I have to start thinking of how the user will be using the end product."

"Next year I'll just come for the workshops."

"Student from other discipline, they have great ideas"

"It didn't"

**Question 6.6: Please comment on how the format of the learning experience helped your learning.**

**Summary:** Participants found that learning material through lecture and then immediately applying the material was an extremely effective way to absorb new information. Working in groups was also a positive learning experience for many participants, one student said, "The group experience was great, it showed me the importance of collaboration." Several students also mentioned that feedback from professors and teammates was crucial to producing a great end product.

**Comments:**

"The only thing I learned was that I need to work on improving my communication from myself to other group members and being able to understand and translate ideas one person's ideas to another."

"Getting critical feedback from the professors helped to make our project more practical and financially possible."

"The seminars were helpful and so was communicating with my team."

"The group experience was great, it showed me the importance of collaboration/"

"It was great working with my team members."

"As mentioned before, learning then applying definitely solidified the information into my mind."

"The format was great. I take from it that a good way to designing is gaining information first about the issues or user and designing for that. Then seeking criticism from my team or others that could help patch up design flaws."

"Did I mention that I really liked the lectures? Because I really liked the lectures."

"Child health and overall human health"

"It didn't"

**Question 6.7: Please comment on HOW OFTEN YOU PARTICIPATED during team discussions and HOW THE ATMOSPHERE IN YOUR TEAM ENCOURAGED OR DISCOURAGED your participation.**

**Summary:** Participants had a variety of different experiences with participation in their groups. While almost all of the participants felt encouraged by the fellow members of their team who were active in the project, many were discouraged by the fact that after the initial meeting many participants did not show up or do any work. This meant groups of 6-7 people where only 2-3 people were doing any work. However, there are many inspiring quotes from the participants who did work together. One student commented, "My entire team participated often including myself. The team's atmosphere definitely encouraged discussion in that no idea was deemed unnecessary until discussed thoroughly." It seems as though there were students who did not want to be part of the project, but for those who did want to be there, it was a great experience where all ideas were appreciated.

**Comments:**

"At first I participated fairly often but once I figured out that I had a member who was completely and only fixated on her ideas, I was there when the group had discussions but I was working on other things. Basically was only there to attempt to help where obvious help was needed."

"We started off as a group of seven and by time Monday, myself and two other students presented the project. It became apparent that the teams with a positive attitude amongst all the members were the ones that stuck together."

"I participated in team discussions whenever I could, and we had a group text going all weekend to keep everyone informed of how things were progressing. The people who were enthusiastic about the project definitely encouraged me to participate."

"I often participated in group discussion and the atmosphere generally was very welcome to new ideas."

"I attended every team meeting and helped with a majority of the project prep."

"My entire team participated often including myself. The team's atmosphere definitely encouraged discussion in that no idea was deemed unnecessary until discussed thoroughly."

"I participated the entire weekend besides when I had to leave for work. My group always encouraged participation. Because there were only three of us we all had to participate."

"Luckily (or unfortunately, depending on how you look at it) no one took this project all that seriously. Our democratic discussions were great, but when it came to participation, it was more like a benevolent dictatorship. If people weren't going to do any of the work, they didn't get a final say. #sorrynotsorry. "

"All of them, they valued my opinion"

"Since it was only one guy and me we literally made all the work. The others were forced to do this so no one showed up."

"My team was very well balanced. We were all able to voice our ideas and were positive an encouraging to those speaking. My group was amazing. I wish I could work on more projects with them."

**Question 8.5: Please comment on how the RESOURCES (those things that allowed you to have a better product) in this experience helped your learning.**

**Summary:** Most participants agreed that "the seminars helped with information and facts, as well as to get people thinking about certain aspects of obesity and health." For some, the seminars were more of a refresher than anything else, but they still were a helpful starting point for research. Other participants commented again on how helpful the faculty check-ins were. There were a couple of students who were unable to attend the seminars or felt that research online was more helpful for their specific project.

**Comments:**

"Just research in general helped understand the symptoms of certain problems and how you can go about solving them. You would learn a lot more by putting yourself in that lifestyle. I was not able to make it to any of the seminars but I'm sure that would have helped as well."

