

COMMON TRAINING

INSTRUCTIONAL GUIDE

SECTION 14

EO C203.06 – PARTICIPATE IN PROBLEM-SOLVING ACTIVITIES

Total Time: 30 min

PREPARATION

PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-702/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

Review the lesson content and become familiar with the material prior to delivering the lesson.

The time spent on each activity is at the discretion of the instructor. If time permits, activities may be conducted consecutively. If the group is large, activities may be conducted concurrently. When conducting activities concurrently, ensure enough supervision is available.

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

An experiential approach was chosen for this lesson as it allows the cadets to acquire new skills through a direct experience. This approach allows cadets to experience problem-solving activities and define that experience on a personal level. They will be given the opportunity to reflect on and examine what they saw, felt and thought while they were having the experience, and consider how this will relate to future experiences.

INTRODUCTION

REVIEW

N/A.

OBJECTIVES

By the end of this lesson the cadet shall be expected to participate in problem-solving activities.

IMPORTANCE

It is important for cadets to participate in problem-solving activities as it may improve their leadership abilities in a peer setting by allowing cadets to practice communication skills, positive group dynamics and problem-solving techniques.

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BACKGROUND KNOWLEDGE

Problem-solving activities offer a clearly defined opportunity to practice the skill of problem-solving. Each task is designed so that the group must employ communication skills, positive group dynamics and problem-solving techniques. This problem-solving approach to learning can be useful in developing each individual's awareness of their decision making, responsibilities and cooperation with others. Groups engage the problem by taking advantage of the combined physical and mental strengths of each of its members. Problem solving is an unrivalled way to build morale and a sense of camaraderie.

ACTIVITY 1

Time: 20 min

OBJECTIVE

The objective of this activity is to have cadets solve a problem within a peer setting.

RESOURCES

N/A.

ACTIVITY LAYOUT

N/A.

ACTIVITY INSTRUCTIONS



Brief the cadets on any safety rules or any other guidelines pertaining to the activity.

1. Divide the cadets into groups of 8 (preferably 4 males and 4 females).



If there is not an even number of males and females, any alternative to identify the two groups may be used (e.g. hats on/hats off, tunics on/tunics off, etc.)

2. The group must solve the problem in the least number of moves. The object of the game is to have all the males end up on one end of the line and all the females on the other end of the line.

3. Have males and females alternate in line.

4. All moves must be made in pairs. Any two cadets standing side by side (without a space between them) may be considered a pair. Pairs may change with each move.

5. As a pair moves, an empty space is created in the line.

6. The empty space may be filled by another pair.

7. Pairs may not pivot or turn around.

8. The final line must have no spaces or gaps.

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There are many ways to solve this problem. Have cadets attempt to solve this problem a number of times, trying to minimize the number of moves on each attempt.

The following sequence illustrates the minimum 4 move solution.

1. Move 1 – Pair 2/3 move to the end of the line past 8.

M F M F M F M F
1 (2 3) 4 5 6 7 8

M F M F M F F M
1 4 5 6 7 8 (2 3)

2. Move 2 – Pair 5/6 move into the slot vacated by the previous pair.

M F M F M F F M
1 4 (5 6) 7 8 2 3

M M F F M F F M
1 (5 6) 4 7 8 2 3

3. Move 3 – Pair 8/2 move into the slot vacated by the previous pair.

M M F F M F F M
1 5 6 4 7 (8 2) 3

M M F F F F M M
1 5 6 4 (8 2) 7 3

4. Move 4 – Pair 1/5 move into the slot vacated by the previous pair.

M M F F F F M M
(1 5) 6 4 8 2 7 3

F F F F M M M M
6 4 8 2 7 1 5 3

SAFETY

N/A.

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ACTIVITY 2

Time: 20 min

OBJECTIVE

The objective of this activity is to have the cadets solve a problem within a peer setting.

RESOURCES

- Masking tape, and
- A stopwatch.

ACTIVITY LAYOUT

Using masking tape make a rectangle shape on the floor, 5 m long and 30 cm wide.

ACTIVITY INSTRUCTIONS



Brief the cadets on any safety rules or any other guidelines pertaining to the activity.

1. Divide the cadets into two groups.
2. Each group forms a line inside the rectangle, one behind the other, facing into the centre of the rectangle.



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Figure 1 Cadet Shuffle

3. Each group must exchange places with the other group without touching the floor outside the rectangle.



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Figure 2 Cadet Shuffle

4. Time each attempt.
5. For each person that steps outside the rectangle, add 10 seconds to the time.
6. Have cadets attempt this game a number of times, trying to minimize their time on each attempt.

SAFETY

Remind cadets that there is to be no horseplay or pushing other cadets outside the rectangle.

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REFLECTION

Time: 5 min

GROUP DISCUSSION



TIPS FOR ANSWERING/FACILITATING DISCUSSION

- Establish ground rules for discussion, e.g. everyone should listen respectfully; don't interrupt; only one person speaks at a time; no one's ideas should be made fun of; you can disagree with ideas but not with the person; try to understand others as much as you hope they understand you; etc.
- Sit the group in a circle, making sure all cadets can be seen by everyone else.
- Ask questions that will provoke thought; in other words avoid questions with yes or no answers.
- Manage time by ensuring the cadets stay on topic.
- Listen and respond in a way that indicates you have heard and understood the cadet. This can be done by paraphrasing their ideas.
- Give the cadets time to respond to your questions.
- Ensure every cadet has an opportunity to participate. One option is to go around the group and have each cadet answer the question with a short answer. Cadets must also have the option to pass if they wish.
- Additional questions should be prepared ahead of time.

SUGGESTED QUESTIONS

Q1. How did it feel to solve the problem?

Q2. How could your group have improved on its performance?

Q3. Did the group follow a problem-solving technique? Why or why not?

Q4. Did your group members use positive group dynamics when discussing how to solve the problem? Why or why not?



Other questions and answers will develop throughout the group discussion. The group discussion should not be limited to only those suggested.

CONCLUSION

REVIEW

Upon completion of the group discussion the instructor will conclude by summarizing the discussion to ensure that all teaching points have been covered. The instructor must also take this opportunity to explain how the cadet will apply this knowledge and/or skill in the future.

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TEACHING POINTS

TP1. The group must employ communication skills, positive group dynamics and problem-solving techniques.

TP2. Problem solving develops each individual's awareness of their decision making, responsibilities and cooperation with others.

TP3. Groups engage the problem by taking advantage of the combined physical and mental strengths of each of its members.

TP4. Problem solving is an unrivalled way to build morale and a sense of camaraderie.



Reinforce those answers given and comments made during reflection, but ensure that the teaching points have been covered. Any teaching point not brought out during the group discussion shall be covered during review.

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

N/A.

CLOSING STATEMENT

Problem solving is a key leadership quality. Practicing the skills of problem-solving should assist cadets in leading in a peer setting by increasing their self-confidence. Problem-solving activities allow cadets to practice communication skills, positive group dynamics and problem-solving techniques.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

C1-006 (ISBN 0-8403-5682-X) Ronhke, C. (1984). *Silver Bullets: A Guide to Initiative Problems, Adventures Games and Trust Activities.* Dubuque, Iowa: Kendall/Hunt Publishing Company.

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