PIVOT

Reconfiguring information literacy instruction space to engage students

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ROAD MAP

- Research question

- Why does classroom space matter?

- Literature review

- Challenges

- Classroom spaces

- BYOD

- Action research

- Limitations

- Next steps

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RESEARCH QUESTION

• Does classroom space have an impact on student engagement in information literacy instruction sessions?
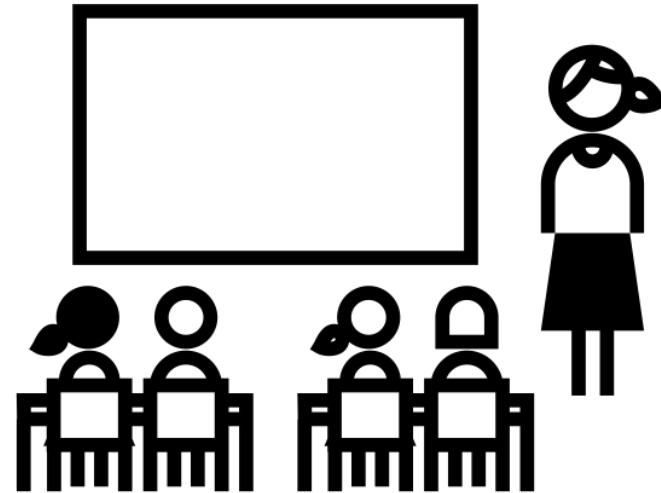
• How can we work with existing technology and classroom configurations to improve student engagement?

• How can we modify some active learning techniques so that they work well in a variety of classroom spaces?

• What is the "best" classroom to choose for IL sessions?

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MORE THAN JUST 4 WALLS…

- colours,

- textures,

- brightness,

- cleanliness,

- furniture arrangement,

- seating position, and

- sightlines

…can all impact student learning
and behaviours (Weinstein, 1981)

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CLASSROOM SPACE MATTERS

- "It is time to end the monotony. Teachers and instructional designers need to develop what Steele (1973) has referred to as "environmental competence" – the awareness of the physical environment and its impact and the ability to use or change that environment to suit one's needs. Instructional designers must explore the impact of various spatial arrangements and determine which formations will maximize the effectiveness of the designed instruction." (Weinstein, 1981, p.17)

- "Teachers are recognizing the need to replace traditional lectures with activities that engage the students in the learning experience. Class sessions where the teacher uses the time talking about IL skills and demonstrating databases seem to be less effective in engaging students than session where students practice the skills, work in teams to solve a problem, and discuss the concepts being presented. The physical aspects of a classroom make a difference in the effectiveness of the learning activities that teachers use. Social interactions between teachers, students, and peers can also be affected by the classroom configuration." (Julian, 2013, p. 69)

LITERATURE REVIEW

- Julian (2013)
  - Compared noise level in "flexible" and "traditional" classrooms

- Schiller (2008)
  - IL designers can learn from video game designers
  - Learning should be scaffolded; students should learn to fail

- Smith (2004)
  - Computer labs facilitate mimetic learning
  - Simple, single-objective tasks

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CHALLENGES

- Access to technology

- Familiarity & functionality of technology

- Planning/prep time

- Fixed or flexible classroom configuration

- Student engagement

- Faculty expectations

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INNOVATIVE CLASSROOMS

- "innovative classrooms" or "flexible classrooms" or "conversation cafes"

- furniture moves easily, can be arranged in multiple configurations

- usually rely on students supplying their own technology

COMPUTER LABS

- no set up required – configuration is fixed

- ensures every student has access to technology

- tech problems are reduced as each student is using the same platform

- are not as conducive to group work or small class discussions

- impede sight lines

CLASSROOMS

TRADITIONAL

- usually can be reconfigured for lecture or tutorial style classes

- often rely on students supplying their own technology

- can be the most comfortable environment if it's seen as the "regular classroom"

