

# FINE TUNING THE GROUP ACTIVITY USING THE 4S STRUCTURE

ALLISON HOSIER

## INTRODUCTION

When course instructors bring their students to the library for research instruction, the librarian may only have only one shot to make a lasting impression. Creating engaging lessons can be a challenge and sometimes our more creative ideas can fall apart, causing the librarian to rely on tried and true lectures and demonstrations to get our point across. Group activities help give students a more active learning experience but can be unpredictable and planning them can seem less than worthwhile when they inspire nothing more engaging than non-answers such as “we got the same thing they did” once implemented in the classroom. Participants in the “Fine Tuning the Group Activity Using the 4S Structure” workshop at LOEX 2013 expressed that while they like that group work gives students an opportunity to pool knowledge and have a more active learning experience, uneven division of work responsibilities and a lack of engagement can be problems.

Team-Based Learning is a collaborative learning method that takes group work to a new level, offering application activities designed using the “4S” structure. The 4S’s can enhance group work and effectively eliminate non-answers and other problems commonly associated with the group activity. The 4S structure has been successfully implemented at Coastal Carolina University as part of one-shot sessions on topics as varied as copyright issues with online images, evaluating sources, learning how to distinguish scholarly from non-scholarly sources, and more. This article will explain the 4S structure, outline several examples of how it can be used for teaching information literacy concepts as part of one-shot sessions, and explain the benefits of using the 4S’s.

## THE 4S STRUCTURE

Team-Based Learning (TBL) was created by Larry Michaelsen during his time teaching at the University of

Oklahoma. As part of this collaborative learning method, students work in permanent teams of 5-7 peers. Most of class time in TBL is spent on application activities that follow a readiness assurance process that holds students accountable for materials studied outside of class and ensures that they are prepared for the lesson at hand (Michaelsen, 2004). The recommended structure for these application activities includes what Michaelsen calls the 4 S’s: significant problem, same problem, specific choice, and simultaneous reporting. When used together, these elements maximize learning and student engagement in the classroom (Parmelee & Michaelsen, 2010). Team-Based Learning as a whole works best as part of a course that meets multiple times and has been successfully used as part of a credit-bearing information literacy course at the University at Albany, SUNY (Jacobson, 2011) but the 4 S’s piece can easily be adapted for one-shot sessions.

### Significant Problem

One question students who attend one-shot sessions for their courses may ask themselves is, “Why does this matter?” This is a fair question and one that can come up in a lesson that uses active learning just as easily as it might come up in a lesson that is lecture- or demonstration-based. The first “S” addresses this issue by challenging the librarian to not just design a group activity for its own sake but to make it one that clearly relates to the assignment the students will be working on so that they apply what they’ve learned directly to their research project.

### Same Problem

Often, when instructors split classes up into groups, the strategy is to treat the lesson like a puzzle and give each group a different piece of the puzzle to work on so that when groups present their findings, the bigger picture will be revealed. The trouble with this is that students may not be interested in what other groups have worked on, even if it will

add to their own learning, and will consequently tune out while other groups are speaking. The second part of the 4S structure is to have groups working on the same problem at the same time.

### **Specific Choice**

Open-ended questions can inspire lively discussion or they can result in blank stares. Giving groups a specific choice is not about right or wrong answers, but rather giving students a reason to work together within their groups in order to reach a common goal. It also gives groups a framework for expressing their answer, which is especially important when they may not yet have a good understanding of the vocabulary or concepts with which they are working.

### **Simultaneous Reporting**

Simultaneous reporting is especially crucial to the 4S structure because this is the element that prevents non-answers such as “we got the same thing they did,” which can stop discussions cold. When all of the groups report their answers simultaneously, it requires everyone to commit to an answer, which makes it more likely that they will be able to contribute meaningfully to the discussion afterward.

## **EXAMPLE INFORMATION LITERACY ACTIVITIES USING THE 4S STRUCTURE**

The following three example activities feature the 4S’s and have been used by the author as part of one-shot sessions at Coastal Carolina University in Conway, South Carolina.

### **Identifying Scholarly Articles**

Helping students learn how to find scholarly articles is a common request for one-shot sessions. Starting a lesson on finding scholarly articles by reviewing the characteristics of a scholarly, peer-reviewed journal can be an effective way to gauge what students already know about the topic. In this activity, the librarian asks groups of students to look at printouts for the database records of two articles, which are labeled “A” and “B.” The task is for each group to identify which of the two articles is from a scholarly source based on their knowledge of scholarly sources.

