IT'S UP IN THE AIR, OR IS IT?*

In his observations about the sociological imagination, C. Wright Mills argues that people have difficulty seeing connections between individual outcomes and social structures. Inspired by Mills's observations, we developed a classroom exercise for stratification and organization courses that demonstrates how social structures can constrain individual actions and still produce outcomes that students often attribute to individual effort. Using the simple process of flipping coins, this exercise minimizes the importance of individual differences while producing an aggregate outcome that mirrors the skewed distributions of personal wealth, firm size, and corporate assets in the United States. Faced with this counterintuitive outcome, we engage students in a discussion that explores how changing the rules of the game or the equivalent social structures could change the overall outcome of the exercise or the distribution of valued goods and services in the United States. In this paper, we demonstrate our students' enjoyment of the game format; more importantly, we demonstrate how this exercise is an effective way to teach students about the importance of social structure.

LINDA A. RENZULLI
University of Georgia

HOWARD E. ALDRICH
University of North Carolina at Chapel Hill

JEREMY REYNOLDS
University of Georgia

ACCORDING TO C. WRIGHT MILLS (1959), someone with a sociological imagination can connect social structure to biography. Using one's sociological imagination means being able to understand individual behavior as the outcome of historical processes affecting a person's social environment. To instructors trained in sociology, the sociological imagination is clear, and in fact may even seem obvious. Nevertheless, to students, the idea of structures constraining an individual's life chances sometimes seems hopelessly abstract. Instructors often struggle with how to help students find and express their sociological imaginations. In-class games have been cited as an excellent way to make abstract concepts more concrete for students (Coco et al. 2001; Groves, Warren, and Witschger 1996). Our exercise will help instructors teach the fundamental principle that structure and rules matter. The exercise uses a tangible demonstration of the principle that the rules of social structure constrain the behavior of individuals and shape outcomes for them.

Often, college students have difficulty envisioning connections between individual action and social structural outcomes. This is not surprising, given that U.S. culture explicitly values and celebrates individual control and achievement. Whether they live in a blue-collar neighborhood in Chicago or a penthouse apartment on Fifth Avenue in New York, Americans tend to believe that their achievements result solely from individual performance. Connecting historical and social processes with individual outcomes is far less intuitive in our culture than is blaming the victim or praising the victor. For example, studies of Americans'

*The authors would like to thank Robert Woodberry and Jennifer Hamil-Luker for their comments on earlier drafts. We would also like to thank Amy Davis for trying this exercise in her class. Please address all correspondence to Linda A. Renzulli, Department of Sociology, University of Georgia, Athens, GA 30602; e-mail: renzulli@uga.edu.

Editor's note: The reviewers were, in alphabetical order, Davita Glasberg, Paul Leslie, and Renee White.

beliefs about stratification consistently show that people believe that others are poor because of insufficient motivation and dissolute morals, rather than because of limited opportunities or other contextual factors (Kluegel and Smith 1981). Americans tend to believe that opportunities to get ahead are available for everyone and that people's position in the stratification order are a function of their abilities, traits, and efforts, rather than social or economic factors (Kluegel and Smith 1981). Given the beliefs that students bring with them to class, instructors must find creative ways to illustrate that structural factors can and do play a large role in the various stratification processes.

In this note, we delineate an exercise that can be used in courses or lectures about stratification or organizations to help students consider the importance of social structures. This exercise uses the simple process of flipping coins to show students how individual actions, when aggregated at a system level, produce outcomes that look as if they could be the result of individual intentions. Building on Mills' observations, the exercise helps students see that meaningful patterns at an aggregate level can be explained as the outcome of structural constraints imposed on actions—the "rules of the game."

In order to illustrate the success of this exercise on student perception of the sociological imagination, we review two domains in which instructors can use the exercise and give the conceptual background that an instructor should establish before using the exercise. Then, we outline how the exercise is conducted and how instructors can explain the rules to students. To conclude, we offer suggestions on how to use the results of the exercise in class discussion.

