EAB

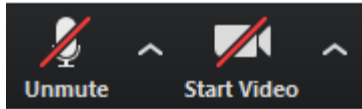# Four Ways to Align Center of Teaching and Learning Activities with Student Success Goals
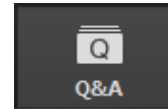
Mic and Video Controls

Click the mic and camera pictures until they have a red line indicating they are both off.

Asking a Question

To ask the presenter a question, type it into the Chat panel and press send.

EAB

We help schools support students
from enrollment to graduation and beyond

> Find and enroll your right-fit students

> Support and graduate more students

ENROLLMENT SUCCESS

STUDENT SUCCESS

INSTITUTIONAL SUCCESS

INSIGHTS

EXPERTISE

> Prepare your institution for the future

ROOTED IN RESEARCH

7,500+ Peer-tested best practices

500+ Enrollment innovations tested annually

ADVANTAGE OF SCALE

1,500+ Institutions served

3.7 M+ Students supported by our SSMS

WE DELIVER RESULTS

95% Of our partners continue with us year after year, reflecting the goals we **achieve together**

EAB Functional Collaborative Emerges from Research on Equity in Student Success

Kickoff webinar to allow participants to share perspectives and advice on current challenges

Midpoint Update Webinar to discuss early conclusions and direct further research

Results webinar to share research findings and discuss next steps

- 3 webinar roundtables
- ~45 Teaching and Learning Leaders
- Wide-ranging issues related to strategy, management, and policy

American University
Kiho Kim

Bowling Green State University
Julie Matuga
Jessica Turos

Bradley University
Helja Antola Crowe

California State University, Long Beach
Kirsten Fleming

Carnegie Mellon University
Marsha Lovett

Central Michigan University
Pete Ross
Jeremy Bond

Columbus State University
Susan Hrach

Concordia University
Rob Cassidy

Dixie State University
Bruce Harris

Drake University
Arthur Sanders

Elon University
Deandra Little

Georgetown University
Eddie Maloney

Indiana University
Rebecca Torstrick

Lewis University
Michael Cherry

Memorial University of Newfoundland
Gavan Watson

Morgan State University
Catherine Martin-Dunlop

Old Dominion University
Annette Finley-Croswhite

Rollins College
Nancy Chick

Saint Louis University
Debra Lohe

Southwest Baptist University
Angela Carr

Susquehanna University
Rolfe Peterson

The New School
Rita Breidenbach

University of Alabama in Huntsville
Michelle Greene

University of Central Arkansas
Amy Hawkins

University of Dayton
Deborah Bickford

University of Denver
Virginia Pitts

University of Massachusetts, Amherst
Claire Hamilton

University of Mississippi
Nancy Wiggers

University of North Carolina at Greensboro
David Teachout

University of South Alabama
S. Raj Chaudhury

University of Tampa
Cheri Etling-Paulsen

University of Tennessee, Knoxville
Matthew Theriot

University of Texas at Arlington
Ann Cavallo

University of Texas, Rio Grande Valley
Javier Cavazos

University of the Fraser Valley
Maureen Wideman

University of Virginia
Michael Palmer

Valparaiso University
Cynthia Rutz

Vanderbilt University
Derek Bruff

Washburn University
Melanie Burdick

Washington State University
Rebecca Van de Vord

Washington University in St. Louis
Eric Fournier

Wayne State College
Yasuko Taoka

Western Carolina University
Jonathan Wade
Eli Collins-Brown

Most Pressing T&L Issues Across Three Webinars

" What is the T&L unit's role in providing faculty with leadership development opportunities?"

" How can T&L units serve as effective hubs of scholarship of teaching and learning?"

" What metrics should T&L units use to measure the impact of their programming?"

" What is the optimal service delivery model for an effective T&L unit?"

" Are teaching awards enough to incent faculty to engage with the T&L unit?"

" How should institutions create a brand new T&L unit?"

" How can T&L units facilitate broader faculty adoption of learning technologies?"

" How can T&L units increase faculty engagement beyond the usual suspects?"

" How can T&L units scale the most effective pedagogical practices?"

" What are the implications of Truth and Reconciliation on T&L activities?"

" Should instructional designers and online learning support be included within the T&L unit?"

" What is the T&L unit's role in facilitating ADA compliance?"

" How can T&L units effectively support faculty at all stages of their career?"

" What is the optimal balance between in-unit instructional expertise and centralized T&L support?"

" How can T&L units become more involved with strategic planning?"

" How can T&L units move away from using student evaluations of teaching?"

" How can T&L units support the spread of inclusive pedagogy?"

" What capabilities should T&L units oversee?"

Source: EAB interviews and analysis.

Evolution of Student Success From Support Services To Academic Experience

More Attention on In-Class Performance and Outcomes

In-Class Activities

Financial Wellness

Career Development

Degree Progress

Next-Gen Advising

Developmental Ed

Degree Planning

Early Intervention

First-Year Experience

Special Populations

Student Engagement

| 2020 | 2010 | 2000 | 2000 | 1990 | 1980 | 1970 |

45% Moving from lecture-based pedagogy to active-learning decreased course grade gaps between underrepresented and majority students by 45%

Student's likelihood of stopping out increases after receiving their first F

47% Of graduates of color had a faculty mentor, compared to 72% of white graduates

Source: Haak, D. C., J. Hille Ris Lambers, E. Pitre, and S. Freeman. "Increased Structure and Active Learning Reduce the Achievement Gap in Introduction to Biology." *Science,* 332 no. 6034: 1213-6.; 2018 Strada-Gallup Alumni Survey, Mentoring College Students to Success; EAB interviews and analysis.

