This paper, one of a series derived from techniques used in training student teachers, explores the process of manipulating the variables in a problem or conflict or challenge situation. Specifically, it explores interpersonal feelings, intrapersonal feelings and conflicts that occur when these two are not in harmony. The technique calls upon the group to walk through a low level intrapersonal conflict (in a group setting), and to react to interpersonal behaviors in a conflict resolution. It is also expected of the group to respond to intrapersonal high level conflicts. To work with the force field concept, the following process is used: (1) Fact Assessment, including refinement of the problem and problem preparation; (2) Idea Exploration, including idea production and idea development; and (3) Solutions, including reality testing via gaming and group discussion, and action steps. Several types of interpersonal and intrapersonal relationships are explored, and old problems are restated through force field analysis. Various games are outlined for use in problem solving and task fulfillment. The author has sought to show how process approaches might be used to make participants feel pressures and forces not normally in their background realm. (Author/CJ)
Process Concerns In Use of Force Field Techniques

Michael C. Giammatteo
Research and Development Specialist

Field Paper No. 3
1967

The substance of this paper was reported at a meeting of the supervisors of student teachers held in Portland, Oregon. Preparation of the paper was performed pursuant to Contract No. OEC-4-6-001509-1509 with the United States Office of Education, Department of Health, Education, and Welfare under the provisions of the Laboratory program, Bureau of Research.

Northwest Regional Educational Laboratory
400 Lindsay Building - 710 S. W. Second Avenue
Portland, Oregon 97204
PART I: FORCE FIELD ANALYSIS NO. 3

The process of manipulating the variables in a problem or conflict or challenge situation will be explored in this session.

Our hope today is to explore techniques to associate and synthesize in new ways the knowledge and experiences we possess, as well as the new knowledge and experiences we may acquire in the future.

Specifically, we intend to explore interpersonal feelings, intrapersonal feelings and conflicts that occur when these two are not in harmony.

Plans call for us to walk through a low level intrapersonal conflict in a group setting. Secondly, we will react to interpersonal behaviors in a conflict resolution; finally, we will respond to intrapersonal high level conflicts.

To enable us to work with the force field concept we may use any number of techniques and approaches. The process to be used in this session is as follows:

1. Fact Assessment
   A. Refinement of problems - pointing up interpersonal and intrapersonal factors that impinge on assessment and/or location of areas where we may obtain facts.
   B. Problem preparation - gathering and sorting data to be analyzed.

2. Idea Exploration
   A. Idea production - brainstorming about all possible approaches to problem solution.
B. Idea development - reprocessing the resultant idea via modification and combination and various other techniques.

3. Solutions
   A. Reality testing - testing of solutions via processes such as gaming and group discussion, etc.
   B. Action steps - adoption considerations... time lines, etc.

A fair idea put to use is better than a good idea internalized and personal but not released. To facilitate this, the following suggestions are herein offered.

GROUND RULE SUGGESTIONS FOR GROUP MEMBERS

1. Responsibility for the group is shared by all members of the group. Identify with the group and its goals--if the group fails, it's your fault, not the "group's" fault.

2. Decisions should always be made by the group. They are not made by the leaders, any individual, or any clique--all important policies should be decided by the group. The group should set its own goals, and decide on the technique that it should use to accomplish them.

3. Be informal. It is helpful to use first names, wear informal clothing, arrange chairs in an informal way (circles not rows, etc.), encourage spontaneous discussions with few rules, as far as possible do away with voting, handraising, informal debate, Roberts' Rules, etc.
4. Use methods which will allow as many as possible of the group to participate. Let group discuss frequently in subgroups—bring out minority and individual opinions by asking frequent questions of group members.

5. Be flexible. Be flexible in rules, agenda, and in all procedures in the group. You should establish an agenda for your meeting, but you should always modify it when you find that the group wishes to modify it. The constitution of your procedural rules should change progressively as the needs and interests of the group change.

6. The group should cut down the threat to individual members. Get the group acquainted with each other as persons—use informal seating, minimize rules, separate the members of cliques or friendship circles, discuss the problem of status, use subgroupings to get members used to talking in the group.

7. The group should continually evaluate its progress. This may be suggestion boxes, etc. The important point is that it should be done often, briefly and well.

8. Group members should be conscious of the importance of the roles they play in the group. Study the different roles that people play, analyze the roles you play, consciously play roles that are helpful to group progress.