STRATIFICATION AND INEQUALITY

In stratification and inequality classes, instructors typically ask students to consider the question, "Who gets what and why?" Most social stratification theories, inspired by the sociological imagination, use social structural explanations to help answer those questions. Structural explanations of stratification posit that context, institutions, and social patterns explain the distribution of valued goods and are thus important factors in the process of social attainment and mobility.

If students are accustomed to using individual explanations rather than reasoning with their sociological imaginations, structural rationales for stratification will be difficult for them to grasp. Instead, individualistically-centered explanations of stratification may seem more plausible than structural ones, and students may also interpret structural explanations in individualistic ways. Davis and Moore's article "Some Principles of Stratification" (1944) is particularly useful for highlighting such oversights because it is a work that is both widely read and widely misunderstood by students in stratification classes.

In a survey of the American Sociological Association's collection of syllabi and instructional material for stratification classes, we found that 10 out of 14 syllabi used a reading from Davis and Moore and/or explicitly mentioned functional theory (Sernau 1996). Therefore, we conclude that an exercise that helps students critically evaluate the theory would be useful for contemporary sociology classes. Furthermore, we realize that students find Davis and Moore's theory attractive; yet, even after reading their work, students tend to focus on individuals' paths to positions rather than the structure itself. These findings illustrate that instructors need a dramatic device that makes salient the structural context within which the competition for a fixed system of rewards takes place.

Davis and Moore (1944), in their functional theory of stratification, argue that some societal positions are more important than others and that the most important positions must be filled by the most qualified people. To motivate the most qualified people to fill the most important positions, society must offer them greater rewards.

Davis and Moore can be read in two different ways. From a structural point of view, sociologists can focus on the hierarchically-ranked positions into which individuals must fit and how one's chances of holding a position depend on the number of such positions and the number of individuals seeking them. Students, however, often focus on the sorting process itself, interpreting Davis and Moore as saying that "talent" is what drives the sorting process. Such students project an assumption into the functional theory that individuals are solely responsible for their position in society. Even criticisms of Davis and Moore can overlook the structural side to the argument. For example, Tumin's (1953) criticism focused on the difficulty of finding and assessing talent. In the debate over "finding talent," it is easy to overlook the larger issue of society as a hierarchically organized opportunity structure.

This exercise is intended to show that forces other than (or in addition to) individual characteristics shape outcomes and distributions of societal rewards. Any reading that stresses structural forces as opposed to individual characteristics can be used as background reading for this exercise. Other than Davis and Moore's functional theory, instructors might be interested in having students read paired sections from *The Bell Curve* (Herrnstein and Murray 1994), which is used often in stratification courses (Sernau 1996), and *Inequality by Design* (Fischer et al. 1996). Whereas *The Bell* Curve emphasizes an individual's IQ as one of the most important factors in a person's ability to "get ahead," *Inequality by Design* stresses that structural characteristics and social rules make a significant difference in people's life chances. Our exercise can be used to juxtapose the two theories and can have students thinking more critically about the significance of individuals' talents as a source for their success.

Oliver and Shapiro's (1977) work on wealth inequality, *Black Wealth/White Wealth* (especially pages 1-10), is a particularly good reading for this exercise because the distribution of coins that our exercise produces is an accurate reflection of wealth in the United States. Oliver and Shapiro very convincingly show that cumulative disadvantage and cumulative advantage processes generate the current distribution of wealth. They show that Black minorities sought self-employment (a way to accumulate wealth), but were blocked by laws and policies—an indication that rules rather than personal motivation kept some people from accumulating wealth.

This exercise could also be used with readings or materials that encourage students to think about the possible consequences of guaranteeing equality of opportunity or equality of outcomes. In particular, instructors may want to consider excerpts from Michael Young's *Rise of the Meritocracy* (Young 1994) or Kurt Vonnegut's short story (1968), "Harrison Bergeron," which was also made into a movie by the same name in 1995.

In sum, we believe that the coin toss is a hands-on approach to teaching stratification concepts and theories. Even when these new ideas may be antithetical to students' beliefs, the coin toss encourages them to use their sociological imaginations. In addition, talent, IQ, and motivation are emotionally charged topics, but the coin toss takes the emotion out of the equation and allows students to focus on how social rules and structures operate.

