

# Active Learning Classroom Design to Support Innovative Information Literacy Instruction

David Burns, Ellen Filgo,  
Amy James, and Sha Towers

# Information Literacy at Baylor

Amy James

Head of Instruction and Information Literacy



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# Research & Engagement Library Instruction Data

Academic Year	# of Sessions	# of Participants	% Active Learning
2017-2018	434	8929	19.5%
2018-2019	541	10096	23%



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# Building an Active Learning Classroom

David Burns

Director of Learning Space and Media Services

# Laying the groundwork

- In 2016 the Library did some work assessing our current formal learning spaces
- Formed Teaching and Learning Spaces Working Group
- Learning Spaces Rating System (Educause initiative)

“provides a framework to measure the potential performance of a learning space, that is, to assess what the space enables learners and instructors to do in it. It serves as a way to measure progress toward designing learning spaces that support active learning and engagement.”

Introduction, Learning Spaces Rating System

# LSRS Criteria

**Part A: Campus Context, Planning, and Support Considerations**.....

- Section 1: Integration with Campus Context (ICC).....
  - ICC Credit 1.1: Alignment with Campus Academic Strategy .....
  - ICC Credit 1.2: Learning Space Master Plan.....
  - ICC Credit 1.3: Compatibility with IT Infrastructure and Plans .....
  - ICC Credit 1.4: Commitment to Evidence-Based Research and Assessment .....
  - ICC Credit 1.5: Campus Leadership for Learning Spaces .....
- Section 2: Planning and Design Process (PDP) .....

  - PDP Credit 2.1: Stakeholder Engagement .....
  - PDP Credit 2.2: Evidence-Based Planning and Design.....
  - PDP Credit 2.3: Pilots and Prototypes.....
  - PDP Credit 2.4: Evaluation Plan .....
  - PDP Credit 2.5: Dissemination of Findings.....

- Section 3: Support and Operations (SO) .....

  - SO Credit 3.1: Support.....
  - SO Credit 3.2: Space Orientation and Training .....
  - SO Credit 3.3: Training of Support Team .....
  - SO Credit 3.4: Faculty/instructor Development .....
  - SO Credit 3.5: Financial Sustainability of Operations .....
  - SO Credit 3.6: Scheduling Systems .....
  - SO Credit 3.7: Diverse Patterns of Use.....

**Part B: Environment, Furnishings, Layout, and Technology**.....

- Section 4: Environmental Quality (EQ) .....

  - EQ Credit 4.1: Daylight .....
  - EQ Credit 4.2: Views to Outdoors .....
  - EQ Credit 4.3: Interior Visibility .....
  - EQ Credit 4.4: Lighting Control .....
  - EQ Credit 4.5: Thermal Comfort.....
  - EQ Credit 4.6: Acoustic Quality.....
  - EQ Credit 4.7: Environmental and Cultural Inclusiveness .....
  - EQ Credit 4.8: Accessibility and Universal Design .....

- Section 5: Layout and Furnishings (LF) .....

  - LF Credit 5.1: Proximities within Space.....
  - LF Credit 5.2: Movement through Space.....
  - LF Credit 5.3: Seating Density .....
  - LF Credit 5.4: Furniture Configuration Flexibility.....
  - LF Credit 5.5: Work Surfaces .....
  - LF Credit 5.6: Seating Comfort.....
  - LF Credit 5.7: Movable Partitions .....
  - LF Credit 5.8: Transparency .....
  - LF Credit 5.9: Access to Adjacent Informal Learning Areas .....
  - LF Credit 5.10: Writable Surfaces .....
  - LF Credit 5.11: Physical Storage.....
  - LF Credit 5.12: Future Proofing.....

- Section 6: Technology and Tools (TT).....

  - TT Credit 6.1: Electrical Power.....
  - TT Credit 6.2: Network Connectivity.....
  - TT Credit 6.3: Visual Displays .....
  - TT Credit 6.4: Sound Amplification.....
  - TT Credit 6.5: Audio/Visual Interface and Control .....
  - TT Credit 6.6: Distributed Interactivity .....
  - TT Credit 6.7: Session Capture and Access.....

