The responsible research leader must ensure that practical, to-the-point, and up-to-date research is produced by the research team. The responsible leader can assist teacher research by:

a) Insisting that the teacher provide a short and meaningful example of how others can use the research in question,
b) Providing incentives that result in the invention of products that are not already available,
c) Developing teamwork between the leader and the staff,
d) Using available resources in the most cost-effective manner,
e) Delegating responsibility,
f) Clearly delineating the responsibilities delegated to each member of the research team,
g) Letting capable staff grow to meet the demands of educating children,
h) Establishing priorities that simplify the decision-making process, and
i) Caring enough about the work to strive after the highest feasible quality.

The role of the responsible leader is a) learnable, in that one need not be born with certain traits to succeed as a leader; b) measurable, in that the effectiveness of the leader can be demonstrated for all to see; and c) adaptable, in that the leader can grow while helping others develop untapped inner resources. (HMD)
THE ROLE OF THE RESPONSIBLE LEADER
IN DEVELOPING TEACHER-PREPARED RESEARCH

Howard P. Alvir
May 8, 1974
A leader is herein defined as anyone who motivates after providing relevant data and good example. The data may be provided in either a formal or informal setting. The good example may be provided in either a legal contract or a human contact. The motivation must be summed up in a short and mutually agreeable goal. The goal identified with the leader provides a general sense of direction which evokes many positive responses from a variety of persons, each of which has an individualized and more specific objective.

An example may help here.

Researcher A says, "I never tell my staff what to do while teaching, this would turn them off. I pass on the latest research data instead."

Innovator B says nothing much, but tries out one new thing after another in the hope that staff members will follow up with imaginative and creative techniques.

Nice Guy C gets along well with staff members and can get all sorts of people to do almost anything once or twice as a personal favor.

Researcher A, Innovator B, and Nice Guy C each have a different dimension of the leader: data-power, thing-power, and people-power. All three can become leaders with the acquisition of new competencies.

The leader has all three powers. A responsible leader has a sense of responsibility for all this power plus the acquired ability to respond relevantly to data, things, and people. A relevant response is one that meets needs directly. Since needs vary considerably, the leader in one situation may be quite unlike the leader for a different group.

A researcher can become a responsible leader if more than data is presented to back up a discovery. This extra something includes the ability to produce a practical piece of research.
What Is a Practical Piece of Research?

A practical piece of research is one that is to the point and up-to-date. A good piece of basic research is not always a good piece of applied research. Research that is "to the point" is a combination of clarity and communication: this is the essence of basic research. Research that is "up-to-date" is a combination of committee (more than one mastermind) and channels (more than the theoretically possible): this is the essence of applied research.

The following paragraphs develop this theme.
TWO GOALS OF BASIC RESEARCH

<table>
<thead>
<tr>
<th>What Research Stresses</th>
<th>Why</th>
<th>This Means Less Emphasis on</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLARITY</td>
<td>Stress responsibility to voters and taxpayers.</td>
<td>Technical Terminology</td>
</tr>
<tr>
<td>COMMUNICATION</td>
<td>Avoid duplication and &quot;reinventing the wheel.&quot;</td>
<td>Printed Book</td>
</tr>
</tbody>
</table>

Implementations of clarity and communication can take a number of approaches.

Clarity issues stress such things as performance objectives, behavioral objectives, criterion-referenced evaluation in place of norm-referenced evaluation, curriculum modules, self-evaluation, and responsible accountability. If two or more of these terms are unfamiliar, definitions and examples are in the Educational Index, ERIC, and other retrieval sources. If the Educational and ERIC are unfamiliar, ask the local librarian. The librarian’s responses to these questions introduce a whole world of ideas that can help in daily educational work. This is a key task of research.

