# Selected Problems in
# SOCIAL EDUCATION

*by*

**Homer and Helen Kempfer**

Indian Adult Education Association
17-B Indraprastha Marg
New Delhi

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# CONTENTS

# INTRODUCTION

For twenty five years now, the Indian Adult Education Association, among its other activities, has been publishing literature with a view to provide field workers with new ideas and improved skills in adult education programmes. Last year, we had planned to bring out a comprehensive book on Social Education, which could serve as a guide book and also as a text-book in the various training centres that are coming up rapidly in the country. Various circumstances, however, prevented the completion of this project. The national emergency compelled us to abandon it for the time being, but at the same time high-lighted the need for such a book in view of the very significant role that social education could play in mass mobilisation for the defence of the country. We, therefore, decided that some of the chapters of the comprehensive book

which were ready for the press should be brought out in a book form in the hope that they would serve as a guide to field workers. Although these are largely isolated chapters each deals with a problem of which a social educator needs to be aware.

The authors are gifts to India. Dr. Homer Kempfer came to India under the United States Aid Programme; along with him came his charming spouse Helen. While Homer was advising the officials, Helen was quietly working with the Indian Adult Education Association as a volunteer, to help it develop its English Journal, the *Indian Journal of Adult Education*, as a medium of training for field-workers. That both of them devoted themselves wholeheartedly in building up the adult education movement is evident from the pages of this book.

We are grateful to them for what they have done and hope that they will continue to give us the advantage of their knowledge and experience in years to come. We, on our part, would justify their labour by building up a powerful movement for Adult Education in the country.

Shafique Memorial,
17-B Indraprastha Marg,
New Delhi.
October 20, 1963.

**S.C. Dutta**
Honorary General Secretary
Indian Adult Education Association

# 1 SOCIAL EDUCATION AND SOCIAL CHANGE

One dominant characteristic of modern times is the accelerating rate of cultural and social change. As soon as Independence released the energies of the freedom fighters, India's leaders began to channel that energy into the massive task of social reconstruction. Law and order and revenue task remained, but with Independence came a new governmental function—that of building a state and society dedicated to the welfare of the Indian people. Indian leaders realized that the expectations of the people could be met only if far-reaching social changes could be brought about. The general direction of these changes was written into the new Constitution. The Community Development programme, which began its national expansion in 1952, is the largest effort of its kind ever undertaken by any nation.

Cultures have always changed, of course. No culture has remained completely static. Before modern communication and transportation made cultural diffusion relatively easy, most societies changed very slowly. Up to about 100 years ago the Chinese culture, largely protected from outside influences, had remained relatively stable for at least 4,000 years. Japan had a long history of slow change until intercourse with other nations began over a century ago. Many other cultures, both primitive and civilized, have continued for many centuries with relatively little change. Even though historians point out several major civilizations which have risen and fallen, they agree that slow evolutionary change has been the rule.

India, although repeatedly invaded from the northwest, has maintained a relatively stable culture in the villages. Dynasties and rulers have changed, but cultural changes, for the most part, have been slow. In recent decades, however, a revolution of rising expectations has swept around the world. People everywhere are coming to realize that poverty, disease, ignorance, starvation, and overpopulation need not continue to be their lot. India is striving to meet the expectations of her people through a great effort of planned social change. The American, French, Chinese, and Russian revolutions and many others involved considerable violence. India, true to her tradition, is attempting to bring about the necessary social changes through evolutionary, planned, integrative, adaptive and forward-looking means.

### The Industrial Revolution

About 200 years ago, the invention of the steam engine started the Industrial Revolution in Western Europe. This Revolution unleashed forces which have had greater impact on human beings than most of the political revolutions and religious movements of history. Science, invention, technology, and mass production have greatly increased our control over nature. Instead of remaining always the victim of natural laws, we have

discovered that we can increasingly work in harmony with those laws to our own benefit.

The primary benefit of science is that it gives us control over our environment. By applying science we can rise above the level of animals—the law of the jungle—the survival of the fittest. More than ever we can lift ourselves out of the "balance of nature" and create a new balance in our favour. We can lengthen our lives, better capitalize upon natural resources, make much of nature do our bidding, and avoid many of the evils that formerly surrounded us. More now than ever before we can be in control of our own destiny.