HYBRID

- computer labs with improved sightlines and collaboration space

- usually some flexibility with configuration

- students can choose to use lab computers or their own devices

BYOD: BRING YOUR OWN DEVICE

- 2 classes, 39 respondents

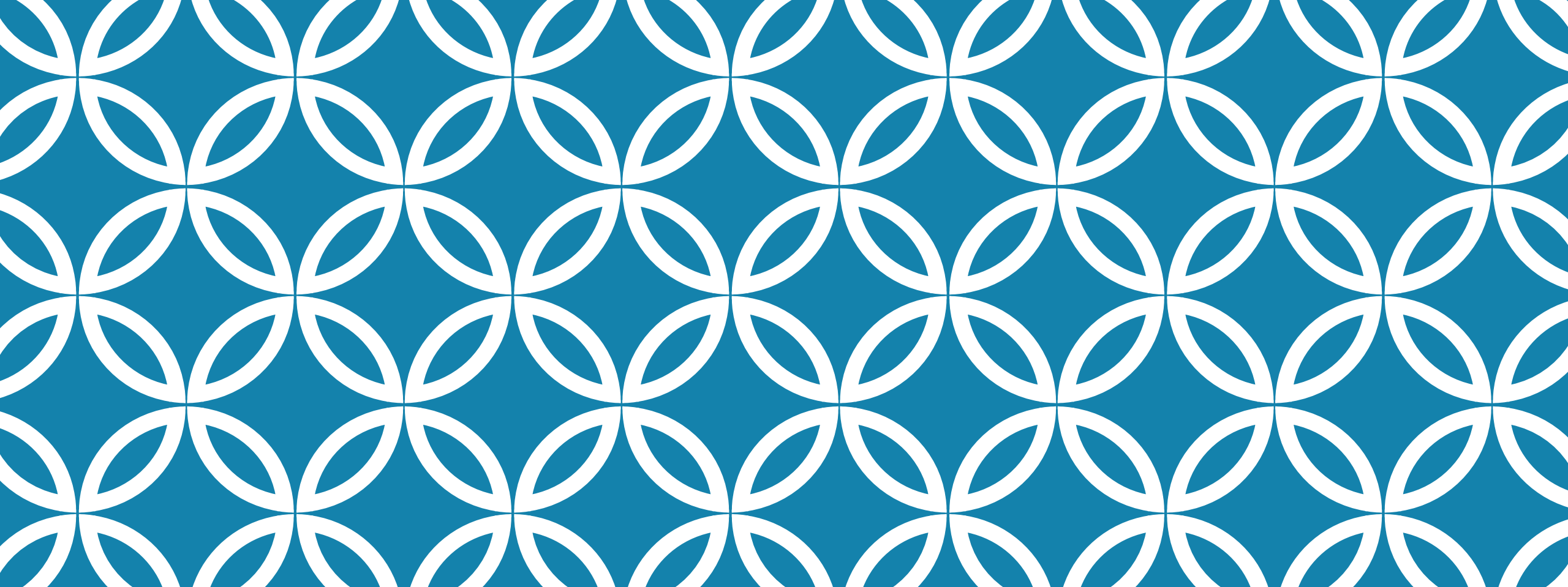| Circle the statement you agree with most strongly:	Respondents	Percentage
"I prefer attending workshops in my regular classroom (bringing my own device)"	25	64%
"I prefer attending workshops in computer labs (using lab computers)"	9	23%
No preference	5	13%
Total	39	100%

ENGAGEMENT STRATEGIES

- Simple, single objective tasks (Smith, 2004)

- "scavenger" or "treasure" hunts

- think – pair – share

- discuss, discuss, discuss

Examples:

- Can you locate this source?

Pollard, D., DeConto, R. M., & Alley, R. B. (2015). Potential Antarctic Ice Sheet retreat driven by hydrofracturing and ice cliff failure. Earth and Planetary Science Letters, 412, 112-121. doi:10.1016/j.epsl.2014.12.035

- 60 seconds to find "Environment Complete"

- "Try and limit to peer review only"

- "Show your neighbour" or "share with your group"

ACTION RESEARCH

3 classrooms

3 classes

1 set of instruction material

STUDENT ENGAGEMENT

- Questionnaire was optional; link posted on final slide

- Response potentially indicates, to some extent, student engagement

	Traditional classroom	Computer lab	Hybrid classroom	Overall total
Total students	18	14	9	41
Respondents	10	5	8	23
Response rate	55.5%	35.7%	88.8%	56%

LEARNED SOMETHING NEW

- To what extent do you agree with the following statements?

"I learned at least one new thing"	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Traditional classroom	9	1			
Computer lab	4		1		
Hybrid classroom	7	1			
Overall total	20 (86.9%)	2 (8.7%)	1 (4.3%)		

COMMENTS

- **Traditional classroom:**

"boring workshop but great information"

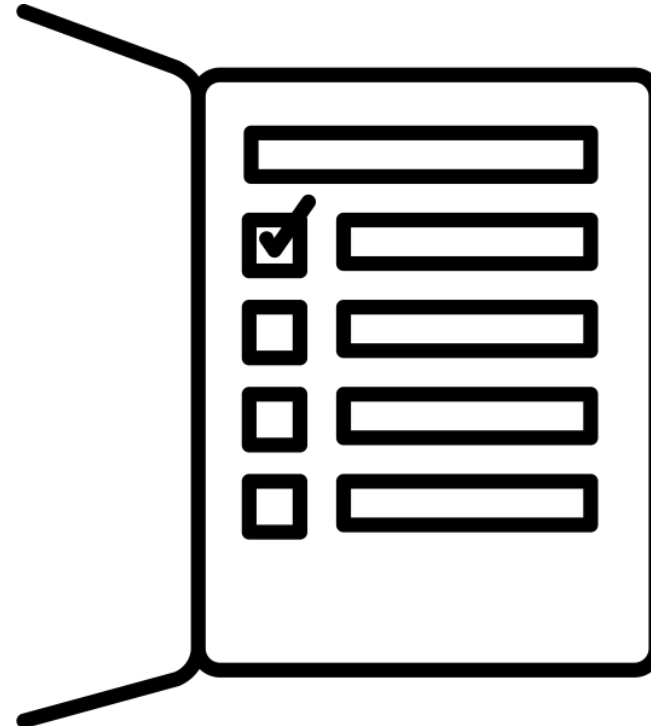"can we have the powerpoint emailed to us?"