9. Sit so that, if possible, all members of the group can easily see the faces of all other members. Sit in a circle or a double circle—do not have leader sit or stand apart from the group—do not sit too close.
10. **Let the group be active.** Let group members move around frequently—encourage an informal atmosphere—consciously provide for movement and verbal participation of all members.

The group's individuals will feel these types of reality devils as we go to the solution phase of our day:  (Reality devils)

**Acceptance.** What advantages can you show for your idea and how might you dramatize these advantages? Avoid assuming that the student teacher of your peer group will see your idea as you do.

**Anticipation.** How should you anticipate objections to your idea in a move to be prepared to overcome them?

**Assistance.** In what ways might other people or groups be of help to you in application of your idea?

**Location.** What places or locations might be advantageous for putting your idea into practice? Can you move a student teacher to another room or school?

**Timing.** In what ways might you take advantage of special times, days, dates for implementing your idea?

**Precautions.** What ways might you pretest your idea?

In problem solving, the fact finding process calls for careful observation with all senses in order to discover the relevant factors involved. Our exercises today will try to break us out of a mold so that the forces in the force field are vital ones and not those as anticipated.
INTERPERSONAL PRESSURES AS RELATED TO FORCE FIELD ANALYSIS

1. The input by overhead: (Document from 1700's, letter to friends, etc.)

2. Divide into group of four.

   First question: How would you describe the community way of life out of which this document came?

   Concerns:
   Size:
   Time:
   Neighborhood:
   Social class system:
   Other:

   Second question: How would you like to live there, or what is the question you would ask of the natives if you planned to live there?

   Third question: Are we asking questions or the same question over and over? What are the recurring themes: Freedom from/freedom for.

   Fourth question: Now study the community by studying freedom.

   Freedom with respect to:

<table>
<thead>
<tr>
<th>Intellectual</th>
<th>Personal Style</th>
<th>Residence</th>
<th>Association</th>
<th>Work</th>
<th>Freetime</th>
<th>Political</th>
</tr>
</thead>
</table>

-5-
Let us trace through the process of exposing the forces:

<table>
<thead>
<tr>
<th>Process</th>
<th>Feeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Start with confrontation</td>
<td>Individual transaction</td>
</tr>
<tr>
<td>2. Emergence of awareness of thoughts and feelings</td>
<td>Group transactions</td>
</tr>
<tr>
<td>3. Group for purpose and goal identification and responses pooled</td>
<td>Depersonalize responses of respondee group (pooling of testimony)</td>
</tr>
<tr>
<td>4. Confrontation again in response to leader questions - focus on common theme</td>
<td>Leader intervention to identify common theme</td>
</tr>
</tbody>
</table>

### Process Flow

<table>
<thead>
<tr>
<th>Target</th>
<th>Process Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self in Relational Situation and Class and Self</td>
<td>Individuated</td>
</tr>
<tr>
<td>Confronting situation</td>
<td>Emergence of awareness</td>
</tr>
<tr>
<td>Knowledge of Object and Interrelationships</td>
<td>Individual investigation</td>
</tr>
</tbody>
</table>
Internal responses to this create acceptance and/or rejection of evidence presented: What makes you think a student teacher would respond any differently?

The above is indicative of interpersonal pressures to accept and conform; we see the force field thrusts are not clearly causality (cause-effect). Let us examine this model and its demise.
PART II: MACHINE/CAUSE/EFFECT MODEL

Man is part and cannot separate himself. These ten thoughts are illustrative of this bias.

1. The cause/effect principle is basic to the machine. Turn the key in the car and it starts. Provide the proper cause and it will produce (always) the same effect. (Behavior approach - have we tried this with humans?)

2. The machine has a principle of unity and continuity. All of its parts have a specified function, and these parts are bound together in a united whole. (Community action programs, an example? -- Progressive education, a thought!)

3. The machine then is predictable. The inside of your television set may look odd to you but to a trained mechanic it is known and understood. (Some childhood behaviors may look "odd" to you but to a trained clinician they are known and understood. When a clinician helps us understand a child, the teacher verifies the aid in day by day reality tests. When a mechanic repairs our television set we also verify the skills he possesses. The television does work--the child does behave!)

4. Open up a machine and you can see how it carries out its predetermined work. The machine is observable.

5. In summary, the machine holds forth these principles:

   Cause/effect relationships  Completely predictable
   Unified                      Observable
   Predetermined
Material items became of prime importance and simple machine principles of causality were introduced into all areas of life: education, economics, medicine. We assumed that discovery of more facts would let us make better predictions and maintain better control over things. Man's main purpose was seen as production.

