

## **Competency Based Team Formation: An Experiential Exercise**

**Barry A. Friedman**

The State University of New York at Oswego, USA

School of Business

247 Rich Hall

Oswego, New York 13126

and

Suleyman Sah University, Istanbul, Turkey

### **Abstract**

*Groups are widely used to achieve organizational objectives including improved products, services, productivity and quality. Teamwork is among the top skills employers look for in new hires. Educators therefore place considerable emphasis on teamwork. In this exercise, undergraduate and graduate students learn how to form task groups composed of relevant and complementary knowledge, skills, and abilities (KSAs), and balance the need for task effectiveness and student developmental needs. Students are presented with a Request for Proposal (RFP) from Apple® that describes a store employee retention issue. Students brainstorm KSAs that are required to effectively write competitive proposals, conduct KSA self-assessments, and form task groups based on complementary KSAs and student developmental needs. The instructor then debriefs the exercise to reinforce learning objectives. Relevant literature, handouts, and rubrics are provided. This exercise is appropriate for graduate and undergraduate students of organizational behavior, human resource management, and business administration.*

**Keywords:** group formation, teamwork, experiential learning

### **1. Introduction**

Groups are commonly used by organizations to achieve results that are beyond the scope of a single individual, to improve products and services, and for continuous process improvement (Levi, 2013; Contractor, 2013). Teamwork is among the top ten skills employers look for in new undergraduate and MBA hires (Ghannadian, 2013). It is therefore not surprising that instructors frequently employ student project groups to assist students develop skills needed for their future workplace roles. Bonewright (2010) reviewed forty years of literature that used Tuckman's initial (1965) and later model of small group development (Tuckman & Conover, 1977). Bonewright concluded that the forming, storming, norming, performing, and adjourning stages of small group development remains the most widely accepted sequence of how groups move from conception to performance. The initial stage called "forming" assumes that individuals are already assigned to a group and endeavor to establish ground rules and interpersonal relationships (Bonewright, 2010). A critical step in this forming stage not explicitly addressed in the literature is the selection process. Students need experience in selecting individuals for ad hoc or long term groups as well as skills in facilitating groups through the team development stages.

Research suggests that a variety of complementary knowledge, skills and abilities (KSAs) including cognitive, technical and interpersonal, are associated with team preferences and effectiveness (Gwynne & Gobble, 2012; Khanbabaie, Lajevardi, & Kohsari, 2011; Neuman & Wright, 1999). Zhu, Huang and Contractor (2013: 251) found that individuals join ad hoc groups to complete difficult projects "tend to collaborate with specific teammates who have complementary skills, those who have similar age or skill level, and those who are affiliated with the same organizational entity". The exercise reported here provides students with group formation experience; that is, the process of selecting group members. Amato and Amato (2005) found that students with prior group project experiences preferred groups with complementary styles (as measured by the Myers-Briggs Personality Assessment). On the other hand, students with little group experience preferred the comfort of groups with similar styles.

## 1.1 Exercise Objectives

The objectives of this exercise are to experience and learn processes that (1) form groups based on relevant and complementary KSAs, and (2) balance the need to effectively and efficiently complete assigned tasks and the need address group member developmental needs. By participating in this exercise, students will be able to incorporate the need to form effective project groups with the need to develop individual student KSAs and relate their experience to relevant empirical literature.

The group formation experiential exercise is part of a four day intensive team building seminar (Appendix A). In the four day seminar, participants form groups, engage in team building activities, and subsequently complete the assigned task. Please contact the author for additional information about the complete four day seminar. Only the group formation part of the seminar is presented here.

## 1.2 Exercise Overview

Students are first presented with a Request for Proposal (RFP) from Apple<sup>®</sup>, Inc. that describes a low retention issue with store employees (Appendix B). So that group time is used efficiently, participants should read the Apple<sup>®</sup> RFP case prior to the exercise. The exercise begins with a student brainstorming session that identifies KSAs required to effectively write the proposal and win the contract. Students then form groups based on their self-assessment of the relevant KSAs. This exercise was developed and pilot tested as part of a MBA intensive seminar conducted June, 2013 at a German University. The exercise was subsequently refined with both undergraduate and graduate business students at a state and a private university in the United States.

The group formation exercise requires 50 minutes, but additional time may be allotted contingent on pre-reading and discussion/debriefing depth desired. Four student groups of five students each is optimal for the exercise (i.e., 20 students), but the exercise can be done with as few as ten or as many as forty students. Greater exercise detail including instructions and materials for conducting and debriefing the exercise is offered below.

