Enhancing Arthur Andersen Business Ethics Vignettes: Group Discussions Using Cooperative/Collaborative Learning Techniques

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ABSTRACT. Arthur Anderson & Co. has made a significant contribution to assist and encourage the teaching of business ethics. They provided assistance initially through workshops and curriculum materials; currently they are using campus coordinators to disseminate information and materials. The curriculum materials can be used by the instructor to assist students in practicing their moral reasoning skills and cover four academic areas: Accounting, Finance, Marketing, and Management. These materials include business ethics video vignettes, suggestions on presentation methods, guidelines for implementing a stakeholders' analysis approach to ethical reasoning, and possible discussion questions. The vignettes present ethical dilemmas that persons may encounter in entry level positions. We have used the vignettes, the accompanying discussion questions, and the suggested stakeholder analysis in class presentations. This paper presents a discussion of the basic concepts associated with cooperative learning, an example of the implementation of cooperative learning techniques using the Arthur Andersen Accounting Ethics Vignettes, and empirical results of the influence of these particular group discussions on the students' ethical responses. We did not attempt to measure whether the individuals' moral levels changed, but whether the group discussions stimulated any changes in the students attitudes toward the particular ethical dilemma they viewed.

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Introduction

Arthur Andersen & Co. has made a significant contribution to assist and encourage the teaching of business ethics. They provided assistance initially through workshops and curriculum materials; currently they are using campus coordinators to disseminate information and materials. The curriculum materials can be used by the instructor to assist students in practicing their moral reasoning skills and cover four academic areas: Accounting, Finance, Marketing, and Management. These materials include business ethics video vignettes, suggestions on presentation methods, guidelines for implementing a stakeholders' analysis approach to ethical reasoning, and possible discussion questions. The vignettes present ethical dilemmas that persons may encounter in entry level positions. We have used the vignettes, the accompanying discussion questions, and the suggested stakeholder analysis in class presentations. The discussions were often lively, but overall audience participation was limited, with only a few vocal students actually participating.

There are several implementation problems associated with group discussions in the classroom, as noted in Arthur Andersen's Business Ethics Program materials. Some students choose the role of free riders and silently let others lead and dominate the discussion. Students may also have an inability or unwillingness to expand on or refute others' ideas, (AA Integration Issues II-1). The challenge in using

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the ethics materials is to find a way to engage the greatest number in actually thinking about ethical problems.

Through a series of faculty development seminars we became aware of cooperative/collaborative learning techniques which provide educators with guidance on methods to structure group activities in the classroom. The use of cooperative/collaborative learning techniques as a basis for group discussions of the Arthur Andersen business ethics vignettes encouraged participation by all students. All members of a group are put into a situation where they must contribute to the group's discussion. The techniques also provide the students with a chance to become experts on a particular topic. This expertise should provide students with self-confidence to expand or challenge other group members' ideas.

There is support in the moral reasoning literature that ethical discussions among group members are superior to an individual's consideration of a moral dilemma. Nichols and Day (1982) concluded that interacting groups reason at a significantly higher moral level than the average of the members of the groups, using the defining issues test of moral judgment development (202). Nelson and Obremski (1990) indicated that "student-led discussions appear to be more effective than teacher-led discussions in producing moral growth (737)." These previous research studies provide motivation for the use of group techniques to support students' ethical problem solving.

This paper presents a discussion of the basic concepts associated with cooperative learning, an example of the implementation of cooperative learning techniques using the Arthur Andersen Accounting Ethics Vignettes, and empirical results of the influence of these particular group discussions on the students' ethical responses. We did not attempt to measure whether the individuals' moral levels changed, but whether the group discussions stimulated any changes in the student attitudes toward the particular ethical dilemma they viewed.

Development of cooperative skills

One of the primary purposes in the early development of cooperative learning was to change the focus of the classroom from a competitive atmosphere to a cooperative environment. Traditional classrooms were structured so that students worked on an individual basis in an atmosphere that fostered competition among students. However, the world in general requires that people cooperate and work together. Dukerich *et al.* (1990) contend that it is important to study the moral reasoning of groups because many of solutions for moral dilemmas in business are decided on by groups and not one individual. The exercise described here requires that the students work together in the cooperative learning groups to form a consensus to solve an ethical dilemma. The technique used provides them with a structured group framework to solve similar problems they will encounter in practice.

