THE K. PATRICIA CROSS ACADEMY

INSTRUCTOR'S GUIDE

Teaching Technique 06

Analytic Teams

ACTIVITY TYPE	TEACHING PROBLEM ADDRESSED	LEARNING TAXONOMIC LEVEL
• Discussion • Reciprocal Teaching	• Poor Attention/Listening • Low Motivation/Engagement • Lack of Participation	• Application: Problem Solving • Learning How to Learn

Analytic Teams

In *Analytic Teams*, each team member assumes a different role with specific responsibilities to perform while listening to a lecture or watching a video.

1 Clarify your teaching purpose and learning goals for *Analytic Teams*

2 Identify the learning task's underlying problem and role prompts

3 Set assignment parameters

4 Develop a plan for learning assessment or grading

5 Communicate assignment instructions to students

6 Implement the technique during a lecture or video

7 Reflect upon the activity and evaluate its effectiveness

Step-By-Step Instructions

In this section we provide you with guidance on each of the seven steps involved as you consider this technique.

STEP 1: CLARIFY YOUR TEACHING PURPOSE AND LEARNING GOALS

Analytic Teams is a technique in which students assume roles and specific tasks to perform during an instructional activity. Because the roles are general ones that focus on the listening task, this technique can be adapted and used across many different disciplines and fields. The technique also has many applications as the roles would benefit students who are critically reading an assignment, listening to a lecture, watching a video, or other activity that requires analytic skills.

Analytic Teams provides opportunities for instructors to use this technique as is or adapt it to accomplish specific instructional goals. The technique is particularly useful for helping students understand the different activities that constitute a critical analysis. It provides them with an opportunity to focus on learning and performing one aspect of the analytic process at a time. Thus, the activity scaffolds learning and prepares students for more complex problem-solving assignments in which they must assume multiple roles. It also improves participation as students have a job to do: report out from a specific role perspective. And because everyone has a reporting role, this technique can help equalize participation in discussion, prompting under participators and providing boundaries for under participators.

This technique can also serve as an informal, formative assessment technique. As you listen to student reports, you can gauge where analytic weaknesses exist and also identify gaps in understanding. This information can help you to tailor your instruction to best meet students' instructional needs.

STEP 2: IDENTIFY THE LEARNING TASK'S UNDERLYING PROBLEM AND PROMPT

Select an assignment that requires use of a complex analytical process, such as a reading or a lecture. Next, choose roles depending on the learning goals and the specific analytical processes you hope students will develop. Ideally, you will find four to five roles students could carry out, although in some cases, you might find it desirable to have pairs or triads. You might choose general roles, such as the ones we describe in the **Support Material** section of this document (e.g. proponent, questioners, critics), or you might choose something specific to the discipline or field (e.g. in law, you might choose prosecutor, defendant, judge, jury member).

Formulate a specific prompt along the lines of: "As you listen to this lecture, each member of your group will assume a separate and distinct role. The roles are…". You will also want to determine whether you will allow group members to choose their own roles or whether you will assign them. If the latter, decide whether you will assign randomly or purposefully and choose your method for the assignment.

STEP 3: SET ASSIGNMENT PARAMETERS

In considering the assignment parameters, you will want to consider how long you will leave groups working to compile their results. Typically 5 to 10 minutes will be sufficient, depending upon the complexity of the task. For a fairly short activity with minimal complexity, it would be beneficial for students to present their analyses in a full class discussion. You will want to give them an idea of how long their reports should be. For example, students could give a 1-minute report on the particular role.

You'll also want to decide whether you will take reports from each member of a group (in the case of a small class), or whether you will randomly call on students to report. Consider whether you might call on one person to report from a role and then allow others with the same role to add any new information to the conversation. You may also want to have students submit their analyses in writing or to present them in a poster session or panel format.

STEP 4: DEVELOP A PLAN FOR LEARNING ASSESSMENT OR GRADING

If you want to use the activity as a grade, consider whether it would work best as part of a participation or engagement grade. To score, when a student responds, you can use a simple plus, check, or minus to gauge for completeness.

