
The Change Game: An Experiential Exercise Demonstrating Barriers to Change

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Abstract

Leading change is an essential skill for managers. Instructors in management education must not only teach theories on effectively leading change but also convince students of the necessity of developing their change leadership skills. Students may underestimate the difficulty of convincing others to work toward change; the authors developed the Change Game as a tool to help students experience the difficulties of leading change and identify opportunities for skill development in the area of change leadership. This 45-minute exercise can be used with a range of courses in management curricula, and it scales well for small to large seated classes. Students are divided into two groups (managers and workers) that must cooperate to complete a task and earn a reward. The exercise simulates resistance to change by giving the workers an incentive to stay with the status quo. Classes typically fail to complete the task, which allows for a lively follow-up discussion on successfully leading change, as well as on topics such as communication, intergroup dynamics, trust, power, and motivation.

Keywords

experiential learning, leading change, resistance to change, role-play

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Topics such as the difficulty of leading change in organizations, the importance of communication and trust when leading others, and the effectiveness of nonmonetary motivators receive considerable attention in management classes. In practice, these important topics are often difficult for students to grasp—especially with students who have limited managerial or workplace experience, such as students in undergraduate management programs. A common frustration in many management classes is the student perception that the content is common sense and will be easy to implement in future work roles. It may be difficult for a student to imagine acting in a managerial capacity where coworkers resist beneficial change, or where coworkers assume that managers cannot be trusted. One way to help future managers understand the challenges and frustrations of leading change in the workplace is to use experiential learning (Kolb, 1984) exercises or simulations.

In this article, we discuss a classroom exercise we developed to help students experience the complexities of leading a change effort. This exercise asks a subgroup of the class to perform a seemingly straightforward task: organize the remaining class members to move into a designated seating arrangement. Although simple on the surface, the activity contains factors that serve to make the task more difficult. A mild incentive is introduced to mimic naturally occurring inertia and resistance to change. Additionally, successful completion of the activity requires 100% compliance, increasing the difficulty of the task and opening the door to issues of power shifts and group pressure on individuals. As such, students can experience the challenges and frustrations of attempting to lead “workers” to a mutual benefit and understand the difficulty of implementing theories they learn in the classroom.

In the following sections, we provide a brief overview on leading organizational change, discuss the appropriateness of an experiential learning framework for developing change leadership skills, identify appropriate courses for this exercise, provide a brief summary of the exercise, describe typical outcomes of the exercise, and suggest approaches to debrief the activity depending on the topics and relevance to other course material that the instructor wishes to emphasize. Complete materials and instructions for conducting the exercise are provided in the appendixes and are available online at <http://jme.sagepub.com/supplemental>.

Theoretical Background

Leading Organizational Change

The need for adaptive responses to an ever-changing environment (Leana & Barry, 2000; Singh, House, & Tucker, 1986) has been a common focus of

organizational researchers. A failure to adapt to situational needs could result in loss of opportunities and competitive advantage (Kotter, 1996), failure to adopt new technologies (Kwiatkowski, 1989), noncompliance with governmental regulations (Ring, Bigley, D'Aunno, & Khanna, 2005), or failure of the organization's efforts or the organization itself (Singh, Tucker, & House, 1986). However, even though the need to adapt to both short- and long-term changes are well documented, equally well documented is the fact that individuals often resist change (Kotter & Schlesinger, 2008; Piderit, 2000). Especially frustrating for managers, individuals may even resist beneficial change.

There are numerous explanations for why individuals resist change. Many of these reasons are strongly grounded in a broader understanding of human behavior. For example, the schemata that guide the perception and interpretation of stimuli may prevent us from recognizing opportunities for change in the first place (Bruner, 1957; Fiske & Taylor, 1991; Hilton, Klein, & von Hippel, 1991). Embracing a new method of activity might produce cognitive dissonance with old ways (Festinger, 1962). Change also involves uncertainty, and individuals differ in their tolerance for such ambiguity (Frenkel-Brunswik, 1949). Broadly speaking, individual resistance to change also involves economic uncertainty, habit, and fears that reinforce the status quo (Dent & Goldberg, 1999; Ford, Ford, & D'Amelio, 2008). In addition to the individual barriers to change mentioned above, there are also strong social and organizational forces barring the path to change: regulations and procedures may limit the flexibility to try new approaches; group norms or organizational culture may prescribe the status quo (e.g., Lorsch, 1986); institutional memory or prior failures might prevent new change efforts. A manager or leader must understand and try to overcome these barriers to lead change effectively.

Countering these barriers is inherent to two models of change often taught in management classes and texts. Lewin's (1947) three-stage model argues that individuals must "unfreeze" or overcome inertia and barriers promoting the status quo before change can occur. There have been many criticisms and refinements of Lewin's model, incorporating the complexities of the organizational climate or environment with aspects of the situation or field. It has been argued that the three-stage model oversimplifies the situations in which change occurs, but as Burnes (2004) points out, Lewin designed several models to help explain behavior. Lewin's approach to change did not discount his previous models of field theory or group dynamics. Recently, Cronshaw and McCulluch (2008) argued that a focus on forces that facilitate, restrain, and block change allow for a more useful understanding of Lewin's three-stage model and the related force field analysis than a focus solely on the forces that drive or restrain change. More recent models for leading organizational change also focus on the need both to overcome inertia and to solidify

changes in the organization's culture. Kotter's eight-step model (1995, 1996) emphasizes the importance of counteracting barriers to change through communicating not only the need for change but also the vision of what the change will accomplish. Kotter's model also highlights the role of the leader to share the reasons behind and potential benefits of change in order to create a feeling of urgency and necessity. These two approaches to leading change can provide a framework to allow students to understand and counteract the reasons individuals may resist change.