## 2. Exercise Facilitation Instructions

### 2.1 Exercise Preparation

Instructor preparation for the exercise consists of communication with students, flip charts, and basic materials. A communication to students (with pre-reading) should be sent that states the exercise objectives and logistics (e.g., location date, and time), and that reading the Apple<sup>®</sup> RFJ case prior to participation is essential. Flip charts should be prepared for exercise objectives, the Evaluation Rubric (Appendix C), basic brainstorming rules and KSA examples. Blank flips charts should be prepared for the Student Self-Assessment (Appendix D) and the Group Complementary KSA Matrix (Appendix E). Alternatively, instructors may use PowerPoint slides or overhead projectors rather than flip charts. Hard copies of the above should be made for each student as handouts. Markers and tacks to hang flip charts are also needed.

### 2.2 Pre-Reading

Students read the Apple<sup>®</sup> RFP (Appendix B) prior to the exercise. The RFP refers students to a *New York Times*<sup>®</sup> article that describes a retail store low employee retention issue. Apple requests competitive bids from outside organizations (i.e., student groups) that address the low retention issue. The RFP contains specific parameters regarding the acceptable format: executive summary, problem diagnosis, proposed actions, and budget. Students are also provided with a rubric that clarifies specific criteria used to evaluate students' competitive (Appendix C) proposals.

### 2.3 Introduce Exercise

The instructor briefly reviews the exercise objectives (above), the RFP deliverable (i.e., a written competitive proposal and oral presentation) and the evaluation rubric criteria. Stress that task effectiveness is important, but as students their developmental needs are also important. The instructor must ensure that students understand the basic group task: write and present a proposal that addresses Apple's low retention issue, but that the exercise at this time is to form groups only. Next the instructor outlines the three main exercise steps with the students (KSA brainstorm, self-assessment, and group formation).

## 2.4 Brainstorm KSAs

Inform students that they are about to brainstorm what KSAs they believe are required to conceive, write, and present an effective response to the RFP. Provide a mini-lecture that provides examples of knowledge (e.g., a body of task relevant knowledge such as human resource management and staffing methods), skills (e.g. an observable competence to perform a psychomotor act such as proficiency with computer programs PowerPoint), and abilities (e.g., a competence to perform an observable behavior such as deliver oral presentations) (Office of Personnel Management, 2014). Ask students to consider the evaluation rubric and whatever else they think may be important to win the contract. With the entire class, ask for one KSA example. Acceptable and likely examples include “presentation skills” or “knowledge of compensation and pay practices”.

The instructor then reviews four basic rules of brainstorming: 1) criticisms are forbidden, 2) free thinking and wild notions encouraged, 3) numerous ideas are sought, and 4) combining and building on the ideas of others is good (Levi, 2013; Osborn, 1957). Once students understand the task, the instructor then asks students to *independently* write down all the KSAs they can think of. Stress that all ideas are welcome. Similar to brainwriting (Heslin, 2009), this step is used to encourage uniform participation among group members by minimizing social loafing (Paulus & Yang, 2000), dysfunctional student relationships, and status differences (VanGundy, 1983).

Students then work in triads and generate a consensus list of KSAs, at which time they should post their list on flip chart paper for all students to see. Once all triads have posted their lists, the instructor facilitates a discussion that generates a single consensus KSA list by asking the total class to combine similar KSAs and eliminate duplicates. So that the consensus list is manageable, the instructor asks that students prioritize the list so that it contains from five to ten KSAs.

## 2.5 Self-Assessment

Students then rate themselves against the consensus KSA list. Instruct students to copy the consensus KSA list on the left side of the self-assessment questionnaire (Appendix D). Students rate themselves using a Likert scale where “1” = very weak, “2” = weak, “3” = neither weak nor strong, “4” = strong, and “5” = very strong on each of the dimensions listed on Appendix E. The instructor asks students to identify their two greatest KSA strengths (“S”) and one KSA they wish to develop (“D”).

## 2.6 Form Groups

Once the self-assessments are completed, the instructor informs students that they will next form groups that will work on the RFP (recall that students do not actually write proposals in this group formation exercise). The instructor can provide a mini lecture that explains the benefits of forming groups with individuals that possess relevant and complementary KSAs. The instructor then presents the “Group Complementary KSA Matrix” (Appendix E). A flip chart or an overhead projector with markers may be used. The instructor first lists the consensus KSAs in the first column. Students then place their names on the top row and indicate their two KSA strengths and one area for development by placing “Ss” and one “D” in the appropriate cells.

The instructor then directs participants to form groups based on their posted self-assessments. Instruct participants to select a group where they possess a strength needed for task effectiveness and where they have the opportunity to develop one of their development needs. In other words, the instructor should encourage students to use the Group Complementary Matrix to form groups so that each group contains the needed KSAs across its members, and that members’ developmental needs can be potentially met. Next the instructor should ask students to change their seats so that group members are seated together to facilitate their interaction.