## The Curve of Change

Social scientists have studied social change in considerable detail. They have analyzed the rates of inventions and discoveries in botany, chemistry, entomology, genetics, geology, mathematics, medicine, military weapons, pathology, physics, household labour-saving devices, and many other material fields for several hundred years. New ideas and developments in administration, art, economics, education, human relations, political science, and other non-material fields have likewise been plotted as curves above a time line.

These curves all show a similar characteristic. With equal time units, the rate of increase has not been of the order 1, 2, 3, 4, but more like 1, 2, 4, 8, 16. They are exponential curves which rise very slowly over most of their length—like the compound interest curve. Most growth has been since 1900. As the influence of geometric progression grows, the curves rise sharply. Out of this study a generalized *Curve of Change* has been plotted. (Fig. 1.)

(See Page 4 for Curve of Change)

## THE CURVE OF CHANGE

A growing science and technology accelerate the rate of change.
An accelerating rate of change affects people of all ages.
Slowly evolving cultures require little learning beyond childhood.
A rapidly evolving culture requires learning throughout life.




Fig. 1

The Curve rises as knowledge piles up in the cultural storehouse. As new elements of knowledge are added, the possibility of combining them with other elements already there increases geometrically. Elements A and B can be combined in only one way. A, B, and C can be combined in four ways, but A, B, C, and D can be combined in 11 ways. If E is added, it creates many more possibilities of being used in combination. This geometric growth of knowledge accounts for the sharp rise in the curve. Each new invention or discovery increases the *rate* of change. Science and knowledge feed upon themselves.

The Curve of Change reflects much of the material progress and, in some respects, the social progress of mankind. In prehistoric times and through most of recorded history, inventions and new ideas came very slowly. Mankind made little material progress. In the centuries following the Renaissance, the flow of ideas and discoveries accelerated. New inventions and machines came faster. The Industrial Revolution has proved to be a continuing revolution now making itself very much felt all over the world. The Curve has never flattened out. Revolutionary developments in science and technology have continued at an ever-accelerating pace.

This knowledge has grown so that only now in the Twentieth Century has mankind learned to abolish poverty and to provide a comfortable material standard of living for all.

**Examples**

A century ago Denmark was a poverty-stricken country with a low literacy level. The country was almost completely agricultural with poor, sandy, unproductive soil. The growing season was short. There were few minerals, forests, and power sources. About this time Danish leaders became convinced of the power of education and technical training. They worked hard, built up a practical type of education system, and developed multipurpose and marketing cooperatives. Within a century the Danes have greatly improved their economic condi-

tions. Prosperity is widespread. Nearly all Danish families now enjoy a comfortable middle-class standard of living.

Sweden and Norway likewise are poor in natural resources and suffer a harsh climate. They, too, have developed cooperatives and enlightened social policies, and have used education as a powerful tool for raising the standard of living of their people. Illiteracy is almost unknown. Technical education is widespread.

In the Caribbean Sea, Puerto Rico is an island about 30 miles wide and 100 miles long. A lush climate, reasonably good soil, and one-crop economy supported a population of over 2,000,000 in poverty and ignorance. With encouragement and technical assistance from the U.S.A. the Island began a comprehensive development programme. In 1949 an intensive Community Education programme was begun with 40 discussion leaders, jeeps, and mass media adapted to local conditions. Primary schools were established for all children. Adult literacy increased to approximately 80 per cent in a few years. Villagers no longer look to the capital city for local improvements. They have learned to depend upon their own plans and energies to build schools, roads, public services, and village amenities. The standard of living has risen dramatically.

For several generations Germany has had a high standard of scientific, technical, and general education. World War II left the industrial plants in West Germany almost completely destroyed. Yet, the devastated nation was able to capitalize on outside economic aid and, in less than a decade, in an atmosphere of freedom, rebuilt her industry and economy to a new high level. The secret was education. War could not destroy the educational and technical competence of the German people.

Japan, too, made remarkable material progress in one century by vigorously adopting and adapting science and

technology. After World War II her beaten-down industry did not stay down. The Japanese people had acquired a high level of literacy, education, and technical competence before the War. Japan's rapid post-war recovery was thereby largely assured.

