



Cultivating Graduate-Level  
Assessment Skills Through an  
*A+ Inquiry* Thesis Alternative

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# Presenters



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# Learning Goals

-  Identify stages of the *A+ Inquiry* framework
-  Identify guiding questions relevant to each stage of the *A+ Inquiry* framework
-  Describe how *A+ Inquiry* stages align with postsecondary assessment frameworks
-  Describe how the *A+ Inquiry* stages align with common sections in a thesis paper
-  Describe requirements for completing a Master's level *A+ Inquiry* capstone course

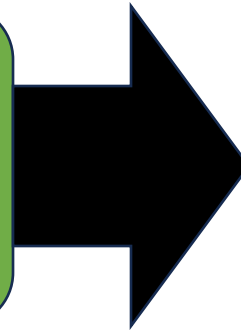


*"Tell me and I forget. Teach me and I remember. Involve me and I learn."*

*Benjamin Franklin*

*A+ Inquiry*  
Capstone  
Course

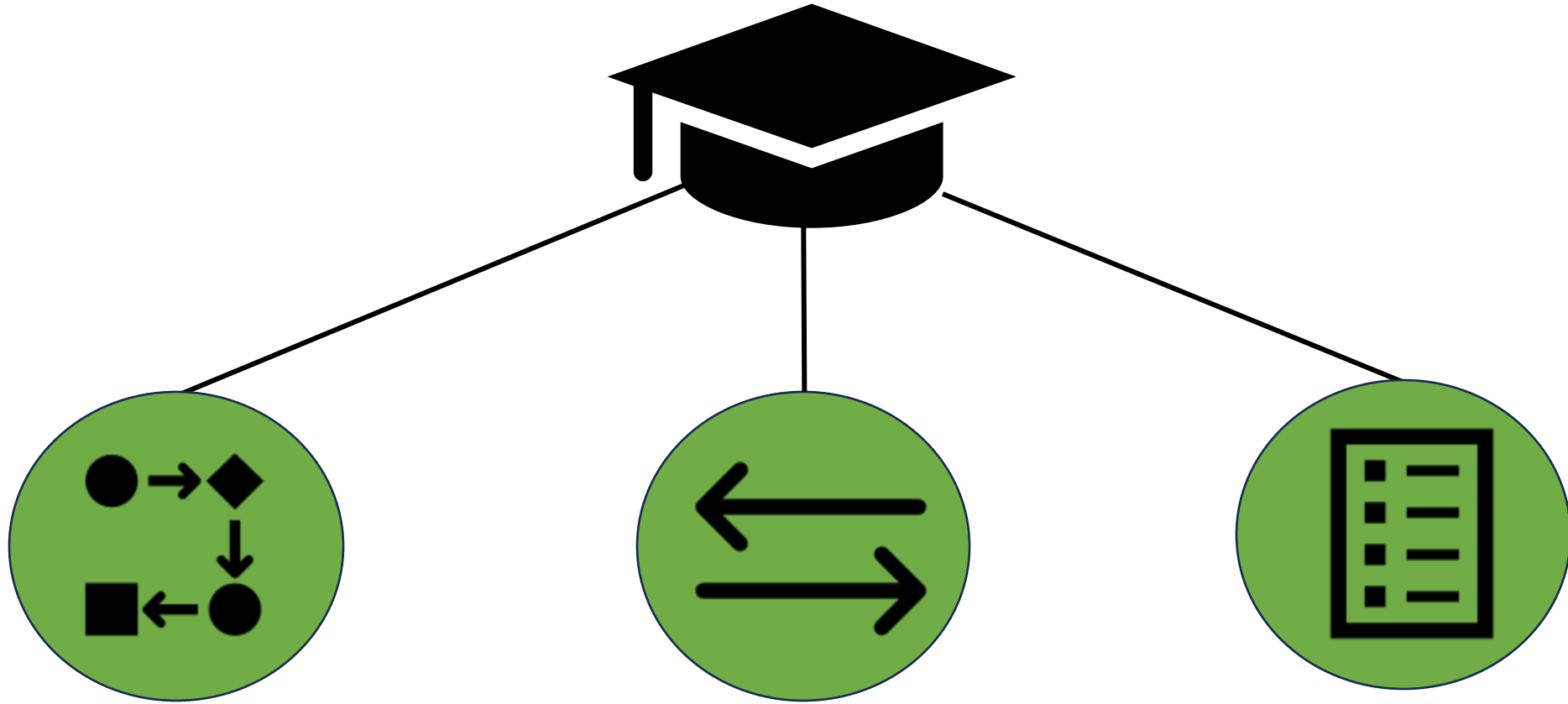
Develop Transferrable  
Disciplined Inquiry  
Knowledge and Skills



Higher Education  
Assessment



# Why *A+* Inquiry?



# Zahl et al. (2023)

- "...the culminating evaluation for many graduate programs has faced the most scrutiny and scholars have called for a replacement that includes more authentic measures of student learning. This is particularly true of the dissertation" (p. 143).
- "The capstone project...is another alternative to a dissertation. These projects are associated with higher levels of student learning because of the applied learning in real-world practice" (p. 144).
- "At their core, these authentic assessment projects require the application of content knowledge and skills within real world-settings to demonstrate competence and mastery of learning within a specific field" (p. 145).



# *A+ Inquiry's Purpose*

Synthesize common stages of disciplined inquiry processes  
(e.g., assessment, evaluation, research)

Identify a need  
for more  
information

Formulate  
questions to  
guide a study

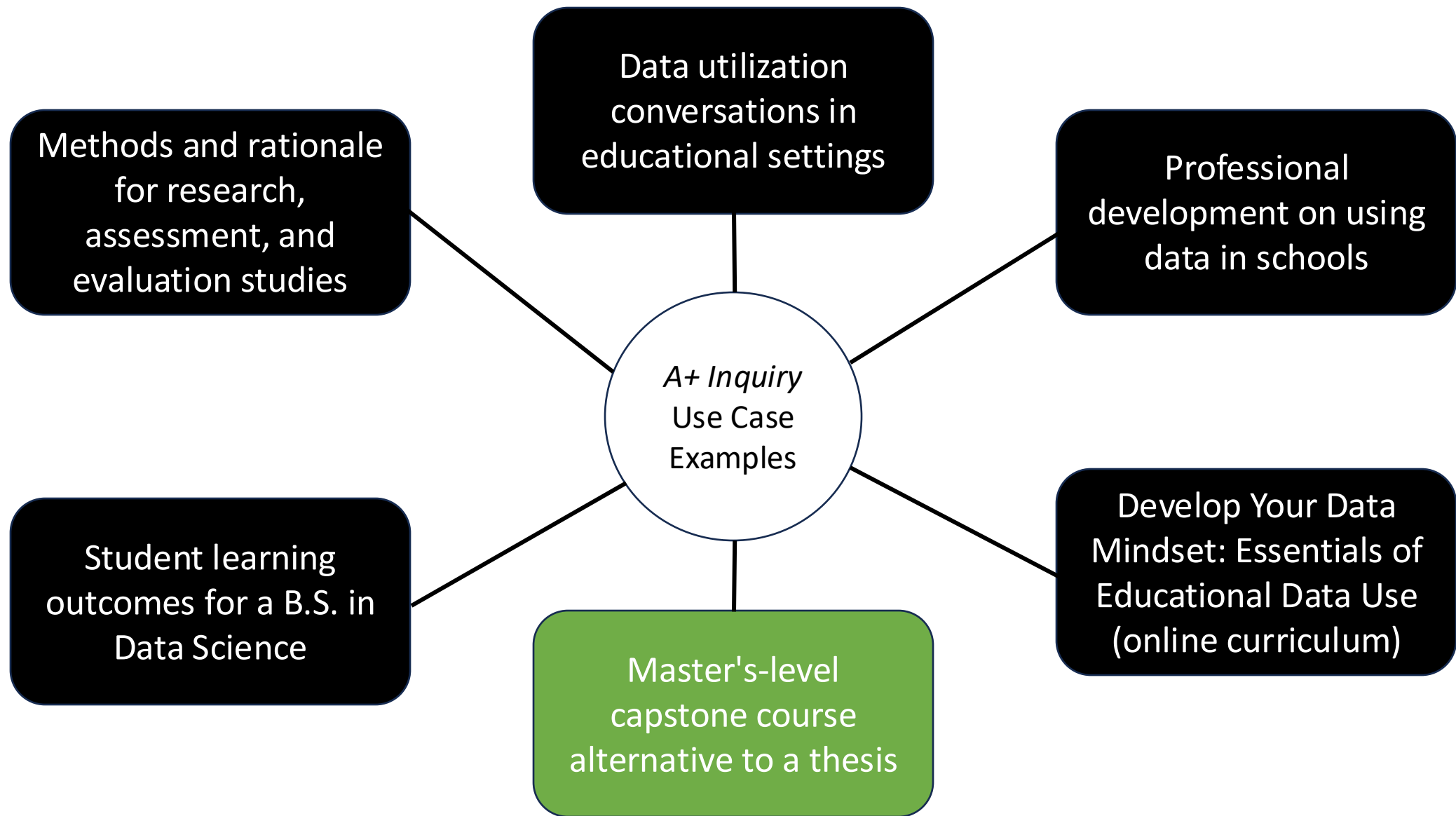
Collect data

Analyze data

Share results  
with  
stakeholders

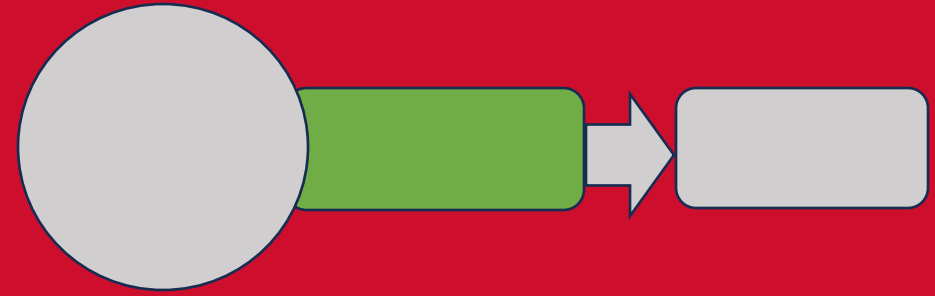
Use results to  
inform  
decisions







# Develop Transferrable Disciplined Inquiry Knowledge and Skills

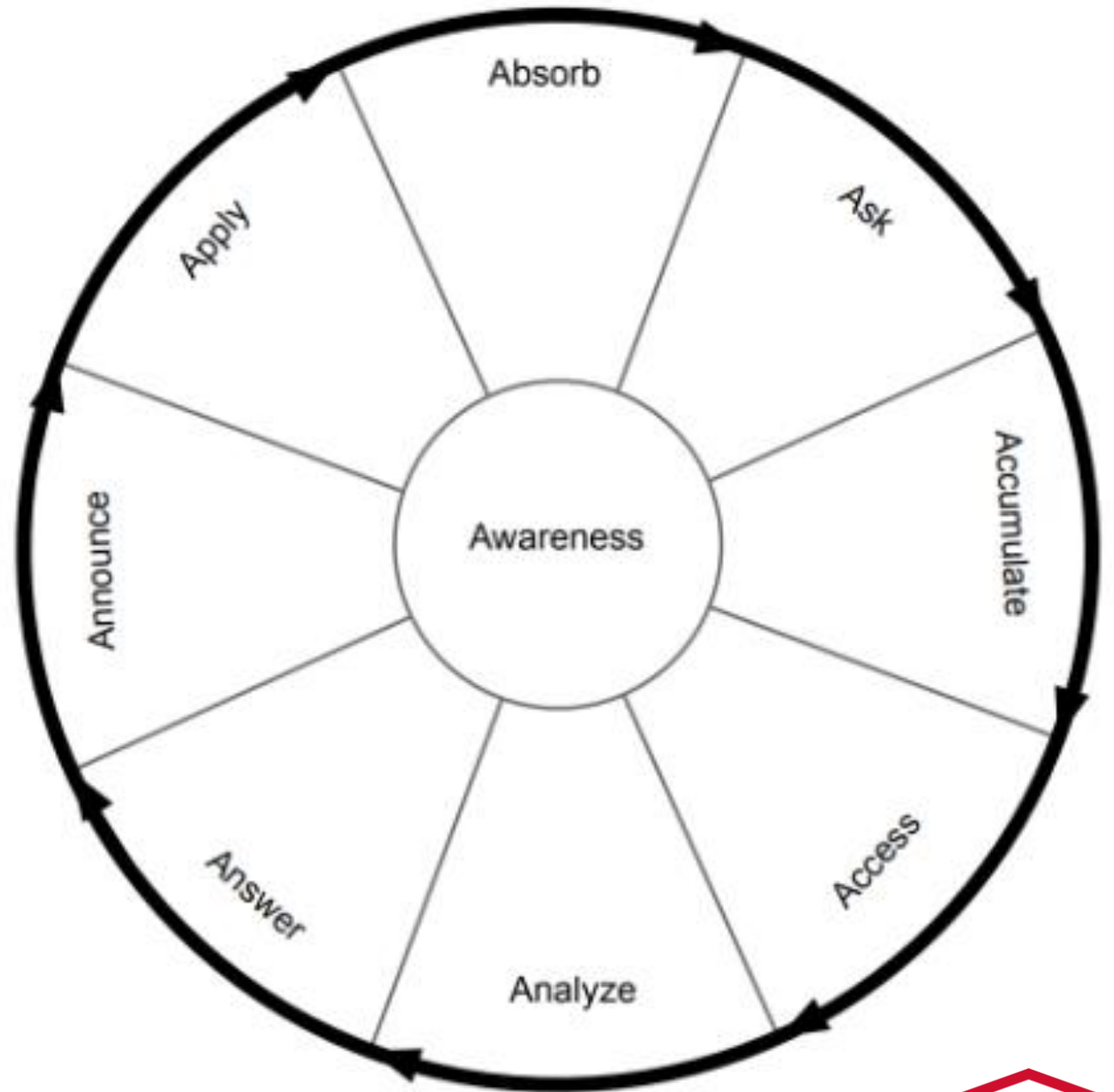


»»» Identify stages of the *A+ Inquiry* framework

»»» Identify guiding questions relevant to each stage of the *A+ Inquiry* framework

