Kurt Lewin's seminal work in organizational communication could potentially help solve many dilemmas faced by workplace literacy programs as they attempt to ensure that program participants not only learn basic skills but also use them in the context of work. According to Lewin's "field theory" approach, an individual's behavior is a function of the interdependent variables of the person and the environment, and the relative ease of inducing a new behavior is the product of the interplay between forces driving toward change in behavior and forces opposing change. The dynamics of these forces may be understood through the example of a nonnative speaker of English learning to use English in the workplace. Lewin believed that resistance to change depends partly on the value of the group standard for the individual. Lewin's action research suggests a three-step model of change that workplace literacy educators could use to help their students develop, use, and retain workplace literacy skills. The model's three steps are as follows: unfreezing old habits to create a state allowing for experimentation with new behaviors, making the actual change, and "refreezing" (retaining newly learned behaviors on a long-term basis through regular practice and consistent reinforcement.) (MN)
What Workplace Education Programs Need to Know About Behavioral Change: Tapping the Work of Kurt Lewin

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Abstract

This paper introduces the work of Kurt Lewin to the field of workplace literacy. Lewin's holistic approach to understanding human behavior and change is useful to workplace educators who are concerned that employees participating in learning not only master new skills, but also use these skills in the context of work.

First, I present Lewin's "field theory" method of understanding human behavior and apply the concepts of force fields to change efforts in workplace learning. To clarify force fields, the paper includes the example of a change process overseen by Lewin in a factory in the 1940s.

Secondly, I discuss the implications of Lewin's research in three areas: group norms and resistance to change, the change model, and group decision making.
Introduction:
Workplace literacy programs provide on-site instruction in basic skills to entry level employees. Currently hundreds of programs are operating throughout the United States; while some offer traditional adult basic education courses, a large portion focus on providing customized instruction to improve the skills of individual employees so that they can be more productive, flexible and trainable workers.

Over the past ten years, this newly emerging field of workplace literacy, also called workplace education or workforce learning, has drawn heavily from the research on reading. This research has led to the focus on task analysis and the development of contextualized basic skills instruction. Workplace educators have paid less attention to the rich field of organizational communication, yet this area hold great promise and potentially could help to solve many of the dilemmas faced by workplace programs as they attempt to ensure that program participants not only learn basic skills, but also use them in the context of work. This paper reviews Kurt Lewin's seminal work in organizational communication and explores its potential for workplace education.

Field Theory:
Nearly fifty years ago Kurt Lewin pointed out the limitations of understanding behavior and learning apart from the environment in which an individual operates. Individual behavior, in Lewin's view, should not be studied in isolation of context. To separate the parts from the whole creates a distorted picture, for the group to which an individual belongs is the ground for his or her perceptions, feelings and actions. Lewin was critical of the approaches which
dissected behavior into small units of analysis, thereby losing sight of the whole. He advocated a "field theory" approach to analysis of behavior, which begins with the situation as a whole.

What is important in field theory is the way the analysis proceeds. Instead of picking out one or another isolated element within a situation, the importance of which cannot be judged without consideration of the situation as a whole, field theory finds it advantageous, as a rule to start with a characterization of the situation as a whole. After this first approximation, the various aspects and parts of the situation undergo a more and more specific and detailed analysis. (p. 63 Field Theory)

Field theory provides a way of looking at human behavior; it is, in Lewin's words, "best characterized as a method: namely a method of analyzing causal relationships and of building scientific constructs." (P. 45)

The field theory method is grounded on the assumption that an individual's behavior is a function of the of the person and the environment. Both the person and environment are interdependent variables:

...behavior and development depend upon the state of the person and his environment, \( B = f(P, E) \). In this equation the person \((P)\) and his environment \((E)\) have to be viewed as variables which are mutually dependent upon each other. In other words, to understand or to predict behavior, the person and the environment have to be considered as one constellation of interdependent variables. (p. 27)

Individual and groups operate in dynamic "fields" in which all aspects are interdependent with the others. Behavior results from forces in the field. This concept of forces can be explored by considering a very simple example- an immigrant employee who rarely speaks English on the job.

The relative ease of inducing a new behavior, such as speaking English at work, is the product of the interplay between forces that drive toward change in behavior and forces that oppose change. In effect, every system can be viewed as either being in a state of equilibrium or seeking

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it. Equilibrium is the steady state balance between the opposing forces and restraining forces. Change represents a disruption of equilibrium.

