## Activity/Exercise

Title, Abstract \& Keywords

Title: Student-Team Selection Using a 'Speed-Grouping’ Process


#### Abstract

:

Many courses use student-team based learning. An early semester challenge is setting up the teams. Typical options include students self-selecting teams or instructor-assigned teams. Both have benefits and challenges. The 'Speed-Grouping' Process is a modified SpeedInterviewing/Dating technique which blends instructor-assigned teams with students selfselected teams. Both the instructor and students have a say in the team member selection decision making process, which can improve the students' team engagement. Session participants will gain the information and experience for using this mixed-method process for student team selection.


Keywords: group-member selection, team-based learning, active-learning classroom

## Introduction

An early challenge in a Team-Based Learning (TBL) course is the group-member selection process. "A Guide to Teaching in the Active Learning Classroom: History, Research, and Practice" (Baepler, Walker, Brooks, Saichaie, \& Petersen, 2016), identifies four general categories for forming student groups for a course. They are identified as random, instructorgenerated, self-selected, and mixed. Prior research has investigated group-member selection from both the instructor-generated verses student self-selected groups (Hilton \& Phillips, 2010), which found that the group's behavior was influenced by the instructor decision on the group composition, which was countered by the opportunity for self-selection bias with student selfselected groups.

The Speed-Grouping Process is a variation of the Speed-Interviewing technique which evolved from the Speed-Dating concept. The students are paired up in a series of quick three- to fiveminute rotating interviews. The Speed-Grouping Process combines the benefit of immediate comparisons between candidate group members of Speed-Interviewing with the mutual evaluations of Speed-Dating. A different variation of the Speed-Dating concept has also been applied to "Enliven and Improve (farmers' market managers) Conferences and Workshops" as speed mentoring. (Lev, 2003)

Within the area of mixed-method group selection, several techniques have been used. They range from a simple extension of the random count-off method with an instructor selected ordering for the lineup then counting off by the number-of-teams approach to using a selection being based on certain characteristics with a computer algorithm forming the groups using multiple student characteristics (Moreno, Ovalle, \& Vicari, 2012). The Speed-Grouping Process as a mixed method for forming student groups which permits the instructor to influence the group
composition while reducing some self-selection bias and with opportunities to improve group diversity and engagement.

The Speed-Grouping Process can be used for undergraduate and graduate courses.

## Theoretical Foundation/Teaching Implications.

The benefits of group-based learning verses students taught using traditional teaching methods has been studied and analyzed with many research studies. (Oakley, Brent, Felder, \& Elhajj, 2004). As Oakley, Brent Felder \& Elhajj state "These benefits are not automatic, however. Being part of an ineffective or dysfunctional team may well be inferior to independent study in promoting learning and can lead to extreme frustration and resentment." Some of the frustration can be reduced by the students participating in the group member selection process.

The Speed-Grouping Process helps improve student group engagement by having the students actively participating in group member selection while balancing it with an instructor's desire to have groups with diverse members. When students participate in selecting their group members, they have an increased personal responsibility for the function of the group. The Speed-Grouping Process takes a few steps and can be completed as part of the first two classes in the semester.

## Learning Objectives.

The students will improve their skills and gain knowledge of:

- Short interviewing others while concurrently being interviewed
- This can help students who will be interviewing at a job fair or "open-house"
- Students in a Human Resource Management course should develop an increased understanding of the importance of preparation prior to an interview.
- Decision making with incomplete information (bounded rationality)
- The experience can be referred to later in the semester if the concept of bounded rationality in decision making is discussed.


## Exercise Overview.

The Speed-Grouping Process requires time within 2 different class periods at the beginning of the semester. (Appendix B provides a visual overview of the process.) Part of the first class is used to obtain some student demographics, for the instructor to use to create the quasihomogeneous groupings. By the end of the Speed-Grouping, no two members from the same quasi-homogeneous groupings should be on the same student team. Table \#1 is an overview of the class and preparation to use the Speed-Grouping process.
Table \#2 details the specific class which the interviews and the selection of group members occurs.