Communication

To lead change effectively, leaders must not only understand the barriers to change; they must also communicate exceptionally well. Kotter (1995) argues that many change efforts fail because the leaders drastically underestimate the amount of communication required. Unfortunately, just increasing the amount of messages does not necessarily improve the quality of the communication. For example, when information is dispersed among members of a group, information that is shared among many or all the group members is more likely to be discussed than information possessed by only a few members. In "hidden profile problems," where crucial information for solving a problem is only held by one or a few individuals, groups have difficulty uncovering all the information to understand the problem fully (e.g., Stasser, Vaughan, & Stewart, 2000).

Even when people are trying to share information, an "illusion of transparency" often emerges where they assume that others share a common base of information and understand their motives and situational constraints on their actions (Gilovich, Savitsky, & Medvec, 1998; Van Boven, Gilovich, & Medvec, 2003). Speakers often believe that they are being clear and overestimate how well an audience comprehends their messages (Keysar & Henley, 2002). Holder and Hawkins (2007) suggest that people have difficulty taking the perspective of someone who does not share the same background knowledge, and this phenomenon may help explain why people overestimate how well an observer understands their message. In the context of leading change, this illusion may result in the manager believing that others fully understand the need for and goals of proposed change.

Power

Returning to Kotter's (1995) model for leading change, another crucial element to leading change involves an understanding of power. According to Kotter,

the second step for successfully leading change involves gathering a coalition with sufficient power. A common approach to discussing power in management classes involves French and Raven's (1959) bases of power. These bases of power include power based on outcomes one can control (i.e., reward and coercive power), individual aspects of the leader such as skills or charisma (i.e., referent and expert power), and power based on the position one holds in the organization (i.e., legitimate power). Merely focusing on these bases of power, however, may lead students to underestimate the power subordinates might have over a manager's outcome. When students do consider the power workers hold, they often conceptualize such power in terms of unions or labor relations and do not consider the individual ways workers can exert their power by resisting or undermining the leaders. For example, workers might feign ignorance about how to accomplish their tasks, mock their supervisors, deliberately slow their rates of performance, or even commit acts of sabotage or theft (Roscigno & Hodson, 2004). If the cooperation of workers is necessary for the success of a task, the workers have an element of control over the outcomes of their leaders. The perspective of task interdependence power (e.g., Franz, 1998) captures this dimension and is useful to help convince students of the informal elements of power in a situation.

In addition to personal bases of power, intergroup dynamics and power differentials may be present in many change scenarios. Merely categorizing individuals into separate groups can elicit pro-in-group favoritism (e.g., Brewer, 1979). The out-group is often viewed negatively and mistrusted, especially in situations involving conflict (e.g., Chambers & Melnyk, 2006). In managerial contexts, Tjosvold (1989) argued that when workers conceptualize a situation as cooperative, their interactions with their superiors should be more positive and productive. Conversely, in more competitive situations, workers should be less likely to exchange or disclose information and may be more suspicious of their managers.

Teaching Change Management Through Experiential Learning

We sought to create a rich simulation that would allow students to both experience the difficulties involved in leading change and to reflect on this experience to prepare them to lead change effectively in the future. Concrete experiences followed by reflection and application can greatly enhance the learning process in many situations (e.g., Kolb, 1984; Smart & Csapo, 2007). In particular, open-ended experiences that allow students to creatively solve problems can lead to engaged classroom discussions, (e.g., Caza, Caza, &

Lind, 2011; Stovall, 2010). Experiences can lead to active learning, resulting in a greater skill development and understanding of how to apply materials (Smart & Csapo, 2007).

Experiential learning is an ideal avenue for teaching students to lead change. McDonald and Mansour-Cole (2000) developed a simulation modeling the complexity of organizational change that requires students to solve problems and deal with emotions arising from a change initiative (in this case, a hospital merger). Change simulations can also illustrate structural and procedural change (e.g., Rollag & Parise, 2005) and can be an ideal way to emphasize the importance of communication when trying to implement change. These simulations can provide rich information that can improve classroom discussions and may be especially valuable when students do not have extensive workplace experience to draw on in discussions.

Leading change requires appropriate use of many managerial skills. Managers must identify a challenge and develop an appropriate solution. They also must clearly communicate to reduce barriers to change. We developed an engaging simulation in which members of a class are asked to lead a change effort. This exercise was designed to be difficult to allow students to experience the complex challenges associated with resistance to change. Postexercise discussion can guide students through a reflection of their own and their classmates' behaviors and enable them to identify productive approaches to use in the future. We developed this exercise and the debriefing discussion with the following learning goals in mind: to help students to gain an appreciation for the difficulty of leading change, to recognize individual barriers to change, and to analyze and evaluate their behaviors in order to develop effective strategies for future change efforts.

The Change Game

In the Change Game exercise, a subgroup of the class is given the task of organizing the remaining classmates to sit in a prescribed order within a 45-minute time limit. Although simple on the surface, the exercise is made more difficult by two explicit, though subtle, factors. First, issues of stereotypes, power, and status have been introduced by dividing the class into subgroups ("managers," who are responsible to enact the change, and "workers," who must assume the new seating order). Second, at the start of the activity, the subgroups are provided with slightly different information about the potential rewards. The manager group must gain the workers' trust and ensure unanimous cooperation to succeed. The actual task (i.e., changing seats) can be accomplished in mere minutes, even in the largest classroom.

However, the coordination, planning, and communication take far longer than students expect.