ORGANIZATIONS

Organizations have contradictory effects on economic inequality in a society (Aldrich 1999: 341-342). First, they may help reduce inequality by helping potential entrepreneurs from diverse social origins gain access to wealth-generating assets (Reynolds and White 1997). Universalistic and merit-based selection criteria in modern organizations have a similar effect because they diminish the association between people's social backgrounds and their life chances. Second, in contrast to their potential leveling effect, organizations' potential stratify-

ing effect arises from their role as the key generators of wealth in capitalist societies (Bottomore and Brym 1989; Scott 1991). As Dahrendorf (1959), Mills (1957), Stinchcombe (1965), and others have noted, access to ownership and control of organizational assets now separates the privileged from the rest of society. Competitive struggle not only sorts organizations into positions of dominance and subordination but also allocates life chances to individuals affiliated with them (Aldrich and Weiss 1981; Perrow 1991). Therefore, organizations can shape societal rewards.

The distribution of firms in the United States by number of employees or corporate assets is highly skewed. Most organizations have few employees, a few assets, and a high likelihood of failure (Aldrich 1999; Kaufman 1991). Although the number of large organizations is small, they have a dominant share of assets. Most corporations in the United States have less than $100,000 in assets, and the top .002 percent holds about 83 percent of all corporate assets. The largest 9 percent of all corporations control over 95 percent of all corporate assets (Aldrich 1999).

So, why are some organizations large and wealthy while others are not? Given their tendency to explain poverty and other examples of stratification by talking about individual differences, it is likely that students will believe that the fate of organizations, and thus the stratification of firms, arises from differences in managerial talent. Kaufman (1991) offers an alternative explanation based on organizations' difficulties in coping with uncertain environments and builds on similar principles from organizational ecology (Carroll and Hannan 2000). According to Kaufman, organizations and their members cannot keep up with changes in the environment because of barriers to change, such as communication problems, imperfect information, differences in cognitive abilities, and an inability to predict the future. In a winner takes all situation, there must be a winner and most will lose (Frank and Cook 1995). The fate of organizations then becomes problematic for students, challenging their assumptions about hard work.

In order to help students understand that individual effort is not always the only part of the equation for organizational success, two particular questions can be posed: How important is managerial talent in explaining the distribution of corporate assets and organizational size? If environments are as turbulent as Kaufman says, and managers are working blind, will organizations still be sorted into a hierarchy of rich and poor?

PREPARATION AND OVERVIEW OF THE GAME

In order to show how the rules or social structure of society shape outcomes for individuals, it is helpful to introduce students to this perspective with some assigned reading before commencing with the exercise. As noted above, instructors can assign readings that will set the stage for an instructional unit on stratification (who gets what and why?) or organizational sociology (the role of managerial talent versus chance). Depending on the course or lecture, the instructor should have students read Davis and Moore's article (1944) on functional stratification, Oliver and Shapiro's (1997) work on wealth, *The Bell Curve* and *Inequality by Design* (Fischer et al. 1996), chapters three and four in Kaufman (1991), or chapter one in *Organizations Evolving* (Aldrich 1999). These readings will prepare students for the exercise and will provide a background for the concepts which this exercise will introduce.

The exercise is a game that consists of multiple rounds of coin tossing, with each round lasting about two minutes. During each round, students pair off, flip coins, and bet one to three coins on the outcome of each flip (heads or tails). The winner of each bet takes the specified number of coins from the loser. When a student in a pair has lost all of his/her coins (i.e., gone bankrupt), s/he is out of the game and moves to the back of the room. Winners then look for

Figure 1. Sample Results Table: Number of Students with 0-16+ Pennies

Pennies	Round 1	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7
0	1	6	10	16	19	29	31
1-4	17	12	13	6	7	3	1
5-9	29	27	19	19	13	3	1
10-15	1	3	6	5	6	7	6
16-20				2	3	6	5
21+							4

another person to play against for the remainder of the round. During the game, instructors should circulate through the room to identify students who are looking for others to play against and help them find new partners.