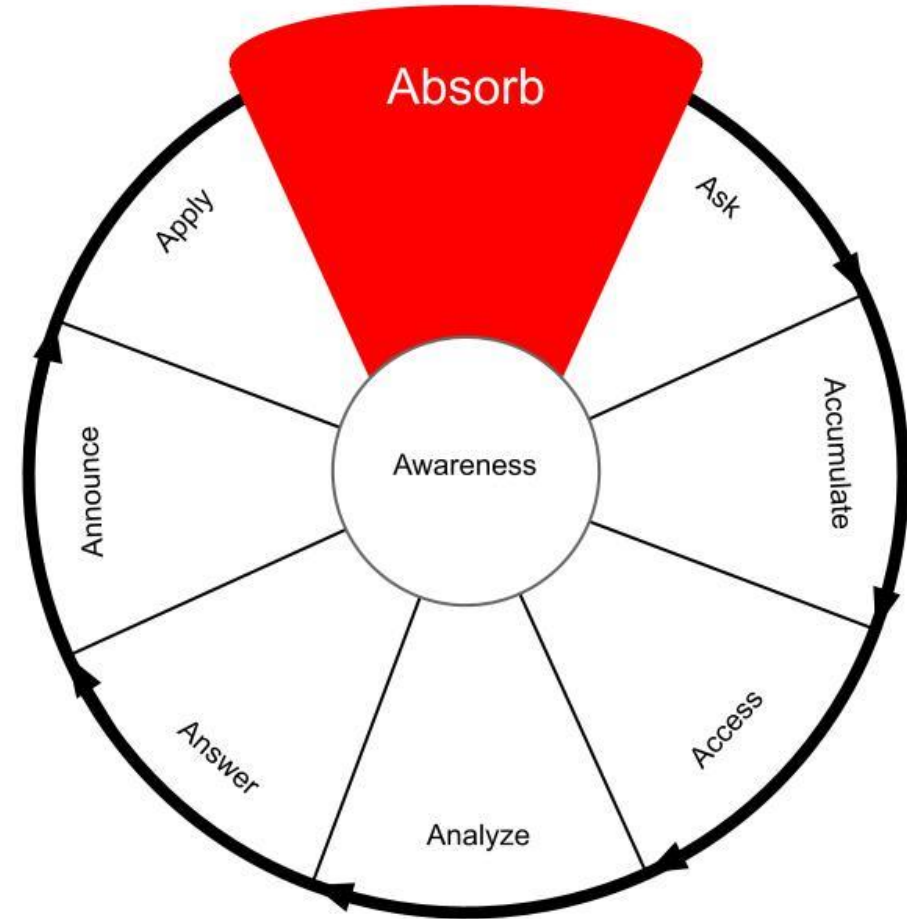


*A+ Inquiry*



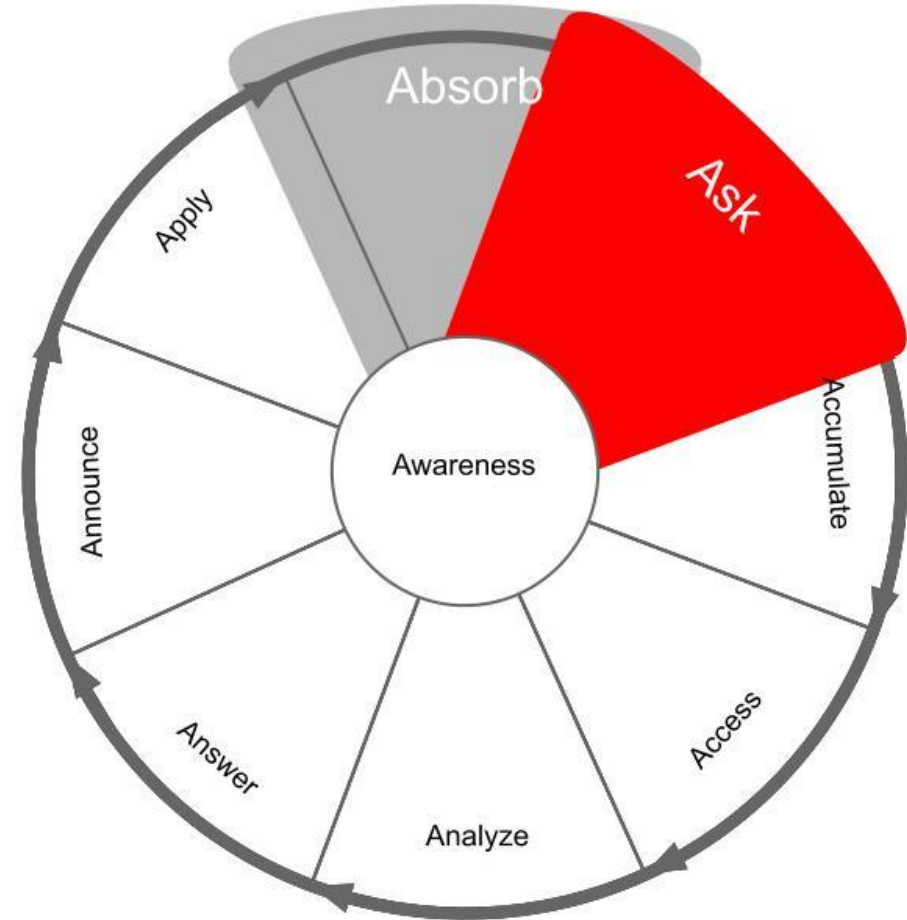
# Absorb

- > What is already known about the context?
- > What is the knowledge gap that needs to be filled?
- > Why is it important to fill the knowledge gap?



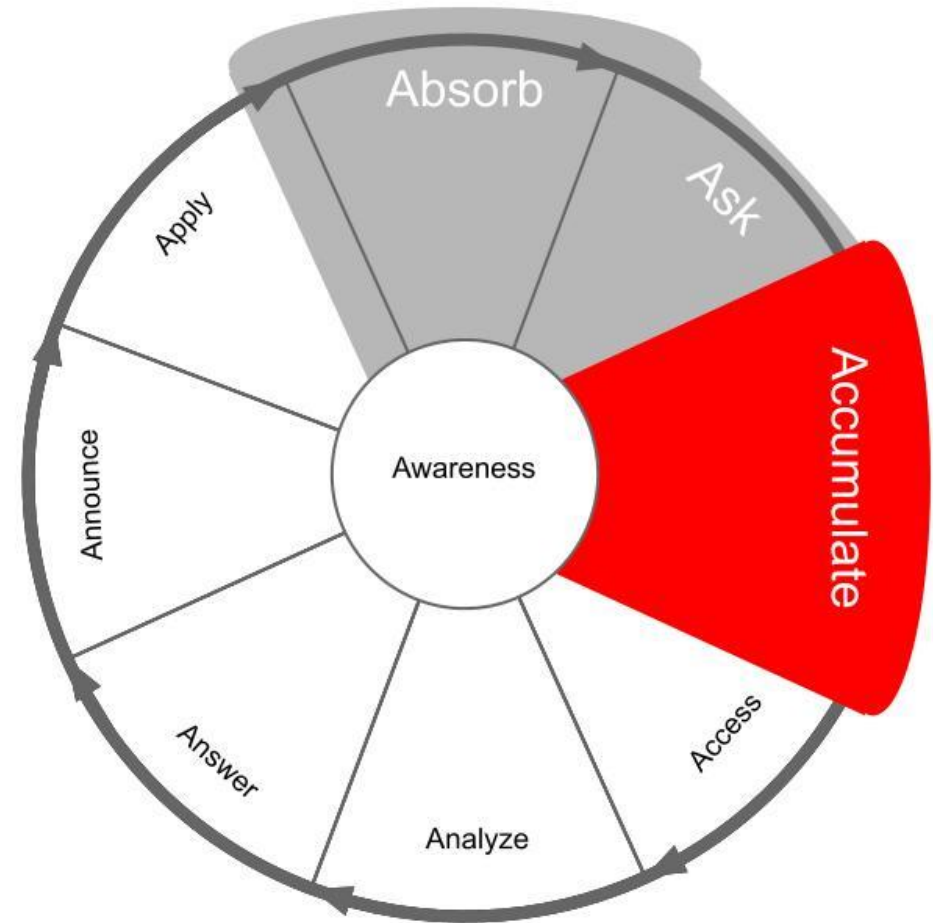
# Ask

- > What questions, if answered, could be formulated to help fill the knowledge gap?



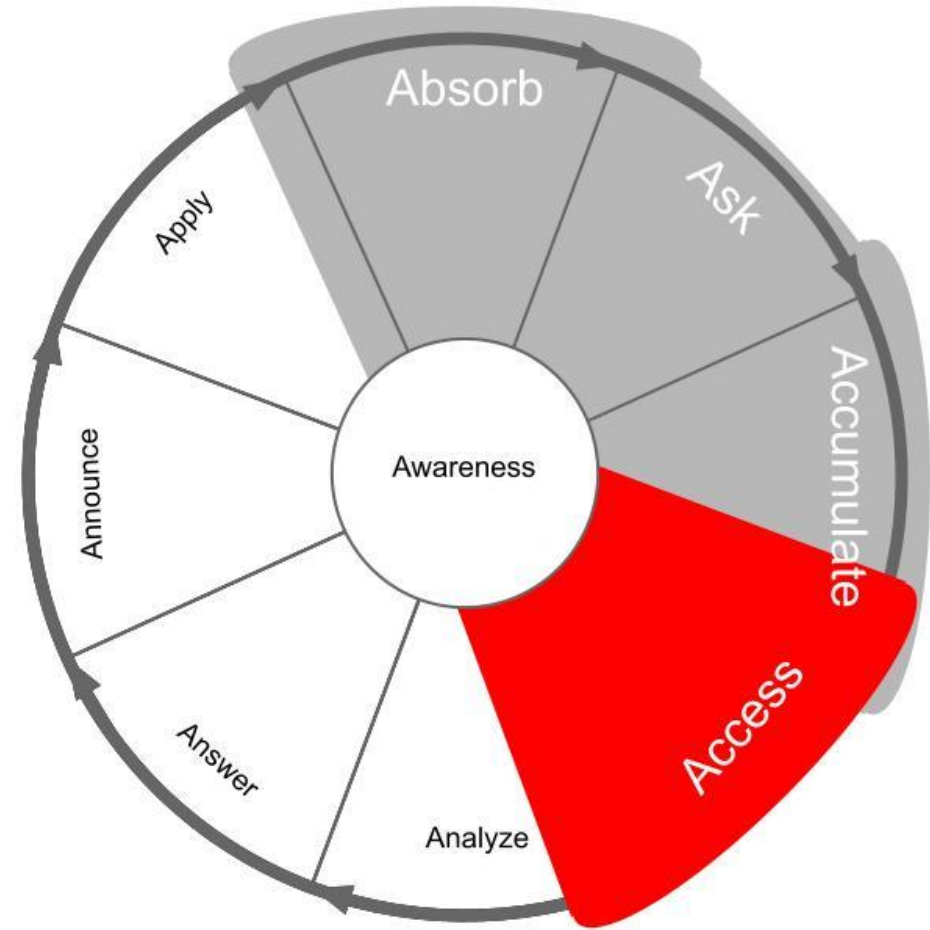
# Accumulate

- > What data are required?
- > Do the data need to be collected or have they already been collected?
- > What is the setting?
- > What instrument is utilized?
- > What is the collection procedure?



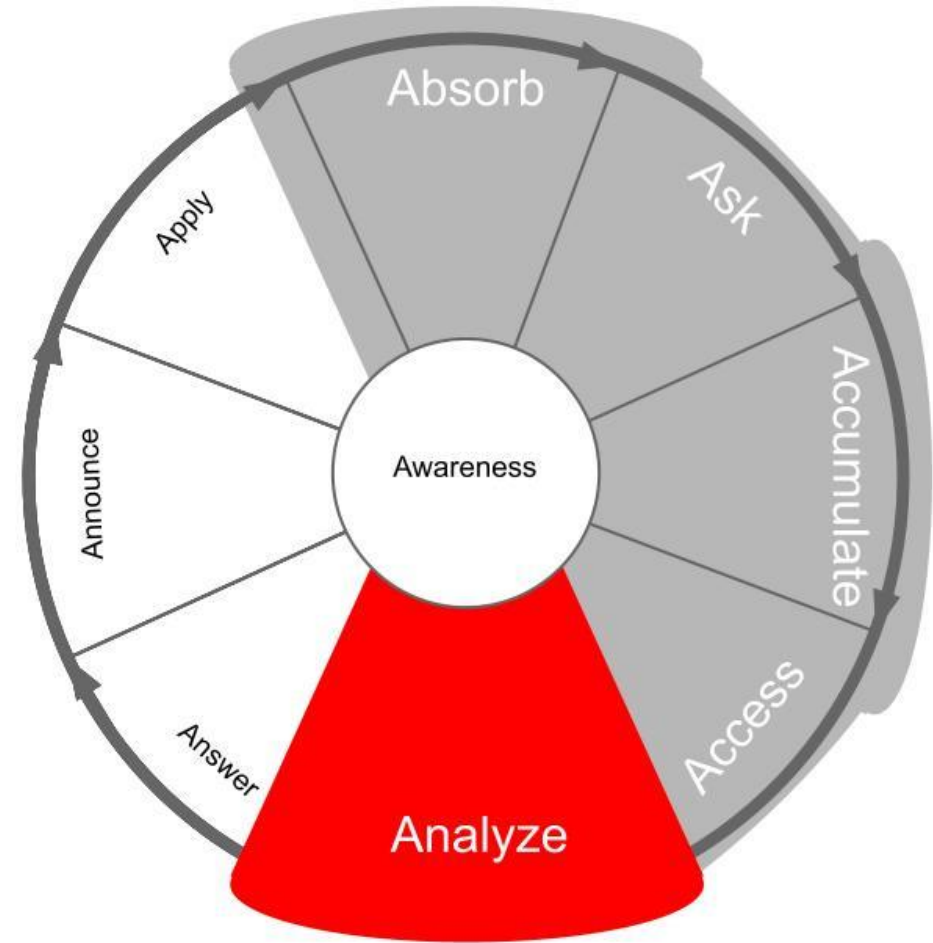
# Access

- > Where are the data retrieved from after they have been collected in the Accumulate stage?
- > What is the procedure for retrieving the data in preparation for analysis?