# Starting the process

- Spring 2017: needed a new classroom and we had some ideas.
- Summer 2017: identified space and secured funding
- Late Summer 2017: assembled planning group (library faculty, admin, technology, facilities – included Learning Spaces Working Group)

Rating the current space:  
what do we have to work with?



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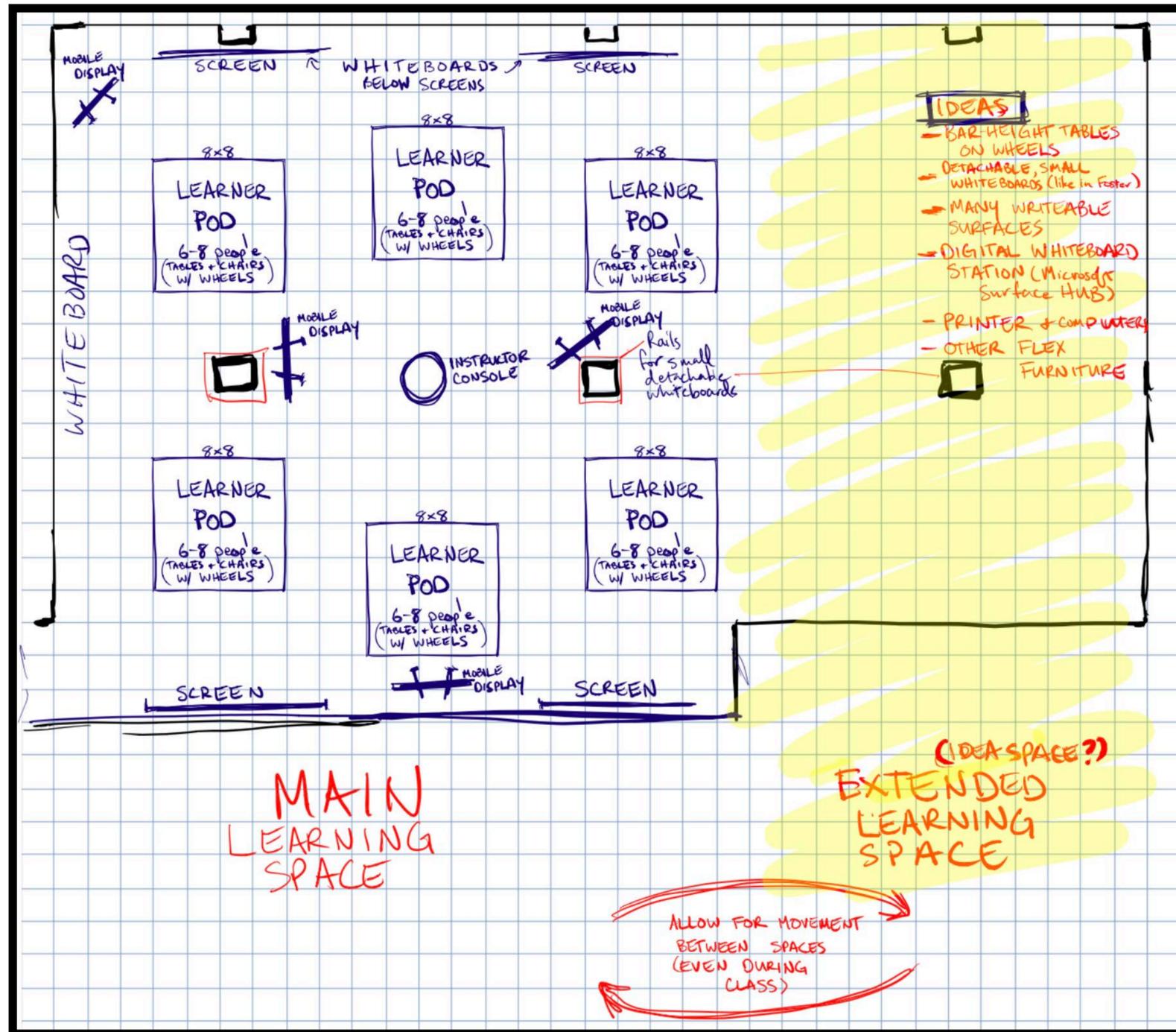