Communication issues stress such concepts as feedback, process awareness, shoptalk, brainstorming, idea exchanges, the search for alternatives, and microfiche technology. All of these terms boil down to a specific way or technique to tell others what has worked to help learners and how well it has worked. Even talking about difficulties is a valid function of communication in research.
## TWO GOALS OF APPLIED RESEARCH

<table>
<thead>
<tr>
<th>What Research Stresses</th>
<th>Why</th>
<th>This This Means Less Emphasis on</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOPERATION</td>
<td>Develop teamwork as the way to tie a lot of brainpower together</td>
<td>The lowly research legmen working under only one mastermind.</td>
</tr>
<tr>
<td>COST AWARENESS</td>
<td>Do the best job possible with the available resources</td>
<td>This is what the professional wants no matter how much it will cost the candidate for a degree</td>
</tr>
</tbody>
</table>

Implementations of cooperation and cost analysis demands the ability to translate basic research into everyday language and the skill to interact with existing educational patterns. Some experts write so abstractly that few readers get the message couched in the more difficult words in the dictionary. Jaw-breaking terms that defy common equivalents are sometimes justified in the name of "bringing order to one's subject." High sounding experts need to be interpreted in simple language to achieve reader cooperation.

Other experts resemble jackpot winners advocating a spending spree in a utopia where anything goes. These extravagant spenders seem unaware that in a given situation most teachers have only limited budgets from local educational authorities. High cost tools need to be retooled into economy compact models that help the educator achieve prespecified goals with high quality standards.
For many practitioners, doing is a way of thinking and planning in terms of the pragmatic human condition. One does the best one can. Activities have a way of accommodating their scope to the available resources and personnel. Next time around, things will be better.

An innovator can become a responsible leader if more than things are used to improve education. This extra mile is measured by four milestones on the rough road of practical research.
FOUR MILESTONES ON THE ROUGH ROAD OF PRACTICAL RESEARCH

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Its Difficulty</th>
<th>Its Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committee</td>
<td>Time</td>
<td>Negotiation</td>
</tr>
<tr>
<td></td>
<td>Give-and-take</td>
<td>Political Expertise</td>
</tr>
<tr>
<td></td>
<td>Hidden Agendas</td>
<td></td>
</tr>
<tr>
<td>Channels</td>
<td>Hierarchy</td>
<td>Pre-Planning</td>
</tr>
<tr>
<td></td>
<td>Paperwork</td>
<td>Expert Opinion</td>
</tr>
<tr>
<td></td>
<td>Routine</td>
<td>Legality</td>
</tr>
<tr>
<td>Challenge</td>
<td>Unknown Territory</td>
<td>Top Capacity Functioning</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>on One's Own</td>
</tr>
<tr>
<td></td>
<td>Uncertainty</td>
<td>Self-Actualization</td>
</tr>
<tr>
<td>Coordination</td>
<td>Thousands of Unrelated Pieces:</td>
<td>Team work with Others</td>
</tr>
<tr>
<td></td>
<td>Legal Checks and Counterchecks</td>
<td>Amalgam of Many Kinds of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brainpower</td>
</tr>
</tbody>
</table>

Committee work keeps one aware of one's equals. Going through channels keeps one aware of one's superiors and of one's limitations. Facing up to challenges keeps one aware of one's grow-power. Coordinating a million and one simultaneous events and details keeps one aware of how much work it takes to get even a small piece of research going. Keeping it going is another milestone itself. This is why one may unwittingly forget imagination and creativity when there is so much else to do.

The nice guy can become a responsible leader if more productivity than friendly people is used to motivate needed research. This obvious truth is backed up by a simple analysis of trends in research formulae.
TRENDS IN PRACTICAL RESEARCH FORMULAE

DECENTRALIZATION \rightarrow \text{REGIONALIZATION} \\
+ \\
TIGHT FUNDING \rightarrow \text{COMPARISON SHOPPING} \\
\rightarrow \text{RESPONSIBILITY} \rightarrow \text{DEMONSTRATED PRODUCT}

This last formula means that people producing results are more likely to be funded than those not demonstrating specific products. "Hard data" is one way to describe success. This information obviously includes numbers and statistics. On a more humanistic level, anecdotal data is also necessary to "get the feel" of a particular program. Someone who has built up the power and momentum to solve problems needs more economic fuel, not less. Pouring money into these centers of success is comparable to betting on a sure thing. It's not a gamble. It's an investment.

Funding agents support research which is clearly visible and promises a worthwhile return for the personnel, time, and money invested. Glittering generalities and technical jargon need to be blue-penciled out to attain clarity. Relevance and response to local needs are universally acceptable as proof of valuable research products.
WHAT DOES THE RESEARCHER DO?