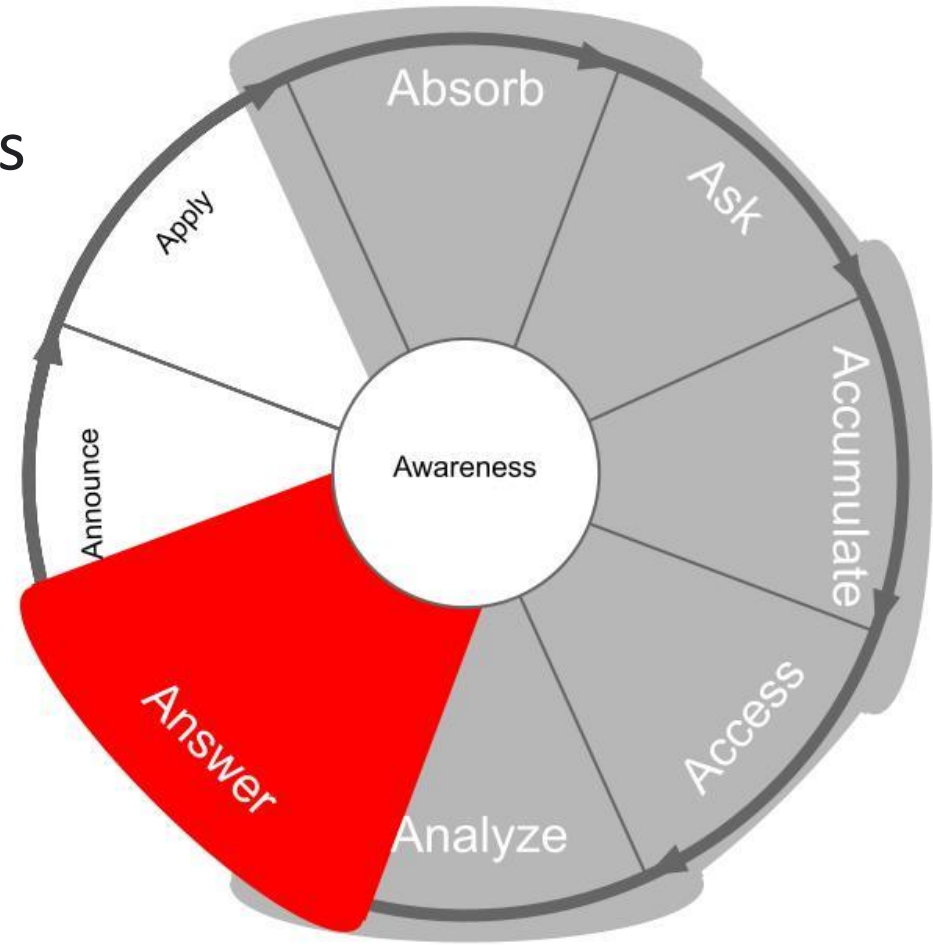
# Analyze

- > What quantitative and/or qualitative data analysis methods are implemented?
- > What tools are required to analyze the data?



# Answer

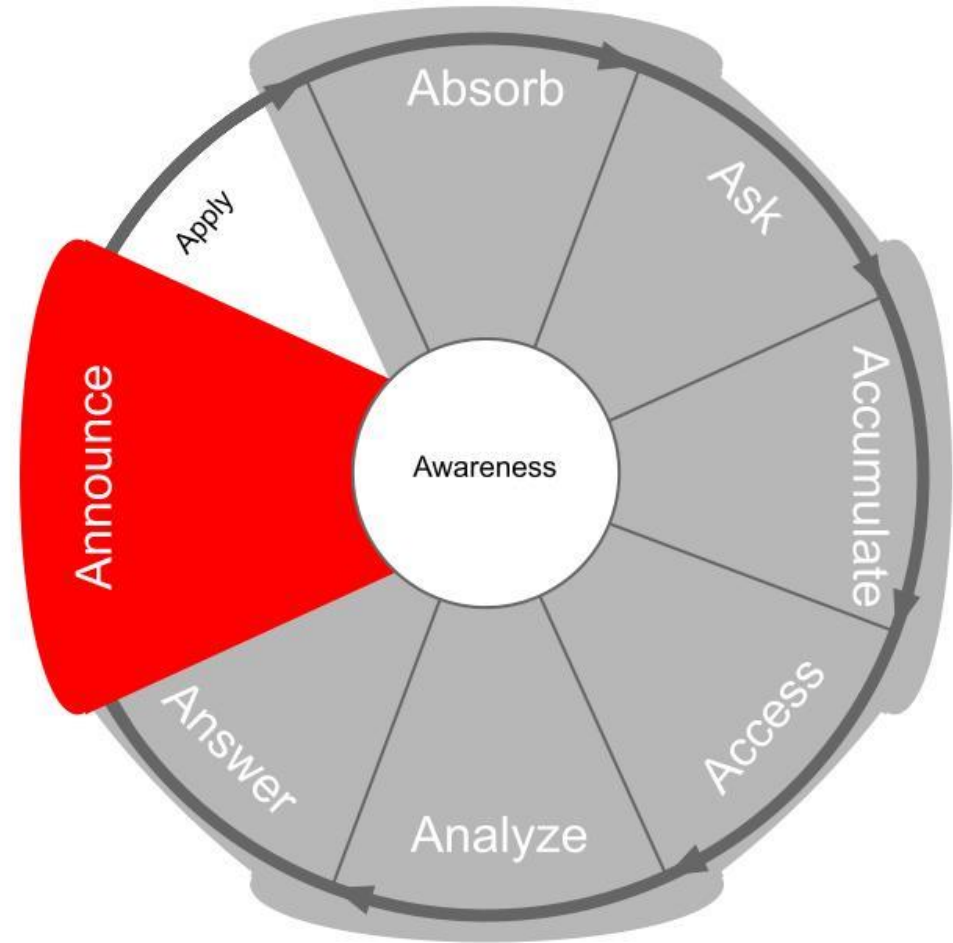
- > What are the answers to the questions that were posed in the Ask stage?
- > How do the answers relate to what was already known about the context?
- > What are limitations of the answers?
- > What are implications of the answers?





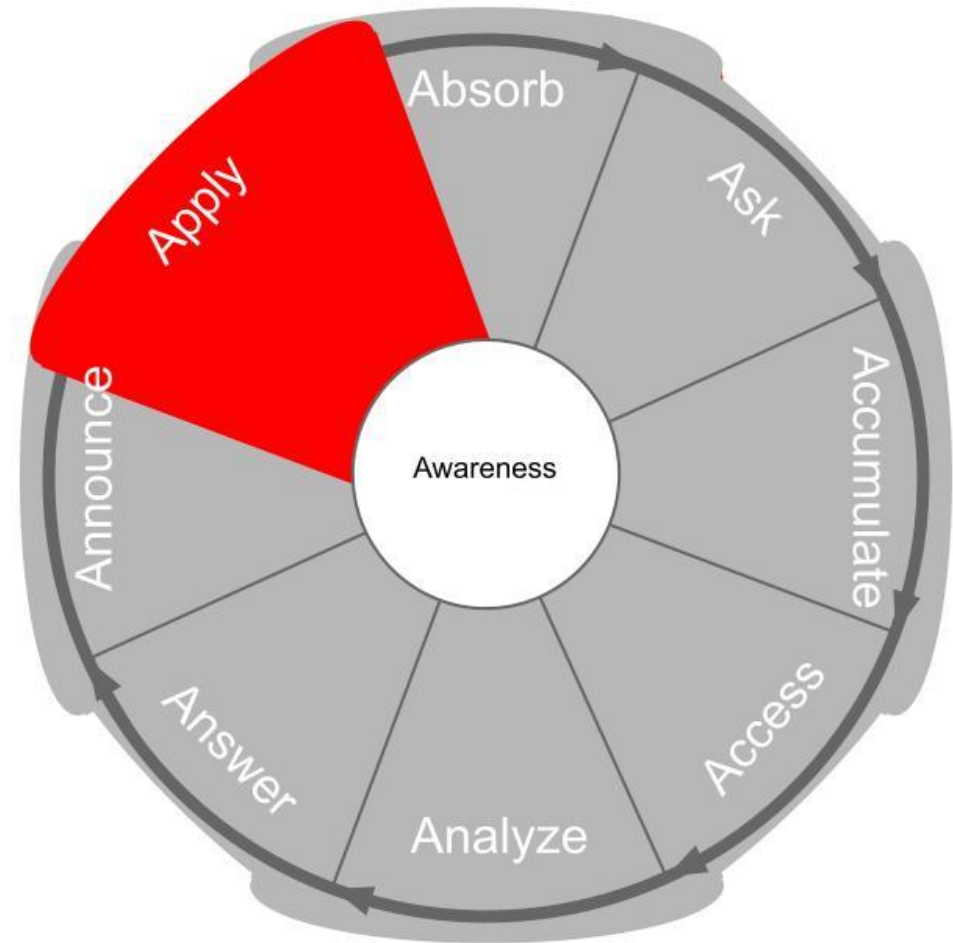
# Announce

- > Which stakeholders may benefit by being informed about the results?
- > Which answers, limitations, and implications are important to communicate to each stakeholder?
- > What is the procedure for disseminating the results to, and/or discussing the results with, the stakeholders?



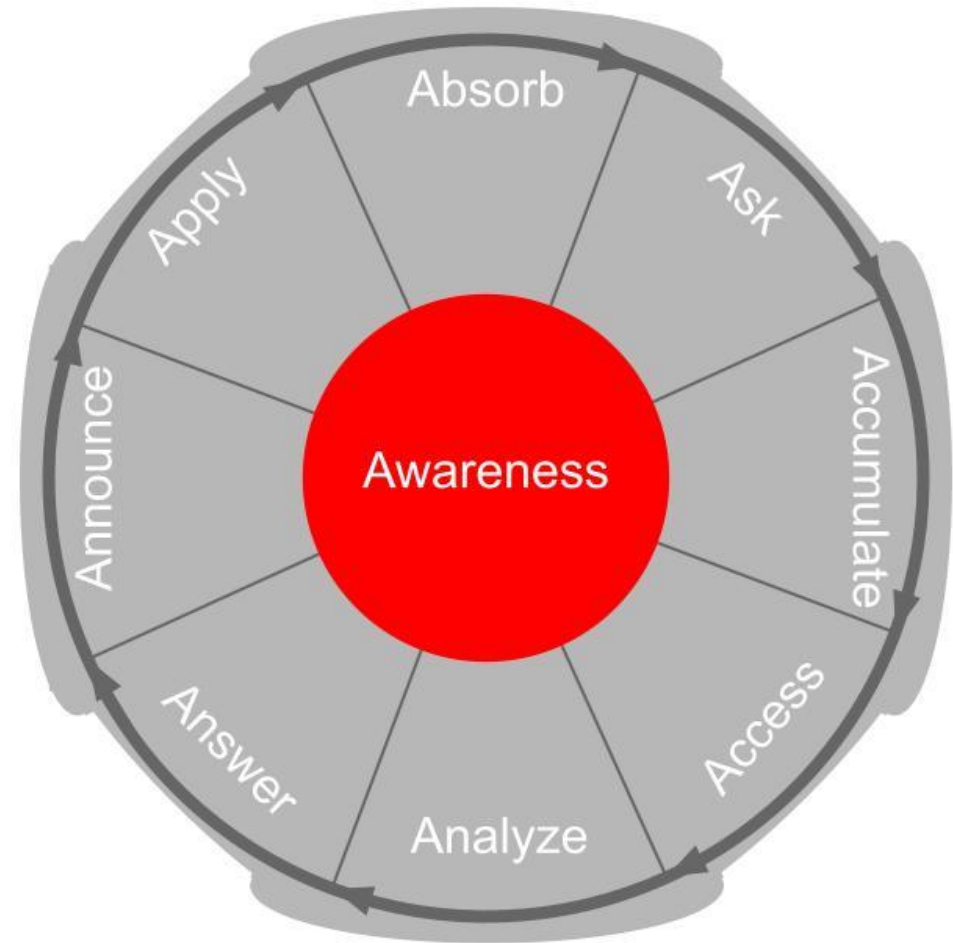
# Apply

- > What decisions or actions are informed by the results that were revealed in the Answer stage?
- > Why are the decisions or actions important to implement?
- > What cautions are considered when making decisions or taking actions based on the results?



# Awareness

> Are you attentive to how a task that you are performing in one stage aligns with the other stages?

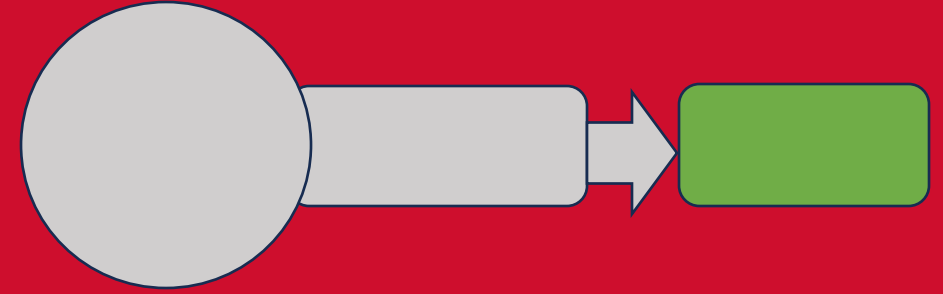


# Activity – Turn and Talk

- > Which stages of the *A+ Inquiry* framework do you tend to implement in your work?
- > What are examples of other assessment, evaluation, or research frameworks that have similar stages?



# Implement *A+ Inquiry* in Higher Education Assessment



- » Describe how *A+ Inquiry* stages align with postsecondary assessment frameworks



# Assessment Framework Alignment

**Academic  
Assessment  
Cycle**

Gustafson et al.  
(2014)

**Elements of  
Good  
Assessment**

Pike  
(2002)