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PART B				
Section 4. Environmental Quality				
EQ	4.1	Daylight	1	1 Dual sets of windows offer daylight. Requires means to control daylight (e.g. curtain/screen/blinds)
EQ	4.2	Views to Outdoors	1	1 Dual sets of windows offer sky and tree views
EQ	4.3	Interior Visibility	1	0 Columns could limit view for learners or instructor
EQ	4.4	Lighting Control	1 or 2	1 Dimming by zone (no light control in room at all currently)
EQ	4.5	Thermal Comfort	1	Unknown
EQ	4.6	Acoustic Quality	1	0 Loading dock, dumpsters, mail room all are distractions
EQ	4.7	Environmental and Cultural Inclusiveness	1	TBD
EQ	4.8	Accessibility and Universal Design	1	TBD
			<b>9</b>	<b>3</b>

# Designing the new space





# Technology Priorities

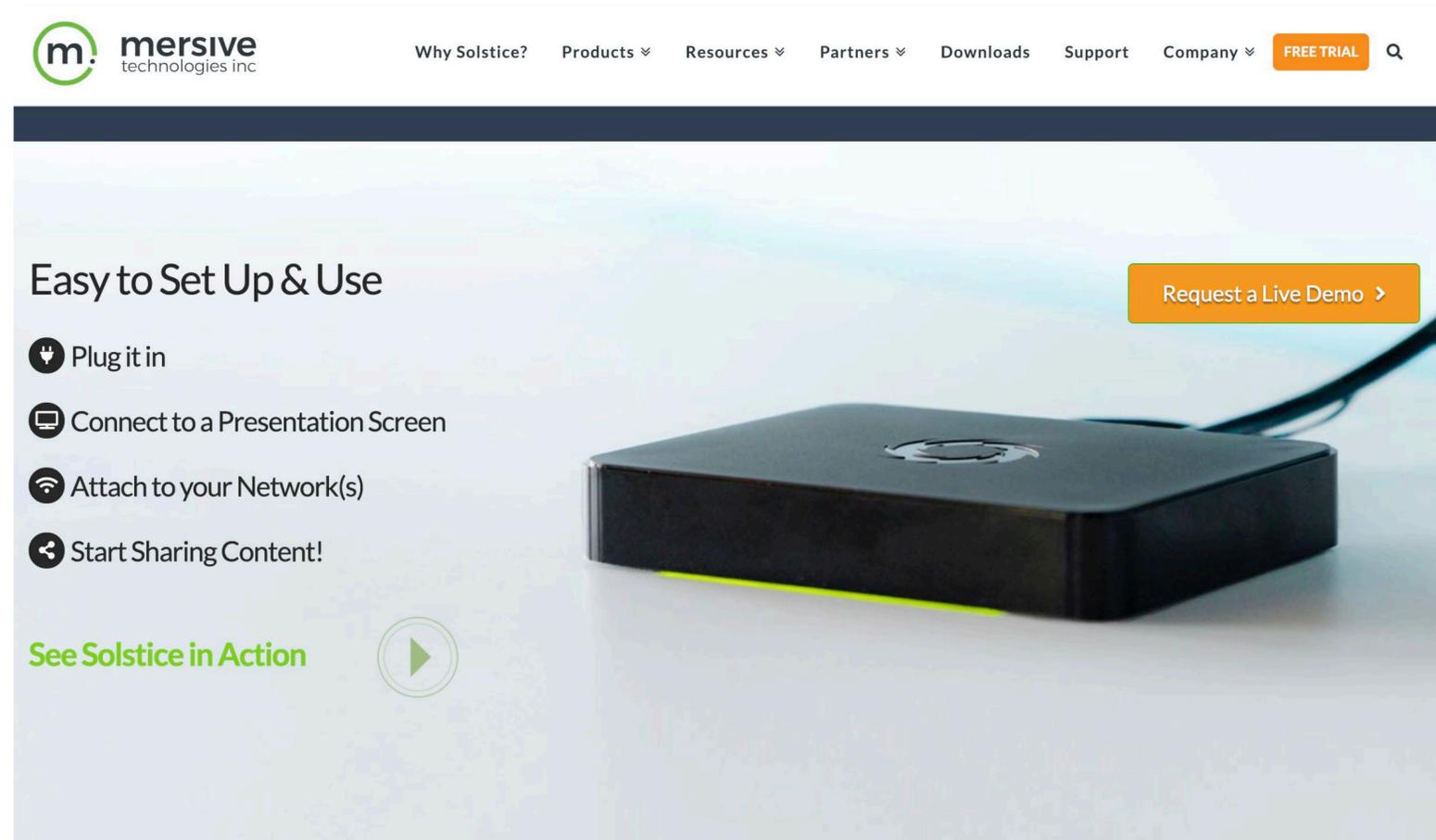
1. Any input to any display
2. Wireless connections to displays



