Evidence of Impact

John Thurm - https://flic.kr/p/5cmQ3m

Impact?

hackNY.org - https://flic.kr/p/bv1dUj

Small Groups

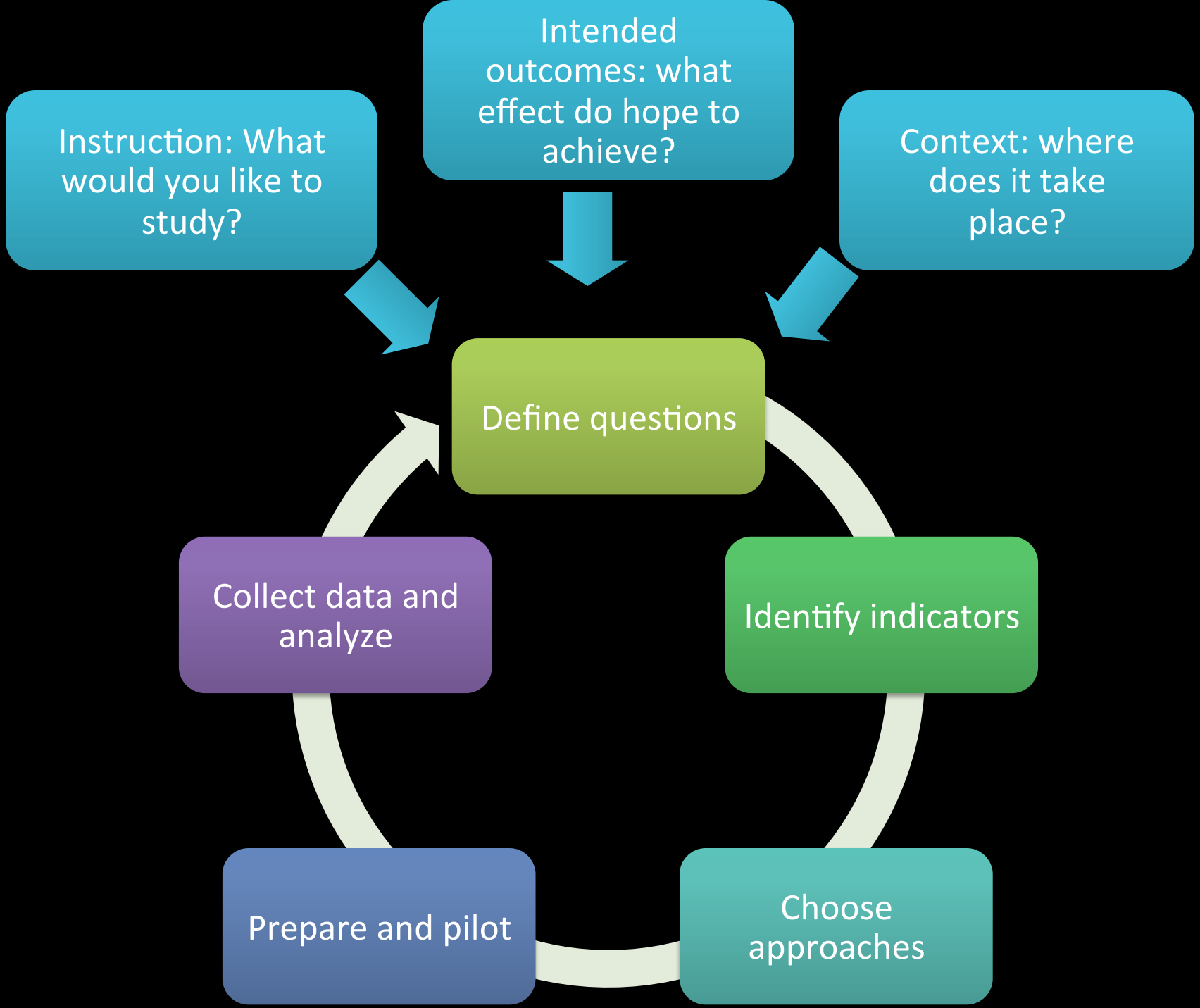
10 min.

- What instructional elements are involved in "flipping" in your article?
- What is the author exploring? [What is the impact of ____ on ____?]

10 min.

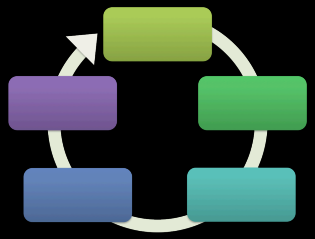
- What does the author do to measure/ explore the impact?
- What advantages/disadvantages do you see in the study design?