**Research Cycle**

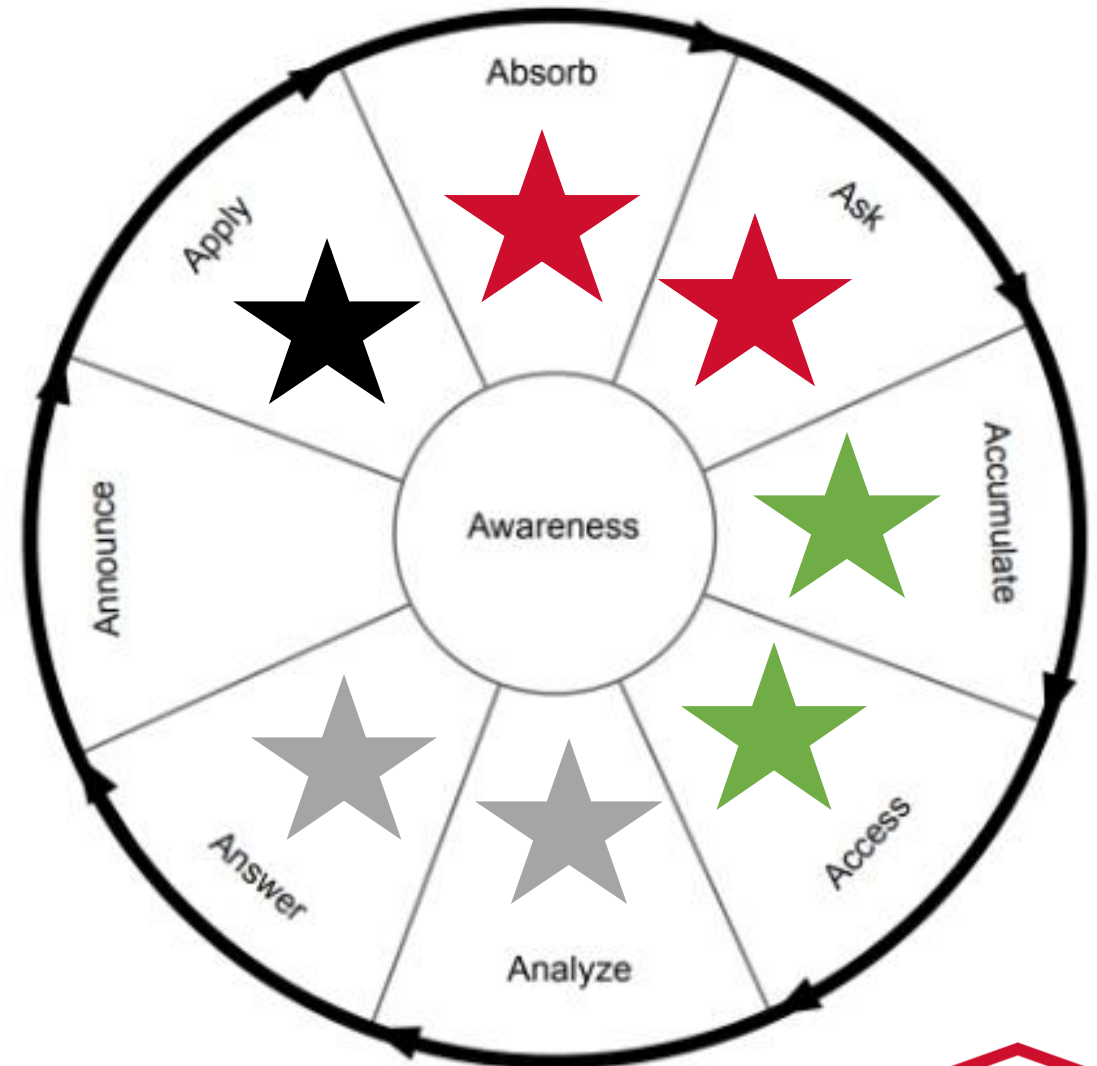
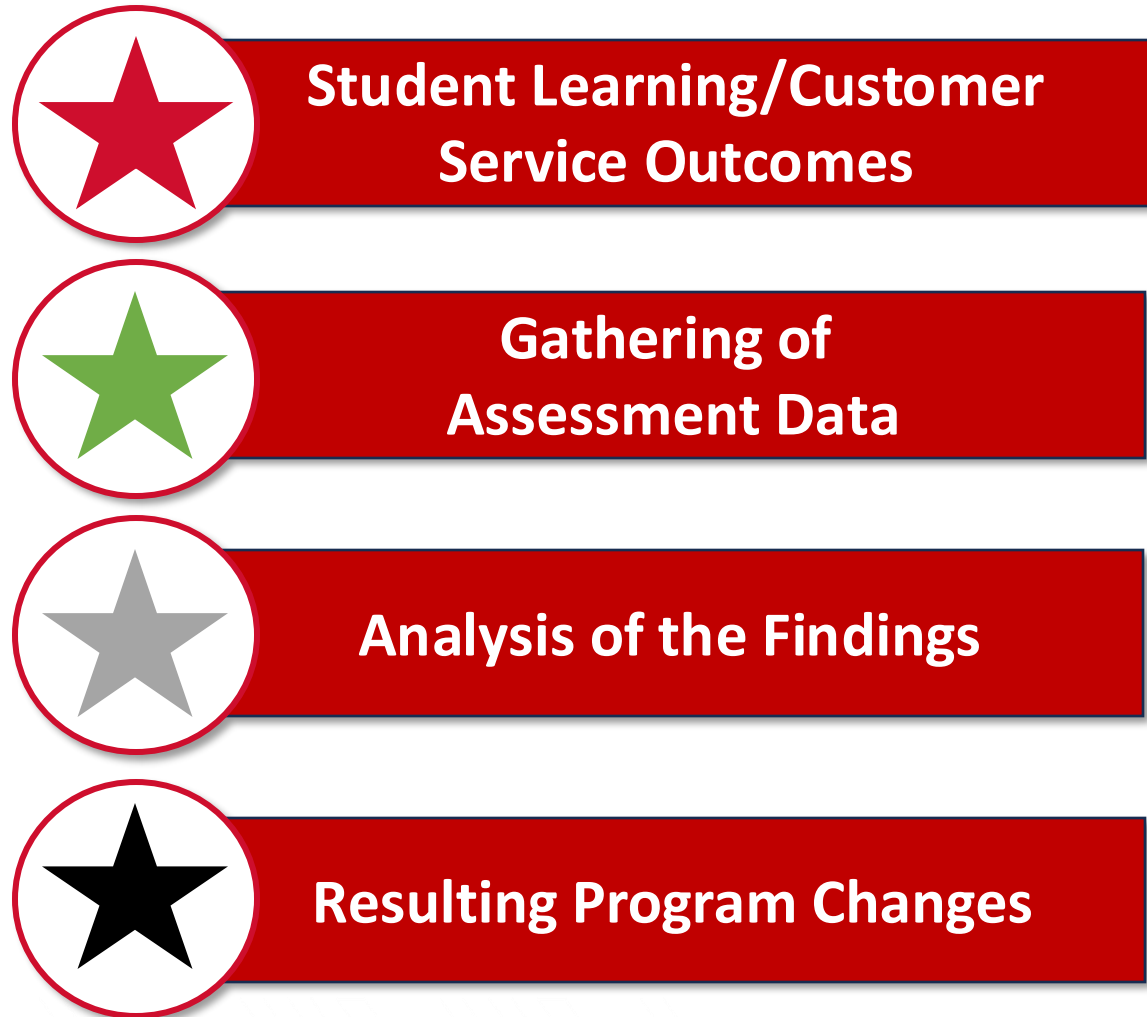
Shermis and  
Daniels's  
(1991)

**Assessment  
Skills  
Framework**

Horst and  
Prendergast's  
(2020)



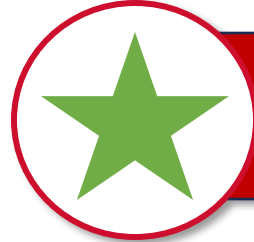
# Gustafson et al. (2014)



# Pike (2002)



**Asking Good Questions**



**Selecting Representative  
Participants**



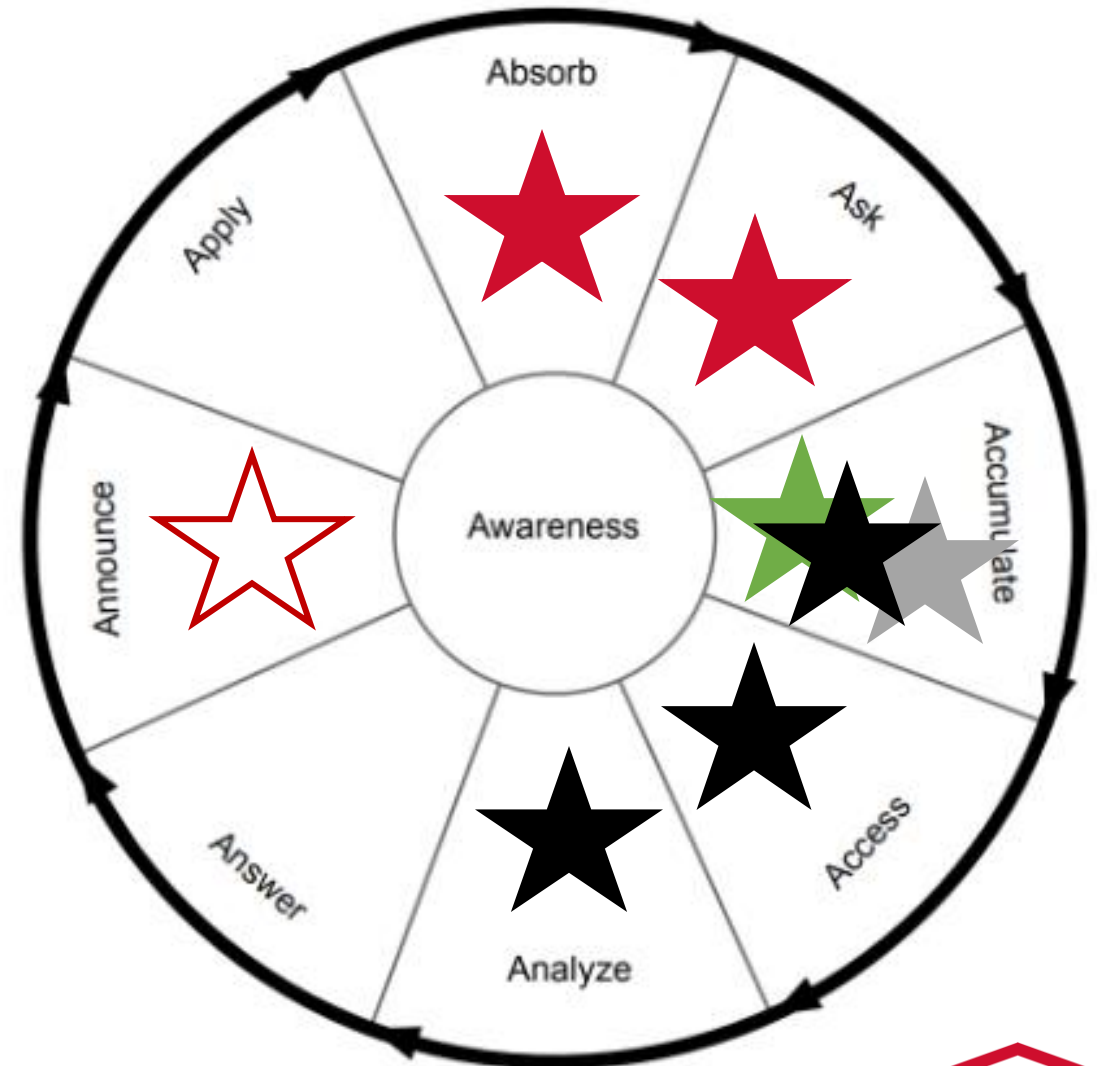
**Using Appropriate Measures**



**Identifying Appropriate  
Methods**



**Communicating Results**





# Shermis and Daniels's (2002)

1. State the general issue or problem (Absorb)
2. Find out what others have learned (Absorb)
  - a. Define the target population (Accumulate)
3. Specify the objectives/hypotheses (Absorb, Ask)
  - a. Specify sample design (Accumulate)
4. Define the operational plan and specify variables (Accumulate)
  - a. Implement the sample selection procedures (Accumulate)
5. Data collection strategies (Accumulate)
6. Data analysis preparation (Access, Analyze)
7. Analyze data and interpret results (Analyze, Answer)
8. Prepare reports, presentations, press release (Answer, Announce)
9. Disseminate and help others use results (Announce, Apply)



# Horst and Prendergast's (2020)

- Prerequisite knowledge (Awareness)
- Foundational assessment knowledge and skills (Awareness)
- 1. Specify student learning outcomes (Absorb)
- 2. Create and map programming to outcomes (Absorb)
- 3. Select and design instruments (Accumulate)
- 4. Examine implementation fidelity (Awareness)
- 5. Collect outcomes information (Accumulate)
- 6. Analyze data, interpret and report results & maintain information (Analyze, Answer, Announce)
- 7. Use results to improve student learning (Apply)
- 8. Assessment in practice – additional skills for assessment (Awareness)



# Cicchino et al. (2023)

1. Learning is designed based on student learning objectives or outcomes  
(Apply --> Absorb)
2. In the context of redesigned learning, students demonstrate knowledge and skills by creating assessable artifacts (Accumulate)
3. Standards and evaluation tools are created to evaluate these artifacts and those tools are normed across reviewers (Accumulate)
4. Student achievement of the learning objectives is evaluated (Accumulate)
5. Assessment data is analyzed (Analyze)
6. Interventions (adjustments to design and delivery of learning activities) are planned and implemented (Apply)



# Activity

## > Sample Scenario - Program Outcome Assessment

Students in Dr. Datta's INQ 490 course write a capstone paper with an instrument section relevant to quantitative data collection. Dr. Datta scores the instrument section of each student's paper on a 4-point scale using the Disciplined Inquiry Capstone Project Rubric. A score of 3 or above represents success. Dr. Datta submits a score for each student in an online form. The scores are automatically compiled in a spreadsheet upon submission. \*

- ☐ Absorb
- ☐ Ask
- ☐ Accumulate
- ☐ Access
- ☐ Analyze
- ☐ Answer
- ☐ Announce
- ☐ Apply
- ☐ Awareness



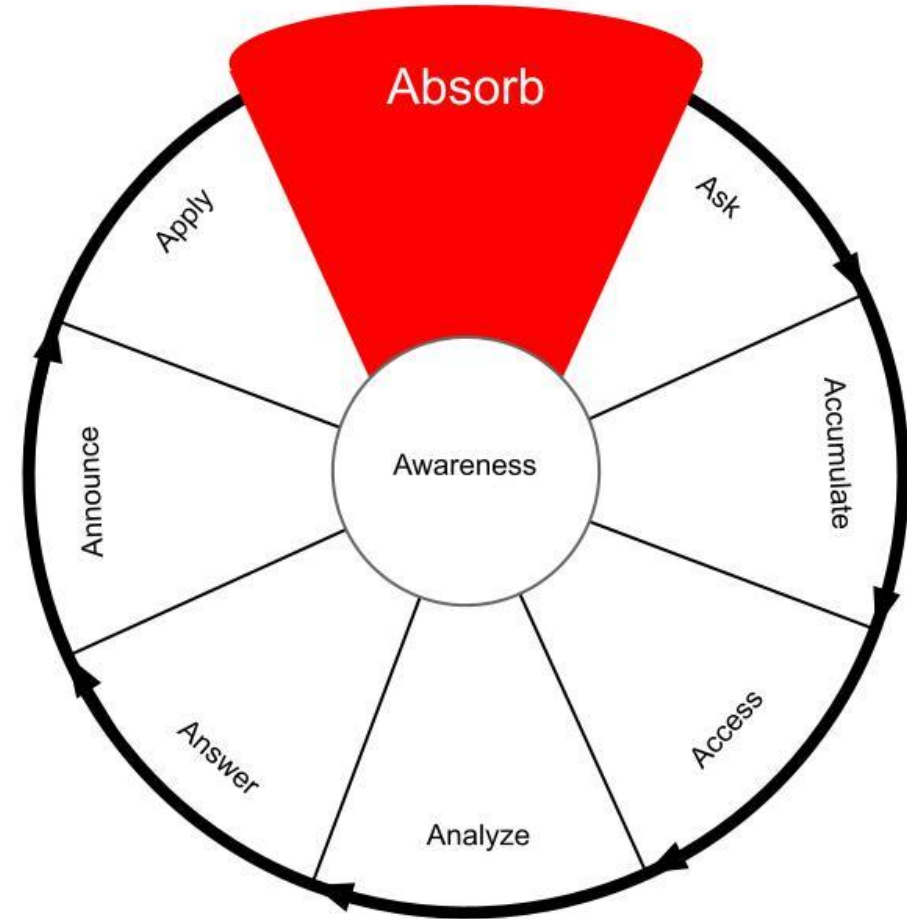
# Absorb

## Known:

- BS Disciplined Inquiry program
- Student Learning Outcome (SLO) 3.1:  
Develop a plan for collecting quantitative data.
- Target: 80% achieve success in describing a data collection instrument in their plan