The rapid material progress in Russia, while at great cost in human lives and freedom, again illustrates more the power of education in social change than of any ideology. In fact, as Inkeles[1] points out, the ideology has been forced to change in practice when it came up against the facts of human nature. But none can deny that the heavy emphasis put on literacy and training in science and technology has paid remarkable dividends in one generation.

The knowledge for abolishing poverty and raising the material standard of living has not been fully applied everywhere. That it be applied is the concern of the technical assistance to developing countries. Moving the available knowledge from where it is to where it should be applied is an enormous problem in educational logistics—one of the topmost challenges of our century. Educators of all kinds and especially Social Educators must carry the major burden of moving this knowledge to people who can benefit from it.

## Cultural Lag

We must examine three aspects of cultural lag : (1) material inventions, (2) human behaviour resulting from these inventions, and (3) systems of belief and cultural institutions.

Material inventions are usually accepted by people if they perform a task at a saving of time and energy and are not too expensive. Buses are a better way of travel than by foot or

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1. Alex Inkeles, "Social Change in Soviet Russia," in Morroe Berger, et al, *Freedom and Control in Modern Society*, D. Van Nostrand Co., New York, 1954.

bullock carts. Where enough people can share the operating costs, busses are accepted.

In accepting the new invention, people often have to change their day-to-day habits and behaviour. If they are not there when the bus leaves, they miss the trip. With buses, they may start later in the day, return earlier, and make more frequent trips. Riding in a bus and more frequent trips to a city means more human contacts, greater exposure to new and different ideas, and greater stimulation to change.

As buses become common, traffic laws, operating schedules, fare regulations, and safety inspections become necessary. Buses require a cash economy ; fares are not paid by barter. Status differences are faced and settled : different classes and castes either sit together, sit separately, stand up, or refuse to ride. Thus buses have an impact not only on behaviour of people but upon belief, systems and institutions.

Cultural lag is the time lapse between the acceptance of the new invention and the change of institutions and beliefs in harmony with it. A few or many years may elapse before traffic laws are developed and enforced or before people become accustomed to keeping on schedule.

Many social problems arise out of this cultural lag. Unemployment, housing shortages, obsolete educational systems, economic insecurity, slums, and many more problems have their roots in cultural lag. Overcoming this lag is a primary task of educators.

Here is a clear example of lag : The motor vehicle accident rate in India is one of the highest in the world—nine times as high as in the U.S.A. according to a recent report. This is chiefly because Indians have not yet learned to live with automobiles. When safety education, enforced traffic regulations, vehicle inspection, better roads, safety consciousness, and appropriate pedestrain awareness develop, the accident rate will be cut. As all countries adopting the invention have discovered,

living with the automobile brings about several fundamental social changes. The introduction of electricity, radios, television, machine industries, miracle drugs, contraceptives, and any other significant product of science and technology will bring far-reaching changes—with their accompanying lag.

**Why is this lag ?**

1. People who accept a new invention often do not see beyond the immediate behaviour changes required. They do not foresee the ultimate consequences of accepting the invention. They cannot predict the changes in cultural institutions and beliefs which may result. Because the invention is new, society will have to accumulate enough experience with it before knowing how to adjust to it.

Formerly in the West, new labour-saving machines made labouring people fearful of unemployment. Economists now habitually try to anticipate the effect of new inventions on employment. Experience has shown that, in general, more employment is created in service and auxiliary occupations than is displaced by machines. There is a lag, however, while displaced persons find employment elsewhere and acquire training for new occupations.

2. Even if changes in institutions and beliefs could be predicted accurately, there would still be the problem of changing the behaviour of large numbers of people. Many obstacles block the way : illiteracy, habits, superstition, taboos, custom, religion, social outlook, the cultural heritage, and inertia. These are the educator's challenge.

If material conveniences are of no interest, if aspiration levels are low, if poor health and malnutrition are accepted as normal, if leisure is valued more than increased material possessions, changes will be slow.

**Stimulus to Change**

Wars, disasters, population growth, depletion of natural

resources, economic cycles, and government policies are among the forces which stimulate social and cultural change. Within any culture the philosophical and religious concepts and value systems also vitally affect the readiness to change.