A More Holistic View of Student Success

New Focus on Academic Success Can Bring CTLs to the Center

Ability to Translate Among Audiences Makes CTLs Critical Student Success Partners

Advising and Student Support

Academic Performance

Engagement

Financial Well-Being
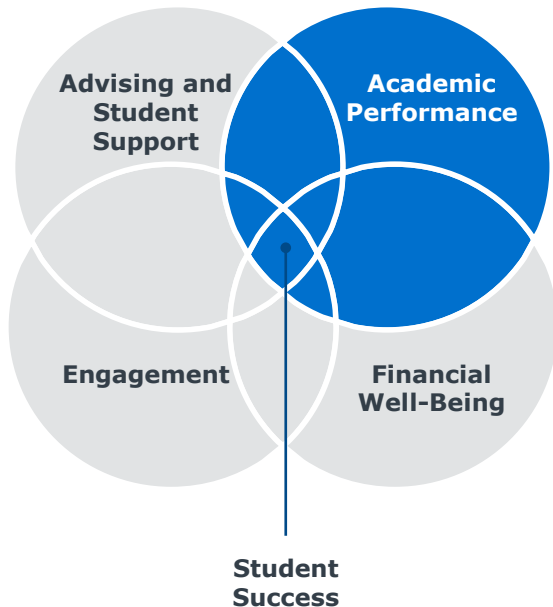
Student Success

"We [CTL staff] think of ourselves as translators…**we can speak the language of student success, faculty members, and administrators**, and we are constantly translating across those boundaries."

CTL Director, Small Private College

Understanding Centers of Teaching and Learning

Programming, Staffing, and Organizational Differences Across Segments

	Research and Doctoral Universities	Comprehensive Institutions	Liberal Arts Colleges	Canadian Institutions
Structure	Centralized (70%)	Centralized (60%)	Single individual (61%)	Centralized (58%)
Length of Time in Current Structure	Mature – 59% in place between 6-20 years	Mix – 46% in place less than 5 years and 31% in place between 11-20 years	New – 62% in place less than 5 years	Mature – 64% in place between 11-20 years
Staffing	Median FTE: 8	Median FTE: 3	Median FTE: 2	Median FTE: 5
Signature Services[1]	Active, inquiry-based or problem-based learning (44%) Integrating technology in traditional T&L setting (35%)	New faculty orientation and development (36%) Blended learning approaches (25%)	New faculty orientation (33%) Course and curriculum reform (27%)	New faculty orientation (50%) Scholarship of teaching and learning (42%)
Approach to Service Provision	Hands-on workshops Individual consultations	Hands-on workshops Individual consultations	Hands-on workshops Web-based resources	Individual consultation Hands-on workshops

1) Reporting the two (out of 39) possible programs that were included the most in the top 3 signature programs within the segment.

Source: Beach, Andrea L., Mary Deane Sorcinelli, Ann E. Austin, and Jaclyn K. Rivard. 2016. Faculty Development in the Age of Evidence: Current Practices, Future Imperatives. Sterling, VA: Stylus.

Current CTL Goals Point to Shift in Emphasis Toward Organizational Change

Top Three Goals that CTL Directors Indicated Guided Their Programming, 2016

1 Create or sustain a culture of teaching excellence ⟶ ⬆ Increase between 2006-2016

2 Advance new initiatives in teaching and learning ⟶ ⬆ Increase between 2006-2016

3 Respond to and support individual faculty member's goals for professional development ⟶ ⬇ Decrease between 2006-2016

Future Direction Points to Growing Focus on Assessment, Online Learning, Multiculturalism, and Curricular Reform

Top Issues CTL Directors Indicated that Faculty Development Should Address in the Next Five Years

- Assessment of student learning outcomes

- Teaching in online and distance environments

- Multiculturalism and diversity related to teaching

- Course and curriculum reform

Source: Beach, Andrea L., Mary Deane Sorcinelli, Ann E. Austin, and Jaclyn K. Rivard. 2016. Faculty Development in the Age of Evidence: Current Practices, Future Imperatives. Sterling, VA: Stylus.

1 **Reduce course DFW rates and help eliminate demographic disparities in academic performance**

2 Facilitate experiential learning opportunities

3 Facilitate the use of open educational resources (OER) to reduce student course costs

4 Promote data-informed teaching practices by facilitating scholarship of teaching and learning

5 CODA: Near- and future-term teaching and learning innovations

CTLs Best Positioned to Partner in Prioritized Course Redesigns

Course Equity Gaps → **Major Changes** → **Delayed Graduation**

1 in 3

Black students and 1 in 7 Latinx students received a D or F in a lecture-based introductory biology course at EAB university[1], compared to 1 in 14 white students

80%

Of underrepresented STEM first-year students at ABC university[1] switched their major out of STEM

+4

A study at XYZ college[1] found that an accumulation of six DFW credits, on average, added four additional months to completion

A Critical Partner in Reform, Not Data Monitoring

"While Centers of Teaching and Learning may not be involved with analyzing course data to identify DFW problems, efforts to address that concern across courses often will involve the CTL. On campuses with CTLs, this sort of student success initiative benefits greatly from collaboration with a teaching center."