- **Hybrid classroom:**

"that was very comprehensive, and super informative. Like, super. Thank you so much I loved sitting through such a breadth of information sharing."

"That was a good session and I appreciate the supportive nature; I hope many other students benefit from this program."

FINAL THOUGHTS

- Keep the lights on

- Be the "coach" not the teacher – walk around the room, check in with each student individually if possible

- Get feedback – through questionnaires, show of hands, observation

Created by Ainsley Wagoner from Noun Project

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REFERENCES

Julian, S. (2013). Reinventing classroom space to re-energise information literacy instruction. *Journal of Information Literacy, 7*(1), 69–82. http://doi.org/http://dx.doi.org/10.11645/7.1.1720

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Smith, S. A. (2004). Designing Collaborative Learning Experiences for Library Computer Classrooms. *College & Undergraduate Libraries, 11*(2), 65–83. http://doi.org/10.1300/J106v11n02_06

Weinstein, C. S. (1981). Classroom Design as an External Condition for Learning. *Educational Technology, 21*(8), 12–19.

For further reading, see https://www.zotero.org/groups/pivot

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Train Tracks by Felipe Perucho
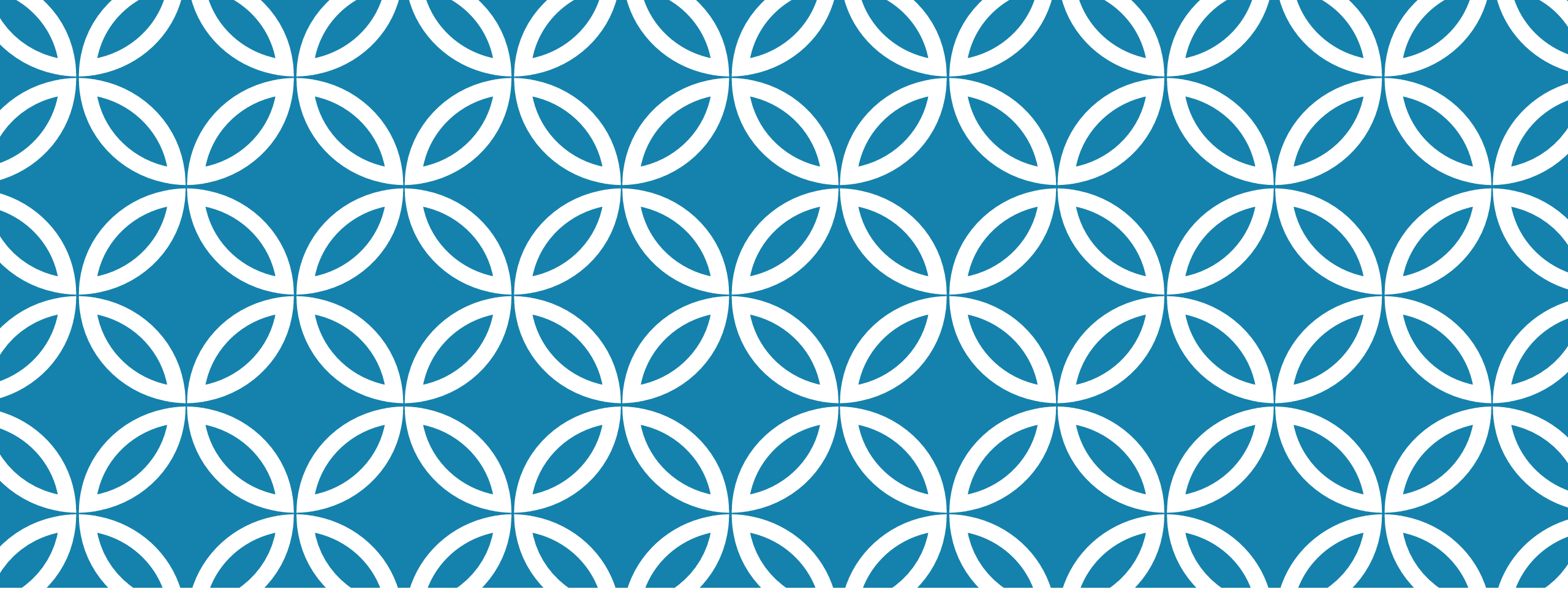
Microscope by João Proença

Classroom by Piotrek Chuchla

Stack Of Books by misirlou

Confused by Cedric Villain

Check-List by Ainsley Wagoner

Shake by Catherine Please

THANK YOU

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