# Technology Solutions

1. Any input to any display: **AV over IP**
2. Wireless connections to displays: **Solstice**

# Wireless connections to displays: Solstice Wireless Displays



Windows  
Mac  
iOS  
Android

# Wireless connections to displays: Solstice Wireless Displays

The screenshot shows the Solstice Wireless Display interface. On the left, a presentation slide titled "Pikes Peak" is displayed, featuring a landscape image of mountains at sunset. A text box on the slide reads "Code Review | Tyler McCollum" and "starting at 14:30". The time "14:17" is shown in the bottom left corner. On the right, the interface displays the URL "http://192.168.3.205". Below the URL, there are instructions: "1. Connect your device to MersiveMain", "2. Browse to the address above", and "3. Connect". A note states "Apple users can AirPlay to Pikes Peak". A status bar shows "6 FRI" with a red "IN USE" indicator and a grey "AVAILABLE" indicator, with "until 15:00" below it. A list of events is shown: "13:00 – 14:30 Plastics Lunch and Learn | Laura Hughes", "14:30 – 15:00 Code Review | Tyler McCollum", and "14:30 – 15:30 Call w/ Aperture Science | Laura Hughes".

AV over IP  
+  
Solstice Wireless Displays  
=  
Any device to any display

# Other features

- Intuitive touch panel
- Color coded group displays
- Height-adjustable instructor table
- Storage for furniture and technology





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# How Moody 104 has Changed (My) Info Lit Instruction to First Year Composition Classes

Ellen Filgo

Assistant Director of Research & Engagement

# ENG 1304 Program at Baylor

- “Thinking, Writing & Research”
- 120 classes/year, 75% taught in the spring semester
- Taught by English grad students, lecturers, adjuncts
- We have provided instruction in a majority of the classes for many years
- Quite a few students test out of or bypass this class

# Previous ENG 1304 Instruction

- Taught in a traditional classroom
- Outline:
  - Basic overview of libraries/services
  - Catalog/database searching instruction
  - Time for individual searching
  - Source evaluation (if time or requested)
  - Topic choice, focusing/narrowing topic (if time or requested)



# Previous ENG 1304 Instruction



# ENG 1304 to ENG 1310

- Changes to core curriculum in the College of Arts & Sciences
- ENG 1310 proposed as an alternative to fulfill the “Research Writing” class
- ENG 1304 still required by programs outside of the CAS
- The switch to ENG 1310 comes alongside bolstered library information literacy efforts

# ENG 1310

- “ENG 1310 is grounded in academic inquiry and rhetoric. Our goal is first to inquire, to determine what is known—and credible—about a topic or issue. Then, we ask questions about what is known: How do we understand and define this issue? How might we evaluate it? What can we do about it? Engaging in this inquiry and responding to these questions leads to rhetorical practice. We use rhetorical skills to construct knowledge by creating arguments that are built on the foundations of what has already been thought and said. Thus, writing and inquiry rely on researching and reflecting upon the thoughts and ideas of others.”