After each two-minute round, instructors tally the number of people with 0, 1-4, 5-9, 10-15, and 16+ coins and post the results on the board, so that students can watch how quickly the distribution of coins becomes unequal (See Figure 1 for a table showing the results of successive rounds). Whoever is still left with coins at the end of each round goes on to the next round and should begin to play with a new partner.[1] The game ends when at least one person has 16+ coins, which can occur as early as the fifth round. By that point, many students are bankrupt.

Results of the game are highly predictable but also counterintuitive to many students. Most players finish with either no coins or 1-4 coins, and a small number of players has 10-15 or more. In a typical game with fifty students, three or four students will have sixteen or more coins while 30 students will be left with no coins. This skewed outcome closely mimics the distribution of wealth and organizational size in the United States: most people have little or no wealth, and most organizations are small.

[1]To achieve a skewed distribution more quickly, students should play with someone from a different coin bracket whenever possible.

RULES AND SETUP

To set up the game, divide students into pairs and give each pair of students 10 coins (five per student).[2] Then, give students time to understand how the game works. It is important that the rules are written out and that students take time to carefully review them before the game begins. The basic game has only four rules:

1) One student in each pair bets on each flip (up to a maximum of *three* coins). (Note: Betting only one coin per flip will work, but the game will unfold more slowly.)
2) The winner of the bet takes the coins from the loser, regardless of who actually flipped the coin or made the bet.
3) Players must flip quickly and cannot stop betting. (Note: Allow some practice time before the game starts and be ready to pick up stray coins that students drop.)
4) Students *cannot* borrow money once they go bankrupt. When they run out of coins, they are out of the game.

At the start of the game, it is also important to get students thinking about how the distribution of coins will change during the course of the game. To make the ultimate outcome as memorable as possible, instruc-

[2]We use pennies for coins, but any denomination will do. You may want to have students bring 5 coins to class to avoid the time it takes to distribute the coins.

tors can start class with a simple question, "Who is so skilled at tossing a coin that they can guarantee that they will flip heads almost every time?" Students often comment that they are skilled at flipping a coin into the air but cannot predict how it will land. Ask the students if they think the uniform distribution of coin flipping talent will simply lead to a random reshuffling of the coins and if it will preserve the uniform distribution of coins among the players; most students believe that it will. They reason that if no one is better at flipping than anyone else, then no one will get ahead.

DISCUSSING THE RESULTS WITH STUDENTS

Many students are astonished at the results, especially when they see how the skewed distribution so closely resembles other distributions that have already been covered in class. A discussion and summary of the game is essential for students to connect the abstract concepts with the simulation and with real life situations.

In order to discuss the importance of skill and talent, instructors can begin in a lighthearted way by asking the "winners" to account for their win. In most cases, they answer in one of three ways. First, they sarcastically acclaim themselves as great achievers: "I used a well-thought-out strategy, and my skill led to success." This mocking comment indicates that students understand they could not have actually used a strategy. Second, they may be embarrassed to answer. Their embarrassment also shows that they feel foolish about taking credit for something they know they did not do. Third, students may tell the class exactly what they did. For example, "I bet tails all the time." And inevitably a "loser" in the class will proclaim that she did that too. In the end, the students begin to understand that their individual skill, action, and intention did not make them winners or losers in this game.

Having established that skill and talent cannot explain the outcome, instructors can then point out that a very recognizable distribution still emerged.[3] Some players will become very wealthy, but most will become bankrupt, even though everyone started out with the same resources and played with the same skill and effort. For comparison purposes in a class on inequality, instructors can bring to class a graph of the wealth distribution in the United States. In a class on organizations, bring a graph of the distribution of organizational size or corporate assets. The distributions are very similar and help students realize that inequality and personal success are not necessarily the result of personal attributes.