The task is designed to be challenging; we have found this to be a versatile exercise that can complement many courses within a management curriculum. We have used it successfully in organizational behavior and leadership classes as well as in more narrowly focused classes such as change management. It offers great flexibility in terms of where to embed the activity in course content. It can be very successful at the start of an introductory course, serving as an icebreaker, a demonstration of challenges managers face, and a vivid and memorable illustration that can be returned to during class discussions throughout a traditional course. Likewise, it can serve as a capstone at the end of a course, illustrating that even though students may have gained a theoretical understanding of concepts, such as motivating and leading followers, in practice it is hard to apply these principles consistently, helping students appreciate the frustrations and complexities of more applied settings. Finally, it can be embedded at appropriate points during a semester to supplement topics such as change, communication, or group dynamics at the instructor's discretion. Detailed instructions for preparing and conducting the activity are found in Appendix A, available online at <http://jme.sagepub.com/supplemental>.

Time and Space Requirements

The time allowed for the actual game must be determined by the instructor prior to class. In a 75-minute class section, we set a 45-minute deadline from the start of the class period. In a 50-minute class session, this time might be reduced to 30 minutes without significantly compromising the activity. A similar amount of time should be allotted for postactivity debriefing. If the instructor chooses to discuss the activity in a subsequent class period, it is important to allow for at least 5 to 10 minutes of class time immediately following the exercise to defuse any frustrations or emotions that might build during the exercise. In our experience, allowing approximately 1½ hours of class time for this exercise and a subsequent class discussion on theories of leading change is ideal.

This exercise works best in a classroom with fixed or orderly seating, so the instructor can provide a seating chart with the managers' instructions. However, any seating arrangement can be accommodated, as long as the reseating instructions can be expressed in simple, noncomplex terms. The managers will need a private space in which to caucus, although stepping outside of the classroom will suffice.

Participants

We have used this exercise in classes ranging from 12 to more than 100 students. Unlike many experiential activities, the change game effectively scales up to large lectures. Our experience suggests that very large classrooms need slightly more time to allow for coordinating the start and end of the activity.

Materials

Prior to class, the instructor must create “game cards.” The cards should be labeled with either numbers, the letter M, or “CEO” (e.g., 1, 2, M, 3, 4, CEO, 5, 6, M, etc.). It is important that there are no missing numbers, so the cards should be in order as the exercise starts. The instructor will also need to bring sufficient cash (50 cents per student) for the payoff in case the class succeeds at the game. For example, in a class of 20 students, the instructor should be prepared to provide \$10; Appendix B provides the order of cards and payout amounts for various sized classes. The instructor will rarely have to pay this bonus—we have found fewer than 1 in 10 classes succeed. The instructor will need to bring instructions for the workers (preferably on a PowerPoint or overhead, see Appendix C), a hard copy of the instructions for the CEO (see Appendix D), and a hard copy of a classroom seating chart for the CEO (see Appendix E for a sample).

Conducting the Activity

At the start of the session, students each buy a game card for \$1.00 and sign the back of the card. Students with numbered cards are asked to sit in the front rows of the classroom; they become the workers. Students with M or CEO on their card are asked to leave the classroom and await further instruction; they become the management. Once all students have been assigned roles and the managers have left the room, the workers are told that if they remain in their seats without getting up for the entire exercise they will be able to trade their game card back for their dollar. Thus, the exercise builds in resistance to change to mimic individual sources such as fear of the unknown or inertia. Workers are then told that they will receive further instructions from their managers.

The instructor then goes to the group of managers and locates the person holding the CEO card. The CEO is then given the sheet of manager instructions and seating chart. The management group is told that if they can successfully

complete the task of moving workers into the prescribed seating chart so that the legitimate owner (the student whose name is signed on the card) is in the correct seat with no empty seats, the CEO will receive a lump sum equal to 150% of the money put in by the students, with the additional money provided by the instructor. The CEO would then distribute the money according to his or her discretion. The exercise is then turned over to the managers, with the instructor serving as an observer for the remainder of the activity.

On receiving their instructions at the start of the activity, the management team often cloisters themselves for a brief period of time to start planning their strategy. Although the period of planning can vary (and for exercises later in the semester or with more advanced students, managers might take a large chunk of time for up-front planning, especially if they are trying to be conscientious), a common outcome is that the workers are left in the classroom without a clear idea of what is going on. Even a 5-minute planning session can lead to uncertainty in the worker group (e.g., "Is the point of the exercise just to see how long we'll sit here?") and can increase the us/them dynamic that has been created by categorization into two groups (e.g., Brewer, 1979). In our experience, few management teams send a representative in or otherwise communicate with the workers while doing their initial planning.

When the management team enters, often after 10 or more minutes of leaving the workers "in the dark," a common scenario is for the managers to form a tableau at the front of the classroom and for a spokesperson (not always the CEO) to announce that the workers need to move into an assigned seating chart. Often the spokesperson will also announce that the workers will receive a certain amount of money (often slightly over \$1) in exchange for moving. Typically, the spokesperson then either asks the workers to move or asks if the workers are willing to move. In either of these cases, the managers are typically surprised when the workers refuse to leave their seats. Progress toward successful completion of the activity depends, at this point, on the managers' ability to accurately diagnose and address the workers' resistance to change.

Our experience suggests that when the exercise unfolds in the typical pattern described above, it is unlikely that the class will succeed in the change task. At this point, there are many possible ways the activity can play out; we discuss three common scenarios with the most common first.

Scenario 1: Some Workers Immediately Leave Their Seat to Comply With the Task

Often, one or more workers will immediately comply with the request to move and will leave their chairs. Almost without exception, however, they

find that the spot they need to fill is still occupied. Holdout workers are quick to realize that, as the task requires the cooperation of all workers, they might rationally request a larger payout to agree to move, especially if the management has increased the initial offer. In this scenario, gaining the cooperation of the holdouts is crucial for the completion of the task. Therefore, as more workers cooperate, the holdouts gain greater power. A small group of holdout workers may emerge who either want an extreme reward or who out of obstinacy refuse to cooperate. Additionally, as managers engage in negotiations with certain holdouts, overall confidence in management erodes. Previously compliant workers become unsure of the total reward available and begin to question whether the originally promised payout is fair and equitable. As the intractability of this problem becomes apparent to the managers, it is common for the management team to want to fire the holdouts. We suggest that if the instructor allows management to fire workers that a penalty be applied ranging from a "severance package" to requiring the managers to find and pay a replacement worker to complete the work. Instructions describing a variation if managers are allowed to fire workers are provided in Appendix F. When the management team realizes the costs associated with turnover, they often resume negotiations with the workers.