6. It did not take man, with his dependent prone nature, long to conclude that man is a machine.

7. The items that were manifest, observable were called real. It was committed to the cause/effect machine model. Ergo, the young science of psychology developed along these lines and gave us the behavioristic view.

8. Mechanistic model thinking regarded measuring and producing as very important. (What is our dropout rate?)

9. Modern technology has shown us we cannot "measure" as a detached observer but indeed we are part of this world. We can describe things by knowing part truths. Nuclear physics is a prime area where complete description is accepted. The scientist studying a particle may describe its speed and direction exactly, but he cannot speak with assurance about its position. This led to a revision of the classical idea of complete predictability. Statistical probability has replaced it.

10. The breakdown of the machine model as a way to understand life is accepted by the young generation but not by the older generation. Many of "our" generation view modern behaviors as the cause of the problems of today.
PART III: (INTRAPERSONAL SESSION)

The cause/effect relationship is not so clear. Let us specify the group stress for conformity with individual stress which usually focus on the steps in conflict which we label problems.

As a group or individual an awareness of conflict is read as a problem. We did this in our second meeting here but left feeling much as we did after our first exercise of today.

Supervisor/student problems center about inter, as well as intra-personal problems or conflicts. We tend to either adapt the students to our values or we adapt to our environment. Sometimes our long-established attitudes and values, as explained in meeting one, prevent us from seeing an opportunity or challenge in a situation. If we see all of the elements, then we are less likely to see a situation as discouraging and more likely to see it as challenging. Thus the exercise this morning becomes highly relevant as a technique to expose elements.

During meeting number two we wrote out our problems; today let us react to challenges. You should use the left side as the interrogator and use one or more of the words on the right as a response.

<table>
<thead>
<tr>
<th>Interrogator</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>Improvements</td>
</tr>
<tr>
<td>Family</td>
<td>Happiness and comfort</td>
</tr>
<tr>
<td>Neighbors</td>
<td>Misunderstandings</td>
</tr>
<tr>
<td>Church</td>
<td>Complications</td>
</tr>
<tr>
<td>House</td>
<td>Waste or inefficiencies</td>
</tr>
<tr>
<td>School</td>
<td>Bottlenecks and routines</td>
</tr>
<tr>
<td>Job responsibilities</td>
<td>Attitudes</td>
</tr>
<tr>
<td>Promotion</td>
<td>Anxieties or fears</td>
</tr>
<tr>
<td>Car</td>
<td>Anger or disgust</td>
</tr>
<tr>
<td>Transportation</td>
<td>Pet peeves and complaints</td>
</tr>
<tr>
<td>Social</td>
<td>Safety</td>
</tr>
</tbody>
</table>
You may discover new challenges and forces as you play with the word combinations. Work on this "intrapersonal" page and keep it as a self reminder. This too is part of your force field "self."

How you feel about "you."

Suppose you have a chance to write your own final review, your obituary, what would you want said about yourself?

Write out things as though they have already been accomplished. Try out the idea now (a page or so) and let us hope you do not find it morbid. By the way, don't leave the obituary lying around . . . . might be difficult to explain.

Write one out then keep it with you . . . . it is yours and you.
This may permit you to manipulate the situation to alleviate the problem.
A supervisor felt one of his supervisees was proving to be unsatisfactory. He was considering the dilemma, "Should or shouldn't I fail this student?" But we know the student has a job already and will teach next term.

Probably neither of these two alternatives (fail - pass) are completely satisfactory, otherwise there would be no question in the supervisor's mind. Force field analysis might offer him a chance to restate the challenge in such a way to permit him to consider many more possibilities. Notice that the supervisor's question, "Should or shouldn't I fail this student," is worded for decision making, not for idea exploration. If we ask, "why should we fail the student," we might answer, "she is not producing positive attitudes in her reading classes, she is indifferent, etc." What might be a new way of restating the problem on the basis of those kinds of answers to our question "why?"

Your tasks through the "Teacher Preparation Game" session will be to restate problems into challenges and to keep in mind the reality devils that make or break the great idea.
PART IV: TEACHER PREPARATION GAME

Representatives: ________________________________

President of College

*Dean of College Education

Secondary Education, Chairman

Elementary Education, Chairman

*Chairman of Board of Trustees

*State Superintendent

*College Teacher

*Supervisor of Student Teachers

City Superintendent

Teachers

*Minimum number of persons in each of two groups.