# Information Literacy Framework

- Searching as Strategic Exploration
  - “Searching for information is often nonlinear and iterative, requiring the evaluation of a range of information sources and the mental flexibility to pursue alternate avenues as new understanding develops.”
  - “The act of searching often begins with a question that directs the act of finding needed information. Encompassing inquiry, discovery, and serendipity, searching identifies both possible relevant sources as well as the means to access those sources. ”

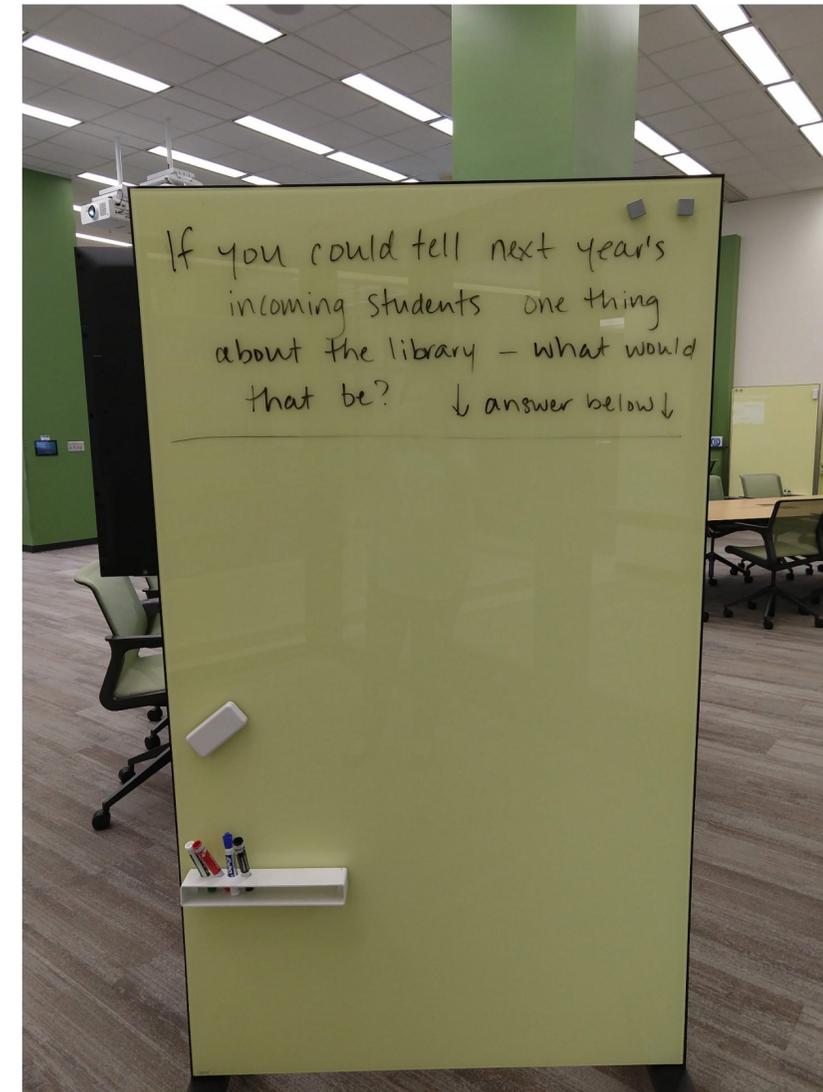
# Underlying Theories

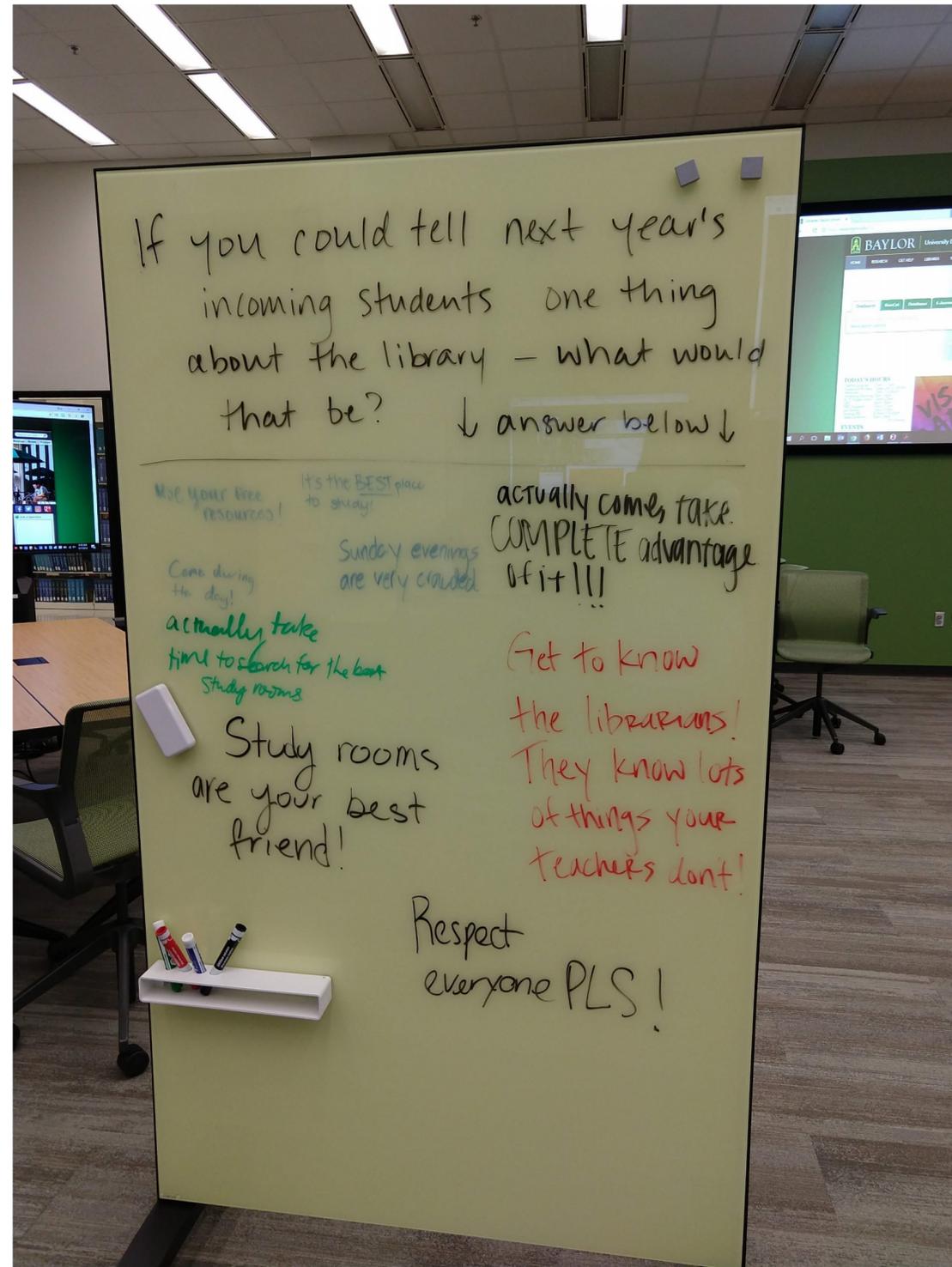
