PROVIDING INTERPERSONAL VARIETY IN SKILL PRACTICE TRIADS: A TWO-RULE METHOD ————

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As an efficient means for practicing interpersonal skills, triads are used in many management courses. Skill development requires practice by undergoing not just one, but a series of exercises. The learning value of the series is contingent on the variety of exercises, and this is provided by variations in the exercise scenarios and by scheduling strangers together in triads. Scheduling a series of stranger triads, however, is not a simple matter. This article describes a scheduling method that can be used in face-to-face and online courses. Several scheduling contingencies are discussed.

Keywords: skill learning; stranger triads; scheduling; series; active server page scripting

University organizational behavior and management courses frequently include learning goals involving student development of interpersonal skills (e.g., giving feedback, listening, delegating, and conflict resolution). Drawing on social learning theory, Whetten and Cameron (1983, 2002) described a method for accomplishing skill learning, by going through the steps of assessment, learning and analysis, practice, and application.

In applying this method, educators are likely to find that the practice step is most problematic, for at least two reasons. First, it is likely to be timeconsuming because students must carry out multiple rounds of practice. Sec-

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ond, practice, by its nature, requires that students deal with a variety of situations for which the skill is appropriate, and the creation and provision of this variety can be itself a demanding task. In designing the practice part of a skill learning sequence then, the criteria of efficiency and variety are paramount. Each of these criteria is discussed next.

Providing Efficient Skill Practice

The criterion of efficiency suggests that practice should be conducted in the smallest group possible, so that all members are actively engaged. Because situations are typically interpersonal, at least two members usually constitute the minimum size. However, a third role, of observer/facilitator/ coach/arbitrator is justifiable, for three reasons: (a) A person in this role can provide a useful perspective that may be difficult for people who are concentrating on carrying out their roles to see, (b) the person in this role also learns vicariously, by observing how the situation is being handled by others and thinking about how well it worked, and (c) the ability to carry out this role is in itself a valuable skill, one that is similar to roles frequently exercised by managers and others in organizations. For many interpersonal skills then, an ABO triad involving two roles (A and B) and an observer (O) provides an efficient basis for skill practice.

Many authors have developed ABO-type triad exercises for skill practice; for example, developing skills in interviewing (Linowes, 1989), listening (Janasz, Dowd, & Schneider, 2002; Sims, 1989), conflict resolution (Janasz et al., 2002; Whetten & Cameron, 2002), influence (Whetten & Cameron, 2002), and negotiation (Asherman & Asherman, 1995; Gordon, 2002). These examples illustrate that ABO-type triad role-plays have been developed as a means of skill development for a variety of skill areas.

Providing Variety in Skill Practice

The criterion of variety is the next issue in designing a skill practice series. The most obvious way to do this is to provide a variety of scenarios, all of which require use of the target skill. Variety can be provided in shared information and in attributes of roles known only to one person. For example, the person in role B may be instructed to have a hidden agenda, and not to easily reveal this agenda.

Role-plays are carried out by individuals, and this provides a second kind of variety, involving the ways different individuals approach and carry out their roles. Because individuals in a class can differ considerably from one

another in a number of ways, this variety can be considerable. Because similar variety is typically found in organizations, learning to deal with student variety is likely to be relevant for graduates applying their skills in organizations. In designing skill practice, then, it is important not only to provide variety in the kinds of scenarios provided but also in the people who take the roles.