The employee who rarely speaks English can be considered to be in equilibrium between forces driving toward change (English classes; a personal desire to be able to communicate with English speaking peers and supervisors; awareness of the opportunities available to bilingual employees) and forces restraining change (e.g., a lack of proficiency in English; a fear of making mistakes in English; social approval from peers in a group with a norm of speaking Spanish; and a lack of opportunity to speak English). For a change to occur, the balance of these factors must favor the driving forces. Below is a force field analysis of this situation:

<table>
<thead>
<tr>
<th>Restraining forces (barriers to speaking English)</th>
<th>Driving Forces (supports for speaking English)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of proficiency in English</td>
<td>English classes</td>
</tr>
<tr>
<td>Fear of making mistakes</td>
<td>Personal desire to communicate with English speaking peers and supervisors</td>
</tr>
<tr>
<td>Norms of speaking only Spanish</td>
<td>Awareness of new opportunities available to bilingual employees</td>
</tr>
<tr>
<td>Lack of opportunity to speak English.</td>
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Traditionally, workplace education programs have focused on the individual in an effort to change behavior. For example, when immigrant employees fail to speak English in a plant, the first response is usually to set up English classes. Or, if members of self-directed teams are having trouble reaching consensus, the common answer is to send the team members to training on group dynamics.

Both of these examples demonstrate the attempt to change behavior by providing the individual with a new set of skills. In neither example is there a consideration of the larger constellation of forces that may be driving behavior.
Field theory provides a method for analyzing behavior in a way that integrates this constellation of forces. According to the theory, the following changes in driving and restraining forces can lead to changes in the status quo:

* Increases in driving forces and change.

1. An increase in the magnitude of a driving force can induce change. Increasing the piecemeal rate paid to sewing machine operators is an example of increasing the magnitude of an existing driving force.

2. An addition of new driving forces can induce change. By offering English classes for the first time, the factory with immigrants adds a new driving force to encourage the speaking of English.

* Alterations in restraining forces and change: Behavioral change can also result from the reduction or elimination in the set of forces that currently act to restrain change.

1. The identification and removal or reduction of restraining forces can induce change. For example, one restraining force that keeps production on work teams from increasing might be the physical strain of hard or fast work. Another restraining force might be the desire to remain not too far above or below the rest of the group.

2. The conversion of restraining forces into driving forces can induce change.

An example of force field analysis in action is found in Lewin's work with the Harwood Manufacturing Corporation in the 1940s. The corporation had just opened a new manufacturing plant in a rural community of Virginia. The factory employed three hundred inexperienced workers. After the usual twelve weeks of introductory training required to reach the skill level of experienced workers, the local trainees produced only half as much as apprentices doing similar tasks in northern plants.
The plant management had tried several reward systems (driving forces) to increase the production, but they had been unsuccessful. Even though the wages were higher than what the workers had earned in other jobs, and even though the workers seemed to feel good about their jobs, the turnover was high.

Lewin observed that the employees' failure to meet management's requirement could be due to their belief that the requirement was impossible to attain. There was nothing inside or outside the plant that could give the quota a social reality. To address the issue, Lewin recommended that the plant management first of all stop putting pressure on individual workers. This driving force had been proven ineffective and merely raised the level of stress and embittered employees toward management.

Secondly, Lewin suggested that the management deal with workers as members of small groups rather than individuals and find methods to give the group the feeling that the standard was realistic and could be reached. Ultimately, this approach led to the plant hiring new groups of workers from a nearby town who had experience in attaining high levels of production. This new group of workers quickly met the production quota. Initially, the original worker's output remained at the lower levels, but over a two week period, their output slowly began to improve until the previously unattainable goal was reached. Once it was clear that the goal was realistic, the group standards shifted and output increased to the higher levels.

Today, while the technology of the workplace has changed dramatically from the 1940s, the principles from Lewin's field theory method still apply as workplace educators are invited into companies because of a driving need to improve basic skills. Sometimes that driving force is sufficient to facilitate the application of learning on the job. But other times, like the
management of Harwood Manufacturing in the 1940s, we find our efforts to produce change are simply met with resistance. We learn that adding a new driving force does not always shift behavior; even when our students master new skills, they often fail to actually use them on the job.

The use of field theory can help workforce educators to develop training programs which result in the use of new skills on the job. The field theory method of analysis takes in the big picture as it assesses the organizational level of support for change. An understanding of significant driving and restraining forces can help us to expend our time in ways that will help application of new skills really take hold.

I now turn from field theory as a method to the findings of the early work in field theory and their application to workplace education programs.

**Group Norms and Resistance to Change:**

In his 1947 article, "Frontiers in Group Dynamics", Kurt Lewin examined the role of group norms in the change process. He wrote that resistance to change depends partly on the value of the group standard for the individual. Individuals which hold the group standard in high regard will be very reluctant to deviate from the norms of the group. On the other hand, individuals with little regard for group norms are more willing to attempt change in spite of the patterns of the group.

This principle has important implications for workplace learning programs. First of all, it reinforces the importance of force field analysis. If group norms hold little sway in behaviors, then working with students from the same work-groups may be of less importance. We have
frequently seen students that are quite willing to eschew organizational norms about learning. These students will come to class and apply their new skills on the job in spite of an army of forces which seem to oppose the learning and application process. When the workplace education program is bumped from the conference room, these students will attend classes in closets. In order to get teacher comments on their writing, they will smuggle their writing samples out of their work area. Perhaps these students are acting out of allegiance to other norms, such as family held norms which value education at any inconvenience. In any case, they are quite willing to change behaviors because of their own internal desires and wants.