Debra Lohe, Director, Reinert Center for Transformative Teaching and Learning

Saint Louis University

Systematized CTL Course Redesign Support Critical for Success

UNC CHARLOTTE

CTL Staff Guide a Rigorous, Step-by-Step Course Redesign Process

Assessment of course needs and goals

Course budget planning

Course material development and evaluation

Course redesign evaluation

Semester 1 ●　●　●　●　●　●　●　● Semester 4

Course redesign planning

Faculty pedagogical and technological training

Project management and facilitation

Scholarship of Teaching and Learning
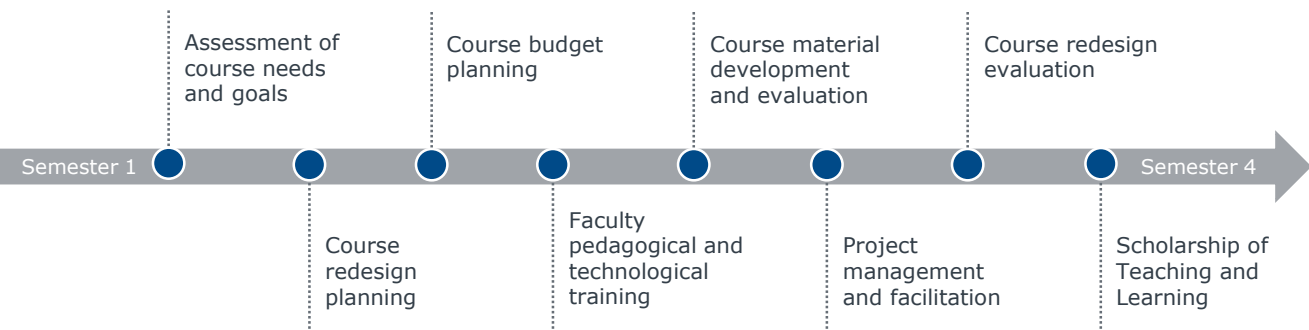
Impact Highlights: Course Redesign Decrease DFW Rates and Improve Student Grades

14

Percentage point decrease in DFW rates in redesigned political science course

17

Percentage point increase in student grades in redesigned physics course

15.7

Percentage point decrease in DF rates in redesigned chemistry course

Source: Large Course Redesign, University of North Carolina, Charlotte; Kropf et al. (2014), Large Course Redesign Project Report: POLS 1110 American Politics; Leilabady et al., (2011) Physics Large Course Redesign Project Report; Asala et al., (2011), Large Course Redesign Project Report: Principles of Chemistry.

Prioritize Resources to Have the Biggest Impact

Eight Criteria to Help Guide CTL Redesign Activities

Redesign **entire courses** within a department, rather than individual sections

Demonstrate support from departmental **faculty, chairs, and deans**

Focus on general education, introductory, and/or prerequisite **gateway** courses

Include a plan for **financial sustainability** and/or an overall reduction in costs

Begin with courses with historically **high DFW (D/F/withdraw) rates**

Describe how the course will use **technology** to reduce costs and improve outcomes

Begin with **high-enrollment** courses with seat capacity constraints

Preserve **academic rigor and course content** while adapting delivery methods

For more information, please see *The Course Completion Playbook* on eab.com

Source: The National Center for Academic Transformation, EAB interviews and analysis.

Revisiting A Familiar Practice

Identifying Missing Pieces from Some Intensive Institutes

Most Course Design Institutes (CDIs) Cover Critical T&L Topics…

Extensive coverage of learner-centered pedagogy theory and practice

Components of effective course design including active learning and learning outcomes assessment

…But Don't Always Include Rigorous Evaluation, Peer Feedback, and Completed Syllabus

SYLLABUS

CDI includes opportunity for peer and CTL staff feedback and collaboration about course design

Faculty end CDI with complete or near-complete syllabus

Rigorous syllabus rubric or guide helps shape and evaluate CDI activities

Rollins
EST. 1885

TCU

FERRIS STATE UNIVERSITY

SAINT LOUIS UNIVERSITY

UNIVERSITY of VIRGINIA

UNIVERSITY OF DELAWARE.

Four Key Elements of a CDI Syllabus Rubric

Detailed Guide Helps Faculty Create Learning-Focused Syllabi

UNIVERSITY of VIRGINIA

① Rubric includes detailed descriptions of each component

② Rubric provides guidance about creating an inclusive classroom

③ Scoring criteria helps identify areas to improve

④ Weighted scoring ensures instructors include the most important components

Criterion[1]	Component	Strength of Evidence		
		Strong	**Moderate**	**Low**
Learning Goals & Objectives	Course level learning objectives are clearly articulated and use specific action verbs		3	
Assessment Activities	Objectives and assessments are aligned	3		
	Major summative assessment activities are clearly defined			2
	Plans for frequent formative assessment with immediate feedback	1		
Classroom Environment	Communicates high expectations, projects confidence of success		1	

1) Adapted from UVA's syllabus rubric, available here

Source: Palmer, M. S., Bach, D. J., & Streifer, A. C. (2014). Measuring the promise: A learning-focused syllabus rubric. *To improve the academy: A journal of educational development*, 33 (1), 14-36.Palmer, M.S., Streifer, A.C., & Williams-Duncan, S. (2016). Systematic assessment of a high impact course design institute. *To improve the academy: A journal of educational development, 35(2)*, 339-361; EAB interviews and analysis.