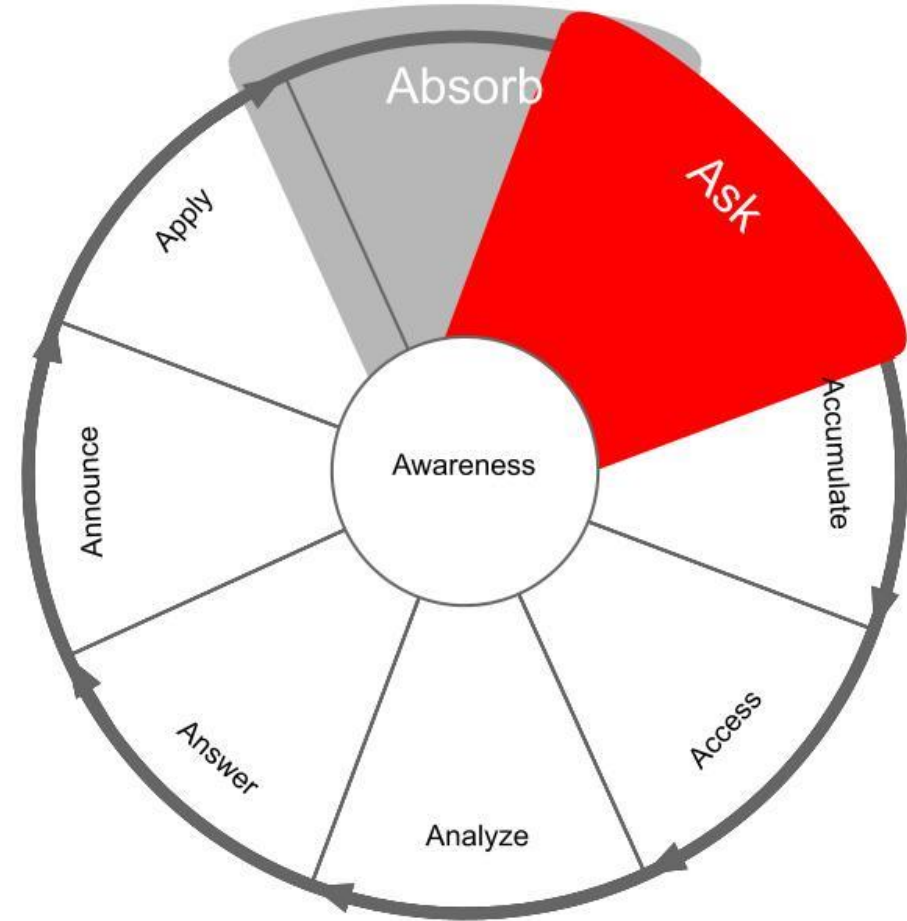
## Not known:

- Extent to which SLO 3.1 is being achieved



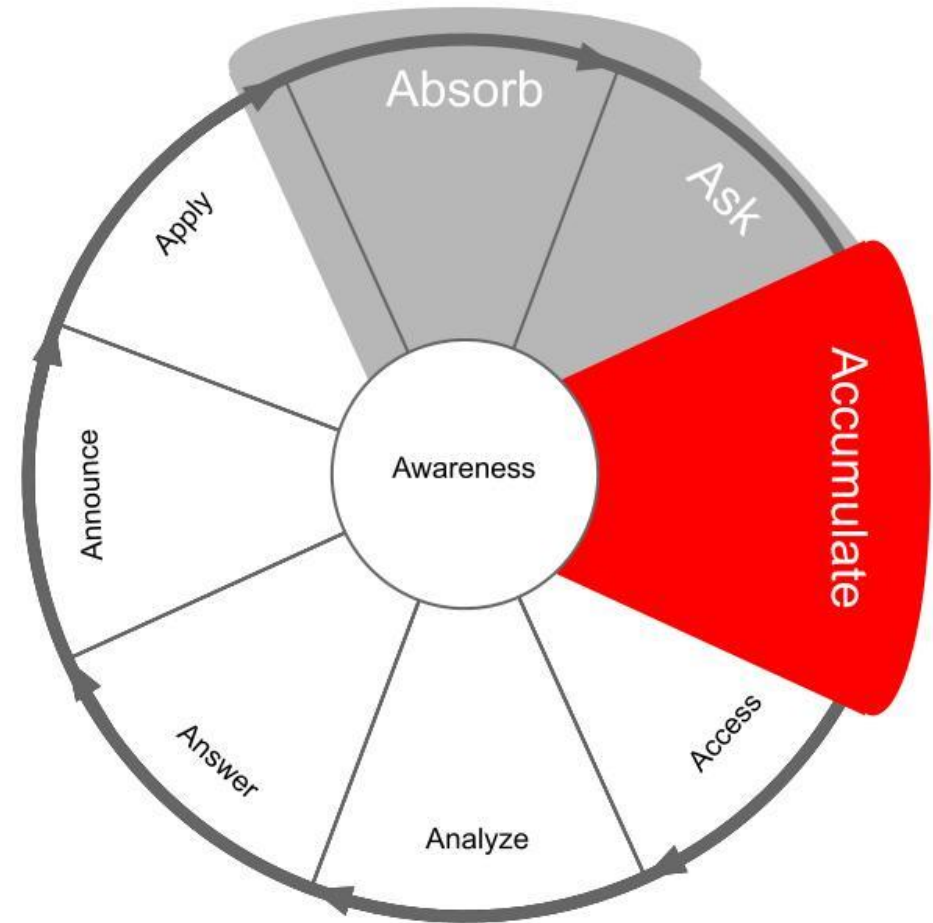
# Ask

> To what extent is the target being achieved?



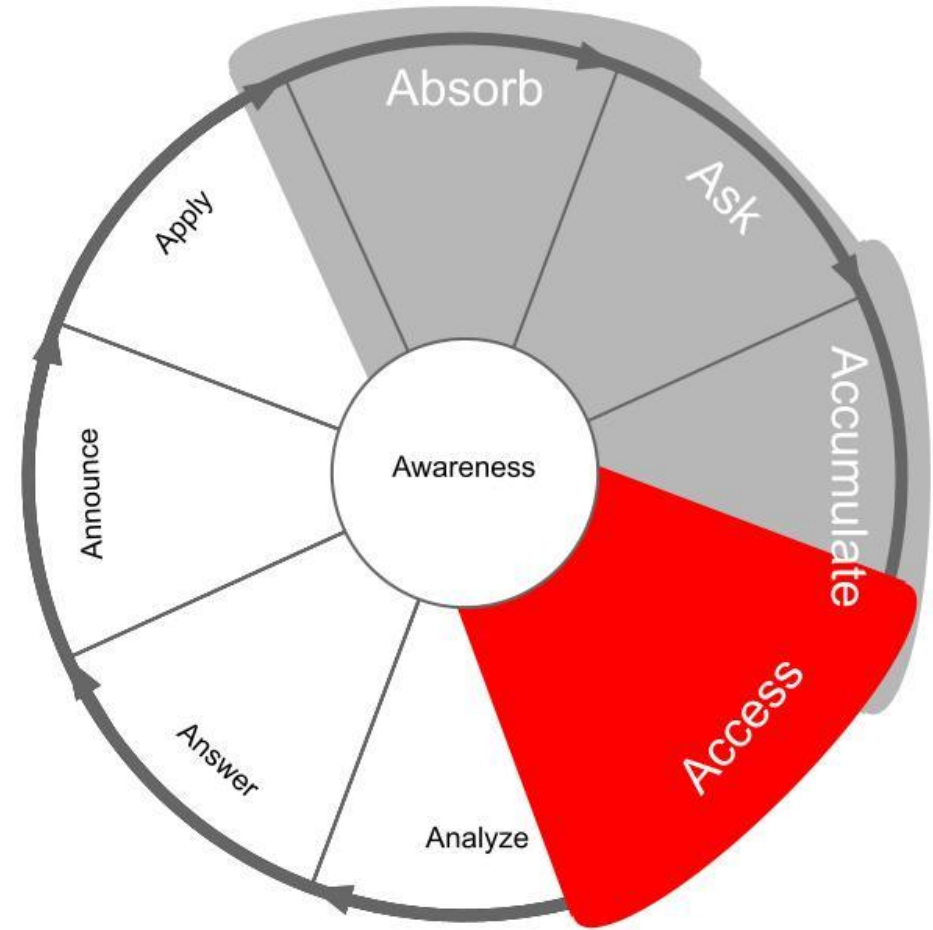
# Accumulate

- INQ 490 course
- Students write a capstone paper with a quantitative data instrument section
- Score the instrument section on a 4-point scale using the Disciplined Inquiry Capstone Project Rubric
- Score of 3 or above represents success
- Submit a score for each student in an online form
- Scores are automatically compiled in a spreadsheet upon submission



# Access

- Retrieve the rubric scores from the spreadsheet where the scores were automatically stored

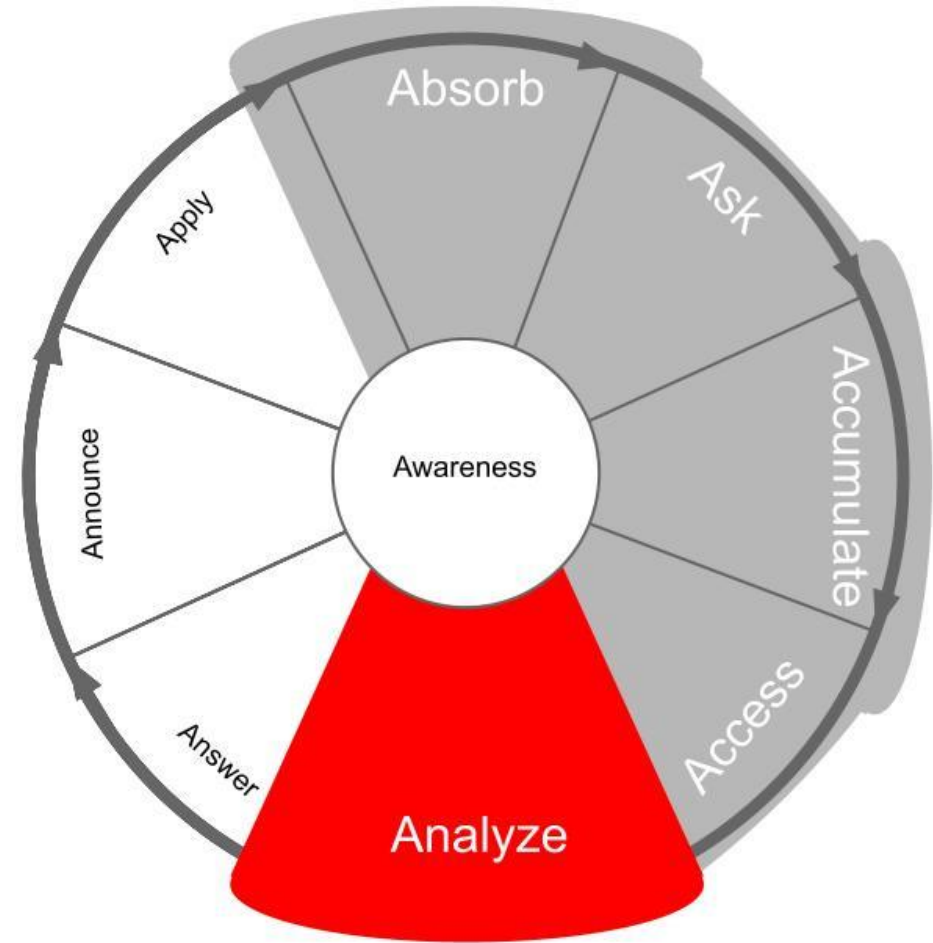




# Analyze

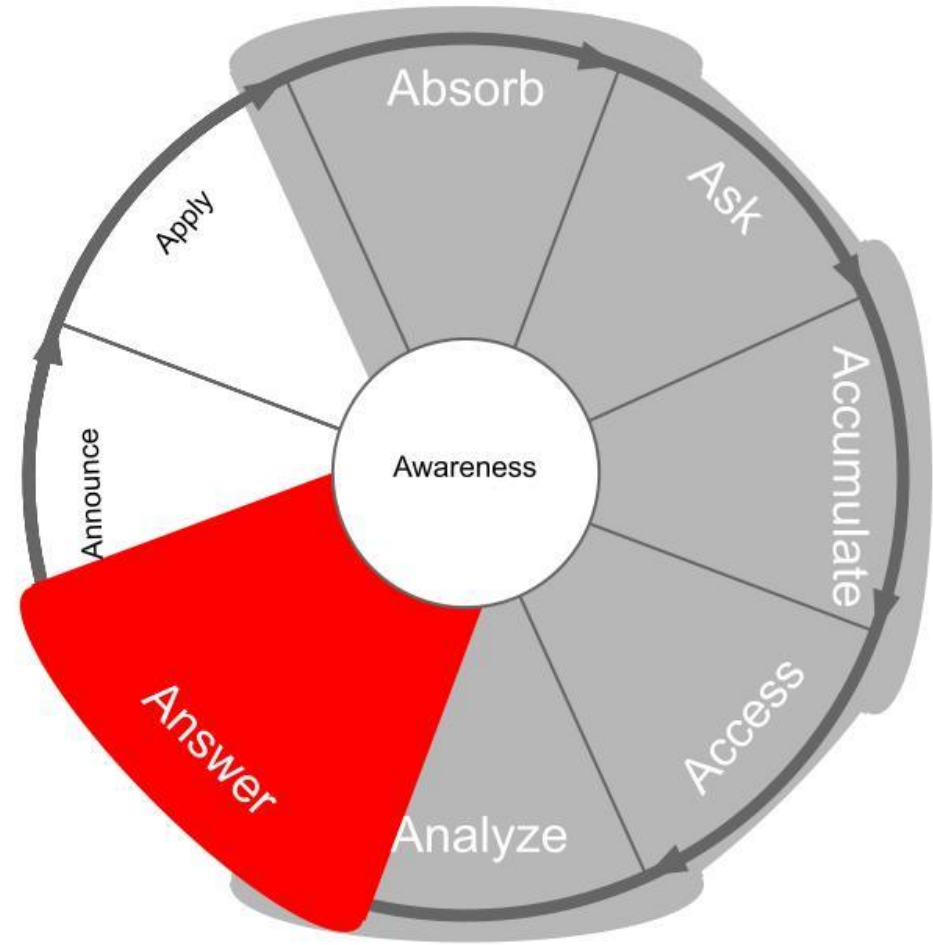
>  $\frac{\text{\# students 3 or higher}}{\text{\# students assessed}} = \% \text{ success}$