Here, however, we run into a technical problem: How do we ensure that successive skill practice triads are populated by people who have not been in previous role plays with one another? In developing a schedule for a sequence of skill practice triads, one or more of the following four alternatives may occur to instructors:

- 1. Use static triads. Simply assign students to a single triad and rotate roles within the triad. This approach is simple but does limit the individual variety contained in the triad sequence. Over time, a static triad may develop norms that constrain how situations are handled. For example, a static triad may develop norms that situations should be handled quickly, that conflict is not approached directly, or that focus should be only on performance issues. A second problem concerns the possibility that a low-commitment student is assigned to a triad, and this person invests minimal effort in the practice. Because the other two members of the triad are stuck with this person, he or she can have a devastating effect on the value of practice activities in the triad.
- 2. Assign an existing group a series of triad role-plays. A group can contain more variety than a triad. As with static triads, however, the group's variety may become constrained by group norms and members' personalities, and the group could be stuck with low-performing members. Feelings generated in group meetings and earlier role-plays can carry over to later role-plays, creating subcurrents that can detract from their learning value. Moreover, this is a less efficient design than a triad because only two students are typically required for the A and B roles. Usually this leads to a surplus of students in the O role.
- 3. On each successive round, ask students to join a stranger triad. This approach is simple and seems effective in providing interpersonal variety. In actuality, however, it is problematic. First, when given a choice, students may use performance instead of learning criteria (Sankowsky, 1993) in choosing triads. If so, students may gravitate toward less strange choices, such as friends, people in their majors, and people similar to themselves. A second problem is that in the actual process of joining up, the choices of later joiners are constrained by earlier joiners and that this inevitably leads to numbers of late joiners for whom no stranger triads are available.
- 4. Assign triads randomly. This requires some work on the part of the instructor in developing a randomizing process, but it does overcome problems associated with static triads and groups, as well as the possibility that students will choose familiar strangers. The problem with this approach, of course, is that a significant percentage of students are likely to be assigned to others they have worked with before. For example, in a class of 27, nine triads can be formed, all of which will be composed of strangers in the first round. In the second round, a

random process has about a 15% chance of assigning a given student to a triad that includes someone from his or her first round—and the odds increase with each successive round.

In sum, none of the methods that may occur to instructors are entirely satisfactory for scheduling interpersonal variety. To my knowledge, no solution to this scheduling problem has been developed. Next, I describe a solution to this scheduling problem.

A Two-Rule Method

I developed this method in 2001 for the purpose of scheduling a sequence of six negotiation skill practice rounds in a junior-level leadership skills course. I continue to use it for my classroom and online sections. I begin by determining how many triads are needed in a class, and numbering these triads. I then assign every student to a triad. After having been placed in an initial triad, students are asked to follow two rules when moving to the next triad:

- Rule 1: Role rotation. In each successive round, everyone rotates to another role, using this rule: A becomes B, B becomes O, and O becomes A.
- Rule 2: Triad movement. Individuals in a triad are listed in order. The first person in a given triad moves to the next smaller triad (e.g., a person in Triad 7 moves to Triad 6; a person in Triad 1 moves to the highest triad). The second person in a triad does not move at all: He or she stays in that triad for all successive rounds. The third person in a triad moves down to the next larger triad; for example, a person in Triad 8 moves to Triad 9 (if there is no larger triad, the person moves to the first triad). There is one amendment to the first and third person's rule when the number of triads is even, which I will describe later.

Figure 1 illustrates how these rules can be used to generate a specific schedule—here, for a class of 21 and 8 skill practice rounds.

Triads are listed in rows, and we see that seven triads are needed to accommodate the 21 students. Skill practice rounds are listed in columns. Each triad contains three student numbers, which correspond to class members. Each student number is followed by a role: A, B, or O. The top student in a cell is to move to the next smaller triad, the middle student is to stay put, and the bottom student is to move to the next larger triad.

Contingencies

The two-rule method stated earlier requires that the number of students in the class is a factor of three, and the number of triads used is an odd number.