Changes can come through (a) discoveries and inventions or (b) through borrowing and adaptation. Inventions can be of physical objects, of procedures, or of social processes. Some of the most worthwhile exports of a culture often are social inventions.

**Borrowing**

A culture can make most rapid growth if it can freely borrow ideas and inventions from others. Borrowing, or diffusion, has always gone on whenever cultures have been in contact. A part of the present-day richness of Indian culture stems from the repeated infusion of outside elements through migration and invasions. (Centuries ago when India was among the most advanced civilizations, the West, though greatly handicapped by distance and transportation, eagerly sought its products. America was discovered in a search for an easier route to India. In a cultural sense, all of the technical assistance offered by the West now might be thought of as belated payment for the ideas which spread from India centuries ago. In a broader sense, however, the cultural exchange today is a two-way flow of cultural elements which benefit both cultures.)

The rate of cultural diffusion depends upon the amount of contact between the peoples and time. A third factor is the selectivity of the receiving culture. Under conditions of freedom, the receiving culture has a choice of what it wants to accept. Ordinarily it accepts only those elements which prove useful—those which provide better answers to its problems than its present methods. At present developing countries are interested in receiving chiefly the products and processes of Western Science and technology such as medicines, fertilizers,

machines, manufacturing processes, and sources of power although improvements in educational systems, administration, and economic policy are also sought.

Receiving cultures have great advantages in this type of diffusion. By systematically studying areas of culture—steel mills, manufacturing processes, agriculture, irrigation, desert reclamation, home science, crime prevention, traffic control, school systems, et cetera—the receiving culture has an opportunity to select and import those elements adaptable to its home conditions. This is the principle back of the exchange and training programmes offered by the United Nations, the UNESCO, the U.S.A. and several other countries. Hundreds of Indian specialists are sent abroad every year in the hope that they will bring back useful ideas.

In regard to inventions and the products and processes of science and technology, this opportunity to adopt, adapt, and import greatly reduces the cost and time required for bringing about cultural change. Nearly all the expense and years required for discovery, invention, research, pilot experimentation, testing, and refinement are avoided. Insecticides, fertilizers, medicines, electronic equipment, and machines can be obtained only for the cost of production. Most of such elements can be produced locally as soon as raw materials can be assembled, factories can be built, and people trained to do the work.

Great benefits can also come at a more intangible level. The impact of both material and social inventions on other cultures can be studied. Before adopting any specific element, we can often see its social effects elsewhere. By careful study, the adopting culture can learn from previous experience, can avoid many mistakes, and save much time, energy, and unfortunate social consequences. Problems created by excessive centralization of industry, rapid expansion of cities, aging of the population, internal migration, and uncontrolled population growth can be foreseen. The same stages need not all be

muddled through. That is, with adequate foresight and policies, industrialization need not bring the excessive exploitation of child labour as happened in some countries over a century ago. Urbanization need not bring slums, if adequate planning is done in time. Practically all of the material and social inventions and their social consequences are open for study in the materially-more-advanced open societies. The quality of national intelligence and sound leadership is shown in the tendency to make such studies and adopt wise policies and programmes affecting social change.

### Rate of Change

Stable village culture. Imbalance between population growth and food. Improvement in communication and transportation. A revolution of rising expectation. Independence and self-government. Under these circumstances, how fast can we expect change to come ?

In a stable society change does not come easily. We can compare the villages with a long heavily loaded goods train at rest. If sufficient energy is applied, the train can be moved—very slowly at first. If more energy is applied, the speed will gradually increase. Eventually, with more energy, the train can be rolling at a satisfactory rate.

Community Development is illustrating the process. This programme is essentially one large educational programme. As with the goods train, progress necessarily has been slow at first but we suspect that ultimately change may come faster than most Indians expect. Likewise, it may touch unexpected areas of life.