What might you use from this article to inform your study design or your study more broadly?


Intended outcomes: what effect do hope to achieve?
Instruction: What would you like to study?
Context: where does it take place?
Define questions
Identify indicators
Choose approaches
Prepare and pilot
Collect data and analyze

Focus

Define Questions



What are you doing in class that you would like to study?

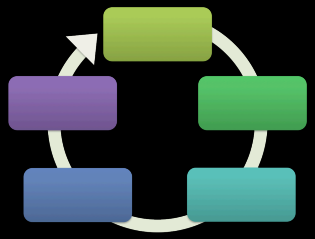
Be specific & identify ALL the elements involved.

Example

- Flip lectures
  - Flip lectures using video
    - Flip lectures using short videos as pre-readings
      - Flip lectures using short videos as pre-reading, followed by group activities in class.

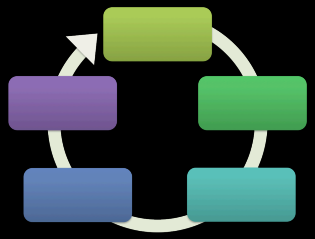
Indicators

Indicators & Success



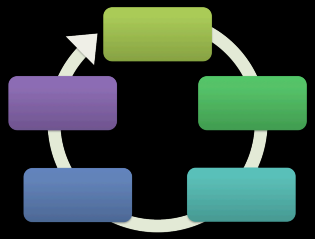
Intended Outcomes	Indicators	What constitutes "success"?
Increased class participation	Number of students completing worksheets	Increase of at least 20%
Improved student learning	Performance on quizzes	Significant difference (+) compared to control group (non-flipped section)
Changed (+) perception of subject	Response to survey question "Has this course changed how you feel about X? If so, how?"	More students respond positive than neutral or negative.

Approaches (Quantitative)



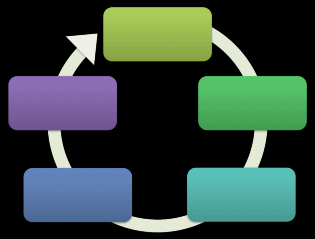
Approach	Description	Useful to answer…
Diagnostics & assessments	A test of knowledge, often using well-established tools	• Do students perform better, compared to pre / control? • Portion of students to show misconception Y.
Structural observations	Observing classes using rubrics or other tools	• What portion of students is on task? • How much time is devoted to clickers?
System log data	Post-hoc analysis of existing data	• Portion of students to access online materials. • Identifying self-explanations in forum posts.
Surveys	A collection of questions to collect self-reports	• Did students find the new tool beneficial? • How much time devoted for homework?

Approaches (Qualitative)



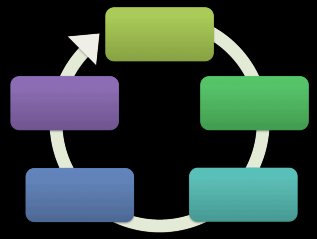
Approach	Description	Useful to answer…
Contextual observations	Observe students, instructors, or TAs, as they complete the task	• How do students use the online tool? • What self-regulated learning strategies do learners use when working with a simulation?
Interviews, focus groups	Talk to students about their experiences, ask them to think aloud	• Where do students struggle in this problem? • What are the perceived benefits of tool X? • What do students think about the course?
Case studies	Document a group over time	• How does the use of tool X change over time? • What are the relationships between this course and other courses, activities? • What are the long term effect and the impact on students' behaviours?

Students/Support Staff	Just Starting	In Process
How have you supported evaluation of impact in the past? What skillsets do you have that might be valuable? What instructional elements do you feel haven't been well evaluated in the past? How might their be evaluation be improved? What opportunities for evaluation exist in courses you're currently supporting?	What is it that you actually do in your class? Explain what you want study the impact of and on what. How do you think you might do that? What challenges do you anticipate? What additional support do you anticipate needing?	Partner with someone and discuss your ideas or what you've done. If you have a specific question or area you'd like feedback on, please include that. What additional support do you anticipate needing?



What are your next steps and what support do you anticipate needing to accomplish this?

Resources



- Educational Research Series
  - Action Research, October 22 1:00-2:30
- Faculty specific support units
- Ido Roll – Senior Manager, Research & Evaluation, CTLT (ido.roll@ubc.ca)
- FL Projects
  - Adriana Briseno-Garzon – Flexible Learning Evaluation Coordinator, CTLT (adriana.briseno@ubc.ca)
  - Maryam Nabavi – VP Students Office (maryam.nabavi@ubc.ca)
- Funding
  - TLEF
  - SoTL Seed Fund