Mai-Dalton (1987) stresses that it is important to have students practice ethical decision making so that when they have ethical decisions to make in the real business world they have a framework to follow. This same philosophy is the basis of the Arthur Andersen Business Ethics Program. The program is structured to provide students with a framework to discuss and act on ethical situations that they will encounter as entry level accountants. With the use of cooperative learning techniques and the Arthur Andersen Ethics vignettes, the students cannot be passive observers in ethics discussions; they are active problem solvers seeking information and sharing ideas with others about situations they will encounter in the careers.

Students may assume a more risk seeking position in a group of their peers than in an open classroom discussion. As group members become better acquainted, the individual members should be more willing to share their ideas. Students also know that their group members are going to expect their participation, so they are forced to be active participants. The need to cooperate and not compete should help them in developing the sense of a team approach which is found in the real business world.

Basic concepts of cooperative learning

Each exercise in cooperative learning is structured so that group members must cooperate to achieve a common goal. Slavin, a prominent researcher in the area of cooperative learning, describes it simply as "heterogenous groups working toward a common

goal (Slavin *et al.*, 1985, 7)." Either the group has to provide a group answer as the end product, or the students in the group can be individually tested, with the group rewarded based on the members' performances. In either case the group has to work toward a common goal – mastery of a concept, or solution of a problem, or accomplishment of a task.

In developing cooperative learning exercises the instructor must develop group rewards. The members of the group will cooperate more fully to achieve their goal if rewards are linked to the group effort. For example, the group's answer may be the basis for a grade, or a bonus system may be developed that rewards group members based on the averages of individual test scores. Students must perceive a need to cooperate with the other group members.

In developing lessons involving cooperative learning two key factors must be considered: Positive or Group Interdependence and Individual Accountability. To achieve Positive Interdependence the exercise must be structured so that group members are dependent on each other for essential information to complete the assignment. For example, instead of giving the group one worksheet containing all the information for solving a problem, pieces of information are given to individual members of the group. The members of the group will then have to communicate their unique information to the group. There must be a sharing of ideas and materials.

Individual Accountability is an essential element in cooperative learning. It means that the exercise must be structured so that each member of the group is held accountable for learning the material. The student has to perceive the need to participate in the group's activities. One method to achieve individual accountability is through individual quizzes. The students learn the material in a group setting, but are tested on an individual basis with group rewards conditioned on the individual members' scores. Another method that is commonly used in cooperative learning is the Numbered Heads Together technique. With the Numbered Heads Together technique each member of the group will be assigned a unique number when the group is formed. In the evaluation stage of the lesson any member of the group can be randomly called upon to present the group's results. Since the group is rewarded based upon an individual member's response, everyone in the group is encouraged to know the answer. A member of the group who can easily grasp the concepts is motivated to see that each member understands the answer because anyone in the group may be chosen to respond. To ensure an understanding of concepts as well as the answer to a specific problem, the individual student could be asked not only to supply the results, but also discuss how the group arrived at the answer.

Group ethics discussion

The Arthur Andersen videotaped Ethics vignette called "The Error" was used as the basis for a group discussion. In the vignette, Jim, a young accountant, is concerned because he has just discovered an error in his forecast of income and he is unsure what action he should take. In class the students viewed the videotape twice to allow them to assimilate the facts of Jim's ethical dilemma. They were then divided into Multi-Alternative groups of three persons and given a worksheet with the following three alternatives:

Alternative 1 – Jim should immediately tell his superiors about the mistake he has made, regardless of the personal consequences;

Alternative 2 – Jim should immediately indicate to his superiors the fact that the actual outcomes may not be as high as the predicted outcomes, without actually admitting his mistake;

Alternative 3 – Jim should never admit his mistake.