>  $\% \text{ success} - \% \text{ target} = \% \text{ point difference}$



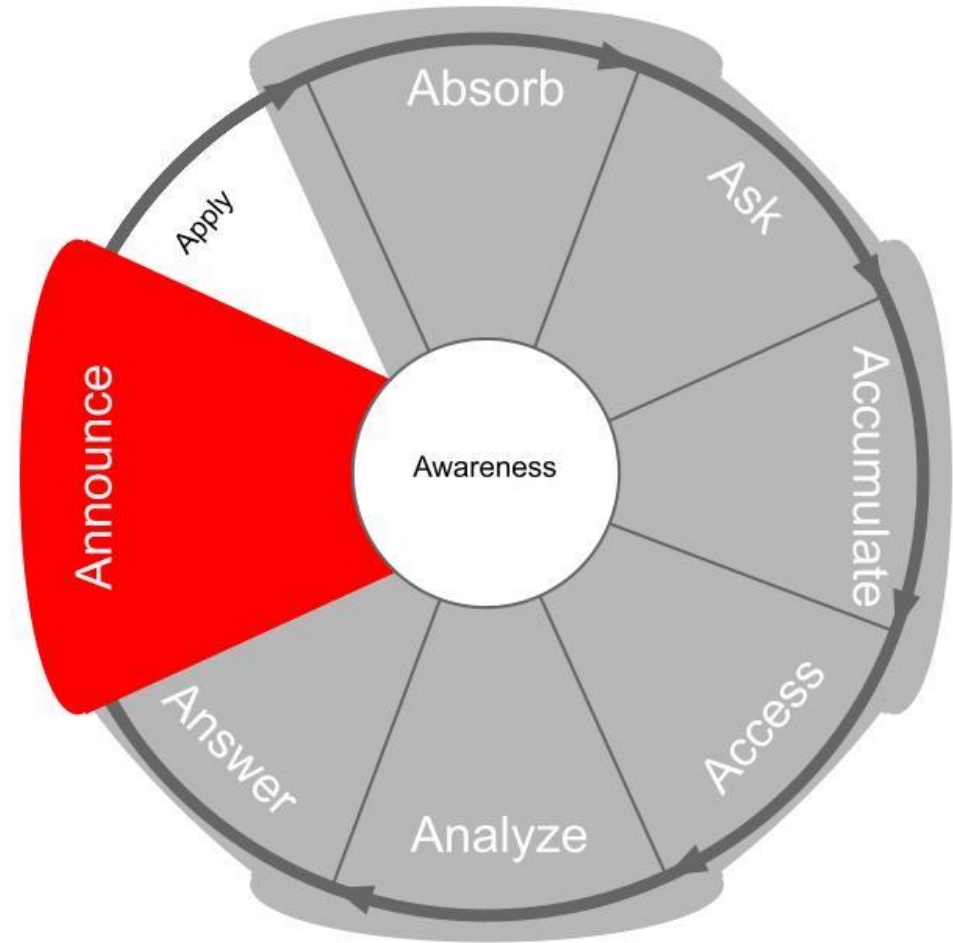
# Answer

- > Describe the extent to which the actual % is above or below the target %
- > Describe limitations and implications



# Announce

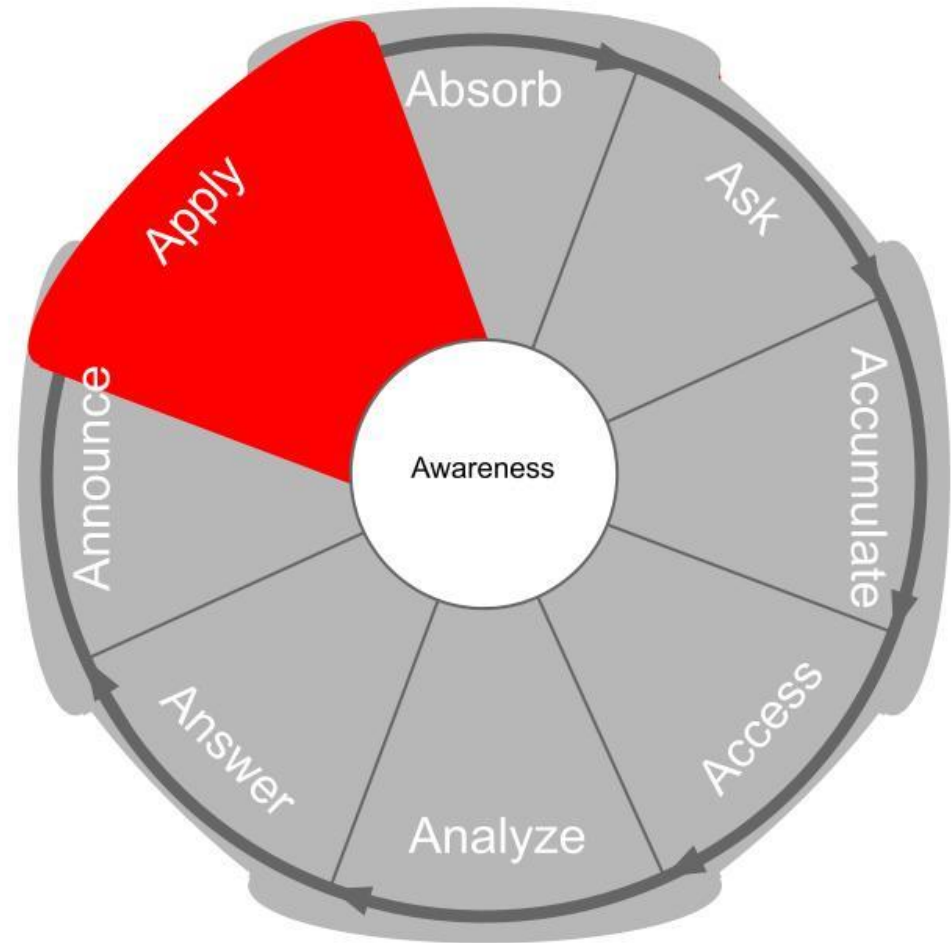
- Disseminate results to:
- Program faculty via email and report at a meeting
- Broader campus via yearly program assessment report
- External program reviewers via a self-study report



# Apply

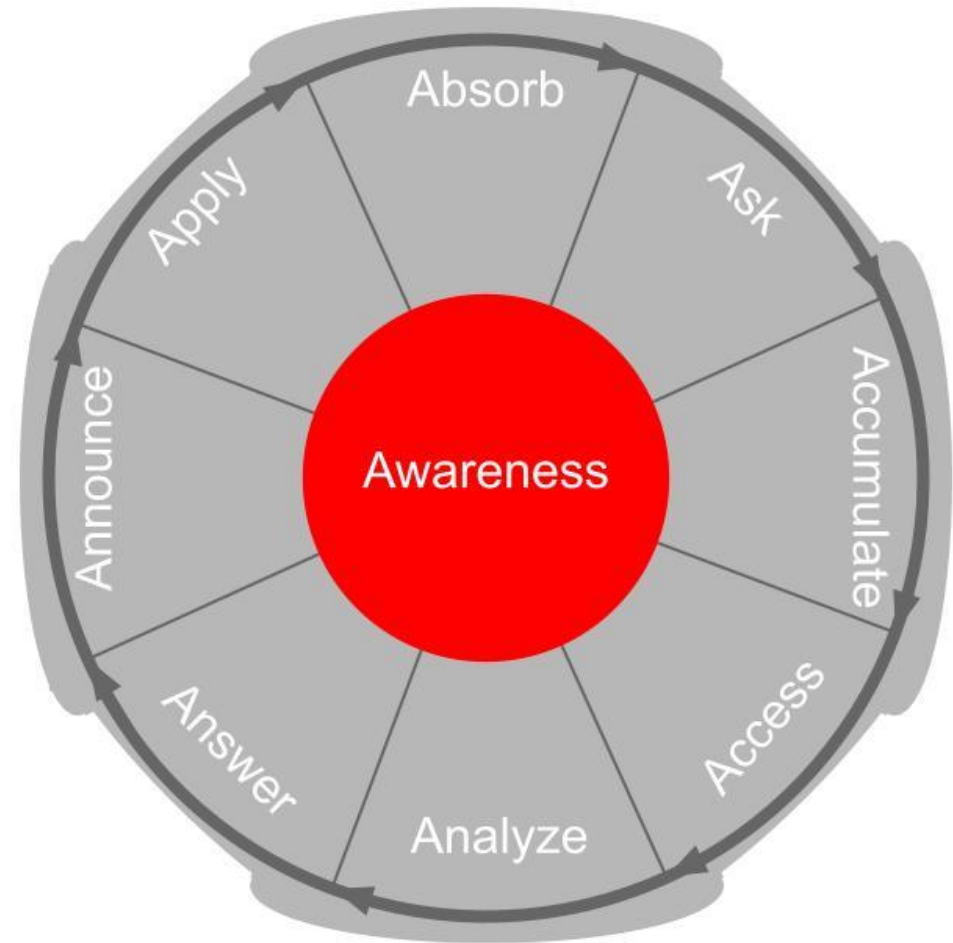
Use results to make decisions relevant to program:

- > Content
- > Delivery
- > Assessment

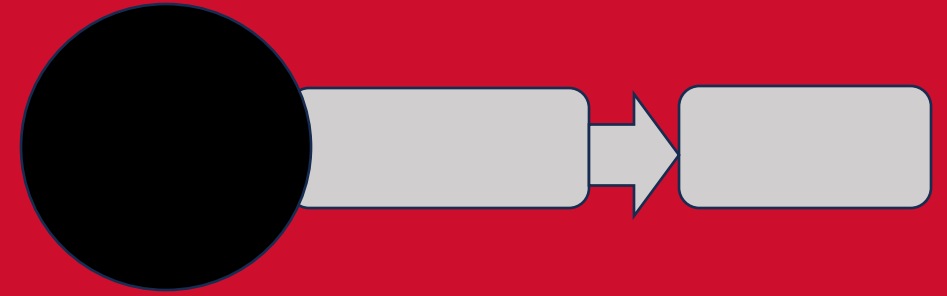


# Awareness

> All stages of the outcomes assessment process were addressed and collectively served a common purpose



# Provide an *A+ Inquiry* Course as a Thesis-Alternative



»» Describe how the *A+ Inquiry* stages align with common sections of a thesis paper

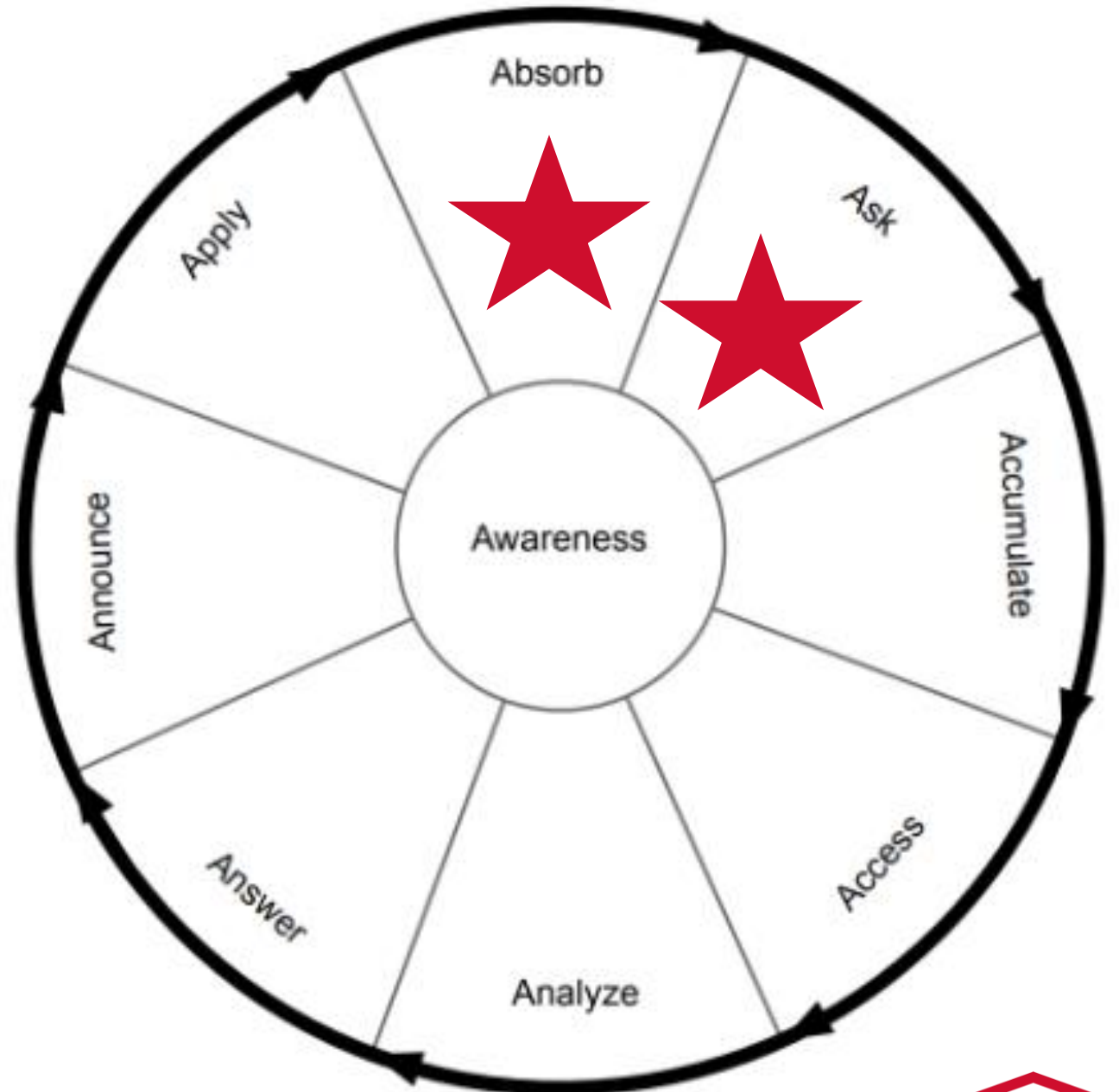
»» Describe requirements for completing a Master's level *A+ Inquiry* capstone course