Number o	of Studen	21 21	Number	of Sessio	ons: 8	Go		
Round:	#1	#2	# 3	#4	# 5	# 6	# 7	# 8
Triad # 1	<u>1: a</u> <u>2: b</u> <u>3: o</u>	<u>4: b</u> <u>2: o</u> 21: a	<u>7: o</u> <u>2: a</u> 18: b	<u>10: a</u> 2:b 15:0	<u>13: b</u> <u>2: o</u> 12: a	<u>16: o</u> <u>2: a</u> 9: b	<u>19: a</u> <u>2: b</u> <u>6: o</u>	<u>1: b</u> <u>2: o</u> <u>3: a</u>
Triad # 2	<u>4: a</u> <u>5: b</u> <u>6: o</u>	7: b 5: o 3: a	<u>10: o</u> 5: a 21: b	<u>13: a</u> <u>5: b</u> <u>18: o</u>	<u>16: b</u> <u>5: q</u> <u>15: a</u>	<u>19: o</u> <u>5: a</u> <u>12: b</u>	<u>1: a</u> <u>5: b</u> <u>9: o</u>	<u>4: b</u> <u>5: o</u> <u>6: a</u>
Triad # 3		<u>10: /6</u> 8: /0 6: a	<u>13: o</u> <u>8: a</u> <u>3: b</u>	<u>16: a</u> <u>8: b</u> 21: o	<u>19: b</u> 8: o 18: a	<u>1: o</u> <u>8: a</u> <u>15: b</u>	<u>4: a</u> <u>8: b</u> 12: o	<u>7: b</u> 8: o 9: a
Triad # 4		<u>13: b</u> <u>11: o</u> 9: a	<u>16: o</u> <u>11: a</u> <u>6: b</u>	<u>19: a</u> <u>11: b</u> <u>3: o</u>	<u>1: b</u> 11: o 21: a	<u>4: o</u> <u>11: a</u> <u>18: b</u>		<u>10: b</u> <u>11: o</u> <u>12: a</u>
Triad # 5	<u>13: a</u> <u>14: b</u> <u>15: o</u>	<u>16: b</u> 14: o 12: a	<u>19: o</u> <u>14: a</u> <u>9: b</u>	<u>1: a</u> 14: b 6: o	<u>4: b</u> <u>14: o</u> <u>3: a</u>	<u>7: o</u> <u>14: a</u> 21: b	<u>10: a</u> <u>14: b</u> <u>18: o</u>	<u>13: b</u> <u>14: o</u> <u>15: a</u>
Triad # 6	<u>16: a</u> <u>17: b</u> <u>18: o</u>	<u>19: b</u> <u>17: o</u> <u>15: a</u>	<u>1: o</u> <u>17: a</u> <u>12: b</u>	<u>4: a</u> , <u>17:/b</u> <u>9: o</u>	$\frac{7:0}{17:0}$ $\frac{17:0}{6:a}$	<u>10: o</u> <u>7: a</u> <u>3: b</u>	<u>13: a</u> <u>17: b</u> <u>21: o</u>	<u>16: b</u> <u>17: o</u> <u>18: a</u>
Triad # 7	<u>19: a</u> <u>20: b</u> 21: o	<u>1: b</u> <u>20: o</u> 18: a	<u>4: o</u> 20: a	7:7 <u>a</u> 20: b 12: o	<u>10: b</u> <u>20: o</u> <u>9: a</u>	<u>13: o</u> <u>20: a</u> <u>6: b</u>	<u>16: a</u> <u>20: b</u> <u>3: o</u>	<u>19: b</u> 20: o 21: a

Skill Practice Triads Schedule Click on your number to access your role description. Please do not read your partner's scenario.

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*If your session has two people and one is an observer, the observer should take the "a" or "b" role, whichever is open.

Figure 1: Sample Schedule, With Arrows Showing the Movements of Students 10, 11, and 12 Through Eight Triads

What if these requirements are not met? In addition, what if one wants to exclude some people from being in the same triad? How can a schedule be maintained if some people do not show up for a particular round? Next, I discuss what can be done about these contingencies.

WHAT IF THE NUMBER OF TRIADS IS EVEN?