This phase of the exercise may appear chaotic at first, as students review the Group Complementary Matrix and form student clusters. Some KSAs may be widely distributed across student participants (e.g., PowerPoint and verbal presentation skills), while other KSAs may be relatively rare (e.g., financial and budgeting skills). Competition for group members with rare but important skills may be spirited but mirrors organizational life where competition for scarce resources and talents are common.

## 2.7 Timing Requirements

A suggested 50 minute timeline for the exercise appears below. Please note that this does not include reading the Apple® RJP case prior to the exercise (30 minutes).

- Explain exercise objectives and evaluation rubric (5 minutes)
- Brainstorm and KSA mini-lecture-(5 minutes)
- Student “brain writing” (5 minutes)
- Triad and total group brainstorming (10 minutes)
- Student self-assessment- Appendix E (5 minutes)
- Complete the Group Complementary KSA Matrix- Appendix F (5 minutes)
- Form student groups (15 minutes)

### **2.8 Debrief Exercise**

Debrief the group formation process by asking students: “How does the group formation process differ/similar from how they typically form class project groups?” “What are the benefits of the process you just experienced?”, “What are some disadvantages of the group formation process?”, and “Do you think this process is typically used in organizations-why or why not?”

Students have reported that the group formation process clarifies complementary KSAs as a basis for selecting group members. Students also point out that group formation based on complementary KSAs and developmental needs may balance the short term need for task completion with the longer term need to develop individuals. That is, a group member with a particular strength can coach another group member that is weak in that KSA.

Disadvantages offered by students may include the low validity of self-assessments and individuals’ unwillingness to disclose their developmental needs to others in organizations with poor organizational cultures with low trust. Students may also argue that the low talent supply, the lack of knowledge of group dynamics, and time pressure may be barriers to implementing the group formation process in smaller organizations. The instructor should challenge students to suggest ways of overcoming these barriers. For example, managers could be held accountable for employee development and incentives for development can be established.

### **3. Student Reactions**

MBA and undergraduate students that performed this exercise initially took the experience very seriously and worked diligently to form groups. An interesting student comment was that she previously joined student class project groups based mainly on friendship, but that she will form groups based on skills best needed to do the work. As mentioned previously, this exercise is a module in an intensive four day teambuilding seminar, and course evaluation ratings were very high for both undergraduate and MBA students. More importantly, students in both groups reported that they learned how to form project groups using a rational process.

### **4. Conclusion**

In this exercise, participants learn to form groups based on complementary KSAs, and balance the need to effectively accomplish tasks with developmental needs. As organizational use of groups proliferates, these group formation skills should serve students well in future organizational roles.

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**Appendix A**

**Four Day Team Building Seminar**

**Learning Objectives**

1. Develop group formation, development, and productivity skills.
2. Understand group and team basic concepts (e.g., definitions, stages of team development, and types of groups).
3. Describe elements of group effectiveness.

**Pre-Reading**

- (1) Dufrene, D. D. & Lehman, C.M. (2011). *Building High-Performance Teams*. South-Western Cengage Learning, United States
- (2) Apple Request for Proposal Case (Apple RFP)
- (3) Ivancevich, J.M.; Konopaske, R & Matteson, M.T. *Organizational Behavior and Management*. 9<sup>th</sup> Edition, New York, McGraw-Hill (2014). Chapter 10 Groups and Teams.
- (4) TerraCog Global Positioning Systems Harvard Case (HBR 2184).

**Agenda**

	Day 1	Day 2	Day 3	Day 4
AM	<ul style="list-style-type: none"> <li>• Introduction discussion</li> <li>• Best/Worst team exercise</li> <li>• Why use teams</li> <li>• When to use teams</li> <li>• Groups versus Teams</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge &amp; Skills needed Apple Case</li> <li>• Apple Case group formation</li> <li>• Team Charter exercise</li> </ul>	<ul style="list-style-type: none"> <li>• Intergroup conflict and resolution discussion</li> <li>• TerraCog Global Positioning Systems Case</li> </ul>	<ul style="list-style-type: none"> <li>• Team evaluation: process check</li> <li>• Apple case group work</li> <li>• Team presentations</li> </ul>
PM	<ul style="list-style-type: none"> <li>• Lost on the Moon team exercise<sup>1</sup></li> <li>• Apple RFP Case Review</li> <li>• Homework: RFP Case</li> </ul>	<ul style="list-style-type: none"> <li>• Team building exercise: Scavenger Hunt</li> <li>• Apple Case group work</li> </ul>	<ul style="list-style-type: none"> <li>• Apple Case Work</li> <li>• RFP Bidder’s Meeting (see Apple case)</li> <li>• Draft RFP due</li> </ul>	<ul style="list-style-type: none"> <li>• Team presentations</li> <li>• Team self-evaluations</li> </ul>

<sup>1</sup> Originally from Hall, J. Decisions, Decisions, Decisions. *Psychology Today*, 1971, 51-54.