Walk up to a typical researcher and ask, "What do you do?" The researcher may smile condescendingly and answer, "Research." This person with the smile may have almost no idea that the word "Research" conveys only a vague meaning to non-researchers. Chances are that the researcher's wife, son, and daughter know that the researcher works a lot with statistics, goes to many conferences and conventions, writes articles for periodicals (researchers never say "magazines"), travels hither and yon to consult, gives lectures, and works constantly on a new book. But, deep down inside, many educators never know what the researcher writes about, lectures about, consults about, or talks about. Once in a while, one hears about a title or two, but any attempt to read or repeat these titles is short lived. All of a sudden it becomes obvious that the researcher, even when a next door neighbor, is a total and mysterious stranger. It's frustrating to see researchers every day and to have no idea of what the researcher does, thinks, and feels working on highly specialized data.

Even this last paragraph is too long. It seems to hint that the researcher is a world apart. Specifically, it doesn't answer the question, "Exactly what does a researcher do?"

People ask this question and are embarrassed not to know the answer. After all, it all seems so obvious that everyone should know what "research" is. When pushed to the wall to answer this question, the researcher doesn't blush, but gets angry or even impatient while inquiring, "Am I being questioned or badgered? Doesn't my questioner realize how important my work is?"

Try it. Ask a researcher, "What do you do?" Watch the painful frown that accompanies the reply to, "Why do you research?" Try these questions, the researcher won't like such inquiries.

This question about the tasks of a researcher needs to be answered by the responsible leader who wants to develop teacher-prepared research.
THE EDUCATIONAL RESEARCHER

Some dry witted humorist once said that about ninety percent of research consists in not knowing where one is going. When the researcher knows the destination, it's no longer research, it's development.

This isn't always true. The medical researcher is trying to find remedies for maladies that are presently incurable. The engineering researcher tries to come up with new technology. The basic researcher tries to come up with ideas that someday will be practical even though today's approximations seem quite abstract and nebulous. The social researcher takes surveys and tries to identify significant trends in politics or sociology. The question still remains, "What does the educational researcher do?"

Perhaps a better question to ask would be, "Who does educational research?" This answer is easy to specify. Most graduate students in education are required to take a course in educational research. Teachers, counselors, administrators, and statisticians all undertake educational research. These educators conduct research to solve practical and annoying problems. Annoying here is synonymous with urgent. Graduate students conduct research to advance the cause of scholarship. The scholarship is often synonymous with the reception of a master's or doctor's degree. This badge of scholarship facilitates entry into higher paying jobs. It can take on many aspects of the blue collar worker's union card.

There are many other ways to make money through research. Consulting professors provide one example of part-time employment in this domain. It can obviously be difficult for a beginner to decide whether the consulting or the teaching is the part-time job. There are faster ways to make money
in educational research. One can write books for education students to buy. An easy way to write enough for a book is to start with articles for educational periodicals and reviews. Starting with one's ideas and techniques is a good place to begin since one can always write sympathetically and well of anything one considers to be a worthy subject. Many charismatic orators have tried a hand at recording sessions. With the right contact, ideas can spread ideas throughout the widening market of voice cassettes. A monotone and unenthusiastic voice is something to be avoided here at all costs. Listeners and inquirers want answers that inform, inspire, and improve.

The author takes the position that there is no one definitive answer to the question, "What does the educational researcher do?" The table on next page gives a few of the many tasks involved in full time educational research.

This list can be updated indefinitely. Here are a few of the many possible subtitles that could be added:

1. Effective delivery systems
2. Program planning for special groups and special goals
3. Effective techniques that have been proven to work
4. Essential procedures that are easy to transport
5. Intervention strategies and coping behaviors
6. Choices vs. forces in career education
7. Packages designed for implementation without special training

The next page stressed targets (goals, objectives, purposes), tests (evaluation, exams, measurement), and technology (resources, media, packages).
Full-time educational researchers specialize in a number of specific and general functions. Here are some of them:

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Respond to</th>
</tr>
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<tbody>
<tr>
<td>Information Feedback</td>
<td>Written and telephone inquiries for data and clarification</td>
</tr>
<tr>
<td>(Specific Objectives)</td>
<td></td>
</tr>
<tr>
<td>Research Dissemination</td>
<td>Needs of practitioners to communicate with one another</td>
</tr>
<tr>
<td>(General Objectives)</td>
<td></td>
</tr>
<tr>
<td>Formative Evaluation</td>
<td>Necessity for ongoing research to be monitored and improved by a committee rather than only one mastermind</td>
</tr>
<tr>
<td>(Specific Evaluation)</td>
<td></td>
</tr>
<tr>
<td>Program Management</td>
<td>Laws and regulations that are necessary to finance, administer, supervise, and coordinate statewide and nationwide project</td>
</tr>
<tr>
<td>(General Evaluation)</td>
<td></td>
</tr>
<tr>
<td>Diagnostic Action</td>
<td>Teachers and schools in search of specific solutions to very unique problems</td>
</tr>
<tr>
<td>(Specific Resources)</td>
<td></td>
</tr>
<tr>
<td>Technological Advance</td>
<td>Trend to develop resources and hardware that will multiply the educational effects of each man hour</td>
</tr>
<tr>
<td>(General Resources)</td>
<td></td>
</tr>
</tbody>
</table>
The author takes the position that the responsible leader can help better teacher-prepared research in educational technology through the following steps:

**Clarity:** Insist that the teacher-researcher provide a short and meaningful example of how others can use the research in question.

**Communication:** Provide incentives for a teacher-researcher to invent only those things that aren't already available in books or from colleagues.

**Cooperation:** Develop teamwork between leader and staff so that all use both brainpower and musclepower as needed to simplify a mesh of research.

**Cost Awareness:** Use available resources to the maximum before buying things that are nice to have around "just in case."

**Committee:** Delegate in such a way as to coordinate without dominating by pulling the strings someone else could handle.

**Channels:** Mark out clearly the responsibilities and limits implied in all delegations to avoid both laissez-faire and autocratic atmospheres.

**Challenge:** Stand back and let capable staff grow to meet the demands made by the responsibility of educating youth.

**Coordination:** Establish priorities that simplify the decision process as to the most important and least important details.

**Concern:** Care enough to strive after the highest feasible quality.

The following nine components arranged in a 3x3 pattern provide a bird's eye view of the role of the responsible leader as herein delineated.
### THE ROLE OF THE RESPONSIBLE LEADER

<table>
<thead>
<tr>
<th>KO</th>
<th>PO</th>
<th>AO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate simple and accurate examples that provide team incentives</td>
<td>Cooperate with all available sources of computible results</td>
<td>Challenge each individual to work up to the highest standards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KE</th>
<th>PE</th>
<th>AE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarify the practical applications of teacher research even in the midst of quantification</td>
<td>Coordinate the myriad of details that add up to success</td>
<td>Care about quality more than quantity in innovations to be transplanted elsewhere</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KR</th>
<th>PR</th>
<th>AR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculate costs of various alternatives in terms of personnel, time, and budget</td>
<td>Channel responsibilities and limitations in such a way that the team pulls together</td>
<td>Commit responsibility to capable recipients worthy of delegation</td>
</tr>
</tbody>
</table>
This 3x3 pattern answers several questions:

K-Qn: The Knowledge Question:
What should the responsible leader do with data and information discoveries?

Answer: Communicate
Clarify
Calculate

P-Qn: The Performance Question:
What should the responsible leader do with things and operational activities?

Answer: Cooperate
Coordinate
Channel

A-Qn: The Attitude Question:
What should the responsible leader do with people and human values?

Answer: Challenge
Care
Commit

The K-P-A questions refer respectively to data, things, and people domains.

There are other ways to categorize the role of the responsible leader. There are other questions to ask:

O-Qn: The Objective (or Goal) Question:
What does the responsible leader do in order to plan?

Answer: Communicate
Cooperate
Challenge
E-Qn: The Evaluation Question:

What does the responsible leader do to measure success with appropriate yardsticks?

Answer: Clarify
Coordinate
Care

R-Qn: The Resource Question:

What does the responsible leader do to utilize a wide array of alternative paths?

Answer: Calculate
Channel
Commit

Looked at in this systematic format, the role of the responsible leader is learnable, measurable, and adaptable.

Learnable: Means that the leader doesn't have to be born with certain traits to succeed.

Measurable: Means that the leader can demonstrate effectiveness for all to see.

Adaptable: Means that the leader can grow while helping others to develop untapped inner resources.