We see in Figure 1 that if the number of triads is odd, the one-smaller and one-larger students will eventually pass one another. This occurs between rounds #4 and #5. In round #4, student 10 is in triad #1, and student 12 is in triad #7. In the next round, the two swap triads. However, if the number of triads is even, both will collide at some point by occupying the same triad. Because the two have been in a triad together earlier, this triad will not be a stranger triad.

This collision will occur when

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the current round = (number of triads)/2 + 1.
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For example, if there are 12 triads, a collision will occur on the 7th round. To keep this collision from occurring, the one-larger/smaller rule must be amended during this round: Both should move two triads, instead of one. In essence, this means that the round is skipped, and the individuals re-form their original triad a round earlier than they would if the number of triads were odd.

This reduction in the number of possible stranger triads appears to be unavoidable, and for even numbers of triads, the number of successive stranger triads that can be generated is one less than the number of triads (e.g., if there are 10 triads, nine successive stranger groups can be created).

WHAT IF THE CLASS SIZE IS NOT A FACTOR OF 3?

It is likely that an actual class size will not be a factor of three, and that one or two students will be remaindered; for example, a class of 34 or 35 will have 1 or 2 remaining students, respectively. The two-rule method could be modified in two ways to include such students. The first approach would be to add an additional observer to one or two triads to incorporate these students. Doing so could provide useful additional observation to these triads. However, this approach would require students to spend less time in the more active A and B roles. Moreover, because this approach would require adding additional observer roles to the role rotation rule, it would also require the scheduling of additional rounds to ensure that all received a given exposure to the A and B roles; for example, to ensure that all individuals carried out roles A and B twice, one would need to schedule seven rounds instead of six.

For these reasons, I have opted to accommodate remaining students in a different way, by scheduling one or two observerless dyads. Specifically, if there is one extra student, one triad is replaced with a dyad, and one dyad is added; if there are two extra students, an additional dyad is added. Dyads are created by not scheduling a stationary student in a triad. Because the one-smaller and one-larger students rotate through these dyads, they only encounter one or two dyads during an entire sequence, and the stationary students do not encounter any. Table 1 illustrates how a schedule can be developed for a class of 22.¹ Instead of creating seven triads and having one student remaindered, Triad #1 is replaced with a dyad, and an additional dyad (#5) is scheduled. The two dyads could be placed anywhere; however, to ensure that students get roughly the same exposure to dyads, they are spaced as far apart from each other as possible.

Because the two rules of movement and role rotation are the same as before, one of the individuals in a dyad may be assigned an observer role

Skill Practice Triads Schedule Click on your number to access your role description. Please do not read your partner's scenario. Number of Students 22 Number of Sessions 8										
Round:	#1	#2	#3	#4	#5	#6	#7	#8		
Triad #1	1: a *	3: b *	6: o *	9: a *	14: b *	17: o *	20: a *	1: b *		
	2: o	22: a	19: b	16: o	11: a	8: b	5: o	2: a		
Triad #2	3: a	6: b	9: o	12: a	17: b	20: o	1: a	3: b		
	4: b	4: o	4: a	4: b	4: o	4: a	4: b	4: o		
	5: o	2: a	22: b	19: o	13: a	11: b	8: o	5: a		
Triad #3	6: a	9: b	12: o	14: a	20: b	1: o	3: a	6: b		
	7: b	7: o	7: a	7: b	7: o	7: a	7: b	7: o		
	8: o	5: a	2: b	22: o	16: a	13: b	11: o	8: a		
Triad #4	9: a	12: b	14: o	17: a	1: b	3: o	6: a	9: b		
	10: b	10: o	10: a	10: b	10: o	10: a	10: b	10: o		
	11: o	8: a	5: b	2: o	19: a	16: b	13: o	11: a		
Triad #5	12: a	14: b	17: o	20: a	3: b	6: o	9: a	12: b		
	*	*	*	*	*	*	*	*		
	13: o	11: a	8: b	5: o	22: a	19: b	16: o	13: a		
Triad #6	14: a	17: b	20: o	1: a	6: b	9: o	12: a	14: b		
	15: b	15: o	15: a	15: b	15: o	15: a	15: b	15: o		
	16: o	13: a	11: b	8: o	2: a	22: b	19: o	16: a		
Triad #7	17: a	20: b	1: o	3: a	9: b	12: o	14: a	17: b		
	18: b	18: o	18: a	18: b	18: o	18: a	18: b	18: o		
	19: o	16: a	13: b	11: o	5: a	2: b	22: o	19: a		
Triad #8	20: a	1: b	3: o	6: a	12: b	14: o	17: a	20: b		
	21: b	21: o	21: a	21: b	21: o	21: a	21: b	21: o		
	22: o	19: a	16: b	13: o	8: a	5: b	2: o	22: a		