"Some of the seminars helped with information and facts, as well as to get people thinking about certain aspects of obesity and health."

"I was unable to attend most of the seminars."

"The seminars were great to launch ideas for the project."

"Well, I think they honed my skills personally. Most of the information wasn't new, but a great reminder and refresher."

"It helped me understand what I will need to know for the real world."

"Seminars did not help. Research on the Internet was more useful towards our idea."

"Faculty check-ins were very helpful!"

"Previous experience"

**Question 10.3: Please comment on how the SUPPORT YOU RECEIVED FROM OTHERS helped your learning in this class.**

**Summary:** Participants had varied answers on this question. While some participants sought help from people outside their group to get fresh ideas, other participants relied solely on their team members and faculty for their project. Interestingly, one participant mentioned that because it was not a graded project for a class, the group members did not take the project seriously enough and perhaps there should have been some sort of incentive in place, or stricter registration, to create more initiative.

**Comments:**

"Talking to other upper classmen and people who have been through this before and know how to bounce around people's ideas helped a lot. The problem is most of the people that come into Nexus have never worked in groups before and therefore don't know how to shift the way you communicate."

"My team members provided a lot of support for one another throughout the process. There was a lot of communication and debate put into every aspect of our idea and our final product."

"The support I received from others was very helpful in my learning process"

"My team originally started with 6 members. However, the involvement of most of the members was extremely minimal. I personally feel this happened because this was extra work outside of class that was not "required" or a "grade". It was difficult to work with people who came to the kick-off, received a team assignment, and disregarded the rest of the weekend. I think it would be beneficial to have an official sign up process that was released to professors so each student had more initiative to take the project seriously."

"It went so fast not much time was spent talking to others outside the faculty and team. However, having someone to bounce ideas off of who had a fresh mind on the matter at hand."

"There wasn't much support from others except the faculty."

"By using other people around me, I was able to gain more help from them additionally to the help I was already seeking."

“Although my group was small with the amount of people it was still helpful to discuss our different ideas and develop an interesting project. I think we often learn more from our peers than we do from our teachers.”

“The night before it was due, someone brought snacks. That was considerate and helpful.”

“They supported each idea”

“None besides one member”



# Advocates Annual Report for 2015-2016

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## Guidelines for the Report:

### 1/ What is the state of Nexus Learning in your College?

1. What do people understand by the phrase “Nexus Learning” in your judgment? Is it surface analysis, that is anything that contains active, engaged learning, real world projects, collaborative work, and evidence that there is some liberal arts and sciences connection, defines Nexus Learning?
  - In the Kanbar College, from discussions with colleagues, I believe that the understanding of Nexus Learning is growing, but still thin.
  - There is an understanding that the branding of “Nexus Learning” has value to our students, and further that the individual faculty will be judged based on their acceptance of NL.
  - However, faculty will typically say that anything that has “real world” application is NL automatically. The emphasis on and understanding of active and engaged has not reached a critical value as yet.
  - “Infused with the Liberal Arts” is not something I hear people speak about.
2. Has there been any assessment done that discussed the concept and the use of Nexus Learning? You might check with the assessment advocate. Is Nexus Learning embedded in the assessment requirements?
3. What has resulted from discussion and action around Nexus Learning? In the curriculum committee where you are a representative, in the AOO, and in other places?
  - In the KEC, we have reached a point where the proposers contact me prior to submitting their proposals to discuss what is meant by NL and how it may (or may not) be applicable to their particular proposal.
  - In the AOO there is less discussion about this, and I think it is because that scrutiny has been delegated to the college level committees.