*Significant Problem:* Since students are required to use scholarly articles for their course assignment, knowing how to identify one from a database record will be significant to them in this context. They will be able to apply what they’ve learned when they search for articles for their assignment.

*Same Problem:* As part of this activity, all groups are given printouts of database records for two articles, one from a scholarly, peer-reviewed source and one from a popular source. Each group is given the same two printouts, which ideally show information such as the title of the article, the title of the publication, the length of the article, the abstract and more. To promote group interaction, each group should only be given one

or two copies of each printout rather than one copy for each person in the group.

*Specific Choice:* In this case, the specific choice groups will need to make is whether Article A or Article B is the scholarly article based on the information they have about each. For classes of students that may already have experience with research, the choice can be made harder but for students who are just starting out, a more obvious choice will still generate good discussion.

*Simultaneous Reporting:* Groups can report their choice in a number of ways, including writing their answer on a mini marker board or piece of paper and holding it up at the same time or holding up pieces of colored paper that correspond to their choice (for example, red for A and blue for B), or holding up a given number of fingers (one if they chose A as the scholarly source, two if they chose B). The librarian should then choose groups to explain why they chose the way they did. The list of characteristics of a scholarly journal article are often generated by student responses. After the discussion, the correct answer is revealed and the librarian clarifies any points of misunderstanding.

### **Evaluating Sources**

If the assignment the students will be working on involves an annotated bibliography, helping the students learn how to evaluate sources, in addition to helping them locate these sources, may be of interest to the course instructor. This activity asks students to think about whether a source is appropriate for a given research topic by giving them an example source to work with and then challenging them to use the tools they will need to be familiar with for their assignment by asking them to find a source that they think is “better.”

*Significant Problem:* In order to successfully complete an assignment such as an annotated bibliography, it is important to be able to articulate whether or not a particular source is valuable to research. Having the skills to evaluate the source is applicable to any research project.

*Same Problem:* For this activity, each group should be given a printout of a record for a book or article (depending on the requirements for their assignment) that includes information on when the item was published, who wrote it, and information about the contents. The librarian should also give an example research topic to go along with the item. The example topic should relate to the assignment that students will be completing for the class. Each group should be given the same printout for the same item and the same example research topic, with only one or two printouts per group to promote interaction within the group. Depending on the level of the students, the librarian may want to first ask the class to help create a list of criteria to look for or use an established tool like the CRAAP test to guide students in their evaluation.

*Specific Choice:* After looking at the information in the printout, the groups should decide on a grade to give the source based on how appropriate it is for the given research topic, with

A being the best possible source and F being the worst possible source (as a note, the item chosen should not be really worthy of an A in the eyes of an experienced researcher). Groups should write their choice down on a piece of scrap paper, a mini marker board, or a similar tool.

*Simultaneous Reporting:* All groups should report the grades that they chose for the item at the same time. The librarian should make note of any differences and ask students to explain their answers. Once the groups have explained their reasoning, the librarian should clarify as needed.

As a continuation of this activity, the librarian can challenge groups to use the library tools they will need to complete their assignment to find another item related to the example research topic that is more appropriate than the item they were given. Each group should decide on a single source and then report on what they found to the class.

### Copyright Trivia

The ethical use of information is a less common topic for a one-shot session, but when it does come up, this activity can help introduce students to the topic by exposing what they already know about copyright, what they think they know, and what they still need to learn. This activity can be done with students who already have a background on the topic through their class or with students who have had no formal introduction to copyright. It's important for this activity to emphasize that it's not a competition or a test and that the goal is not to get all of the questions right, but to see how familiar students already are with the topic and to touch on some surprising facts.

*Significant Problem:* The ethical use of information can be important for an assignment where students are being asked to create projects that require them to be conscious of copyright issues, such as one that requires the use of images found online. Knowing more about these issues will affect the way they use copyrighted information in their own assignments.

*Same Problem:* This activity involves asking groups a series of true/false questions about copyright, which can be presented in the form of a slideshow, with the question on one slide the answer on the next slide, and the explanation on a third slide. The questions should be presented to the whole class so that the groups are all working on the same question at the same time.