This scenario can be emotionally charged and the instructor must be prepared for the possibility of confrontation between the groups, or between particular managers and workers. The most extreme case of such confrontation that we have experienced occurred after a small number of workers initially left their seats, and the management team had broken apart to persuade the reticent workers to move. Although there is merit in such personal appeals (especially when managers used preexisting bonds with workers), it often leads to many side deals. Again, while it may seem opportunistic, it is understandable that workers—unsure of how much money is actually available or how high the management can actually go in compensation—sometimes push for personally advantageous deals. In one highly salient example, a manager approached a worker and asked him, "What would it take for you to move?" The worker replied, "Well, I'd be willing to move for \$5." As the official offer was \$1.50 at the time (although some side deals for \$2 were being independently made by other managers in the large classroom), this request was perceived as extreme. The manager, affronted, loudly shouted, "Is it worth \$5 for the rest of the class to think you are a jackass?" This polarizing reaction naturally exacerbated the manager/worker distrust and conflict. Although this was, by far, the most extreme emotional response we have observed, it also provided for a highly productive postactivity discussion. We give suggestions for structuring the debriefing discussion later in this article.

Scenario 2: Some Workers Indicate That They Are Willing to Move, but Everyone Is Still Seated

If the managers open communication and seek verbal commitments from workers prior to having anyone leave his or her seat, the likelihood of holdout workers gaining power is decreased. In our experience, this approach is much more likely to lead to success. The ideal outcome would be for the group to reach consensus on the need for change and the distribution of the winnings before anyone moves from his or her seat. Common failings in this approach center on a lack of communication from both groups. For example, managers often respond to worker concerns by quickly increasing their initial offer. This capitulation confuses the workers, who commonly have no idea where the extra funds are coming from. Also, it is not unusual for the management to remain in the dark about the worker information and incentive for remaining in their seats. If directly asked about the extra funds, the managers are often vague, and workers quickly pick up on any dissembling.

In classes where Scenario 2 is unfolding, and effective intergroup communication is taking place, cooperating workers will often join in the persuasive process and dialogue with holdout workers. In comparison with Scenario 1, Scenario 2 tends to be less concerned with opportunism, but more concerned with risk and trust that the managers will deliver the promised funds. As the management needs total cooperation to receive the funds, excellent communication and a commitment to the overarching group are necessary for success. Some salient outcomes for this approach include pooling the group resources and agreeing to work together for a common goal (e.g., a class pizza party, or a donation to charity) instead of an individual payout.

Scenario 3: Workers Are More Unified and Deal With the Management in a Collective Manner

In this case, workers typically start communicating and speculating on the purpose of the exercise before the managers return to the room. A clear leader may emerge from the workers, and there is an agreement for the group to work together. This approach has potential advantages and disadvantages. On one hand, by agreeing to a collective strategy, the workers often have clearer communication with the managers and reduce the chance of side deals and opportunistic behavior. On the other hand, by banding together as a group, the intergroup conflict tends to increase. Many times the worker representative requests an advance of the funds, which is infeasible given the task structure that the “company” only receives the funds on successful

completion of the task. In many cases, the representatives try to draft written agreements or contracts to protect the workers' interests. Anecdotally, as the principals try to gain contractual protection, trust starts deteriorating, and it is not unusual to see participants try to craft vague wording (e.g., not specifying when payment will be delivered) that would be in their benefit.

Concluding the Exercise

On rare occasions, the class will conclude the exercise prior to time expiring, either by successful completion of the task or by the managers forfeiting the exercise. In the remaining cases, the instructor should give a 5-minute warning and then announce the exercise is complete when time expires. The instructor may, at his or her discretion, either return everyone's money or only that of the workers who remained in their seats. If the instructor feels that the learning experience will be more valid if the outcome is real and the students lose their \$1, then we argue that it is important to prevent the appearance of personally profiting from the exercise. One solution is to donate the surplus funds to a charity. Ideally, there will be enough time to immediately debrief the exercise, but if not, the instructor should allow at least 5 to 10 minutes for defusing any extreme feelings that might have arisen during the exercise.

Suggested Approaches to Debriefing the Exercise

Defuse extreme emotion. If the students were unable to complete the task, the instructor should soothe emotions and frustrations immediately. We typically start by empathizing about the difficulty of the task, and next we share that the exercise was designed to be extremely difficult. If there seem to be lingering tensions, they are often directed at holdouts, so we explain that the game creates a powerful situation that almost uniformly produces holdouts, and we remind the managers that they might have acted in the same way had they been assigned the role of a worker. If discussion will continue in a second class period, the instructor might assign a reflection paper or ask students to gather their thoughts in writing before the next session. Sample paper prompts and discussion questions are provided in Appendixes G and H.

Disclose instructions for each group. If the information in each group's instructions has not already been revealed, the instructor should ask the students to discuss it. In some cases, the managers might not have known about the incentive to remain seated. Workers might discuss how they felt they were being "good workers" by following their duties (i.e., remaining seated) while the

managers, without this information, might have assumed the workers were obstinate or lazy. These opposing viewpoints can provide an excellent link to concepts of perception, attribution, and the power of the situation on behavior.