TABLE 1

NOTE: a. If your session has two people and one is an observer, the observer should take the "a" or "b" role, whichever is open.

(e.g., in Triad #1 and Round #1). An asterisk is placed in all dyads that points to a footnote reminder that if so, the O person should take the unoccupied A or B role. In this class of 22, students will spend 25% of their time in dyads. As the class size increases, this percentage will decrease (e.g., in a class of 34, students will spend about 17% of their time in dyads). This, to me, seems the best trade-off: Although students lose some observer input, they spend more time in the more active roles, a simple rule of role rotation is maintained, and all triads/dyads are stranger groups-up to the limits described earlier.

WHAT IF SOME PEOPLE IN THE CLASS ARE NOT STRANGERS?

Frequently, class members already know other people in the class, either through previous experiences or through other experiences in the class itself. The class may contain a married couple, two members of a sports team, or two people who work together in a firm. Moreover, one's course design may place people into groups, where they get to know one another. It is probably not desirable to schedule these people together into triads because they will have some acquaintance with one another, thereby reducing the benefits of a stranger triad. How can we prevent the scheduling of these individuals into the same skill practice triad?

In examining Figure 1 and Table 1, one may notice that the two-rule method does not bring a person into contact with every other member of the class.² This is a consequence of the uniform role rotation rule: People start out in a role group, say role A, and will not be scheduled with any other As. The next turn all these people will be Bs and again will not be scheduled with any-one else in the B group. Thus, this method ensures that members of a given role group will never be scheduled with anyone else in their role group.

Thus, if one wants to keep specific people from being scheduled in a triad together, all one needs to do is to start them out with the same role. There are limits to the numbers of people who can be kept apart in this manner, but one can use it to substantially reduce the incidence of nonstrangers being scheduled together.

WHAT IF PEOPLE DO NOT SHOW?

The final contingency that I consider pertains to the human side of scheduling. Having made an effective schedule, what if one or more people do not show up? One can provide incentives for showing up (e.g., by setting expectations that people will show, by taking attendance, and by scoring participation). Inevitably, however, there can be people who miss sessions, and for legitimate reasons such as illness, family problems, and unexpected work demands. Although such absences may be unavoidable, they create problems for the person and for the other members of his or her triad. If B does not show, A has no counterpart, and O has nothing to observe.

This is only a problem for the classroom because online triads can simply reschedule. My response in the classroom is to use a just-in-time format. Individuals are not provided role materials until the class starts. At that point, I ask the triads to form and check to see if all are functional. If not, I try to reorganize so that the triads can go on. For example, I may make triads into dyads or move a solo individual to a partial triad. Having carried out this check, I then pass out the materials for the session and start the session. In

Round:	#1	#2	#3	#4	#5	#6	#7	#8	#9
Triad # 1									
Triad # 2									
Triad # 3									
Triad # 4									
Triad # 5									
Triad # 6									
Triad # 7									
Triad # 8									
Triad # 9									
Triad # 10									
Triad # 11									

Figure 2: Tally Sheet for Self-Administered Skill Round Series

Note: Instructions for Tall Sheet

The instructor will help you with Round #1 by telling you:

Which Triad you are in: ____ (write number)

Which movement rule* to follow: 1-smaller resident 1-larger (circle one)

Which role to fill in Round # 1: a b o (circle one)

The largest triad: _____ (write triad number)

Using this information, write an "a," "b," or "o" in the table below for each round, in the column corresponding to your triad for that round.