To help students relate the game to real world processes that generate inequality, instructors should discuss how modifications of the rules might alter the outcome. First, ask what would happen if some players started the game with a different number of coins. We use this modification to talk about the importance of social origins. We point out that when a student with ten coins bets three and loses, she has lost 30 percent of her assets but is still in a top bracket of winners with seven coins. By contrast, when students with three coins bet three and lose, they have lost 100 percent of their assets and are out of the game. In short, an initial advantage goes a long way toward success, whereas an initial disadvantage leaves students behind rather quickly (Oliver and Shapiro 1997). When a player gets behind in the game, even with chance determining their subsequent success, it is very difficult to gain coins. In life, the valued good may be education, or income, or wealth rather than coins, but initial advantages are still important.

Second, ask what would happen if bankrupt players could borrow money to get back into the game. This is an opportunity

[3]You can repeat the game if students doubt the first outcome. Results are best displayed graphically by plotting the number of students on the vertical (Y) axis and the number of coins, from zero to n, on the horizontal (X) axis. Connect the dots to show a line dropping sharply from the upper left to the lower right.

to talk about the role of financial institutions, credit agencies, and other sources of capital (Glasberg and Skidmore 1997; Mizruchi and Stearns 1994). Large organizations, for instance, have access to huge amounts of credit and, in some cases, are not allowed to fail. In a similar fashion, some people have better access to credit than others and are thus better able to handle economic misfortune. In essence, the game provides a level playing field by denying everyone access to credit; but in the real world, people have unequal access to credit and thus different chances of amassing wealth or going broke.

Third, discuss the possible consequences of allowing some players to pool their resources and play as a group. Instructors should ask students to consider various ways this might occur, such as through rotating credit associations (Light and Deng 1994) or inter-firm alliances (Gerlach 1992). In the game, everyone plays as an individual, but in real life, we are connected to groups of relatives, friends, and acquaintances who have economic and non-economic resources that can help or hinder our efforts to succeed.

Finally, discuss what would happen if a wealth or inheritance tax had been imposed between rounds. This is an opportunity to talk about the inter-generational transfer of wealth in the United States (Keister 2000). The game also provides an opportunity to talk about income or property taxes and how taxes and the social welfare system might restrict the amount of income inequality in a society. The basic point is that societies usually limit inequality by imposing restrictions on the accumulation and transmission of wealth. The game provides no such safeguards.

In sum, the period after the exercise is used to discuss how the rules of the game both *mimic* and *depart* from the rules of real life. Students sometimes point out that the game is not an accurate reflection of stratification or organizational competition in the real world because in the game, player skill and effort are completely irrelevant. They argue that in the real world people get ahead because they are more talented or more determined than others. The game is not meant to suggest that talent and personal effort make no difference in the real world. Rather, the game eliminates personal differences and provides each player with identical chances for success in order to highlight the importance of rules that are easily overlooked in the complexities of real life. Many students begin the game believing that the outcome will reflect the even distribution of player skill. As the game unfolds, however, they begin to think that the outcome of the game is up in the air with the randomly flipping coin. Ultimately, students should come to realize that the final distribution of coins and their personal chances of becoming a winner are not flukes, but rather the result of the rules of play that determine who gets the coins and why. They should also realize that even in the real world, where skill and effort do matter, their ability to get ahead and their chances of falling behind are also determined by taken-for-granted rules and structures of opportunities.

ASSESSMENT

In general, we have had a positive experience using hands-on exercises in class to promote active learning. For example, we have received comments similar to these: "The exercises are good and help me understand why things are. I really like this class on the whole and enjoy the opportunity to participate," and "I feel that these are good because they are very effective at getting across points, helping us get to know others in the class." Students grasp concepts more concretely during active learning than they might during traditional lectures.

As for the assessment of this particular exercise, students have said that they can more easily relate to the concepts after playing and discussing the game. In a quiz used in an Introductory Sociology class to assess the exercise's pedagogical value, we had students respond to the following question:

"What was the point of the coin toss in relation to class stratification?" Ninety percent of the students who took this quiz received full credit for answering the question correctly. The most common response pointed out that individual achievement was not the only factor that contributes to success. Another common response included an explanation of cumulative disadvantage. They seemed to understand that those with few coins were not always poor due to deficient morals, but rather because they faced constraints on their ability to gain access to wealth. From the students' responses, it was evident that they were beginning to use their sociological imaginations. They had begun to use structural (social class) arguments instead of individual achievement arguments to explain inequality.