Explore general reactions. In our experience, students will express frustration at the difficulty of the task. It is important to keep this part of the discussion on task. If there were salient moments in the activity, the instructor might want to structure this part of the discussion. For example, in the “jackass” scenario mentioned above, the instructor might structure the discussion to sympathetically ask the manager to discuss the frustrations he or she felt (while guiding the discussion away from personal attacks) and ask the manager to take the worker’s perspective. The worker, in this case, might also be asked to share the reasons for his or her decisions and actions, and to take the perspective of the manager. As mentioned above, that incident led to an extremely productive discussion. The worker, now calm, was able to share with the class that because he felt he had been disrespected and verbally abused by the manager, there was no amount of money that would have gained his cooperation. The discussion segued into a sincere conversation about the importance of money versus respect and fairness as motivators.

Leading change. We next discuss that the exercise was developed to simulate barriers to change, making change extremely difficult by design. As discussed previously, some common individual barriers to change include perception, habit, fear of the unknown, and economic forces. The intergroup dynamic may lead students to expect the other group is lying or to interpret the situation based on their preconceived notions of how workers versus managers might act. Although artificial, we argue that the \$1 inducement to stay in their original seats can help mimic the inertia of habits or the status quo bias (e.g., Kahneman, Knetsch & Thaler, 1991), and it is possible that students will initially sit with friends or in locations (e.g., front or back, middle or aisle) that conform to their usual tendencies. Fear of the unknown and the risk associated with moving to a new seat, although paired with a possible gain, might be mimicked by the guarantee of regaining their \$1 by remaining seated. The final individual barriers exemplified in this exercise are economic. Arguably, a loss of \$1 is not a loss that will threaten the economic security of the students or their loved ones, but the aversion of accepting a loss (cf., Kahneman & Tversky, 1979) and norms of fairness appear sufficient to parallel this force. Although these are clearly artificial manipulations of the barriers to real-life change, we argue that they provide a compelling launching point for a discussion of why subordinates might irrationally (at least from the managers’ perspective) resist working toward potentially beneficial change.

Best practices. We like to conclude our discussion by illustrating that in this exercise the presence of an opportunity is revealed to the leaders of an organization, and it is their responsibility to recognize and share their vision to achieve this goal. Kotter's (1995, 1996) eight-step model for leading change is one framework in which to debrief this exercise. We have provided a summary handout of Kotter's model in Appendix I. In particular, the best practices for succeeding in this exercise would follow Kotter's first five recommendations. According to Kotter, some of the steps a leader should follow to lead change are creating a feeling of urgency, forming powerful coalitions, creating and sharing a vision for change, and countering barriers to change. This model can provide a framework to discuss successes and failures in the exercise. Groups that have succeeded have taken steps that are consistent with Kotter's model, clearly explaining the opportunity and gaining buy-in from the workers before trying to get them to change seats. Unsuccessful groups tend to overlook the importance of explaining the need for and urgency behind the requested change and do not appreciate the complexity of the barriers to change. Similarly, if the instructor prefers to use Lewin's (1947) three-stage model or force field analysis, discussion can focus on the situational forces that restrain change (e.g., the desire not to lose their dollar, confusion, and uncertainty over what is being asked of the workers and why), and whether the managers created sufficient forces to encourage or drive the change.

Variations

Firing holdout workers. A small group of holdout workers may emerge who either want an extreme reward or who out of obstinacy refuse to cooperate. At this point, it is common for the management team to want to fire the holdouts. We suggest that if the instructor decides to allow management to fire the worker(s), a penalty be applied. Although Kotter and Schlesinger (2008) acknowledge that, when time is critical, it might be appropriate to fire uncooperative workers; this approach is not without substantial costs. Turnover is costly to organizations (O'Connell & Kung, 2007), and the costs include finding and training replacement workers, as well as productivity losses. If managers are allowed to fire workers, instructions for this variation (including a "severance package") are provided in Appendix F. When the managers realize the costs associated with turnover, they often resume negotiation with the workers.

Alternate course topics. Depending on the needs of the instructor, this exercise can also be used with topics of communication and trust. Kotter (1995)

argues that dramatically undercommunicating the need for and vision of change contributes to many failed change efforts. Players tend to assume all parties know the rules constraining their actions, which can be used to demonstrate the “illusion of transparency” (Gilovich et al., 1998; Van Boven et al., 2003). Often, students in the role of manager in the change game do not seek out the explanations for why workers are reluctant to comply and either assume they are “bad workers” or that there is a hidden motivation to sabotage the management. Managers in the change game may be quite stingy with the information they choose to reveal. Intentionally or unintentionally, they may fail to mention where additional funds are coming from and are usually very reluctant to share information about the size of the potential payout. Once the workers pick up on this omission or deception, they often become reluctant to volunteer information about their incentive to remain in their seats, instead making comments such as “this is my favorite seat” or “I’m comfortable where I am.” The initial communication between managers and workers is critical and sets the tone for the remainder of the exercise. It is not an exaggeration to say that mishandling the initial communication can in practice doom virtually all hopes of success. Indeed, that can be an important teaching moment.

Additionally, this exercise could be tied to discussions of workplace power. French and Raven’s (1959) bases of power could be incorporated into the discussion. Legitimate power is arguably possessed by the CEO and managers through the game’s structure. The management group holds potential reward power and possibly coercive power (especially if the facilitator allows management to fire disruptive employees). Depending on the personal characteristics of the formal or informal leaders who emerge, referent power might be present in the activity, but it is less commonly observed. However, one of the most important illustrations of this exercise with regard to power is that the managers’ power bases alone cannot accurately capture the dynamic of power in this game. As mentioned previously, students tend to underestimate or dismiss the power of the worker group. If the game plays out with lone holdouts, the task interdependence (e.g., Franz, 1998) becomes extremely clear.