The groups were given the task of coming to a group consensus and ranking the three alternatives in order of preference. When the groups presented their rankings at the end of the session, they were required to give the reasons for their alternative choices. They were told beforehand that the Numbered Heads Together technique would be used in selecting the group member who would provide the rankings and the reasoning for their choices. Each member of the group had to be prepared to respond, which introduced the element of individual accountability into

the group process. There was no indication that group rewards, such as a grade, were needed. The students were told anyone could be called upon to provide the group's response; the element of surprise was enough motivation in this situation.

Before the students ranked the alternatives, each student in the Multi-Alternative group was given a sheet with only one of the above alternatives, and they were asked to become an expert on the assigned alternative. In this way the students in the Multi-Alternative group became interdependent on each other, creating the positive or group interdependence element necessary in cooperative learning. The students moved to Single-Alternative groups and discussed the pros and cons of their specific alternative and the implications of this alternative on the different stakeholders who were affected by Jim's dilemma: Jim, other Managers, Employees, Stockholders, Creditors, Community, and Society in general. The Multi-Alternative group then was dependent on the expert for a particular alternative to report back the implications of choosing that alternative. A person in the Single-Alternative group had the chance to be a free rider at this point in the group process. They may be silent in the discussion, but they had to listen and assimilate the information because their Multi-Alternative group members were depending on them to report on their assigned alternative. A person with little self-confidence may also be motivated to speak up in the Multi-Alternative group because he/she devoted time to developing ideas about the assigned alternative. Their superior knowledge of the alternative should instill the confidence to share the ideas they had formulated or assimilated in the Single-Alternative group.

When the discussion was completed, students from the Single-Alternative groups returned to the Multi-Alternative groups and presented the positive and negative characteristics of their assigned alternatives. The students had become the experts on their alternatives and they were expected to contribute to the overall group discussion. The groups were then called upon to give their rankings and the reasons for the rankings, using the Numbered Heads Together technique. In this situation the groups were not receiving a grade on their responses, yet we observed a high level of participation. The students were willing to participate because they had a chance to discuss the material in the groups and they provided new dimensions to Jim's ethical dilemma.

Changes in individuals' responses

There was interest in whether the group discussion changed the groups' responses to Jim's ethical dilemma. A questionnaire (shown in the Appendix) was administered to the students before and after the cooperative learning group discussions to two separate groups of students: a graduate Sports Management class (17 students) and a Beta Alpha Psi (BAP) meeting (20 students). The questionnaire included a list of six possible actions Jim might choose to follow. The pre- and post-discussion responses were analyzed to determine if the group discussions had any influence on the students' responses.

Table I presents the overall results for the two classes. Based on the mean responses the students on the whole selected Question 6 as the best alternative to Jim's ethical dilemma: Jim should immediately tell his superiors about the error he made regardless of the personal consequences. There was some support for Jim to indicate to his superiors that the actual outcomes may be different than predicted, but the students on the average disagreed with the other alternatives presented in Questions 1, 2, 3, and 4.

The changes in the standard deviations from pre- to post-questionnaires shown in Table I indicate that the variability of responses increased on the post-questionnaire. Respondents did not simply give the same responses to questions on the post-questionnaire as they did on the pre-questionnaire. The discussions apparently did cause persons to reevaluate their positions, and in many cases to select different responses at the end of the exercise. For three questions, the range of responses increased as well.

Tables II and III present results that focus on the differences in individuals' responses before and after the group discussions for the Graduate Sports Management students and the BAP students. The results are shown separately for the two groups, recognizing the fact that the discussion of the overall groups' rankings varied for each session. It would be misleading to pool the two groups responses together since the discussion surrounding the presentation of the groups' results were different. The non-parametric Wilcoxon signed rank test for correlated samples was used to determine if there were significant differences between the pre- and post-discussion responses. The two tailed p-values adjusted for small sample sizes are reported for each question.

In Table II for the Graduate Sports Management

TABLE I
Descriptive statistics
pre- and post-results

(1) I believe that JIM should say nothing at the moment, but be prepared to admit his mistake if questioned by his superiors.