In a stratification and inequality class, we used a more systematic evaluation form similar to those used to assess other games (Coco et al. 2001; Groves, Warren, and Witschger 1996). We asked students to complete a questionnaire at the end of the exercise to help evaluate its usefulness and appropriateness for learning. Following Coco et al.'s (2001) evaluation scheme, we asked students about two broad aspects of the exercise: the game's and the discussion's effectiveness in creating understanding of the material, and students' receptiveness to using games in the classroom. The students were asked to respond to a series of statements using a five-point Likert scale ranging from "strongly agree" = 1 to "strongly disagree" = 5 (see Appendix I).

Students rated the overall effectiveness of the coin-toss game and the discussion very favorably. In fact, the average and modal response to the four questions that asked students if the game helped them understand the importance of social structure and whether or not it illustrated the points the instructor wanted to make was 2 (agree). The average responses for the questions asking the students about the game itself seemed slightly less positive (between agree and neither agree nor disagree) than the responses for the questions asking them about the discussion after the game. This suggests to us that the success of the game depends on a good discussion afterward. Consistent with active learning techniques (Woodberry and Aldrich 2000), it implies that instructors who use the coin toss should prepare and leave time for a discussion.

Students indicated that using games is a positive experience for them. They indicated that they believed games should be used in college classrooms. On average the response for "I do not think that games should be part of university learning" was a four (disagree) with no students indicating they agreed or strongly agreed with the statement. In addition, the survey revealed that students believed that the coin-toss was an interesting way to learn the material (average 1.6 = strongly agree to agree).

Finally, we asked students to apply what they learned from the coin toss game to a stratification topic that should be relevant and timely for them: one's ability to attend college and get a degree in four years (see Appendix II). Students showed that they realized getting through college required more than just intelligence. In short response quizzes, they acknowledged that some high school students could not afford college or did not have access to information about loans. They realized that wealthier students would not have to work during the year and may be able to achieve higher grades in their class and attend classes at all times, while others' work schedules could conflict with class and could affect their overall grades. In all their answers, students acknowledged that structures and rules (timing of classes for example) could affect a person's ability to get into and finish college regardless of talent.

Based on informal and formal evaluations in four classes (two introduction sociology classes and two stratification courses), we believe that the coin toss is a positive learning experience for students. Nevertheless, aspects of the coin toss could be improved. Since we have used the exercise several times, we have been able to improve upon it each time and thus have suggestions for

implementation as well as words of caution.

First, the game relies on probabilities - the probability of flipping heads or tails and the probability of winning and losing the game. We recommend discussing the difference between these two probabilities after the game. For example, in one class we asked students, "What would have happened if we played the game again? Who would be the winner?" Students realized that they could not predict who would win and were certain that the winner of the original game would not win in subsequent games. They also realized that the distribution of the coins would ultimately be the same at the end of each game. This simple set of questions quickly illustrates the difference between the probability of winning the game and the probability of flipping heads or tails. The probability of flipping heads or tails never changes: the chance of flipping heads is one in two every time. However, the probability of an individual surviving to the last round is much smaller and could, in fact, vary from person to person. Students will suggest, and correctly, that those who have a lot of coins can stay in the game longer by betting conservatively. In addition, "bad" flippers, i.e., those who drop their coins each time they flip, will thus flip and bet fewer times than other students. As a result, they may increase their chances of remaining in the game.

Second, the game and the following discussion fill an entire class. The game fits best in a 75-minute class, but can be done in a 50-minute class; if instructors watch their time carefully. Here are some ways to reduce inefficiency and thus increase time for discussion. Because the description of the game can be unwieldy, the instructor can provide directions before class, put the directions on an overhead that remains up during class, demonstrate the flipping and betting process before the students start playing, and encourage students to bring five coins to class (rather than distributing the coins after class starts). In doing these four things, we have reduced some of the inefficiency in relaying directions and starting the game.

Third, those students who go bankrupt are left idle. After round one, there will be some students who cannot play while the rest of the class continues to play the game. As seen in figure two, by round four, one third of the class is bankrupt. We encourage students to watch the others play the game and to note the "strategies" their classmates use. Then, when we are discussing the outcomes of the game, the students can comment on how they played and on what they observed.