Student Reactions

This exercise has been used in many settings, including undergraduate, MBA, and executive education over an 11-year period. We have used this exercise at two markedly different universities. The exercise was initially developed at a large state university with a current undergraduate enrollment

of approximately 24,000 (44% female). The majority of students commute to this campus, and typical enrollments for undergraduate organizational behavior classes ranged from 60 to 105. More recently, we have been using this exercise at a private university with an undergraduate enrollment of approximately 1,600 (54% female). The majority of students live on campus, and typical enrollments for undergraduate organizational behavior classes range from 18 to 30.

We have found this exercise is well received and provides an engaging springboard for classroom discussions. Based on our extensive use of the change game in our classes, we are confident that this exercise has improved our students' learning. Although we have conducted the exercise for many years, we only recently considered formally sharing the exercise with other educators. In that context, we recently collected quantitative data from two sections of undergraduate organizational behavior at the smaller private university to explore the effectiveness of this exercise.

In the first undergraduate organizational behavior section, we asked 22 students to report their general reactions to the exercise in terms of how well it illustrated key concepts of the difficulty of leading change, as well as a general question regarding their perception of whether they learned from the exercise. Students indicated their agreement on a 7-point Likert-type scale, with larger numbers indicating greater agreement. These responses, shown in Table 1, indicated strong consensus that the students felt the exercise helped illustrate several fundamental concepts of leading change.

Although this evidence supported our perception that students responded very positively to the exercise, we sought to examine whether the exercise helped students make progress on our learning objectives. In particular, we wanted to measure whether students felt the exercise helped them to understand the barriers to change and the difficulty of leading change. In the second undergraduate organizational behavior section, we asked 24 students to respond to a series of questions related to how the exercise helped them understand barriers to change and the difficulties involved with leading change. Additionally, based on concerns that students might learn "the wrong things" from this exercise, we also verified that students perceived the exercise as an illustration of common mistakes. Students indicated their agreement on a 6-point Likert-type scale, with larger numbers indicating greater agreement. These responses, shown in Table 2, indicated strong consensus that the students felt the exercise helped them understand key concepts of leading change, consistent with our learning goals for this exercise.

In addition to these quantitative self-reports of student learning, we sought to find additional support for the effectiveness of this activity. Student feedback

Table 1. General Student Reactions to the Exercise

Question	Mean	SD
The exercise was harder to complete than the managers expected	6.55	0.60
The exercise illustrated that people resist change even when it might be in their best interest	6.27	0.98
The exercise made me think about the challenges managers face	6.14	0.89
I learned from this exercise	6.36	0.90

Note. Responses on a 7-point scale from 1 (*definitely false*) to 7 (*definitely true*). $N = 22$.

Table 2. Learning Objectives

Question	Mean	SD
This activity and discussion helped me understand the situational forces that might make individuals reluctant to change their behaviors	4.88	0.54
This activity helped me to understand the types of individual barriers to change	5.00	0.51
This exercise helped me understand how course concepts can be applied when leading change	5.00	0.78
This exercise made me aware of mistakes to avoid when leading change	5.25	0.74
This exercise helped me realize that leading change is harder than it looks	5.46	0.72
This exercise illustrated content that was covered in our readings	4.67	0.64
This exercise helped me better understand the process of leading change	5.00	0.66

Note. Responses on a 6-point scale from 1 (*strongly disagree*) to 6 (*strongly agree*). $N = 24$.

and comments from other courses parallel this evidence. Responses to an end-of-semester assignment asking students to reflect on the most important concepts they learned in the course often specifically volunteered the change game as one of the most interesting and useful elements of the course. One MBA student argued:

Trust was repeatedly proven difficult to establish, maintain, and accurately predict. The semester began with the game in which a lack of

trust in leadership made success impossible, this occurred when only one dollar was at risk. The beginning game caused me to recognize trust is a critical factor in any change attempt, additionally changing my thoughts and the approach I will use to establish change. . . . It was a surprise to see strong willed resistance to change with less than a dollar at risk. The resistance in our initial change was brought about by several factors, past bad experiences, fear of losing something of value, framing of the initial request (body language) and most of all distrust of the individuals placed in the pseudo-leadership position. Prior to the game experience, I held the belief that since I was honest and straightforward I would be believed and trusted; my view has changed. While I still believe that my core work team trusts me, I must acknowledge that resistance can be so strong that any change initiative will fail. I will be more cautious in my communication, delivery, and expectations; especially when working with newer core members.¹

Clearly, the student's comments illustrate the impact the activity had on her learning. In the above example, the exercise was conducted in one of the initial classes. However, similarly positive feedback emerges when the activity takes place at the end of the semester as a capstone experience. It is not unusual for students to link course concepts back to the exercise at later points in the semester or even in subsequent courses with the instructors. Although these examples are anecdotal, we argue that the ability of students to link material back to this exercise (in some cases months after the exercise) supports our view that this exercise helps students learn. Taken together, we argue that we have converging evidence from a variety of approaches (e.g., Schmidt-Wilk, 2010) supporting the utility of using this exercise for teaching organizational change.

Limitations and Conclusion

Although we are confident that this exercise is a valuable tool to teach organizational change, it is not without limitations. As mentioned previously, it has the potential to create a strong emotional reaction during the exercise. There is the possibility that the classroom dynamic among students might be harmed or that students could resent being manipulated by the instructor. However, in our extensive use of this activity over an 11-year period, we have not observed this reaction (although we deliberately defuse emotions and reframe the frustration as a learning experience). Another limitation involves the role of the dollar as a proxy for barriers to change. Clearly, the

dollar is an artificial—and possibly heavy-handed—substitute for fear of the unknown or risk; in our experience, it does motivate the workers to resist change. The fear of losing the dollar is not the only force that keeps the workers seated, but it is part of the picture. Even if students disagree with the generalizability of the dollar as a “real-life” barrier to change, it provides a starting point to discuss barriers they may experience in the workplace. For example, students readily recognize that managers in “real organizations” often have only partial insight into the motivations and concerns of their personnel. Finally, a possible limitation involves the classes that *are* able to complete the task successfully. If the class does not experience distrust or resistance, it is difficult for them to imagine how the exercise typically unfolds.