The task is to set up experiences and content required of people wanting to become teachers.

Reality Demons: These people are to keep in mind the reality devils and keep pushing ideas into conformity with reality.

Representatives:

Mr. Certification Officer

Mr. Parent Public

Mr. Cost Benefit

Mr. Average School District Superintendent
Procedures

1. A set period of time in which each group will work toward fulfillment of the task.

2. At the end of this period of time each group will report to the other group and to the reality demons. Coverage items to be included in the report:
   a. Rationals
   b. Experiences
   c. Content
   d. Time and duration of experiences and content
   Apply whatever procedure your group elects to present the coverage items.

3. Reactions by reality demons

4. Summation

   In general, the preceding session was designed to show how process approaches might be used to make participants feel pressures and forces not normally in their background realm.

   In closing, the thoughts most crucial to using force field analysis are: When thinking of forces keep in mind imagination and judgement tend to clash but each are different tools by which to assess a force, also recall the number of times you can modify a force, reverse a force, or combine a force. The real test of today is how many new thoughts that crossed your mind today will alter your actions away from this session.
TEACHER PREPARATION GAME

I. Educational Objectives: 1. Set up content in ideal teacher preparation program.
                            2. Set up experiences in ideal teacher preparation program.
                            3. Set up sequence of above two

II. Scope: Present time - each team to have $1,500,00 for operating budget, $1,600,000 for equipment and other capital outlay items and opportunity to seek additional funds, program for 20 full-time staff members, number of students to be determined by team.

III. Principal Roles: College President = Status quo
                Dean = Research over service orientation
                Elementary Chairman = Service oriented
                Secondary Chairman = Research oriented
                Superintendent of schools = Status quo – anti-university
                State Superintendent = Seeks power alignment
                and would like to serve as its spokesman.
                Supervisors – As per individual
                Others – As per individual

Reality Demons:
Mr. Lay Public = React to rapid changes negatively
Mr. Cost Benefit = Cost per student unit; how much per year per student
Mr. Certification = Concerned about lack of control

Jurors: (Reality Demons)

To count total points per team to see which group has acceptance

IV. Motives:

As per description above

V. Resources:

As per scope plus obvious power of State Superintendent and President

VI. Interaction:

Group selected to prepare ideal teacher preparation program

VII. Decision Criteria:

When all agree = 100 points
Any 4 agree = 60 points
Dean and Department Head agree = 40 points
Chairmen agree = 30 points
Any 2 agree = 20 points
If no one agrees = 0 points

Self-Interest Points: (Number of points each person has at start of game)

College President = 40 power points
State Superintendent and Dean = .30 power points each
Department Head and Chairman = 20 power points each
Supervisory Personnel = 20 power points each
Other (Supt., Principals) = 20 power points each

If others subscribe to your position a constant weight or score of 20 is added to your point total.
If you have to relinquish your position you lose 20 points.

Main communication exists between teachers, supervisors and elementary education department.

Little communication between Chairmen and College President.

State Superintendent has superficial communication with all parties.

Dean has superficial communication with all parties.

Main lack of agreement occurs between College President and Dean, between Dean and Department Heads, between State Superintendent and most other groups, between Supervisors and most other groups.
Sequence of Action

Elect Teams

Team #1
Ground Rules

Discussions as per
group design

Report to group

Team #2
Ground Rules

Discussions as per
group design

Report to group

Reality Demons

Score Game

Review

Termination of Win:
The team with the most supportive number of points for any one approach. Crucial termination is—did participants achieve their goal.
Conflict Matrix For:

NEW TEACHER PREPARATION PROGRAM

<table>
<thead>
<tr>
<th>Issue</th>
<th>Pro</th>
<th>Con</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status Quo</td>
<td>College President</td>
<td>College Chairman</td>
</tr>
<tr>
<td></td>
<td>Superintendant of Schools</td>
<td>Supervisors</td>
</tr>
<tr>
<td>Service Orientation</td>
<td>Elementary Education Department</td>
<td>Dean</td>
</tr>
<tr>
<td></td>
<td>School District</td>
<td>Secondary Education Department</td>
</tr>
<tr>
<td>Research Orientation</td>
<td>Secondary Education</td>
<td>Elementary Education</td>
</tr>
<tr>
<td></td>
<td>Dean</td>
<td></td>
</tr>
<tr>
<td>Power Alignments</td>
<td>State Superintendents</td>
<td></td>
</tr>
</tbody>
</table>