- Every proposal in KEC now has some discussion of Nexus Learning, although the authenticity or depth may be less than optimal in some. Nonetheless there is an awareness and an attempt to address it.
- We have the following prompt in the course proposal form:
  - *Identify strategies you will use that promote engaged, active students, collaborative and integrative work, real world projects, and/or infusion of liberal arts and sciences. If there are interdisciplinary opportunities to be explored in the course, list them here as well.*

## 2/ What has your work as Nexus Advocate involved this year?

1. For example: training for classroom consultation, mentoring, course development, information dissemination, committee work, Celebrate Teaching Week, workshop attendance, workshop/lunch discussions. Please give specifics.
- Met with an adjunct professor to discuss teaching strategies.
  - Met with an adjunct professor to discuss flipped classroom technology and implementation.
  - New faculty orientation
  - KDEC Adjunct Faculty orientation
  - Develop and run Wednesday Talking Teaching luncheons
  - Worked with young faculty (Suss, Havens, Wagoner, and Bhaskar) to develop Nexus Learning strategies in the classroom
  - Worked with young faculty (Martin) to modify specific in-class laboratory exercises to enhance active learning.
  - Solicited presentations for EduSeries, and attended.
  - Participation as Ex-Officio member of Kanbar College Education Committee, and elected member to Academic Opportunities and Oversight committee.
  - Attended Lilly Conference
  - Presented paper at the Lilly Conference.
  - Performed classroom visitations for several faculty, a few who just wanted feedback – not for a formal review process.
  - Worked on a task force to develop a more thoughtful classroom observation form that applies to online as well as in-class and hybrid teaching.
  - Introduced the notion of a “Nexus Minute” in the SDE faculty meetings – a brief chance for individuals to highlight something they have been doing – but it was never actually realized due to other issues.
  - I have spent some time with the Engineering students discussing the importance of Nexus Learning and the DEC Core which has helped to change

the attitude of the students, allowing them to recognize the significance and importance of these opportunities.

### **3/ What are your recommendations and your goals for next year?**

1. Your observations about Nexus Learning across the campus, and your recommendations for next year for the campus as a whole
  - I observed that NL has mostly been accepted as a branding opportunity for the University.
  - I observed that the majority of the faculty believes they are already doing NL (whether they are or not).
  - I observed that faculty don't want additional burdens put on them, which creates a obstacle to embracing new approaches or changes in the existing coursework. It is easier to continue to do things as usual, but brand them as NL than it is to re-work courses from the ground up.
  - I observed that the Talking Teaching and EduSeries are quite effective in getting faculty thinking about and talking about active and engaged learning, as well as strategies for the classroom. Of course this applies to the faculty who choose to attend.
  - I recommend that we find a way to get more faculty involved in the Talking Teaching and EduSeries programs. This might be related to the specific time they are scheduled, or to the way they are announced.
  - I recommend that CTINL events be distributed as Outlook Calendar events so that faculty can more easily put it in their calendar if they wish. Several times I have had faculty tell me that they forgot about one event or another. And when I asked them about the idea of an Outlook Calendar event they were uniformly supportive.
2. Your specific goals for your college and for your role as Nexus Advocate.
  - I would like to see Kanbar College faculty be more open to permitting change in their coursework, with the goal of increasing active engagement on the part of the student.
    - The challenge is this requires faculty to first acknowledge they can do a better job, and second to be willing to put in the time and effort necessary to make the changes.
  - As for my role as Nexus Advocate, I am willing to serve in whatever capacity the Director of CTINL chooses

## **APPENDIX V**

### **CSHLA Nexus Advocate Final Report (Dr. Anne Bower)**

NEXUS Advocate C-SHLA Activity Report Fall 2015 to Spring 2016

#### **1/ What is the state of Nexus Learning in your College?**

NEXUS learning is actively embraced in C-SHLA with multiple faculty members designing, implementing and assessing new teaching strategies both on-line, hybrid and in face-to-face settings. Faculty in C-SHLA implemented numerous NEXUS learning grants and were awarded teaching grants and awards for creative teaching from outside organizations as well (eg Jeff Klemens and Casey Wagoner).

#### **NEXUS GRANTS BEING IMPLMENTED IN 2015-16:**

Anne Bower, associate professor of biology, and Kathryn Mickle, assistant professor of anatomy

Grant Purpose: To increase student critical thinking skills and subject mastery through the redesign of freshmen and sophomore foundational courses in anatomy and physiology using POGIL (Process Oriented Guided Inquiry and Learning) pedagogies.