# Thesis Alignment

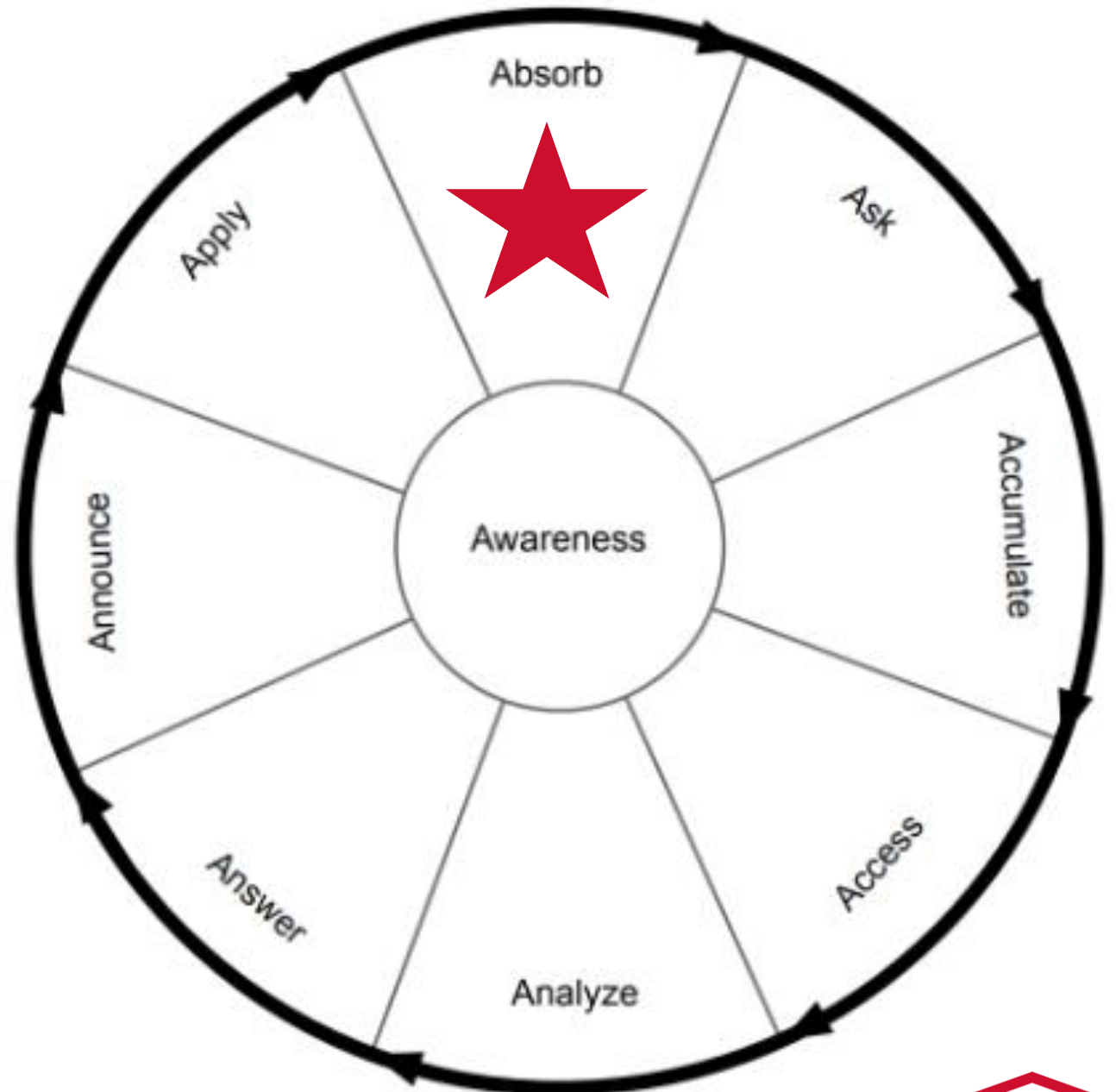
## Chapter 1: Introduction

- Background of the problem
- Statement of the problem
- Significance of the study
- Research questions