| Class Sequence |  |  |
| :---: | :---: | :---: |
| When | Objective | Forms/Materials |
| Preparation for the $1{ }^{\text {st }}$ class | - Review/Modify "Information Sheet" for the 'Getting to know you' portion of the first class. <br> - Print copies for the students to complete. | - Information Sheet (See Appendix A) |
| $1{ }^{\text {st }}$ Class | - Have students complete the <br> "Information Sheet" to obtain the background information for the quasihomogeneous groupings. <br> - Inform the class they will be going through a group selection interview process in the next class and to come to class with 2 key questions they will ask potential group members. | - Information Sheet |
| Preparation for the $2^{\text {nd }}$ class | - Group the students into quasihomogeneous groups. <br> - For a class with 32 students which will be divided into 8 teams, create four quasi-homogeneous groups. <br> - Write each student's name on the colored index card for their quasihomogeneous groups. | - Package of $3 \times 5$ " Colored Index Cards <br> [- Use a different color for each quasi-homogeneous group. <br> - Typical Index Card Colors: <br> Blue/Violet/Canary(Yellow) <br> /Green/Cherry(Red)] |
| $2^{\text {nd }}$ Class | - 'Speed-Grouping’ Day (See Table \#2 for details) | - Organized colored index cards with students' names on them \& bring some spare cards <br> - Envelope/Hat with group numbers. (used to random draw group numbers.) <br> - Group Sign-up Sheet |
| Follow-up from $2^{\text {nd }}$ Class | Organize and publish 'Speed-Groups" with group members names and group numbers on LMS. |  |

Table 1-Class Sequence for 'Speed-Grouping'

Note: The sequence within the above table only relates to the portion of the classes which are related to the Speed-Grouping Process.

| Sequence - Speed-Grouping Day |  |  |
| :--- | :--- | :--- |
| What | How | Time |
|  | -Explain what will be occurring in <br> today's class <br> -Pass out the individual colored index <br> cards with the students' names <br> into the quasi- <br> homogeneous <br> groupings | -Organize the seating so all students <br> with a like-colored are sitting in the <br> same row. In the row in front/behind <br> are all students with another colored <br> card. (See Appendix C) <br> -Remind them to write down their 2 <br> key questions they will ask potential <br> group members, |
| Interviewing | - Have students interview each other. <br> (See Appendix C for the interview <br> rotation sequence) <br> -Note: Some students may experience <br> information overload prior to the last <br> round. | Approximately 35 to 50 <br> minutes |
| per round. |  |  |
| Pick your group | - Students should reflect \& identify <br> other students from other quasi- <br> homogeneous groups who they could <br> work with as group members <br> members <br> - Based on their interviews, students <br> pick their group members <br> - Each group will have 4 students, each <br> with a different colored index card. <br> (Green, Blue, Red, \& Yellow) | 8 to 12 minutes |
| Contact info | - Select group number by random <br> number drawing <br> - Fill out group member names on the <br> instructor's sign-up sheet \& return <br> index cards as a group | 4 to 8 minutes |
| - Students exchange contact info <br> - Students discuss how the group will <br> work on collaborative documents | Remainder of class |  |

Table 2-Speed-Grouping Class Sequence

## Session Description.

The session will walk-through the preparation and execution of the Speed-Grouping Process to equip the participants with information to use the process for student group-selection for a course.

Proposed timeline for the session is as follows:

- Introduction and Overview

5 minutes

- Steps in the Speed-Grouping Process 10 minutes
- First day of class
- Second day of class
- "Be the students" in the Speed-Grouping Process

15 minutes

- Workshop participants will participate in shortened Structured Speed-Interviewing.
- Collaborative Dialogue 5 to 10 minutes
- Q \& A, plus suggestions for improvement
- Workshop participants shared experiences and past lessons-learned


## Works Cited

Baepler, P., Walker, J., Brooks, D. C., Saichaie, K., \& Petersen, C. I. (2016). A Guide to Teaching in the Active Learning Classroom: History, Research, and Practice. Sterling, Virginia: Stylus Publishing, LLC.

Doyle, T. (2008). Helping Students Learn in a LearnerCentered Environment. Sterling, Virginia: Stylus.
Hilton, S., \& Phillips, F. (2010). Instructor-Assigned and Student-Selected Groups: AView from Inside. Issues in Accounting Education, 25(1), 15-33.

Lev, L. (2003, April). Using Speed Dating Techniques to Enliven and Improve Conferences and Workshops. Journal of Extension (JOE), 41(2).