CDI & Learning-Focused Syllabus Development
Improve Student Outcomes & Faculty Confidence

A+

Courses with inclusive syllabi reduced gap in DFW rates between URG and majority STEM students

CDI participation increased faculty confidence in their ability to use student-centered teaching activities

Syllabus rubric won the 2014 POD Network Innovation Award

"The syllabus is extremely comprehensive but also **gets me excited to work with the teacher** and participate in the class."

"I like how they **emphasize the realistic aspects of learning and participating** rather than simply laying out work to be done."

Students' perception of learning-focused syllabi at UVA

Mid-Course Advice Helps Test Teaching Changes

CTLs Provide Useful Feedback Service But Face Three Challenges

Faculty requests CTL peer review and/or observation service

CTL staff observe class and conduct student focus groups

CTL staff and instructor debrief and consider any pedagogical changes

Scalability

6.4 Average number of professional staff at CTLs[1]

2.4 Average number of faculty fellows at CTLs[1]

70% Of surveyed CTL directors reported annual programming budgets under $100,000[2]

Trust Barriers

Students less willing to talk openly with faculty and staff about the challenges they encounter

Missing Perspective

Faculty miss out on important student perspective on course activities

1) Based on survey data from University System of Maryland Project on Leading Academic Change: An Early Market Scan of Leading-edge Postsecondary Academic Innovation.
2) Beach, Andrea L., Mary Deane Sorcinelli, Ann E. Austin, and Jaclyn K. Rivard. 2016. Faculty Development in the Age of Evidence: Current Practices, Future Imperatives. Sterling, VA: Stylus.

Source: Yeager, D. S., Purdie-Vaughns, V., Yang, S.,* & Cohen, G. L. (2017). Loss of institutional trust among racial and ethnic minority adolescents: Consequence of procedural injustice, cause of behavioral disengagement. *Child Development, 88, 658-676;* Beach, Andrea L., Mary Deane Sorcinelli, Ann E. Austin, and Jaclyn K. Rivard. 2016. Faculty Development in the Age of Evidence: Current Practices, Future Imperatives. Sterling, VA: Stylus.; University System of Maryland Project on Leading Academic Change: An Early Market Scan of Leading-edge Postsecondary Academic Innovation.

On-Demand, Customizable Service Provides Relevant, Timely Feedback

Multiple Consultant Role Options Help Faculty Get Right-Fit-Advice

MINNESOTA STATE
UNIVERSITY
M A N K A T O

Students Consultant Request Form[1]

Please mark all the service options you are interested in:

☐ **Recorder/Observer:** consultant records classroom activities, such as lecture chronology, describing rather than evaluating

☐ **Faux Student**: consultant takes notes as if they were a student in the class

☐ **Primed Student**: consultant records classroom activities, with a focus on specific issues requested in advance by instructor

☐ **Student consultant**: instructor asks consultant for evaluative feedback on classroom activities or particular learning issues

☐ **Combination of above**

BEREA
COLLEGE

UNIVERSITY OF CALIFORNIA
MERCED

BRYN MAWR
C O L L E G E

Program Supports Faculty Innovation
And Changes Student Perceptions of Learning

"I work with students more as colleagues, more as people engaged in similar struggles to learn and grow. **I have become even more convinced that students are experts in learning and essential partners in the task of creating and developing new courses** and refining existing ones."

Faculty Partner at Bryn Mawr College

"This experience has made **me increasingly alive to both the professor's perspective and to my own responsibilities as a student** in creating and maintaining a positive and effective learning environment for all members of the class."

Student Consultant at Bryn Mawr College

1 Reduce course DFW rates and help eliminate demographic disparities in academic performance

2 **Bring experiential learning opportunities to scale**

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4 Promote data-informed teaching practices by facilitating scholarship of teaching and learning

5 CODA: Near- and future-term teaching and learning innovations

Experiential Learning a Growing Priority

But Plans to Increase Participation Face Key Scalability Challenges

Innovative career office programming…

New approaches to student and alumni engagement have enhanced the impact of Career Services

…but only reaching a small population of students

- Median FTE of 4 staff
- Up to 1:6,000 student-to-advisor ratio

Growing focus on internship placement…

Participation rates are at decade highs, and internships are now a competitive prerequisite in many fields

…but not always accessible to all students

- Many internships are unpaid and/or non-credit-bearing
- Underrepresented students lack the time, network, and funds to participate

Growth in experiential learning requirements…

More universities are requiring hands-on learning experience to graduate

…but faculty may not know about all available resources

- Uneven adoption between academic and pre-professional disciplines
- Faculty need additional pedagogical support to create in-class experiential opportunities

CTL Programming Helps Faculty Bring High-Impact Practices to Classroom

Service and Community-Based Learning

CTL acts as a clearinghouse for best practices and tools, to help faculty redesign courses to incorporate high-impact practices into their courses

Ryerson University

Experiential Learning Specialist

CTL hire faculty fellows or EL-dedicated professional staff to lead workshops, provide individual consultations, and organize EL-related intensive institutes

IOWA STATE UNIVERSITY

Collaboration with Career Services

CTL either directly oversees career services or is part of the same reporting structure to facilitate employer and community partnerships

UNIVERSITY OF THE FRASER VALLEY

For more information, please see *Integrating Academic and Career Development* on eab.com

Source: Center for Excellence in Learning and Teaching, Iowa State University; Learning and Teaching Office, Ryerson University; Teaching and Learning Centre, University of the Fraser Valley; EAB interviews and analysis.