STEP 5: COMMUNICATE ASSIGNMENT PARAMETERS TO STUDENTS

While you can provide the instructions for this technique orally, it can be useful to show the roles on a slide or even better to share a handout.

STEP 6: IMPLEMENT THE TECHNIQUE

- Select an analytic task. Break the process into parts.

- Form student groups and give each individual a specific role.

- Assign the reading, present the lecture, or show the video.

- Give teams time for members to share and work together.

- Ask for reports.

STEP 7: REFLECT UPON THE ACTIVITY AND EVALUATE ITS EFFECTIVENESS

When reflecting on the activity and how effective it was, consider the following questions:

- Did the technique match the course learning goals and objectives?

- Did it meet my goals for this learning module?

- Was it appropriate for the students?

- Did the technique keep the students engaged?

- Did it promote student learning?

- Did it provide me with information about student understanding?

If you answer yes to all or most of these questions, next consider how you might improve the activity for the next use.

Support Materials

The materials in this section are intended to help you with the process of implementing this technique.

SAMPLE ROLES AND RESPONSIBILITIES

- **Proponents:** List the points they agreed with and state why.

- **Critics:** List the points they disagreed with or found unhelpful and state why.

- **Example Givers:** Give examples of key concepts presented.

- **Summarizers:** Prepare a summary of the most important points.

- **Questioners:** Prepare a list of substantive questions about the material.

VARIATIONS AND EXTENSIONS

- Assign the different roles to teams instead of individuals.

- Give each group a different assignment to critique that is related to the same issue. This will increase engagement in the follow-up class discussion.

- Extend this activity for more than one class session.

Online Adaptation

This section is intended to help you with the process of implementing and assessing *Analytic Teams* in your online class.

HOW TO START

- Choose a reading assignment, lecture, or video topic that requires analysis.

- Assign teams of 4 to 5 students to breakout rooms or discussion forums.

- Assign each team member to an analysis role, such as:
  Proponent, Critic, Example Giver, Summarizer, or Question Preparer.

- Inform students that they will respond to the assignment according to their designated role.

- Conclude by having groups write a team analysis that they share in a whole class discussion.

VARIATIONS

To vary this technique, consider assigning different analysis roles to whole teams instead of individuals, or give each team a separate reading or video assignment to analyze related to the same issue.

Technique Template

Following are two templates to assist you as you think through how you might implement this technique in your own class. The first is a completed template, providing an example of how Claire Major adapted *Analytic Teams* in her course, *Reading Research in Higher Education.* The second is a blank template for you to fill out to tailor this technique for your course.

Technique Template

Sample *Analytic Teams* Completed Technique Template:
Content from Claire Major

Reading Research in Higher Education

Course Name

COURSE CHARACTERISTICS

What are the situational factors that impact this course? For example, is it on campus or online? How many students? Is it lower division or graduate? Are there student attributes such as attitudes, prior knowledge, reasons for enrolling, and so forth that should be taken into account as you consider this technique?

> This is a graduate level research course that we offer as part of an executive EdD in higher education administration. The course has approximately 15 students enrolled each term. The program is an accelerated one, and this is one of 4 research courses they take prior to writing their dissertations.

STEP 1: CLARIFY YOUR TEACHING PURPOSE AND LEARNING GOALS

Why are you choosing this technique? What do you hope to accomplish?

> I'm choosing this technique because graduate students often have difficulty reading research articles from a critical analytic perspective. Using this approach should help them break down the component parts, and when they have mastered these parts, they should be able to read articles more critically. Thus it is a form of scaffolding of critical reading of research articles in education.

STEP 2: IDENTIFY THE LEARNING TASK'S UNDERLYING PROBLEM AND PROMPT

What is the question you want learners to address, or problem you want them to solve?

When I assign a research article for students to read, I will ask students to take on different roles during the reading. The roles and responsibilities are as follows

1. Perspective: Look for unwarranted assumptions or an either/or outlook; consider instances of absolutism, relativism, and bias in the study framing and design.