	Mean	SD	Median	Range
Pre	2.865	1.566	2.00	1–6
Post	2.459	1.773	2.00	1–7

(2) I believe that JIM should say nothing at the moment, but prepare a report to cover his mistake in case he is ever questioned by his superiors.

	Mean	SD	Median	Range
Pre	2.270	1.071	2.00	1–5
Post	2.324	1.473	2.00	1–6

(3) I believe that JIM should attempt to divert attention away from the forecast error and attempt to impress his superiors with his positive qualities.

	Mean	SD	Median	Range
Pre	2.189	1.050	2.00	1–5
Post	2.270	1.484	2.00	1–6

(4) I believe JIM should make discrete inquiries about the personal consequences of admitting the truth before going to his superiors.

	Mean	SD	Median	Range
Pre	3.541	1.426	4.00	1–7
Post	3.649	1.585	4.00	1–7

(5) I believe JIM should indicate to his superiors the fact that actual project outcomes may not be as high as predicted outcomes, without actually admitting any fault.

	Mean	SD	Median	Range
Pre	4.324	1.435	5.00	1–7
Post	4.162	1.724	5.00	1–7

(6) I believe that JIM should immediately tell his superiors about the error he has made regardless of personal consequence.

	Mean	SD	Median	Range
Pre	5.162	1.482	6.00	1–7
Post	5.486	1.726	6.00	1–7

(1 – Strongly disagree 7 – Strong agree)

TABLE II
Graduate sports management class
pre- and post-results
Wilcoxon signed rank test

P-Value

(1) I believe that JIM should say nothing at the moment, but be prepared to admit his mistake if questioned by his superiors.

0.2100

(2) I believe that JIM should say nothing at the moment, but prepare a report to cover his mistake in case he is ever questioned by his superiors.

0.7632

(3) I believe that JIM should attempt to divert attention away from the forecast error and attempt to impress his superiors with his positive qualities.

0.5040

(4) I believe JIM should make discrete inquiries about the personal consequences of admitting the truth before going to his superiors.

0.0644

Pre 3.176 (mean) 3.0 (median) 1–5 (range)
Post 3.941 (mean) 4.0 (median) 1–6 (range)

(5) I believe JIM should indicate to his superiors the fact that actual project outcomes may not be as high as predicted outcomes, without actually admitting any fault.

0.9414

(6) I believe that JIM should immediately tell his superiors about the error he has made regardless of personal consequence.

0.4632

(1 – Strongly disagree 7 – Strong agree)

class the only significant difference in the pre- and post-discussion responses was for Question 4. The individuals shifted their responses toward agreeing more that Jim should make discrete inquiries about the personal consequences of admitting the truth before going to his superiors. The discussion of the groups' rankings in class had involved the fact that if Jim told the truth he may be fired immediately. A more mature student had introduced the idea of Jim having to provide for a family. This discussion point may have been the reason for the overall shift in responses.

Table III presents the results for the BAP students. The only statistically significant difference in individual responses occurred for Question 6. After the discussion of the groups' rankings the students

TABLE III
Beta alpha psi meeting pre- and post-results
Wilcoxon signed rank test

P-Value	
	(1) I believe that JIM should say nothing at the moment, but be prepared to admit his mistake if questioned by his superiors.
0.4416	
	(2) I believe that JIM should say nothing at the moment, but prepare a report to cover his mistake in case he is ever questioned by his superiors.
0.8438	
	(3) I believe that JIM should attempt to divert attention away from the forecast error and attempt to impress his superiors with his positive qualities.
0.9770	
	(4) I believe JIM should make discrete inquiries about the personal consequences of admitting the truth before going to his superiors.
0.2676	
	(5) I believe JIM should indicate to his superiors the fact that actual project outcomes may not be as high as predicted outcomes, without actually admitting any fault.
0.5650	
	(6) I believe that JIM should immediately tell his superiors about the error he has made regardless of personal consequence.
0.0042	
	Pre 5.25 (mean) 5.5 (median) 3–7 (range)
	Post 6.15 (mean) 6.5 (median) 3–7 (range)

(1 – Strongly disagree 7 – Strong agree)

agreed to a greater degree that Jim should immediately tell his superiors about the error he made. Again the overall discussion of the groups' rankings did focus on that the fact that Jim would be worried all the time that someone would find out about his mistake and he would be in a worse situation because he did not tell the truth.