## Appendix B

### Apple<sup>®2</sup> Retail Sales Force Retention

#### Submission deadline: (Date)

#### Bidders Meeting: (Date)

Questions can be submitted prior to the bidders meeting.

Questions may be emailed to: Instructor name (email), and will be answered within one business day. Instructor (name) will represent Apple for the purposes of the RFP.

#### Introduction

Apple, Inc. invites proposals for increasing the retention rate of its valued in-store retail sales force employees. Apple wishes to increase retention of its in store salespersons. Based on previous work and reputation, your group has been selected to receive this RFP and is invited to submit a proposal. No work is to be sub-contracted.

#### Bidders Meeting

There will be an opportunity for bidders to meet with (Instructor name) for a Question and Answer session on the date indicated above. The purpose of this meeting is to give bidders the opportunity to ask (Instructor name) questions about the project.

#### RFP background Information

Segal, D. (2012). Apple's retail army, long on loyalty but short on pay. *New York Times*, June 23. This article may be found at <http://www.nytimes.com/2012/06/24/business/apple-store-workers-loyal-but-short-on-pay.html?emc=eta1>

#### Submission Procedure

Proposals conforming to the requirements set out below must be received by (Instructor Name) no later than the deadline above. Any bid received after that time will not be considered. All submittals must be hard copies. Modifications to bids already submitted will be allowed if submitted prior to the deadline. Apple reserves the right to waive irregularities, reject any or all bids, and to negotiate with the selected bidder in the event that the price exceeds available funds.

#### Submission Format

Proposals are limited to 6 pages (double spaced 12 font), and must contain the following:

1. Executive summary: brief overview.
2. Project objective(s): specific expected results and measures are specified. Proposed methods, techniques and/or rationale regarding how each objective will be achieved.
3. Background and problem diagnosis.
4. Activities, responsibilities, and timeline.
5. Summary budget.
6. References: articles that support proposed action, methods, and/or techniques are cited. References should in American Psychological Association format (<http://owl.english.purdue.edu/owl/resource/560/01/>).
7. Group member signatures.

#### Proposal Selection Criteria

Submissions will be judged on the following criteria (see evaluation rubric for more detail):

1. Creativity: the proposal should include, but not be limited to, compensation.
2. References: the proposal should include current research that supports the any recommendations. Current research refers to articles published in journals within the past 10 years.
3. Professionalism: the presentation to Apple<sup>®</sup> Management (Instructor Name) should be brief, concise, and well presented. The document should be well written and adhere to the required format outlined above.

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<sup>2</sup> This RFP is for instructional purposes only.

**Appendix C**

**Apple® Request for Proposal (RFP)**

**Evaluation Rubric**

	<b>Excellent</b>	<b>Acceptable</b>	<b>Poor</b>	<b>Unacceptable</b>
<b>1. Creativity:</b> the proposal should include, but not be limited to just pay solutions.	New, fresh, multifaceted, original	Few but creative approaches	Single approach, limited to pay	No approach given
<b>2. References:</b> the proposal should include current research that supports recommendations (published in journals within the past 10 years).	Scholarly peer reviewed recent articles that justify proposals	Few scholarly articles that justify proposal	Mostly non-scholarly articles (e.g. newspaper, blogs)	Very few references provided to justify proposals
<b>3. Professionalism:</b> the presentation should be brief, concise, and well presented. The document should be well written and adhere to the required RFP format.	Proposal clear and compelling, presenters dressed appropriately	Proposal clear but sometimes not compelling	Proposal unclear at times, not very convincing	Proposal unconvincing
<b>4. Teamwork:</b> the group should demonstrate teamwork towards a common goal.	Extensive evidence of teamwork, such as being responsible for one another's performance, providing constructive feedback.	Some evidence of teamwork, learning and improvement	Little insight into team process, teamwork, learning, or improvement.	No insight into team process, teamwork, learning, or improvement.

**Appendix D**

**Self-Assessment Questionnaire**

Place an "S" next to two strengths. Place a "D" next to one area for improvement	Consensus List: Knowledge, Skill and Abilities	Very weak	Weak	Neither weak nor strong	Strong	Very strong
		1	2	3	4	5