Jeanne Felter, associate professor and program director, M.S. in Community and Trauma Counseling, and Michelle Gorenberg, assistant professor of occupational therapy

Grant Purpose: To create a trauma-informed interprofessional clinic that serves the emotional and behavioral needs of children, adolescents and families from the Philadelphia area, while providing students with a real-world, collaborative training module.

Frank Wilkinson, associate professor of biochemistry, and Ryan Long, assistant professor of ethics and philosophy Grant Purpose: To study, through implementation in Hallmarks core and biology major courses, how performing genetic self-tests and participating in classroom discussions on genetic testing impacts student attitudes on related ethical, professional and public policy problems.

Cross college:

Jack Suss, adjunct professor, and Jeff Klemens, visiting assistant professor, who teach biology and environmental science as part of the DEC core. Grant Purpose: To develop interactive simulation models capable of maintaining an active and engaged learning environment in an online course and test their effectiveness across thirty PhilaU classes.

The List of 2016-17 award recipients has strong representation from C-SHLA.

#### **2/ What has your work as Nexus Advocate involved this year?**

## Fall 2015

My NEXUS activities in Fall 2015 focused in four main areas:

- Facilitating and leading a weekly professional development experience of faculty and staff focused on reflecting on the book: **How Learning Works: Seven Research-Based Principles for Smart Teaching** which resulted in numerous pilot and exploratory activities by the faculty involved in a wide range of courses and levels across multiple colleges
- Facilitating and leading a three part series of professional development based on a series from the Chronicle of Higher Education on best practices from Micheal Lang. The results were shared in faculty discussions:

Sept 11: Students Applying What They Learn Beyond the Classroom. Read: Lang, M. (2013) Why they don't apply what they have learned, Part 1. Chronicle of Higher Education. Retrieved from <http://chronicle.com/article/Why-Dont-They-Apply-What/136753/> ( Meet in in KCC 306C )

Oct 30: Successful Learning Strategies of Students Across Classes and Contexts. Read: Lang, M. (2013) Why they don't apply what they have learned, Part 2. Chronicle of Higher Education. Retrieved from <http://chronicle.com/article/Why-They-Dont-Apply-What/137389/> (Meet in Kanbar Fish Bowl)

Nov 20: Getting to Real World Connections. Read: Lang, M. (2013) Why they don't apply what they have learned, Part 3. Chronicle of Higher Education. Retrieved from <http://chronicle.com/article/Why-They-Dont-Apply-What-They/137963/> (Meet in Kanbar Fish Bowl)

- Member of the CSHLA CEC with active support of NEXUS learning activities for new course development in the college

## Spring 2016

My NEXUS Advocate activities in Spring 2016 focused in multiple areas:

- Facilitating and leading a weekly professional development experience of faculty and staff focused on reflecting on the book by Ken Bain entitled: “ **What the Best College Teachers Do**” which resulted in numerous pilot and exploratory activities by the faculty involved in a wide range of courses and levels across multiple colleges
- Coordinating and encouraging faculty to share their own practices with others in teaching workshops by Kay Magee on Mathalicious, Ellen Knapp on Zaption, Niny Rao Reflection Techniques in Science Research, Ryan Long and Frank Wilkinson on Attitudes and Ethics in Biology (NEXUS grant results), Megan Fuller on Participatory Action Research: Learning Through the Lens of Change and myself on Careers Engagement in Freshman Biology (NEXUS grant results)
- Presenting at and attending with a group of faculty the Temple Teaching Conference in January
- NEXUS MAXIMUS planning and presentation to CSHLA for how to engage
- Participant in TJU integration committee for identifying early wins in Learning and Library coordination

- Member of the CSHLA CEC with active support of NEXUS learning activities for new course development in the college
- Mentor on learning techniques and assessment strategies to multiple groups of junior faculty submitting for NEXUS Learning grants to improve teaching and learning in mathematics, physics and occupational therapy.
- Mentor for the Teaching Portfolio Workshop for junior faculty working on reflecting upon and assessing their effectiveness in their first year of teaching

### **3/ What are your recommendations and your goals for next year?**

My goals for 2016-17 are to:

- Facilitating the faculty and staff development book group with continued opportunities to share applications and teaching reflections. This is a university-wide initiative and could be expanded to have an on-line interactive component with additional technology assistance so that PhilaU faculty who work at a distance as well as TJU and Penn Charter faculty could participate without coming to campus
- Expand the professional development sharing of the book group to be a faculty learning community. It has a strong start now and needs further outreach and development
- Mentor faculty creating new curriculum which is submitted to the CEC to add or expand upon NEXUS learning principles and practices
- Encourage faculty to participate in NEXUS MAXIMUS with open lines of communication of the multitude of ways to do so
- Encourage and facilitate faculty sharing their teaching practice and research findings through multiple forums on and off campus
- Continue to participate in TJU learning committee initiatives
- Mentor junior faculty at the Teaching Portfolio Workshop

## **APPENDIX VI**

### **CABE Nexus Advocate Final Report (Prof. Dave Kratzer)**

#### **Nexus Learning Advocate Report . Academic Year 2015-16**

David Kratzer, College of Architecture and the Built Environment (CABE) Philadelphia University 6.25.2016

#### **The state and understanding of Nexus Learning in CABE**

*Statement from previous year's report: Architecture, and its allied disciplines, utilize collaborative and interdisciplinary processes in the design and construction of our natural and built environments. Each project team must be composed of varied professionals working as a large team to find realization. The obviousness of this condition creates amongst the CABE faculty a certain apathy to the Nexus Learning initiatives. The discussion within CABE is not focused on the value of Nexus Learning, of which all agree, but in realizing the importance of incorporating collaborative and interdisciplinary learning methodologies into courses. The common attitude is if students work collaboratively in groups and consider their allied disciplines in completion of their work then NL is being addressed. The reality is that simply grouping students around a common project rarely engages true NL. Collaborative methodologies and structures must be incorporated to expand the student's working skills in order to take full advantage of the current and future opportunities of our professions. Improving this condition is where I believe my advocacy is best directed within the college.*

*The CABE curriculum, with the exception of Construction Management, is built around the design studio as the central core of learning. The studios are project based and intended to synthesize all ancillary coursework and content through the act of design completed in a professional context. Research, technical content, representation, construction and management all are taught in reference to the design process and the roles professional designers have. Most studios incorporate collaborative, interdisciplinary, and liberal arts components into the project processes in many ways miming the profession. Most rubrics address these components as well. The "real world" learning is tougher as it works best with real clients and sites which are difficult for faculty to find and coordinate.*

Update for 2015-16: I have over the past year been more aggressive in conveying to the faculty of CABE the understanding, and emphasizing the need, for collaborative methodologies and structures in CABE coursework. I have presented at each CABE and architecture program faculty meetings updates on the NL programs and initiatives with a reminder of my role as NL advisor and sounding board. Proportionally higher numbers of faculty sought my input and advice on NL and collaborative methodologies than the previous reporting cycle.

#### **Has there been any assessment done on Nexus Learning in the college?**

Syllabi for most courses have incorporated NL boiler plate language. Those that don't are courses where NL is not a strong component. All new course proposals have been vetted at the CABE CEC committee level. I have pressed for faculty to include NL criteria in their rubrics for assessment but must admit that much improvement is needed here. I plan to become much more aggressive on inclusion of NL criteria into course rubrics, and the subsequent assessment, this coming academic year.

### **What has been the discussion about Nexus Learning in the CEC and AOO committees?**

The CACE CEC was the best location to address NL issues. The AOO committee tended to review course issues on a more global level. My CACE CEC observation was that a standard NL paragraph is being included in all course material but little denotation of specific methods or outcomes. Course proposers mentioned numerous times that including anything other than general boiler plate NL references in the

syllabi might limit the limit the running of the courses. This again is hard to argue against but more specific methods to better implement NL initiatives with faculty eventually running the courses might be a better way to guide implementation of NL methodologies. I will attempt to implement a CACE workshop on NL methodologies in the first week of classes especially for the adjuncts.

### **What Has Your Work as NL Advocate Involved this year?**

Training, classroom consultation, course peer-to-peer evaluations and mentoring?