2. Procedure: Looked for considerations of logic and evidence in the research methods. Will the proposed methods answer the research questions? Do the proposed methods make sense?

3. Expression of findings: Look for hasty conclusions, overgeneralization, oversimplification, contradiction, and meaningless statements.

4. Reactions/conclusions: Look for changing the subject, shifting the burden of proof, and creating a "straw man."

STEP 3: SET ASSIGNMENT PARAMETERS

What are the assignment logistics? For example, will this be assigned individually or is it group work? How long will the assignment take? Will students be submitting a product? What materials, resources, or additional information do you anticipate needing?

I will share a handout in class with each student. Each student's handout will identify the specific role and the responsibilities the student should take on while reading. The handouts will also contain space for the students to record their thoughts while reading. When students return to class, they will show their handouts as an "entry" ticket to class. I will put them into groups with a member of each role group represented. They will then each share their perspectives and discuss how the authors could have improved their research.

STEP 4: DEVELOP A PLAN FOR LEARNING ASSESSMENT OR GRADING

If you decide to assess learning, how will you determine that learning has occurred? For example, will you use a simple +/check/- grading system? If you use a rubric, will you use an existing one or create one? What will be your criteria and standards?

To assess student learning, I will take up the handouts and grade them with a simple rubric I create for each role. The rubric has 3 categories: thoroughness of reading demonstrated, accuracy of statements, and attention to details. I will rate each category on a 4 – 1 scale (4=very high, 3-high, 2- low, 1= very low).

STEP 5: COMMUNICATE ASSIGNMENT PARAMETERS TO STUDENTS

How will you communicate assignment parameters to students? For example, through a handout? A prompt on a presentation slide? Assignment instructions in your online course?

I will describe the assignment in the handout which I will distribute in class.

STEP 6: IMPLEMENT THE TECHNIQUE

How will you adapt steps/procedures for your students? Are there any additional logistical aspects to consider?

My plan is to following the procedures as listed, with the exception of having students do the first part of the analytic work outside of class prior to doing the collaborative work in class. After groups discuss, I will have each group report out to the class.

STEP 7: REFLECT UPON THE ACTIVITY AND EVALUATE ITS EFFECTIVENESS

Note: This step will be completed after you have implemented the technique.
Did this technique help you accomplish your goals? What worked well? What could have been improved? What might you change if you decide to implement the activity again?

To reflect on the technique, I will consider the process and the products the students submitted. I will try to determine whether the activity met the goals that I had for it and if so how I might improve the activity going forward.

Technique Template

This template is intended for use when planning to implement **Analytic Teams** in your class. Fill in the blanks below, and use the information provided elsewhere in the Instructor's Guide to assist you in your thinking.

Course Name

COURSE CHARACTERISTICS

What are the situational factors that impact this course? For example, is it on campus or online? How many students? Is it lower division or graduate? Are there student attributes such as attitudes, prior knowledge, reasons for enrolling, and so forth that should be taken into account as you consider this technique?

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Did this technique help you accomplish your goals? What worked well? What could have been improved? What might you change if you decide to implement the activity again?

References and Resources

PRIMARY SOURCE

Content for this download was drawn primarily from "Collaborative Learning Technique 17: Analytic Teams" in *Collaborative Learning Techniques: A Handbook for College Faculty* (Barkley & Major, 2014), pp. 249–254. It includes material that was adapted or reproduced with permission. For further information about this technique, including examples in both on campus and online courses, see the primary source:

Barkley, E. F., Major, C. H., & Cross, K. P. (2014). *Collaborative Learning Techniques: A Handbook for College Faculty.* San Francisco, CA: Jossey-Bass

CITATIONS AND ADDITIONAL SUGGESTIONS FOR FURTHER READING

- Barkley, E. F., Major, C. H., & Cross, K. P. (2018). *Interactive Lecturing: A Handbook for College Faculty.* San Francisco, CA: Wiley/Jossey-Bass.

- Barkley, E. F., (2010). *Student Engagement Techniques: A Handbook for College Faculty.* San Francisco, CA: Wiley/Jossey-Bass

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