Facilitating Inter-Unit Collaboration

Leverage Organizational Structures to Scale EL Across the Curriculum

University of Dayton
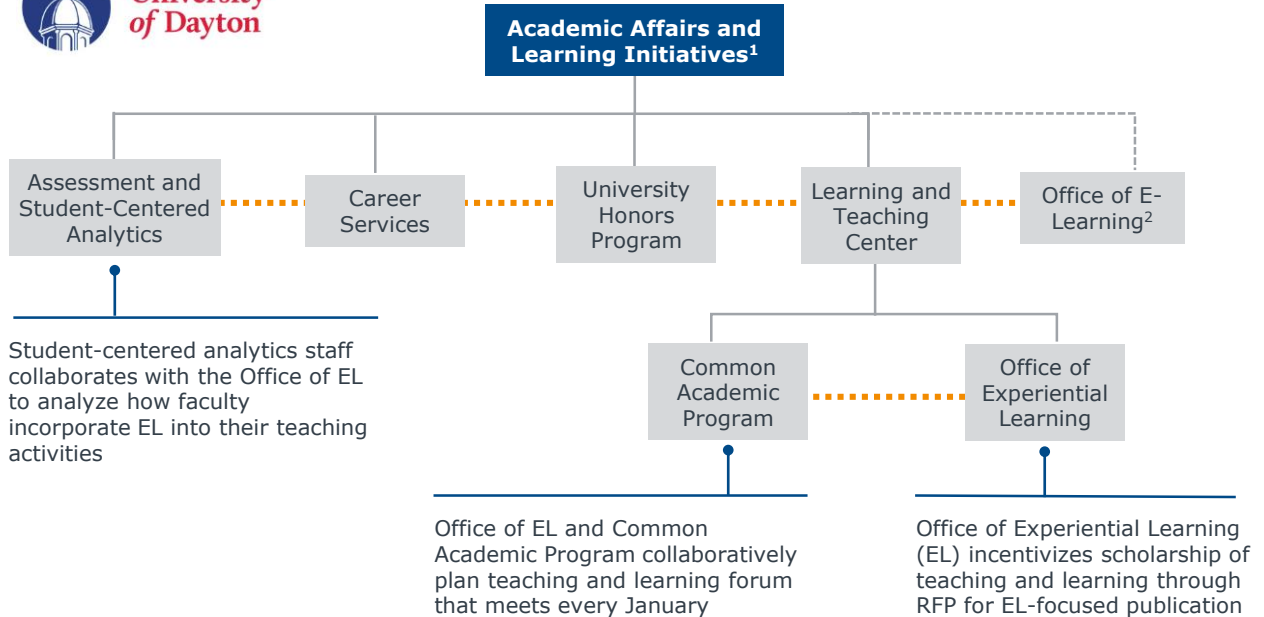
Academic Affairs and Learning Initiatives[1]

| Assessment and Student-Centered Analytics | Career Services | University Honors Program | Learning and Teaching Center | Office of E-Learning[2] |

Student-centered analytics staff collaborates with the Office of EL to analyze how faculty incorporate EL into their teaching activities

Common Academic Program

Office of Experiential Learning

Office of EL and Common Academic Program collaboratively plan teaching and learning forum that meets every January

Office of Experiential Learning (EL) incentivizes scholarship of teaching and learning through RFP for EL-focused publication

Source: EAB interviews and analysis.

Finding The Missing Piece

Use CTL Activities to Facilitate In-Class Student-Led Knowledge Production

Common EL Opportunities Allow Students to Create Knowledge Outside Classroom But Neglect In-Class Activities

VANDERBILT UNIVERSITY

Internships

Student Organizations

In-Class Activities

Undergraduate Research

Co-ops
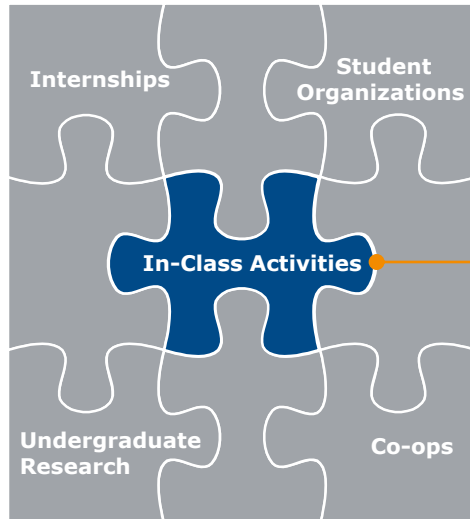
CTLs Can Help Instructors:

- Use class assignments to allows students to solve real-world, unsolved problems.

- Allow students to share work with peers as well as faculty.

- Give students greater autonomy in their work.

Vanderbilt's CTL-led **Celebration of Learning** exhibition allows students to share their projects and participate in student-faculty panels about the course learning dynamics.

CELEBRATION of LEARNING

Source: Celebration of Learning: An Exhibition of Students as Producers, Vanderbilt University; Derek Bruff, "Students as Producers: An Introduction", *Vanderbilt University,* September 3, 2013.

Putting Students in the Driver's Seat

Student Involvement in Pedagogy Boost Student Experience and Learning

Socratic Syllabi

Faculty prepare learning outcomes and schedule, while students work together to decide on assessment activities

Student-Generated Question Banks

Students learn about Bloom's taxonomy and contribute to multiple-choice question bank that is used to develop assessments

Ungrading

Students semi-regularly reflect independently, with peers, and faculty on their learning and course performance

"If, as teachers, we just ask students why, when and how they learn, what we can get back is way more valuable than any standardized assessment mechanism can reveal."