Moreno, J., Ovalle, D. A., \& Vicari, R. M. (2012, January). A genetic algorithm approach for group formation in collaborative learning considering multiple student characteristics. Computers \& Education, 58(1), 560-569.

Oakley, B., Brent, R., Felder, R. M., \& Elhajj, I. (2004). Turning Student Groups into Effective Teams. Journal of Student Centered Learning, 9-34.

Reis, R. (2017, January 8). Ways to Form Student Groups. Retrieved from Stanford University Tomorrow's Professor Postings: https://tomprof.stanford.edu/posting/1532

Sullivan, D. J. (2008, June 16). Speed Interviewing: Lessons Learned From Speed Dating. Retrieved from ERE Media: https://www.ere.net/speed-interviewing-lessons-learned-from-speed-dating/

## Appendix A - Sample Information Sheet

Please complete and return this form during the first class. Thank you!
Name $\qquad$ How would you like to be addressed? $\qquad$
Where are you from? $\qquad$
E-mail Address (Please print) $\qquad$
Current degree program(s) $\qquad$
Which section are you registered in? $\quad \square$ Section -01 M/W 10:00-11:45 am
Your reason for taking this course: $\qquad$

## Views of Learning

What are your strengths as a learner?
$\qquad$
$\qquad$
How useful do you think this course is in helping you reach your career/learning goals?

- Very Useful
- Useful
- Not Useful
- Uncertain

How do you describe your learning preference?

- Like to learn alone
$\square$ Like to learn with others
$\square$ Both are fine

What are your weaknesses as a learner?
$\qquad$
$\qquad$
How confident are you speaking in front of others?
$\square$ Very confident

- Confident
- Somewhat confident
- Not confident

How do you feel about learning in groups?

- Like it
- It's OK
- Don't like it

On average, per course, how many hours do you study per week? $\qquad$
Please provide your current overall GPA: $\qquad$
On a scale from 5 to 1 , with 5 being the highest, please answer the following 3 items -
> Please rate your overall writing skills
> Please rate your overall presentation skills
> Please rate your overall mathematics skills
$\begin{array}{lllll}5 & 4 & 3 & 2 & 1\end{array}$
$\begin{array}{lllll}5 & 4 & 3 & 2 & 1\end{array}$
$\begin{array}{lllll}5 & 4 & 3 & 2 & 1\end{array}$

How many credit hours are you enrolled in this semester? $\qquad$
During the semester, about how many hours a week do you typically work on a paid job? $\qquad$
During the semester, about how many hours a week do you typically work on a volunteer job? $\qquad$

## EMPLOYMENT - ORGANIZATION INTERESTS

| Size of organization | Culture of Organization |
| :--- | :--- |
| $\square$ Small (up to 100 employees) | $\square$ CREATE - "Do things first" |
| $\square$ Medium (100 to 999 employees) | $\square$ COMPETE - "Do things fast" |
| $\square$ Large (Greater than 1000 employees) | $\square$ CONTROL - "Do things right" |
| Profit Prospective | $\square$ COLLABORATE - "Do things together" |
| $\square$ Non-profit | Reach organization <br> $\square$ For-Profit |

## PERSONAL INTEREST

Please specific your goals or interests in rank order for each of the categories listed below:

| Rank <br> Order | Most Interesting College <br> Courses | Hobbies (includes sports) | Career Goals |
| :---: | :---: | :---: | :---: |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |

Describe a time when you have been in contact with an organization's human resources group:
$\qquad$
$\qquad$
$\qquad$

An interesting "fun-fact" about yourself: $\qquad$
$\qquad$
$\qquad$
Other initial comments $\qquad$


Appendix C - Interview Rotation Sequence

Round 1


Round $\mathbf{3}$ \& beyond - $\mathbf{2}$ groups continue to rotate seating for each interview round

Appendix D - Sample Group Sign-up Sheet

|  | Course |  | Term |  |
| :---: | :---: | :---: | :---: | :---: |
| Index Card Color --> | Red | Green | Blue | Yellow |
| Group \# |  |  |  |  |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |
| 7 |  |  |  |  |
| 8 |  |  |  |  |
| Print names legibly |  |  |  |  |