But what about the potential student who is reluctant to go against the norms of his or her work-group? The field theory analysis exposes the difficulty of attempting to change isolated individual conduct apart from the group which fosters the conduct. "If one tries to change the prejudices of an individual without changing the prejudice of his group, the individual will either be estranged from his group or will be under pressure from his group to revert to his initial attitude." D. p. 59. This is particularly true for the person who is deeply rooted in a group and unlikely to resist the pressure to conform.

While workplace education programs seldom address deeply held values, such as prejudices, they do ask participants to change ingrained patterns of behavior in the context of organizations. According to Lewin, in this case, change should be done in the small groups, rather than individually because group-carried change is more effective and longer lasting than individual change.

Perhaps one might expect single individuals to be more pliable than groups of like-minded individuals. However, experience in leadership training, in changing food habits, work production, criminality, alcoholism, prejudices-all seem to indicate that it is usually easier to change individuals formed into a group than to change any one of them separately.
This finding has important implications for the design and delivery of workplace instruction. Workforce instruction delivered to small, cohesive groups of employees who work together may be more successfully applied than instruction that is given to random individuals.

The Three Step Change Process:
Another important finding from the action research conducted by Lewin concerns the process of change itself. Lewin noted that "a change toward a higher level of group performance is frequently short-lived; after ‘a shot in the arm’ group life soon returns to the previous level." (p. 228 Field Theory) Workplace educators know this phenomenon all too well. Course participants learn new skills, they apply them on the job, but six months after the program they have returned to the old habits. Lewin concluded that it does not suffice to define the objective of a planned change in group performance as the reaching of a different level. Maintenance of the new level for a specific period of time should be included in the objective.

To ensure that a change "sticks", Lewin proposed a three step model of change: unfreezing, change, and refreezing. Over the past forty years, this model has been used extensively in organizational development, yet it has not found its way into the literature on workplace education.

Step One - Unfreezing:
Lewin’s theory of change suggests that old habits must be unfrozen to create a state that allows for experimentation with new behaviors. Unless the unfreezing step is consciously considered, the change process is like trying to force water into a bottle that is already full.
The unfreezing process involves the steps of exploring the need for change, diagnosing the issues and forces, planning a strategy for change, and finally, building commitment for the change. One of the most powerful approaches to unfreezing behavior is to involve the participants themselves in gathering data about the situation, analyzing the data, and most importantly making a decision about what should be done. This process is described below in the section on motivation and decision making.

**Step Two - Change or Movement:**
The second stage, or moving stage, concerns the actual movement or change. This second step is the traditional domain of instruction, and workplace education programs have gotten very good at delivering quality instruction. We can strengthen the power of the change step by three main strategies; involving managers during the training, using class time to plan for change, and by linking participants with a support system for change.

**Step Three - Refreezing:**
The third phase in the overall change process is called refreezing. Lewin recognized that there is a fundamental difference between knowing what to do, and doing it on a long term basis. For long term change, new habits need to be practiced through regular opportunities and reinforced on a consistent basis.

Long term change is not only dependent on the "freezing" of the decision process. Structural changes can significantly refreeze behavior. For example, an individual may decide to save more money, and in the change step, the individual arranges for an automatic deduction from his or her paycheck. This structural change acts to keep to keep the behavior frozen.
Research on motivation, change and group decision:
Lewin’s research demonstrated that motivation alone does not produce change. "A lecture and particularly a discussion may be quite effective in setting up motivations in the desired direction. Motivation alone, however, does not suffice to lead to change. the link is provided by the decision". In one study, Lewin’s associate Alex Bavelas compared group discussion with group decision and found that while the discussion group generated ideas for improving production, the group meeting only resulted in a slight improvement. On the other hand, the group which discussed production and closed the discussion with decisions, demonstrated significantly improved levels of production. According to Lewin, the discussion group was motivated to change, but motivation does not translate into change. "A process like decision making, which takes only a few minutes, is able to affect conduct for many months to come."

Workplace programs are applying this principle in two distinct areas. The first is in the use of advisory teams to plan and guide education programs. These committees of supervisors, students, managers, human resource professionals and teachers discuss what they want the program to achieve, work together to gather information about needs, and make decisions about course curriculum, scheduling and policies.

The power of group decision making is also being used in the classroom as students plan to use newly acquired skills back at work. Teachers in these classrooms guide students to carry learning beyond simply practice in the classroom. They put students in small groups which discuss implementation strategies and make concrete decisions of exactly how they will practice newly acquired skills in a prescribed time frame. In some cases, supervisors join the classes for these discussions so that the larger constellation of forces is involved in the decision to attempt new changes in behavior back at work.
Conclusion:

This paper has just brushed the surface of Kurt Lewin's work and its application to workplace education. We have not discussed important findings in leadership, gatekeeping, and the marginalization of group members— all of which can greatly enhance the field of emerging field of workplace education.

While the field has its roots in education and the teaching of reading, it can flourish as a growing field with the knowledge gleaned from the nearly fifty years of research in organizational change that began with the work of Kurt Lewin.
BIBLIOGRAPHY