*Rules for role rotation and determining the next triad to move to

1. Role Rotation: Each time you move to the next round, change your role:

Role "a" moves to role "b" Role "b" moves to role "o"

Role "o" moves to role "a"

2. Determining the next triad to move to

People in a triad are listed in order, and when moving to the next triad, each person follows a different rule:

Top person on the triad list: Use the 1-Smaller Rule. Move to the triad with the next smaller number each round (e.g., if you are in Triad #7, move to Triad #6, if you are in Triad #1, move to the largest triad.

Middle person on the triad list: Use the "Stay Put" Rule. Always stay in the same triad.

Bottom person on the triad list: Use the 1-Larger Rule. Move to the triad with the next larger number each round (e.g., if you are in Triad #7, move to Triad #8, if you are in the largest triad, move to Triad #1.

If your triad has only two people and one is an observer, the observer should take the "a" or "b" role, whichever is needed. The instructor may ask you to temporarily change roles or to carry out a different role if needed.

addition, I schedule an additional optional round for individuals who missed an earlier round.

Implementation

The two-rule system is simple enough so that it can be implemented without developing an actual schedule. One need only schedule people for the first round of triads and inform them of the rules they should follow in rotating roles and moving to successive triads. Figure 2 shows a sheet that can be given to students and enables them to determine for themselves which triads to go to and which roles to take in successive sessions.

The two-rule system can also be implemented by posting a schedule of the type shown in Figure 1 and Table 1, along with a legend that matches student numbers in the schedule with student names. A schedule of this type could be developed by hand but would be laborious to produce because its format changes for different class sizes and numbers of rounds. Fortunately, it is possible to produce this schedule automatically, using a computer program. I have written a program that generates schedules as html pages, which is available at http://mg.boisestate.edu/mg301/cgi-bin/GenerateSPTriads3. asp. By entering class size and number of rounds desired, one can instantly create a schedule tailored to one's class. One only needs to print out this schedule and post it in the classroom.³

Conclusion

A triad series constitutes an efficient method for carrying out skill practice, and many examples of such series can be found in the OB literature. In this article, I suggested that a part of the value of such a series is in the variety of situations that students encounter. Making each successive session a stranger triad introduces significant and relevant variety and thereby enhances the learning value of the series.

To this point, the ability of instructors to provide variety through stranger triads has been limited because a method for scheduling them has not been available. Development of such a method required delving into mathematical considerations that are well outside the normal domain of skill teachers. The results, however, can be applied by anyone. Once mastered, the two-rule scheduling method requires little or no additional effort but provides an enduring improvement in skill learning.

Notes

1. Figure 1 shows a schedule with an even number of triads. A double jump is shown (after Round 4) that is needed to avoid rescheduling individuals from Round 1 together again. If the one-smaller and one-larger students did not jump two triads between Round 4 and 5, they would both occupy Triad #5.

2. This method does not utilize all the variety in the class because people do not interact with others in their role group—about one third of the class. A person interacts with two strangers each round, so it is theoretically possible to develop a method in which people interact with everyone in the class, extending the number of stranger sessions by nearly one third. Because the method presented in this article is fairly simple, creates enough stranger sessions for my designs,

and contains a potential advantage in that it also enables the scheduler to exclude people from interaction, I have not explored ways of reaching this theoretical maximum.

3. An additional feature of this schedule is that when accessed online, each person's role is hyperlinked to the associated role materials. In Figure 1 and Table 1, the hyperlinked materials are for six rounds of negotiation role-plays from Asherman and Asherman (1995). Students in my online sections carry out these role-plays via a chat room. Readers interested in the FrontPage Active Server Page (.asp) script underlying this page should contact the author.

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