*Specific Choice:* Each group will need to discuss the question at hand and decide whether they think it is true or false. Placards with the words "True" and "False" can be printed out ahead of time or mini marker boards can be used to record the choice.

*Simultaneous Reporting:* Once each group has decided whether they think the question is true or false, the librarian will ask them to report their choice by holding up the pre-printed placards, colored pieces of paper (red for true, blue for false), or a given number of fingers (one for true, two for false). Once groups have reported their choices, the librarian will make note of any areas of disagreement and ask each group to explain why

they chose the way they did. The librarian will then reveal and explain the correct answer.

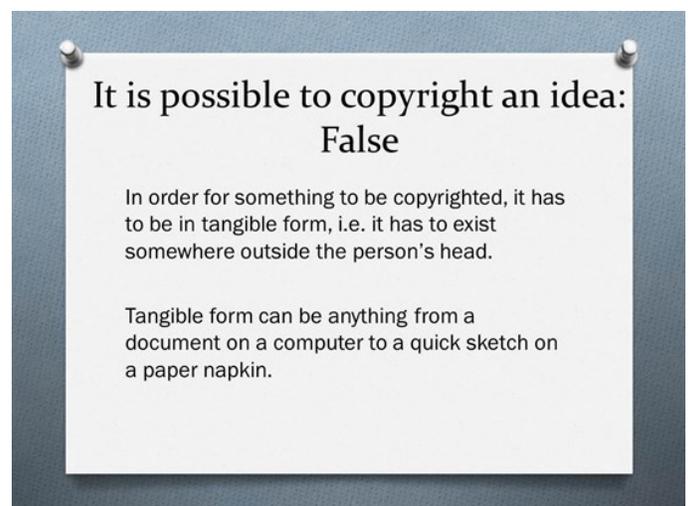
**Figure 1: Copyright Trivia Question Slide**



**Figure 2: Copyright Trivia Answer Slide**



**Figure 3: Copyright Trivia Explanation Slide**



## WHY THE 4S STRUCTURE WORKS

### Significant Problem

Students often see group work as busy work that may not relate to what they need to know in order to do well in the course or on a project. They feel like they can get tasks done faster if they work by themselves. A significant problem is one where there is a clear connection between the activity and the assignment they will need to complete. Students will become more invested in a task if they know why they are completing it.

### Same Problem

When groups work on the same problem rather than a small piece of a bigger puzzle, they know they will be comparing their answer to the answers arrived at by other groups and that they may be asked to defend their reasoning if they came up with something different from everyone else. The result is closer attention paid to the findings of other groups.

### Specific Choice

Students may not be prepared to answer open-ended questions about information literacy-related concepts at the beginning of a discussion or activity. Asking groups to make a specific choice gives them a common goal to work toward and a framework they can use for expressing ideas that may not be familiar to them yet, helping to eliminate “I don’t know” as an option.

### Simultaneous Reporting

Aside from eliminating non-answers by requiring groups to commit to an answer, simultaneous reporting of a specific choice generates discussion by exposing differences in thinking. The key to encouraging discussion here is for the librarian not to reveal the “correct answer” (if there is one) until after the different points of view have been expressed in order. This lessens the fear of being wrong that may cause students to give non-answers in the first place.

## CONCLUSION

Using the 4S structure to fine tune group activities can improve active learning experiences by reducing opportunities for students to give non-answers or tune out when other groups are reporting their findings. This structure is most common in courses that meet multiple times but can be easily scaled for one-time information literacy instruction sessions to create a more effective and more satisfying experience for the librarian, the course instructor, and the students.

---

## REFERENCES

- Jacobson, T. E. (2011). Team-based learning in an information literacy course. *Communications In Information Literacy*, 5(2), 82-101.
- Michaelsen, L. K. (2004). Getting started with team-based learning. In L. Michaelsen, A. Bauman Knight, & L.D. Fink (Eds.), *Team-based learning: A transformative use of small groups in college teaching* (pp. 27-50). Sterling, VA: Stylus Publishing.
- Parmelee, D. X., & Michaelsen, L. K. (2010). Twelve tips for doing effective team-based learning. *Medical Teacher*, 32(2), 118-122. doi:10.3109/01421590903548562.