[4]We would like to thank Amy Davis for this suggestion and sharing the results of her class exercise with us.

CONCLUSION

The coin toss provides a way to illustrate how the sociological imagination can increase a student's understanding of the social world better than individual explanations can. Playing the game encourages students to engage the sociological material and thus facilitates their understanding of it. Also, students find the game fun, as well as intellectually helpful.

APPENDIX I

To what extent do you agree with the following statements?

The coin toss *game* was eye-opening.

1) strongly agree
2) agree
3) neither agree nor disagree
4) disagree
5) strongly disagree

The coin toss *discussion* was eye-opening.

1) strongly agree
2) agree
3) neither agree nor disagree
4) disagree
5) strongly disagree

The coin toss *game* did a good job of illustrating the point that the instructor was trying to make.

1) strongly agree
2) agree
3) neither agree nor disagree

4) disagree
5) strongly disagree

The *discussion* did a good job of illustrating the point that the instructor was trying to make.
1) strongly agree
2) agree
3) neither agree nor disagree
4) disagree
5) strongly disagree

This class period helped you better understand the importance of social structures.
1) strongly agree
2) agree
3) neither agree nor disagree
4) disagree
5) strongly disagree

This class period provide an interesting way to learn.
1) strongly agree
2) agree
3) neither agree nor disagree
4) disagree
5) strongly disagree

I do not think that games should be part of university learning.
1) strongly agree
2) agree
3) neither agree nor disagree
4) disagree
5) strongly disagree

APPENDIX II

Apply what you have learned:

As we discussed, the outcome of the coin toss game would be different if we changed the rules of the game. More specifically, things would have been different if players:

- started the game with different numbers of pennies (i.e., there were wealth inequality)
- could borrow pennies (i.e., there was access to credit)
- could play in groups rather than alone (i.e., you could pool your resources)
- paid taxes when rich or received pennies when poor (i.e., there were taxes & government aid)
- could decide that each bet would have two winners (i.e., opportunities were not limited)

In the space below, explain how the rules of the real world affect a person's ability to attend UGA and get a degree in four years independently of their personal talents and efforts.

Rules of the Real World	**Affect on one's ability to attend UGA and get a degree in four years**
Wealth inequality	
Unequal access to credit	
Pooling of resources	
Taxes and government aid	
Limited number of seats	

REFERENCES

Aldrich, Howard. 1999. *Organizations Evolving*. London, United Kingdom: Sage.

Aldrich, Howard E. and Jane Weiss. 1981. "Differentiation Within the U.S. Capitalist Class: Workforce Size and Income Differences." *American Sociological Review* 46:279-89.

Bottomore, Tom and Robert J. Brym. 1989. *The Capitalist Class: An International Study*. New York: Harvester Wheatsheaf.

Carroll, Glenn R. and Michael T. Hannan. 2000. *The Demography of Corporations and Industries*. Princeton, NJ: Princeton University Press.

Coco, Angela, Ian Woodward, Kirstyn Shaw, Alex Cody, Gillian Lubton, and Andrew Peake. 2001. "Bingo for Beginners: A Game Strategy for Facilitating Active Learning." *Teaching Sociology* 29:492-503.

Dahrendorf, Ralf. 1959. *Class and Class Conflict in Industrial Society*. Stanford, CA: Stanford University Press.

Davis, Kingsley and Wilbert E. Moore. 1944. "Some Principles of Stratification in Social Theory." *American Sociological Review* 10:241-49.

Fischer, Claude S., Michael Hout, Martin Sanchez Jankowski, Samuel Lucas, Ann Swindler, and Kim Voss. 1996. *Inequality by Design*. Princeton, NJ: Princeton University Press.

Frank, Robert H. and Philip J. Cook. 1995. *The Winner-Take-All Society: How More and More*

Americans Compete for Ever Fewer and Bigger Prizes, Encouraging Economic Waste, Income Inequality, and An Impoverished Cultural Life. New York: Free Press.