Jesse Stommel, Executive Director, Division of Teaching and Learning
University of Mary Washington

Source: Teplitski, M. , Irani, T. , Krediet, C. J., Di Cesare, M. and Marvasi, M. (2018), Student-Generated Pre-Exam Questions is an Effective Tool for Participatory Learning: A Case Study from Ecology of Waterborne Pathogens Course. Journal of Food Science Education, 17: 76-84.; Hudd, Suzanne S. "Syllabus under Construction: Involving Students in the Creation of Class Assignments." *Teaching Sociology*, vol. 31, no. 2, 2003, pp. 195–202. *JSTOR*; Dan Berrett, "A Professor Asked His Own Students to Write Their Own Exam Questions. Here's What He Found." *The Chronicle of Higher education*, March 28, 2019. Colleen Flaherty, "Professors' reflections on their experiences with 'ungrading' spark renewed interest in the student—centered assessment practice", *Inside Higher Ed,* April 2, 2019.

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Open Educational Resources Increase Equity, But Adoption Remains Slow

The Problem → **The Impact** → **Long-term Consequences**

54

Increase in textbook costs was 54 percentage points higher than the overall increase in the consumer price index (2002-2012)

65%

Of students decided not to purchase a textbook because it was too expensive

50%

Almost 50% of students indicated that the cost of textbooks impacted their decision to take a course

Key Barriers to the Adoption of Low-Cost Textbook Alternatives like OER

❌ Guidance needed to prioritize which courses to target

❌ Difficult to identify high-quality, discipline-specific resources

❌ Need to redesign courses to effectively integrate OER into pedagogy

❌ OER development and maintenance requires release time or dedicated staffing

Source: Texas Higher Education Coordinating Board (2014), A Study on Open Educational Resources and Their Potential for Use at Texas Colleges and Universities; EAB interviews and analysis.

Opportunity for CTL to Support OER Adoption

Potential Approaches Can Achieve Multiple Student Success Goals

← Less Intensive Course Redesign ... **More Intensive Course Redesign →**

Tap into OER Repositories

- Ideal for introductory and general education courses
- Involves limited pedagogical redesign support
- Opportunity to partner with library and other relevant offices on campus to scale efforts

BCcampus ::: OpenEd

MERLOT

openstax CNX

Provide Grants to Create OER

- Target courses with high-enrollment, high DFW rates, and expensive textbooks
- Work with institutional partners to provide necessary technical, logistical, and pedagogical support. For example, helping faculty redesign courses to use non-textbook materials or helping them create a cohesive narrative around disparate learning materials

CUNY **SUNY** The State University of New York

UNIVERSITY SYSTEM of MARYLAND

Facilitate In-Class OER Development

- Ideal for upper-division courses
- Allow students to help develop learning materials:
  - Students gather public-domain texts and create discussion questions for new textbook
  - Students revise existing resources to make them more inclusive
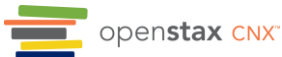
Plymouth State UNIVERSITY

THE UNIVERSITY OF EDINBURGH **UBC**

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SoTL is Rising in Prominence for T&L Offerings

CTLs Expanding Services for the Scholarship of Teaching and Learning

Of 39 Functional Services, SoTL is the Top Choice for CTL Addition or Expansion

Top three services that CTL Directors indicated a desire to add or expand

1 Scholarship of teaching and learning

2 Midcareer and senior faculty development

3 Mentoring programs for underrepresented faculty

Percentage of CTL Directors who Indicated Expanding SoTL Support is a Top-3 Priority, By Institution Type

43%
Liberal Arts Colleges

Currently, none of the CTL directors surveyed indicated that SoTL was a signature program

30%
Comprehensive Universities

Only 14% of CTL directors identified SoTL as a current signature program

22%
Research and Doctoral Universities

R1 Universities currently provide SoTL support, but see an opportunity to expand

10%
Canadian Institutions

SoTL a long standing priority at Canadian institutions

Scholarship of Teaching and Learning
Helps Faculty Evaluate their Teaching Impact

"We support colleagues who are not learning scientists, but who are experts in their own discipline. They have ideas from the literature that they want to implement in their context, or they have some innovative ideas or technology tools they want to try. **It's natural to want to know if it works, how it works, where it works, and where it doesn't work so they can make appropriate and targeted improvements.** We are delighted to help faculty members measure how their teaching and learning projects are going."
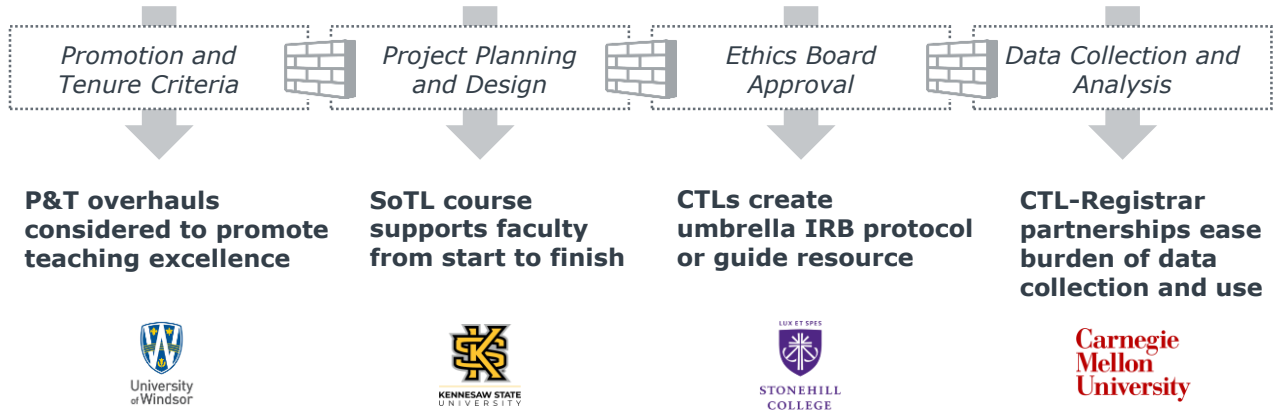
Marsha Lovett
Associate Vice President for Educational Innovation and Learning Analytics and
Director of the Eberly Center,
Carnegie Mellon University