# Thesis Alignment

Chapter 2: Literature Review

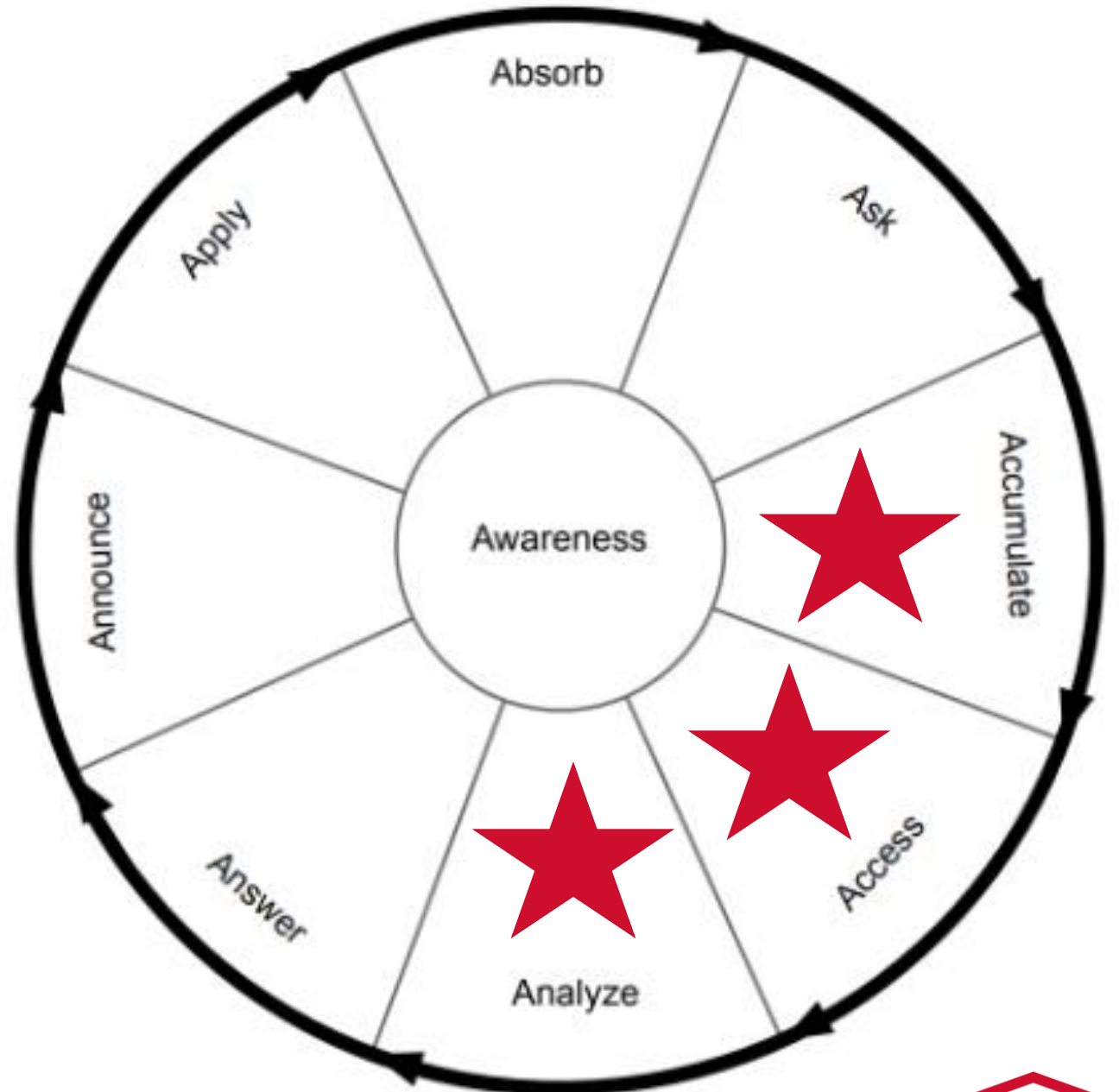




# Thesis Alignment

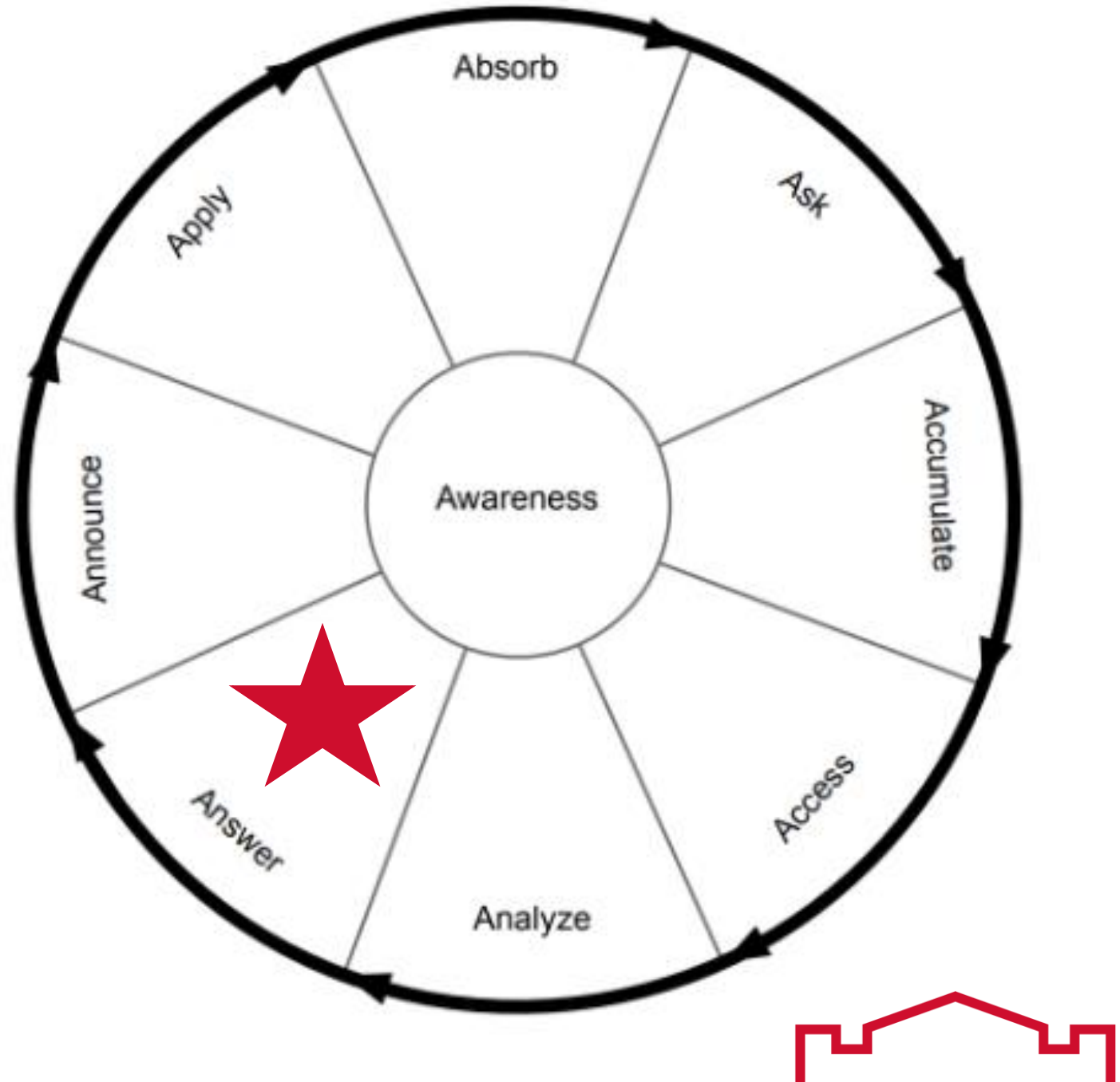
## Chapter 3: Methods

- Setting
- Participants
- Instrument
- Procedure
- Data storage
- Data analysis



# Thesis Alignment

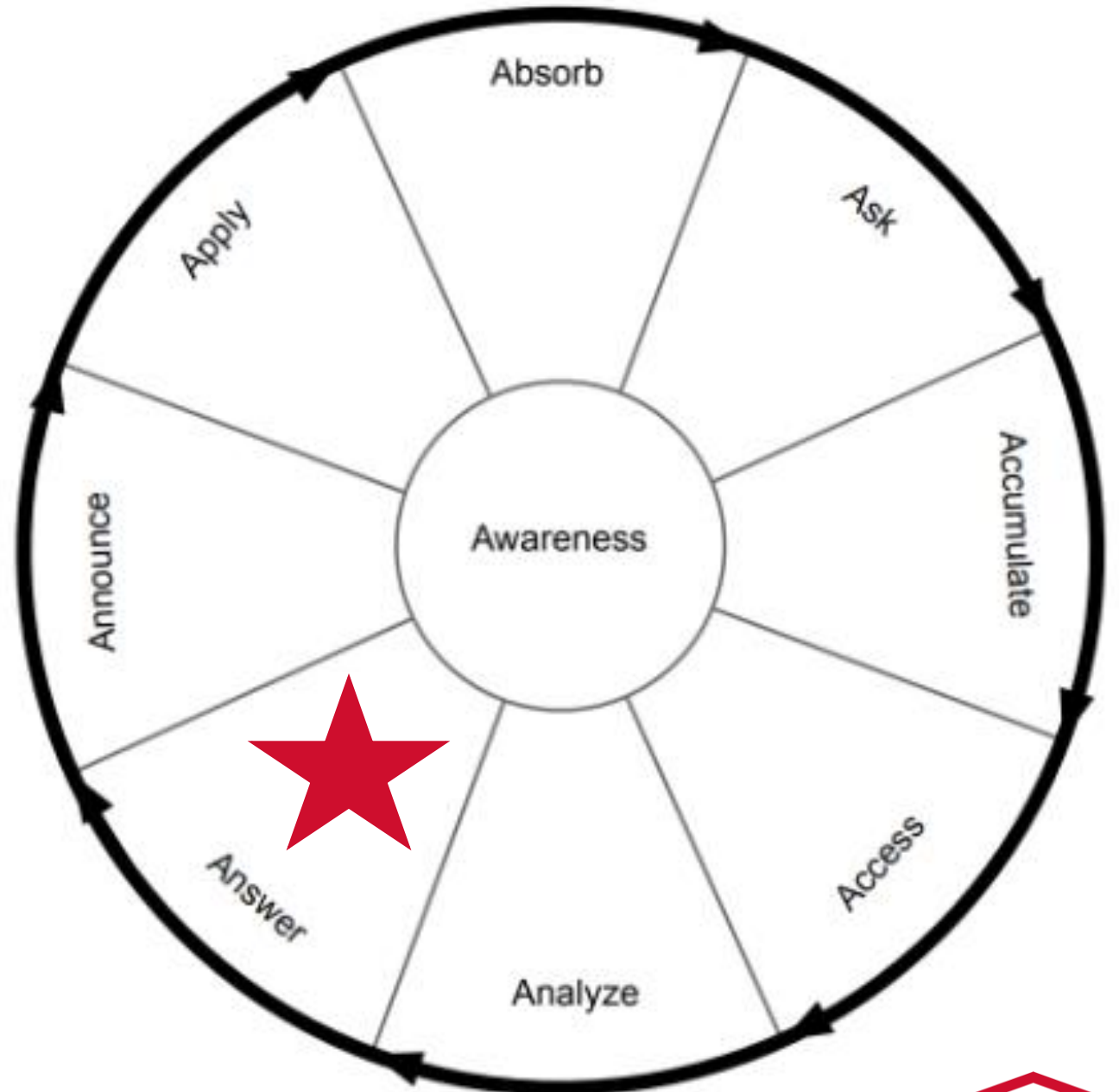
Chapter 4: Results



# Thesis Alignment

## Chapter 5: Discussion

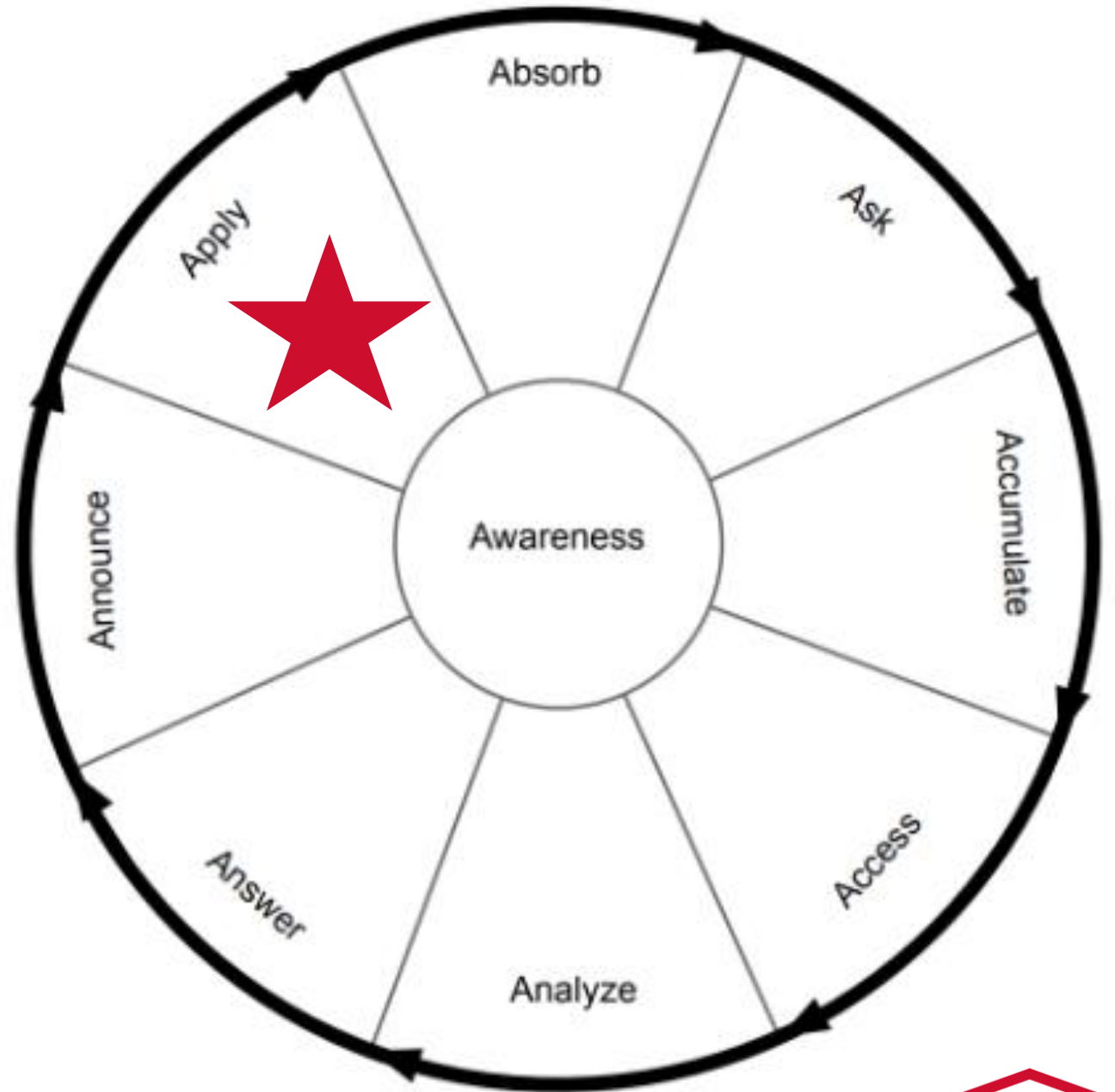
- Discussion
- Limitations
- Conclusions



# Thesis Alignment

## Chapter 5: Discussion

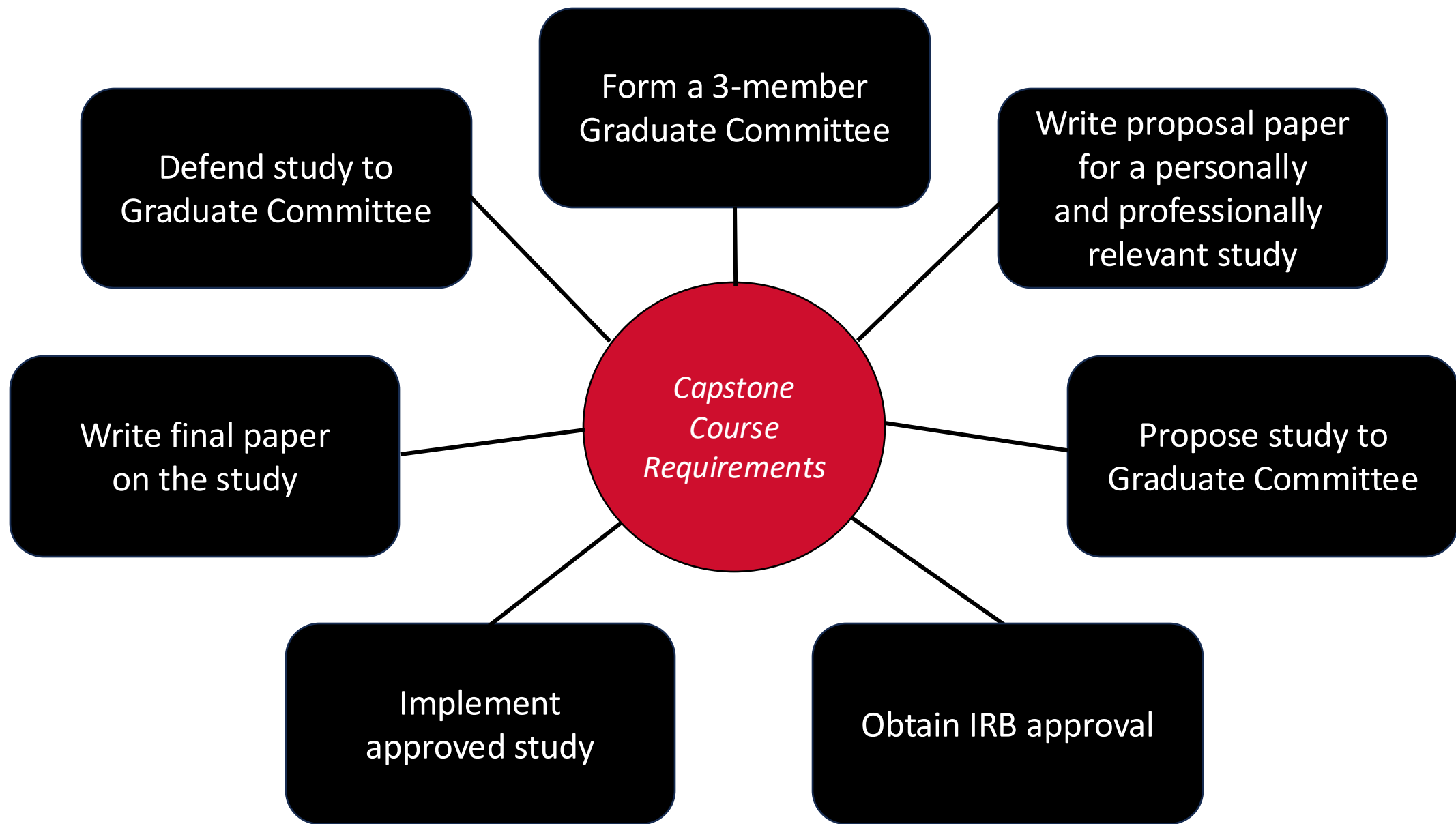
- Recommendations
  - Researchers
  - Practitioners



# A+ Inquiry Capstone Course

Students demonstrate their capacity to plan and implement a complete disciplined inquiry process.





# Capstone Course Outline

Week(s)	Description
1-5	Meet with the entire class for weekly discussions (expectations, A+ Inquiry stages, prepare for proposal and IRB)
6	Submit proposal paper and propose study
7-8	Obtain IRB approval for study
9-13	Conduct study
14-16	Prepare and submit final paper, defend study



# *A+ Inquiry* Capstone Paper Template

**Student/  
instructor  
shared  
Google Doc**

**Formatted  
utilizing  
*A+ Inquiry*  
stages**

**Approximately  
40 writing  
prompts**





*This section begins on a new page*

## **Accumulate**

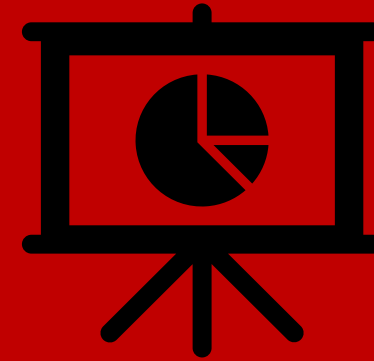
In the Accumulate stage, methods are described and implemented to collect quantitative and/or qualitative data that may be analyzed to answer the question posed in the Ask stage. If required data were already collected, details of the data are described and collection of the data is verified.

### **Participants**

<<Describe characteristics of the participants from whom required data were or will be collected.>> For example, There will be [insert number of participants] participants in this study. They will be [Insert characteristics]. Include demographic details of participants as appropriate (e.g., Age, gender, grade level, race/ethnicity, language, disability, socioeconomic status, occupation, years of experience, etc.)



# Student Feedback



It is honestly a very scary and nerve-wracking process to try to write a huge capstone paper or thesis...[instructor] made this daunting process approachable, relevant, and rewarding. [Instructor] scaffolded the writing process in a way that made each section attainable.

I view research so much differently than I used to and have a greater appreciation for a research project. This capstone project has provided me with thorough research skills I will take into my future studies and the education workplace.



# Lessons Learned

## > Offer flexible deadlines

- 16-weeks is a narrow window in some cases. Unexpected delays or other pressing obligations may arise for students as they are enrolled in the course. Students may extend their capstone project to subsequent semesters if they do not complete in 16-weeks.

## > Stick to the essentials

- Some assignments from earlier iterations of the capstone course are no longer required (e.g., literature matrix, project plan); however, they are still presented and available as tools for students to consider using.



# Lessons Learned

## > **Encourage foundational knowledge**

- Enrolling in the capstone course before completing fundamental courses that address quantitative and qualitative research methods, literature reviews, and other related topics may steepen the learning curve in the course.

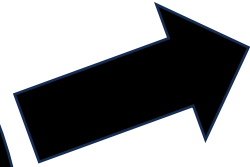
## > **Provide targeted supports**

- Regularly scheduled one-on-one meetings help ensure that the unique needs of each student in the capstone course are supported.

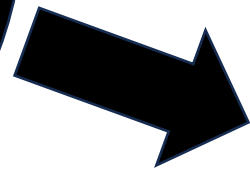


# Potential Impact

Other  
Graduate  
programs  
could use  
*A+ Inquiry*  
to...



Develop a similar capstone course



Develop a contextually-specific project  
(e.g., adapt writing prompts to explicitly  
represent higher education assessment)



# Digital Tool



## A+ Inquiry Scenario Builder

*Requires Gmail or Google account*



<https://bit.ly/aplusingquirybuilder>

### Absorb

Existing knowledge of a context is acknowledged, and a knowledge gap (i.e., a need to know more about something) is identified. Guiding questions: What is already known about the context? What is the knowledge gap that needs to be filled? (i.e., What is not known but should be known about the context?) Why is it important to fill the knowledge gap?

Your answer

### Ask

Questions are formulated that, if answered, will help close the knowledge gap that was identified in the Absorb stage. Guiding question: What questions, if answered, could be formulated to help fill the knowledge gap identified in the Absorb stage?

Your answer

### Accumulate

Methods are described and implemented to collect quantitative and/or qualitative data

## A+ Inquiry Scenario Builder

Select Scenario: Assessing faculty b... (1) ▾

Timestamp (Date) ▾

Edit ▾

<https://docs.google.com>

### Assessing faculty buy-in for a new program assessment system

1. Respond to the questions in the Google Form [HERE](#)
2. Return to this Looker Studio Report to view your responses
3. Select the Scenario and Timestamp from the dropdown menus
4. Click the URL in the edit field on this page to edit responses

Absorb ▾	Ask ▾	Accumulate ▾	Access ▾
Sample State University (SSU) had been piloting new institutional effectiveness software in response to a need for improving its academic yearly program assessment system. Faculty in the pilot programs provided positive feedback and other programs on campus expressed interest in using the system. SSU considered scaling it to all programs in the university, but they were not sure if there would be enough faculty buy-in across the institution to move forward with institution-wide utilization of the new system.	SSU assessment personnel converted the knowledge gap into the following question that could help guide a study for them to improve their understanding of how much faculty buy-in there would be for implementing the new system: To what extent do faculty on campus support transitioning from the current program assessment system to the piloted program assessment system?	SSU administered an online survey to faculty who attended a series of required presentations on the university's spring assessment day. One of the survey questions stated: If you have or were to be given the responsibility of preparing a yearly program assessment, would you prefer to use the new system being piloted or the existing system that most programs are currently using? There were three response options: Current system, New system, I don't know. Forty-two faculty submitted a response.	SSU retrieved the collected survey data from the response summary page on the online survey site in preparation for analysis.
Analyze ▾	Answer ▾	Announce ▾	Apply ▾
SSU analyzed the data by calculating the percentage of respondents who selected each response option to the survey question.	Most (83%, 35 out of 42) respondents indicated they would prefer to use the new system, which suggests there is buy-in from the majority of faculty. Limitations include that not all faculty responded to the survey and the results represent perception data at a single point in time.	SSU program assessment leadership disseminated and discussed the results with various assessment committees and other applicable faculty, staff, and administrators.	SSU used the results of this study and other relevant evidence as rationale to proceed with conceptualizing and implementing a plan to scale utilization of the new program assessment system across the institution.

# [www.aplusinquiry.com/resources](http://www.aplusinquiry.com/resources)

← → ↻ 🔒 aplusinquiry.com/resources 🔖 ☆ ☰



A+ Inquiry

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[Examples](#)

**[Resources](#)**

[Publications](#)

[Contact](#)

## Online Activities

[A+ Inquiry Stages Overview](#)

[A+ Inquiry Sample Scenario - Program Outcome Assessment](#)

## Digital Tool

Use this tool to design a study or describe a study that has already been implemented through an *A+ Inquiry* lens. First, respond to the questions in the Google Form. Then, view your responses on the Google Looker Studio Report. You may edit your responses through a link on the dashboard after they have been submitted in the form.

[Google Form](#) (compile details of your study)

[Google Looker Studio Report](#) (view details of your study)






## Capstone Paper Template



[Capstone Paper Template with Writing Prompts](#)



# Learning Goals

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# Contact Us



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