The responses of the Graduate Sports Management class were also compared to the BAP students to determine if there were significant differences between their responses. The non-parametric Mann-Whitney Test for independent samples was used to determine if there were significant differences (using a two-tailed p-value) between the pre-discussion responses and the post-discussion responses of the two groups of students. As indicated in Table IV the only statistically significant differences at the 0.05 level were found in the response to Question 2 on the pre-discussion questionnaire and Question 6 on the post-discussion questionnaire. In the pre-discussion questionnaire, the BAP students disagreed more strongly that Jim should prepare a report to cover his mistake. The BAP students appeared to be more aware of the difficulty of implementing this alternative.

In the post-discussion questionnaire the BAP students more strongly agreed that Jim should immediately tell his superiors about the error in the forecast. This difference is related to the shift in the BAP students responses indicated in Table III. After the discussion of the groups' rankings there was strong support for immediately telling the truth as the best alternative. In the discussion of the group rankings by the Sports Management class, a student made the point that a forecast is a forecast and that there may be other problems in the forecast besides Jim's error. To that particular student the alternative of indicating to Jim's superiors the fact that actual

TABLE IV
Differences between two groups
Mann-Whitney test

(2) I believe that JIM should say nothing at the moment, but prepare a report to cover his mistake in case he is ever questioned by his superiors.

P Value	0.0397	Pre questionnaire		
	Mean	SD	Median	Range
Sports	2.706	1.263	2.000	1–5
Bap	1.900	0.718	2.000	1–4

(6) I believe that JIM should immediately tell his suepriors about the error he has made regardless of personal consequence.

P Value	0.0197	Post questionnaire		
	Mean	SD	Median	Range
Sports	4.706	1.929	5.000	1–7
Bap	6.150	1.226	6.500	3–7

(1 – Strongly disagree 7 – Strong agree)

project outcomes may not be as high as predicted outcomes, without admitting any fault, appeared to be a viable alternative. This reasoning may have had an effect on the other students' responses on the post-discussion questionnaire about Jim immediately telling his superiors. Since each ethics discussion, even ones involving exactly the same basic materials and format, may be different, we conclude that for the two groups observed, the direction and content of the overall discussion of the groups' rankings affected the responses individuals gave on the post-questionnaire. It is difficult to distinguish whether responses to the post-questionnaire were due to the multi-alternative group discussions or the overall discussions of group rankings.

Conclusion

Based on the results of the pre- and post-discussion questionnaires there were not many significant differences in the responses of the two groups of students after the ethics discussion. Dramatic changes were not expected; it is uncertain in the first place whether the students responded the way they thought they should on the questionnaire or the way the would in a real life situation. The group discussions may have weakened or strengthened individuals' own positions, but their responses on the questionnaire may not vary dramatically. We did not administer the questionnaire to a control group that participated in unstructured ethical discussion. Consequently, no conclusions can be made about the effectiveness of using cooperative learning techniques in improving student moral development. This would be a valuable topic for future investigation.

The important point is that cooperative learning techniques increased students' participation in the ethical discussions. By participating in the group discussions each student has to go through a moral reasoning process on the pros and cons of a particular alternative. Students not only have to agree or disagree with an alternative, but they have to provide support for their conclusions. Through the cooperative learning discussions they had to communicate their own views or the views of others they had learned in the Single-Alternative groups; they were also exposed to different points of view for the other two ethical alternatives they discussed in the Multi-Alternative group. The discussions using cooperative learning techniques allowed the students to work through an ethical dilemma logically and to communicate their ethical reasoning to others.