Concerns about Recognition, Methodology, and Data Limits Participation

Participation in Scholarship of Teaching and Learning

| *Promotion and Tenure Criteria* | *Project Planning and Design* | *Ethics Board Approval* | *Data Collection and Analysis* |

P&T overhauls considered to promote teaching excellence

SoTL course supports faculty from start to finish

CTLs create umbrella IRB protocol or guide resource

CTL-Registrar partnerships ease burden of data collection and use

University of Windsor

KENNESAW STATE UNIVERSITY

LUX ET SPES
STONEHILL COLLEGE

Carnegie Mellon University

> "The current institutional structures and processes of colleges and universities are not designed to facilitate the development, testing, sharing, and adoption of evidence-backed practices which improve student success. The IRB process is just one (very painful) example. The disincentive for faculty on the tenure treadmill is another."
>
> *- Michael Feldstein, e-Literate blog*

CTLs Save Faculty Time with SoTL IRB Approval Support

⚠ Faculty who have no experience with human subjects research confused by IRB process

⚠ Bureaucratic process is a burden for time-strapped faculty

⚠ Creating consent language for students is a daunting task

⬇ ⬇ ⬇

IRB Proposal Guide

DALHOUSIE UNIVERSITY   **STONEHILL COLLEGE**

Umbrella IRB Protocol

Carnegie Mellon University   **RICE**

Consent Form Designer

Duke UNIVERSITY

> "We are happy. The faculty are happy. The IRB is happy because they don't have to support as many faculty who are unfamiliar with the process and yet are essentially applying for the same procedure… I think this IRB component is really key."
>
> - Marsha Lovett, Associate Vice President for Educational Innovation and Learning Analytics and Director of the Eberly Center, Carnegie Mellon University

Two Data Partnerships Aim to Expand SoTL

Internal Registrar Helps CMU Faculty, While New Open Initiative Serves Field

Partnerships with the Registrar and IR Facilitate Data Use

- Helps faculty identify valid control groups for SoTL projects
- Maintains confidentiality of student data
- Streamlined avenues for faculty to acquire and analyze student data

LearnSphere Serves as Hub for External Data Resources

DataShop
Repository with analysis and visualization tools

Tigris
Workflow tool for research projects

LearnSphere

DataStage
Online learning platform that collects students' interactions with course material

DiscourseDB
Analysis tool for discussion-based learning, like chats, discussion threads, and wikis

LearnSphere

Carnegie Mellon University

Stanford University

Massachusetts Institute of Technology

THE UNIVERSITY OF MEMPHIS.
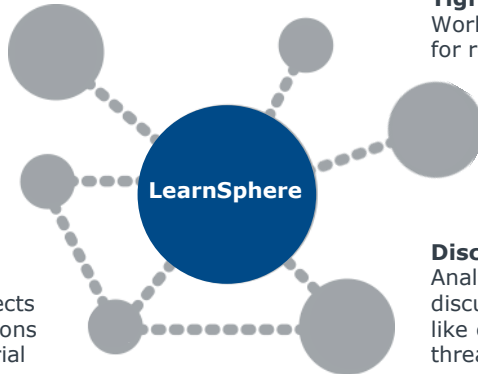
LearnSphere by the Numbers

9
Linked repositories for existing datasets

7
Linked data tools

1550+
Datasets available through DataShop
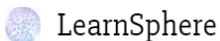
Source: EAB interviews and analysis; learnsphere.org

1 Reduce course DFW rates and help eliminate demographic disparities in academic performance

2 Facilitate experiential learning opportunities

3 Facilitate the use of open educational resources (OER) to reduce student course costs

4 Promote data-informed teaching practices by facilitating scholarship of teaching and learning

5 CODA: Near- and future-term teaching and learning innovations

Four Important Considerations When Making an Investment

Incremental Adoption of VR/AR Technology Prevents Overinvestment

Invest in low-cost tools till enough stakeholder show interest, then slowly purchase more expensive technology

Cost of VR / AR Technology Will Decline, but Space Will Remain at a Premium

As VR/AR becomes cheaper, campus leaders may scramble to find adequate space to use the tech effectively

Students' Independence Using VR / AR Reduces Staffing Needs

Institutions can leverage student expertise and enthusiasm to scale the use of VR/AR technology on campus

Evaluation of VR / AR Impact on Student Outcomes Remains Anecdotal

Given the small number of institutions experimenting AR/VR, impact of the technology is assessed by student engagement and faculty interest