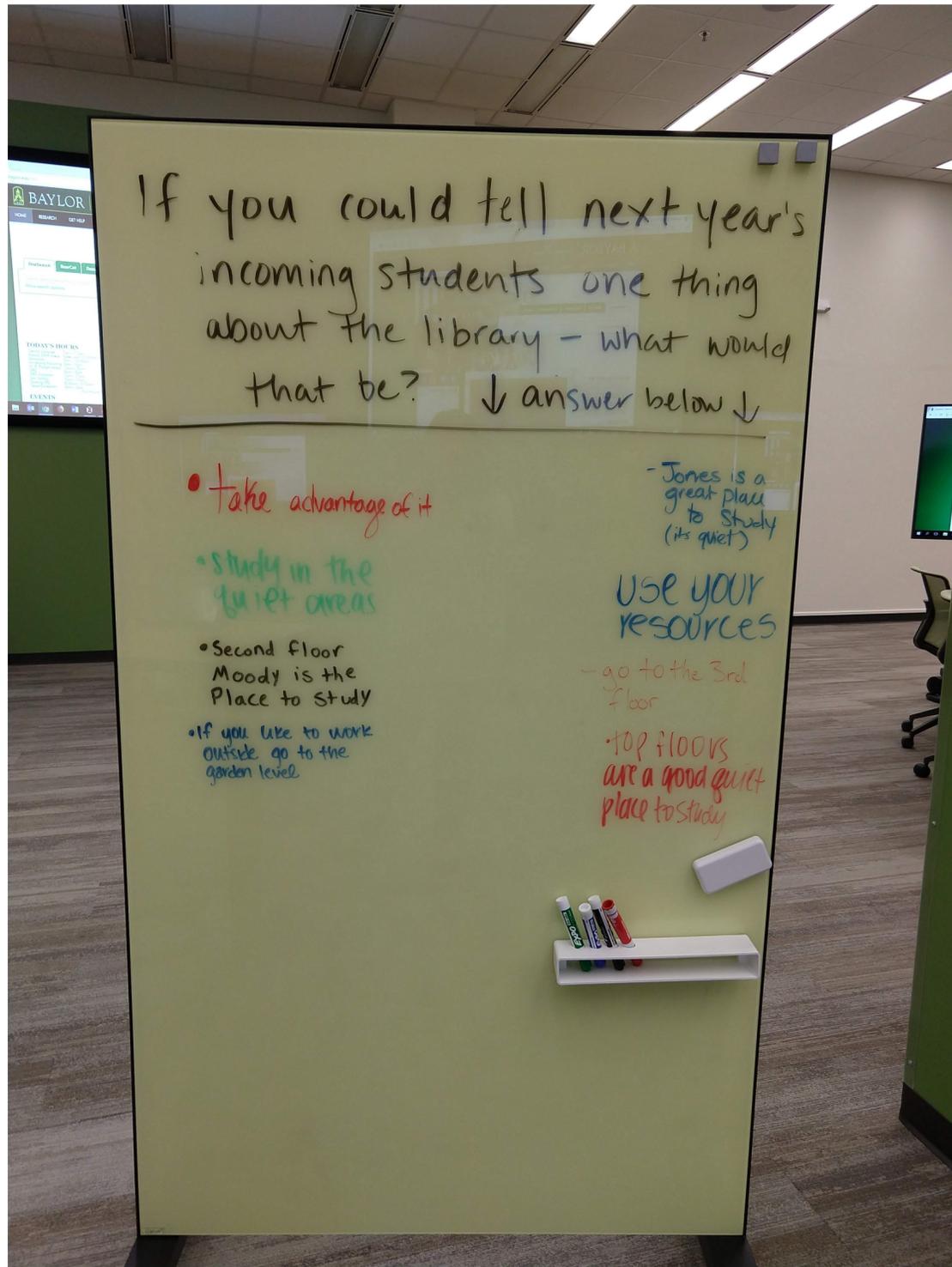
- Constructivist Learning Theory
  - Students construct their own knowledge by building on past experiences and knowledge
- Active Learning Theory (aspect of Constructivism)
  - “instructional activities involving students in doing things and thinking about what they are doing” \*
- Stage set by Moody 104