Leading change is an important skill for management education. Students often underestimate the difficulty of change efforts and the importance of clear communication. This exercise helps students understand the uncertainty, distrust, and barriers that may preclude enacting change. As mentioned above, we have found this exercise helps students better understand these difficulties and that the exercise leads to productive and engaged conversations on successful change initiatives.

Appendix A

Instructions for running the exercise

Class prior to the exercise:

- Remind students they will be playing the game in class and need to bring (and be prepared to lose) one dollar. Ask the students to try to bring exact change.

Preparing the exercise:

- Create the game cards by numbering index cards as directed in Appendix B
 - Prepare a copy of the workers instructions (Appendix C) to project on a screen or write on the class blackboard.
 - Print a hard copy of the CEO instructions found in Appendix D
 - Prepare a seating chart appropriate for the space in which you will conduct the exercise. A sample seating chart for a classroom is provided in Appendix E.
 - Have funds on hand for a potential payout (see Appendix B for possible instructor contributions). We have found that having this
-

Appendix A (continued)

change in the form of rolls of quarters makes the logistics easier in the cases where the class succeeds at the task.

- Optionally, you may want to arrange for an assistant. The assistant can help observe the groups when they caucus and help improve the quality of the discussion.

As the class session begins:

- Make sure everyone buys a game card
- Ask managers to wait outside of the classroom
- Ask workers to fill in the front rows of the classroom

As the game starts:

- In the classroom:
 - Verify that all managers have stepped outside.
 - Display the Worker instructions (Appendix C)
- Outside of the classroom:
 - Fill in the Payout amount based on the number of students in the game (find in Appendix B) on the CEO instruction.
 - Find the player with the CEO card.
 - Give this person the CEO instructions (Appendix D) and seating chart (Example from Appendix E)
 - Announce the deadline for task completion

As the exercise progresses:

- Observe and take notes of points you want to address during the discussion
- Clarify rules as needed
- Optional: if you are asked if the managers can fire workers, you might choose to provide the material in Appendix F.

Conclusion of the exercise:

- The game is completed when the task is successfully completed or if time expires.
 - If the workers have all moved to their new seats, distribute the winnings to the CEO.
 - If the task was not successful, you will return the dollar to any worker who remained in his or her seat for the entire exercise.
-

Appendix A (continued)

- You may also choose to simply return the dollar to every student. Returning the funds may help avoid any impression that the instructor is personally profiting from the exercise.

Appendix B

Payoff amounts and game cards:

Prepare the cards by writing each number or letter on the front of an index card (e.g., 1, 2, M, 3, 4, CEO etc.). The table below shows which card will be the last one sold, as well as the total payoff amount and amount the instructor would have to provide in a win. If 35 students play, the last card sold will be “24”, and the payoff amount to include on the CEO instructions would be “\$52.50.”

Number of Students	Final Card	Payoff Amount	Instructor Provided Funds
1	1	\$1.50	\$0.50
2	2	\$3.00	\$1.00
3	M	\$4.50	\$1.50
4	3	\$6.00	\$2.00
5	4	\$7.50	\$2.50
6	CEO	\$9.00	\$3.00
7	5	\$10.50	\$3.50
8	6	\$12.00	\$4.00
9	M	\$13.50	\$4.50
10	7	\$15.00	\$5.00
11	8	\$16.50	\$5.50
12	M	\$18.00	\$6.00
13	9	\$19.50	\$6.50
14	10	\$21.00	\$7.00
15	M	\$22.50	\$7.50
16	11	\$24.00	\$8.00
17	12	\$25.50	\$8.50
18	M	\$27.00	\$9.00
19	13	\$28.50	\$9.50
20	14	\$30.00	\$10.00
21	M	\$31.50	\$10.50

Appendix B (continued)

Number of Students	Final Card	Payoff Amount	Instructor Provided Funds
23	16	\$34.50	\$11.50
24	M	\$36.00	\$12.00
25	17	\$37.50	\$12.50
26	18	\$39.00	\$13.00
27	M	\$40.50	\$13.50
28	19	\$42.00	\$14.00
29	20	\$43.50	\$14.50
30	M	\$45.00	\$15.00
31	21	\$46.50	\$15.50
32	22	\$48.00	\$16.00
33	M	\$49.50	\$16.50
34	23	\$51.00	\$17.00
35	24	\$52.50	\$17.50
36	M	\$54.00	\$18.00
37	25	\$55.50	\$18.50
38	26	\$57.00	\$19.00
39	M	\$58.50	\$19.50
40	27	\$60.00	\$20.00
41	28	\$61.50	\$20.50
42	M	\$63.00	\$21.00
43	29	\$64.50	\$21.50
44	30	\$66.00	\$22.00
45	M	\$67.50	\$22.50
46	31	\$69.00	\$23.00
47	32	\$70.50	\$23.50
48	M	\$72.00	\$24.00
49	33	\$73.50	\$24.50
50	34	\$75.00	\$25.00
51	M	\$76.50	\$25.50
52	35	\$78.00	\$26.00
53	36	\$79.50	\$26.50
54	M	\$81.00	\$27.00
55	37	\$82.50	\$27.50
56	38	\$84.00	\$28.00
57	M	\$85.50	\$28.50
58	39	\$87.00	\$29.00
59	40	\$88.50	\$29.50
60	M	\$90.00	\$30.00

Appendix C

Rules for Workers

The participants outside are your managers. While they prepare for the game, please read the following rules:

If you leave your seat during the game, you forfeit your \$1.00. If you remain in your seat for the duration of the game, you will receive your \$1.00 back.

- You must keep your card. You may not swap cards with anyone else during the game.
- Don't lose your card. They will be collected at the end to verify participation.