- My classroom consultation was limited to working with a few adjuncts in technology and studio courses that were experiencing difficulties or were frustrated with the performance of their students. It is my intention to better promote the availability of the advocate for consultation. CACE has a large number of adjuncts and it has proven difficult to coordinate times to meet. Again as noted above, workshops in the first week of classes may prove beneficial.
- I was able to advise faculty on submissions to the Temple Teaching Conference, Nexus Learning Grants, and on specific methods for collaborative projects. I remain frustrated by the lack of participation from faculty though this may be as much about lack of time. Adjunct and full time faculty outreach?

“Talking About Teaching” sessions were held over lunch twice a week in a number of formats

with the goal of enticing faculty to join conversations focused on select topics of teaching and NL. A “No Topic Wednesday” was introduced with the goal of making the lunch more informal. These sessions again proved to be popular and successful in engaging faculty in issues of debate. Over 30 sessions were attended. I facilitated a portion of the sessions.

Information dissemination—Public Relations?

- The NL initiatives are presented at the beginning of the semester to the CACE faculty during faculty meetings and to adjuncts during a welcome reception. CACE has a large number of adjunct faculty and disseminating information occurred primarily through email blasts. The Talking About Teaching blasts became a good way to make contact with faculty through a topic and corresponding reading. I periodically sent email blasts with topics relative to CACE – especially at the start and end of the semester. I would like to widen these blasts. Unfortunately, a large proportion of faculty expressed that they were oversaturated with general email blasts and tended not to open/ read the emails.
- My recent research over the past years has focused on projects which incorporated NL methods. I presented papers on these projects at the Environments for Aging in Baltimore and most recently at the EAAE/ ARCC International Conference in Lisbon, Portugal. The latter conference involved much discussion about the methods used to make collaborative designs during design and fabrication of a mobile sustainability lab. Committee and Service Work —where have you been able



to bring up the issue or questions?

CABE CEC Committee – attended 11 meetings

AOO Committee – attended 13 meetings

Nexus Maximus – I participated in the three day event as well as attended planning meetings.

Snow Day Class Activities – I assisted my fellow advocates in compiling teaching activities and opportunities.

New Faculty Orientation – I participated in a minor session.

CABE High School Competition – as a recruitment tool, the competition is a means to interact with prospective students. NL is a central point of discussion in presentation of what students in CABE do through project based learning.

David Kratzer Nexus Learning Advocate Report . 2015-16 Page 2

High School Student Recruiting in Open Houses and trips to high school events including the Pennsylvania Technology Student Association state conference in Seven Springs, PA.

Organizing Celebrate Teaching Events? While I didn't assist in organizing the week, I did a presentation on mobile device programs and

methods to engage students in informal dialog. I also attended numerous other sessions.

NL Improvement Workshops and Conferences?

Dossier Workshops – I participated in 2 workshops

Dossier Portfolio Workshop – I was a faculty mentor for the 3 day program. It was extremely helpful to be on the other side of the table. NL Projects?

As a faculty conducting design-build and collaborative projects, I lead by example. This year's

projects another round on the East Falls SEPTA Train Station and a mobile sustainability design- build studio. Each project was real world with clients, sites and full programs. The collaborative methods were on display through programming workshops and use of collaborative tools as well as exhibitions.

What are your recommendations for next year specifically? What are the next steps for NL (more generally)? Challenges and opportunities?

Recommendations:

To conduct CABE specific workshops especially at the beginning of the year primarily for adjunct and interested faculty to address NL teaching methods and issues.

To continue and strengthen the Talking About Teaching series with possibly focus sessions

relevant to CABE.

To develop clearer NL collaborative methodologies and corresponding assessment tools. These should be in the form of MS office so faculty can pull them and use directly.

Having the advocates split up to cover more ground worked well this past semester. I recommend keeping this structure. Next Steps:

Re-examine NL events and workshops and re-consider how to increase participation. At present a lot of work is devoted to these events with low attendance and participation.

Opportunities & Assignments: I started working on CABE NL Reference Guide which would discuss, describe and collect

resources for NL projects. I have been collecting material and will begin putting the guide together. I would like it to include questionnaires, collaborative matrices, consensus building worksheets, goal generation strategies, available resources, real world clients and sites, etc.