In both sessions some students were concerned about their assigned alternative because it was not the one they would have chosen in the first place. They were told to think about the pros and cons of the alternatives and then weigh them against each other. It was important to communicate to the students that they should explore all the alternatives and be aware of the consequences for different scenarios.

Based on personal observations, the group discussions were lively. The list of stakeholders provided the students with a framework for the discussion in the Single-Alternative groups, and many students made notes on the pros and cons of the alternatives to report back to the Multi-Alternative group. In the Multi-Alternative group the students each took their turns presenting their alternatives. In a previous session of just an open discussion of the vignettes without cooperative learning groups only a few students participated. In contrast the cooperative learning groups showed a marked improvement in student participation with nearly all students discussing the ethical dilemma. In fact, a number of students complained that the Multi-Alternative sessions were ending too quickly.

Besides being useful in ethics discussions these cooperative learning strategies have the potential to improve the development of other skills. They provide students with the opportunities for practicing communication skills: oral and listening skills. The exercise can be adapted to require the group to prepare a written response to Jim's dilemma giving students an opportunity to practice their writing skills in a group setting. An element of Individual Accountability could be introduced by having individual students prepare letters or memos about how the firm should handle ethical problems or how the structured group techniques helped or hindered consideration of the ethical dilemma. Cooperative learning concepts stress the value of teamwork and shared responsibility, and they facilitate the enculturation of accounting students into the role of professionals in a business organization.

Appendix
Responses to the Ethical Problem

Using your own personal experience as a basis, respond to the following questions as if you were in JIM's situation at Marine Motor Works.

(1) I believe that JIM should say nothing at the moment, but be prepared to admit his mistake if questioned by his superiors.

1-------2-------3-------4-------5-------6-------7
Strongly Disagree | Neutral | Strongly Agree

(2) I believe that JIM should say nothing at the moment, but prepare a report to cover his mistake in case he is ever questioned by his superiors.

1-------2-------3-------4-------5-------6-------7
Strongly Disagree | Neutral | Strongly Agree

(3) I believe that JIM should attempt to divert attention away from the forecast error and attempt to impress his superiors with his positive qualities.

1-------2-------3-------4-------5-------6-------7
Strongly Disagree | Neutral | Strongly Agree

(4) I believe JIM should make discrete inquiries about the personal consequences of admitting the truth before going to his superiors.

1-------2-------3-------4-------5-------6-------7
Strongly Disagree | Neutral | Strongly Agree

(5) I believe JIM should indicate to his superiors the fact that actual project outcomes may not be as high as predicted outcomes, without actually admitting any fault.

1-------2-------3-------4-------5-------6-------7
Strongly Disagree | Neutral | Strongly Agree

(6) I believe that JIM should immediately tell his superiors about the error he has made regardless of personal consequence.

1-------2-------3-------4-------5-------6-------7
Strongly Disagree | Neutral | Strongly Agree

References

Arthur Andersen & Co., *Business Ethics Program Reference Guide*, np, nd.

Dukerich, J. M., M. L. Nichols, D. R. Elm and D. A. Vollrath: 1990, 'Moral Reasoning in Groups: Leaders Make a Difference', *Human Relations* **43**(5), 473–493.

Mai-Dalton, R. R.: 1987, 'The Experience of One Faculty Member in a Business Ethics Seminar: What Can We Take Back to the Classroom?', *Journal of Business Ethics* **6**, 509–511.

Nelson, D. R. and T. E. Obremski: 1990, 'Promoting Moral Growth Through Intra-group Participation', *Journal of Business Ethics* **9**, 731–739.

Nichols, M. L. and V. E. Day: 1982, 'A Comparison of Moral Reasoning of Groups and Individuals on the "Defining Issues Test" ', *Academy of Management Journal* **25**(1), 201–208.

Slavin, R., S. Sharan, S. Kagan, R. Hertz-Lazarowitz, C. Webb and R. Schmuck: 1985, *Learning to Cooperate, Cooperating to Learn* (Plenum Press, New York).

Slavin, R.: 1981, 'Synthesis of Research on Cooperative Learning', *Educational Leadership* (May), 665–660.

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