Changing With The Times

Leverage Games for Student and Academic Engagement Opportunities

GAME-BASED LEARNING	ESPORTS

GAME-BASED LEARNING

"Fortnite May Be Addictive, But Could Also Promote Learning, Say Stanford Experts"

"Gaming addiction classified as disorder by WHO"

BBC

> "Games have the potential to make learning more relevant…so many engineering students come in and they fail calculus. Games may be a way to keep them engaged."
>
> *Susan Pedersen, Associate Professor, Texas A&M University*

ESPORTS

6

number of NACE[1] members in 2016

128

number of NACE[1] members in 2019

New eSports Programs Create Opportunity for Retention Gains

> "Since launching the esports program…we've been able to reach new groups of enrolled students who weren't previously engaged in campus life and recruit prospective esports students looking for an opportunity to compete."
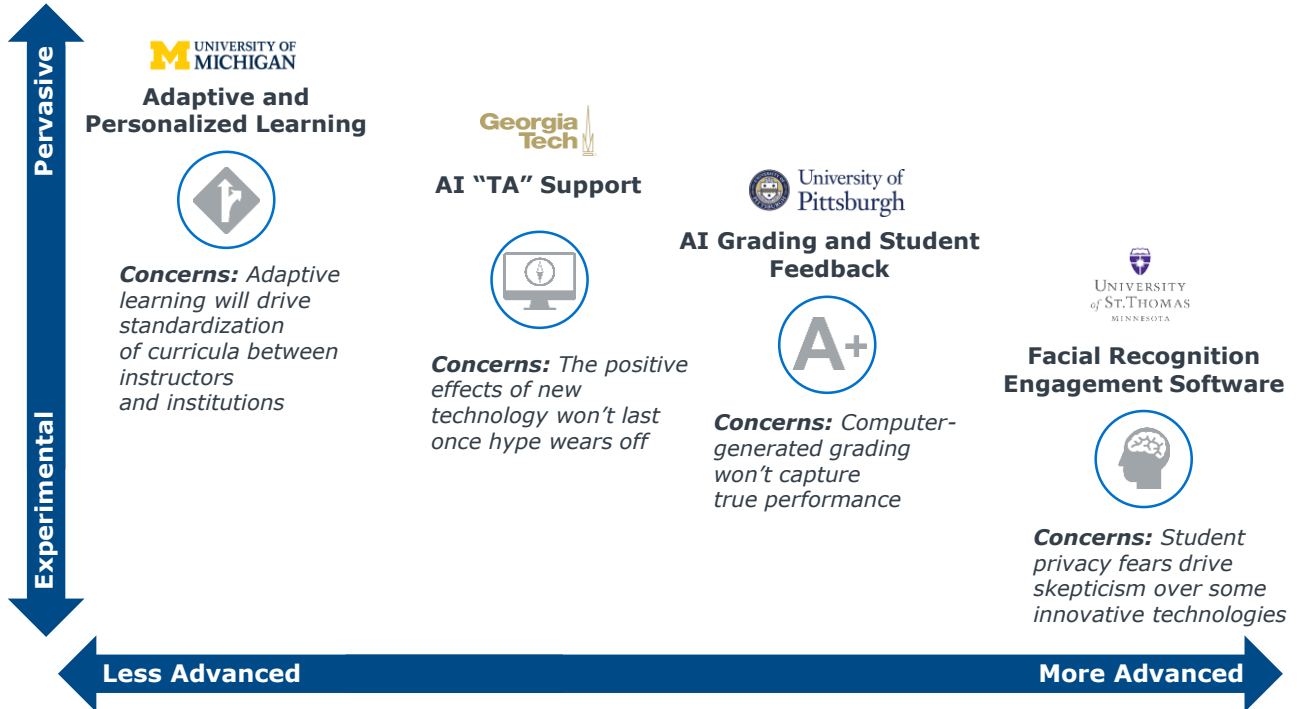>
> *Randy Sieminski, Director Athletics, SUNY Canton*

Growth in Field Creates Opportunity for New Academic Programming

THE OHIO STATE UNIVERSITY   Emerson COLLEGE   BECKER COLLEGE   UCI

1) National Association of College Esports

Source: Jane Wakefield, "Gaming addiction classified as disorder by WHO", *BBC*, January 2, 2018; Patti Zarling, "Can video games help students learn complicated concepts?", *Education Dive*, March 20, 2018; Jeremy Bauer-Wolf, "Video Games as a College Sport", *Inside Higher Ed*, June 9, 2017; Eli Zimmerman, "Universities Invest in Esports Academic opportunities, *EdTech*, November 26, 2018; Jeremy Bauer-Wolf, "video Games: Entertainment or Sports?", *Inside higher Ed*, February 12, 2019; Joe McAllister, "Universities Use New Esports Programs to Entice Students", *Edtech*, march 18, 2019.

Align AI Practices with Classroom Priorities

Guiding the Conversation on AI in the Classroom

Pervasive ↑

Experimental ↓

UNIVERSITY OF MICHIGAN

Adaptive and Personalized Learning

Concerns: Adaptive learning will drive standardization of curricula between instructors and institutions

Georgia Tech

AI "TA" Support

Concerns: The positive effects of new technology won't last once hype wears off

University of Pittsburgh

AI Grading and Student Feedback

A+

Concerns: Computer-generated grading won't capture true performance

UNIVERSITY of ST.THOMAS
MINNESOTA

Facial Recognition Engagement Software

Concerns: Student privacy fears drive skepticism over some innovative technologies

← Less Advanced   **More Advanced →**

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