\* Bonwell, C. C., & Eison, J. A. (1991). *Active Learning: Creating Excitement in the Classroom*. 1991 ASHE-ERIC Higher Education Reports. ERIC Clearinghouse on Higher Education, The George Washington University, One Dupont Circle, Suite 630, Washington, DC 20036-1183 (\$17. Retrieved from <https://eric.ed.gov/?id=ED336049>)

# Classroom activities

- Introduction to library services
- Ask this question as they come in the room:  
“If you could tell next year’s incoming students one thing about the library – what would that be?”





# Classroom activities

- Introduce them to OneSearch (discovery system) on main page of library's website
- 5-10 minutes to find one resource on your topic
- Ask for volunteers to connect to the pod screen and display their item
- Have them describe what they found and how they found it

# Discussion

- Students used all sorts of methods for searching – dumping in whole phrases, selective keywords, utilizing faceted searching, etc.
  - Search strategies
- Students found all sorts of resources – scholarly articles, book chapters, newspaper articles, etc.
  - Source evaluation
- Students encountered problems – items not in full-text, broken links when trying to access full text, books already checked out, etc.
  - Persistence/Asking for help

# Take-aways

- First exercise – difference between 1<sup>st</sup> and 2<sup>nd</sup> semester first year students?
- Second exercise – you have to be a nimble facilitator
- We did a version of Think – Share. Would adding in “pair” help with wanting to share?
- Teaching the discovery system!

# Future Plans

- Amy joined the library faculty in the spring, we have now revamped and streamlined all of our ENG 1304/1310 instruction – which we should be able to teach in any classroom.
- Changes to Jones 105?



# Other Kinds of Instruction in our Active Learning Lab

Sha Towers

Interim Associate Dean of the Central Libraries & Director of Research & Engagement



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# Impacts, Partnerships, Etc.

- Academy for Teaching and Learning hosted seminar series, including session on Active Learning.
- Departmental meetings, new faculty orientations, summer faculty institute and other events.
- Campus learning spaces working group formed to identify spaces on campus for active learning classrooms. Partnership between library, registrar, facilities, departments.
- Hosting first semester-length courses featuring active learning Fall 2019. Active Learning Fellows coming in Spring 2020.

www.chronicle.com/article/Does-Redesigning-Classrooms/240491?cid=at&utm\_source=at&utm\_medium=...

Spaces in the Spotlight - FLEXspace.org active learning space - Google Search Does Redesigning Classrooms Make a Difference to Students? - The Chronicle of Higher Education

THE CHRONICLE OF HIGHER EDUCATION NEWS OPINION DATA ADVICE JOBS PREMIUM ACCESS PROVIDED BY BAYLOR UNIVERSITY LOG IN SUBSCRIBE

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## Does Redesigning Classrooms Make a Difference to Students?

By Shannon Najmabadi | JUNE 29, 2017 PREMIUM

COLLEGE PARK, MD.



John T. Consoli, U. of Maryland

The U. of Maryland at College Park's \$120-million Edward St. John Learning and Teaching Center houses a variety of innovative teaching spaces of different sizes. Glass whiteboards and screens are everywhere.

When Melissa Hayes-Gehrke set foot in a new active-learning classroom here at the University of Maryland, she says it felt like "coming home."

Ms. Hayes-Gehrke, a principal lecturer in astronomy on this flagship campus, had begun incorporating active learning into her lectures years ago, asking students to conduct group work and

But she'd taught in a trad to the floor. They all face

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“the feature . . .that seems to have the greatest impact on learning is not the expensive flat-screen monitors or other showy technology . . . it is the humble circular table.”

<https://www.chronicle.com/article/Does-Redesigning-Classrooms/240491>

# It's the last slide!

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