Gerlach, Michael. 1992. *Alliance Capitalism: The Social Organization of Japanese Business*. Berkeley, CA: University of California Press.

Glasberg, Davita Silfen and Dan Skidmore. 1997. *Corporate Welfare Policy and the Welfare State: Bank Deregulation and the Savings and Loan Bailout*. New York: Aldine de Gruyter.

Groves, Julian McAllister, Charles Warren, and Jerome Witschger. 1996. "Reversal of Fortune: A Simulation Game for Teaching Inequality in the Classroom." *Teaching Sociology* 24:364-71.

Herrnstein, Richard J. and Charles Murray. 1994. *The Bell Curve*. New York: Free Press.

Kaufman, Herbert. 1991. *Time, Chance, and Organizations*. Chatham, United Kingdom: Chatham House Publishers.

Keister, Lisa A. 2000. *Wealth in America: Trends in Wealth Inequality*. Cambridge, United Kingdom: Cambridge University Press.

Kluegel, James R. and Eliot R. Smith. 1981. "Beliefs About Stratification." *Annual Review of Sociology* 7:29-56.

Light, Ivan and Zhong Deng. 1994. "Women's Participation in Korean Rotating Credit Associations." in *Money Go-Round: Women's Participation in Rotating Credit Associations*, edited by S. Ardener. London, United Kingdom: Routledge.

Mills, C. Wright. 1957. *The Power Elite*. New York: Oxford University Press.

_____. 1959. *The Sociological Imagination*. New York: Oxford University Press.

Mizruchi, Mark S. and Linda Brewster Stearns. 1994. "Money, Banking, and Financial Markets." Pp. 313-41 in *The Handbook of Economic Sociology*, edited by N.M. Smelser and R. Swedberg. Princeton, NJ: Princeton University Press.

Oliver, Melvin and Thomas Shapiro. 1997. *Black Wealth/White Wealth: A New Perspective on Racial Inequality*. New York: Routledge, Inc.

Perrow, Charles. 1991. "A Society of Organizations." *Theory and Society* 20:725-62.

Reynolds, Paul D. and Sammis B. White. 1997. *The Entrepreneurial Process: Economic Growth, Men, Women, and Minorities*. Westport, CT: Quorum Books.

Scott, John. 1991. "Networks of Corporate Power: A Comparative Assessment." *Annual Review of Sociology* 17:181-203.

Sernau, Scott. 1996. "Social Stratification Courses: Syllabi and Instructional Materials." Washington, DC: American Sociological Association.

Stinchcombe, Arthur L. 1965. "Social Structure and Organizations." Pp. 142-193 in *Handbook of Organizations*, edited by J. G. March. Chicago, IL: Rand McNally.

Tumin, Melvin. 1953. "Some Principles of Stratification: A Critical View." *American Sociological Review* 18:387-94.

Vonnegut, Kurt. 1968. *Welcome to the Monkey House; a Collection of Short Works*. New York: Delacorte Press.

Woodberry, Robert and Howard E. Aldrich. 2000. "Designing and Running Effective Classroom-based Exercises." *Teaching Sociology* 28:241-48.

Young, Michael. 1994. *Rise of the Meritocracy*. New Brunswick, NJ: Transaction Publishers.

Linda A. Renzulli is an Assistant Professor at the University of Georgia. She currently teaches a graduate seminar in stratification and a gender and work course.

Howard E. Aldrich is Kenan Professor of Sociology at the University of North Carolina, Chapel Hill. His book, *Organizations Evolving* (Sage, 1999), won the Academy of Management George Terry Award as the best management book published in 1998-1999, and was co-winner of the Max Weber Award from the American Sociological Association's Section on Organizations, Occupations, and Work as the best book published in 1997-1999. He teaches graduate classes in organizations and teaching sociology as well as undergraduate classes in work and first-year seminars.

Jeremy Reynolds is a Franklin Teaching Fellow at the University of Georgia. He is currently teaching undergraduate courses in stratification and research methods and writing about cross-national differences in actual and preferred work hours. He received his Ph.D. from the University of North Carolina at Chapel Hill.