Thanks for your cooperation & have fun!

Appendix D

CEO instructions

You are the CEO of the corporation, "Change Etc." Your company has the opportunity to earn the sum of \$_____ to distribute as you see fit. Your instructor has provided the additional funds. In order to earn this money, your workers (the students in the classroom) must seat themselves in the order on the attached seating chart within 45 minutes of the start of the game.

For the task to be accomplished satisfactorily:

- Every seat must be filled by the worker who legitimately holds the assigned number
- There may be no empty or unfilled seats
- All workers must be seated in the correct place by the end of the 45 minutes

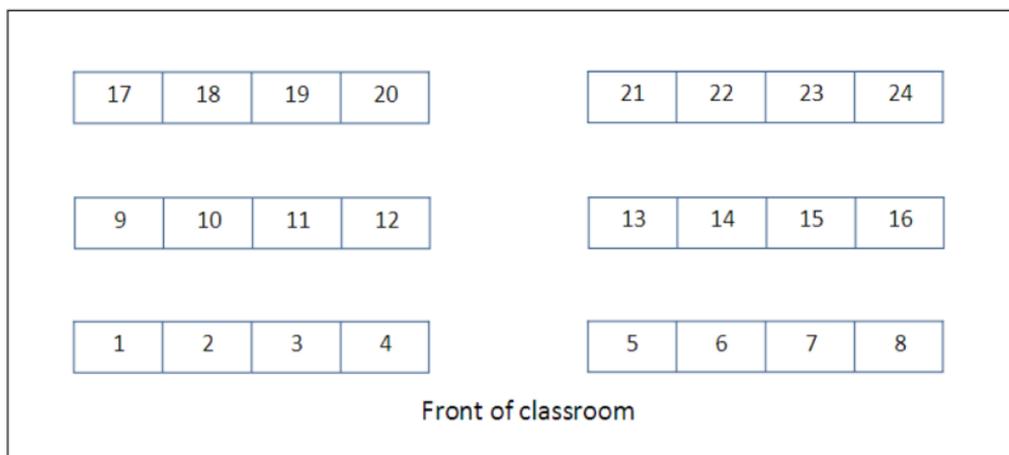
You may go about accomplishing this task in whatever manner you see fit, with the following exceptions:

- You may not physically force the workers to move
- You may not physically take a card from a worker

If you do not successfully accomplish this task within the allotted time, the company will receive nothing. That is, if you do not complete the seating chart in the assigned time, the money is lost, and you will each forfeit your \$1. The instructor's role in this exercise is as an observer. If your company has questions about the rules during the game, the CEO must ask them personally.

Appendix E

Sample Seating Chart:



Appendix F

Exercise Variation: Rules to fire a worker

You have requested information about firing workers. As you consider firing a worker, please bear in mind the following information. Turnover has many associated costs including severance packages, increases in the company's unemployment premiums, as well as the cost of selecting and training a replacement. Based on feedback from your human resources department, firing an employee has an estimated cost of \$4.00, broken down as follows:

- If you fire a worker, he or she will immediately receive \$2.00 from the instructor. This amount includes their earned salary for work completed to date (their \$1.00 guaranteed for remaining in their seat) as well as a \$1.00 severance package.
- Additionally, \$2.00 will be removed from the sum you will receive for successfully completing the task. This amount is to cover the selection and training costs associated with replacing the worker.

If you decide to fire a worker, a manager may fill in for the fired worker. Only the CEO may make the decision to fire a worker and authorize the instructor to pay the severance package.

Appendix G

Sample reflection prompt if debriefing will not immediately follow the exercise

Please take about 5 minutes to write down your thoughts about the Change Game activity we did in class today. To structure your thoughts/reactions, please specify what your role was in the activity (manager or worker), and then jot down your thoughts on your assumptions before the activity got started (before the managers came in to give directions). Was the task harder than you expected? What seemed to motivate members of each group? If you were going to repeat this task as a manager, would you try something different?

Appendix H

Sample Discussion Questions:

Disclose instructions for both roles:

- Managers/workers, what were your instructions for this exercise?
- Were there any other instructions or motives for your role?
- Is any of this information a surprise to the other group?

Explore General Reactions:

- What surprised you most about how the exercise unfolded?
- What really kept the workers from moving?
 - Was their motivation intrinsic or extrinsic?
- How much of a role did the dollar play?
 - Was that realistic?
- Imagine you were assigned the opposite role. Do you think you would have acted differently than your classmates in that role?
 - How much of the behavior can be explained by situational or external causes?
 - If you assumed the workers were being stubborn or that the managers were out to trick you, is it possible you showed the fundamental attribution error?

Leading Change:

- Did the workers understand why they needed to move?
 - How well did the managers communicate?
-

Appendix H (continued)

- Managers, how did you plan your strategy?
- How could we apply Kotter's model for leading change to this task?

Power

- Typically, managers feel they are entitled to a larger share of the money. Why would they think that?
 - Did the CEO have any power? According to French and Raven, what would be the CEO's base of power? Can you think of instances where, as a manager, you may not have tools to back up the power from your position?
 - In negotiation, power comes from alternatives. What was the manager's alternative? Workers? Who would have more power from this point of view?
-

Appendix I

8-step model for leading change (Kotter, 1995, p. 61).

1. "Establishing a sense of urgency"
 2. "Forming a powerful guiding coalition"
 3. "Creating a vision"
 4. "Communicating the vision"
 5. "Empowering others to act on the vision"
 6. "Planning for and creating short-term wins"
 7. "Consolidating improvements and producing still more change"
 8. "Institutionalizing new approaches"
-

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1. Quote from the final exam of an MBA student in the course "Leading Strategic Change." This student played the role of a manager in the activity. Permission to use this excerpt was granted by the student.

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