### One Generation of Change

In the following parallel columns is one illustration of the rate of change in the U.S.A. It is the story of the changes in the work and lives of women in one generation. Change

may not come at the same rate or in the same way to India. Change could be faster or slower. Certainly change will be and should be adapted to fit into the existing culture. The illustration only points out some of the dimensions of change for the reader to ponder.

| *My Mother* | *My Wife* (when still in America) |
|---|---|
| Arose before daylight; started a wood fire in an iron stove; pumped water from an outside well; spent an hour preparing breakfast. | Arose after daylight; turned a button on an electric stove; took eggs from a refrigerator, water from a faucet, ready-cooked cereal from a cardboard box. Breakfast was ready in 10 minutes. |
| Spent 2 or 3 hours preparing food and cooking lunch and dinner; 30 to 60 minutes afterward cleaning up and washing dishes. | Prepared dinner in 10 to 30 minutes by using canned, frozen, pre-cooked, and prepared foods; in 5 minutes put dishes into automatic dishwashing machine. |
| Threw vegetable peelings and garbage to chickens in yard. Many flies. | Disposed of kitchen waste in electric garbage disposal. No chickens; no flies. |
| Had a poorly-arranged kitchen; walked excessively. | Had a scientifically arranged kitchen to save time, labour, steps. |
| Spent 15 minutes a day cleaning and filling oil lamps and lanterns. | Flicked a switch for light. |
| Spent many hours every week with broom, dust cloth, and scrub bucket. | In 4 hours per week cleaned floors, furniture, and woodwork with vacuum cleaner; |

| | |
|---|---|
| | waxed and polished floors with machines. Easy-to-clean buildings. Dust controlled through metalled roads, vegetation on land. |
| Worked hours weekly baking bread. | Bought fresh, sanitary-wrapped, sliced bread from grocer. |
| Spent one hard day each week washing family clothes; another hot day ironing. | Took laundry to commercial laundry; returned ironed. Many new fabrics washed in basin, drip dry and need no ironing. |
| Spent a day every four months making household and bath soap. | Bought soap and detergents. |
| Spent daylight until after dark for a lifetime, like countless generations before her, keeping house for my father and three children. | Kept house, worked 40 hours a week at paid work, and had spare time for community activities. |

**Impact on Human Relations**

It is relatively easy for anyone to understand and accept these physical changes in women's work brought about by the application of science and machines to homemaking. It is more difficult to foresee, to understand, and to accept the changes in human relations brought about by these physical conditions. Here are some ways in which the status and role of American women have changed during the past generation :

1. Women now have more time for work outside the home. A great many married women hold paid jobs—usually before children are born and after they are self-sufficient.

2. Girls are now free to choose careers or marriage and often both. They are more independent; they are no longer required to marry for economic security. Reasons for marrying have changed somewhat.

3. Women have a wider choice of occupations and more opportunities for education.

4. Women are now usually paid at the same rates as men for the same work.

5. Women have more responsibility for child rearing. In rural areas men are near their families much of the day. When a high percent of families live in cities and men work away from home from early morning until dark, child rearing is largely left to the mother. Image of mother changes as mother becomes the principal disciplinarian.

6. Women have more responsibility for household and family management when the husband is away.

**Changes in All Relationships**

As transportation and communication becomes easier and inventions multiply, similar changes can be shown for nearly every area of life. Physical changes affect every human institution and relationship.

The home becomes fragmented. Work is away from home and requires travelling. Home becomes a place to eat and sleep. Multi-story apartments become homes. Recreation becomes commercialized. Population becomes mobile. Civic responsibility is easier to neglect. The joint family is weakened. New security systems are needed.

Employment patterns change. Agricultural work declines. A wage economy develops. Mass production demands literacy, new skills, and specialized training. Fixed employment and retirement ages develop. Unemployment means hardship.

International relations are different. Mountains, rivers, and oceans are no longer effective boundaries. Economics tends to follow natural regions. The bases for diplomacy, politics, national defence, and war change.

Intercultural relations change. Labour-management relations become complex. Different classes, castes, colours, and races are thrown into close contact. Production, not ancestry, becomes a new value.

Personality is affected. Some people are stimulated to develop hidden talents. Other personalities are unable to adjust and withdraw or disintegrate.

Religion either adapts to changing times or is by passed. People develop new philosophical insights, new appreciations in art and music, new values in living. Women may unveil. Widows may remarry. Girls may go to school.

Conservatives may mistake changes for social disintegration. Liberals welcome changes and in time become the conservatives to be replaced by a more liberal younger generation. If the education is adequate, the culture can keep integrated and in balance.

We cannot always predict the shape or form that specific changes will take. However, we can predict that most, if not all, of the social institutions and relationships in India and all other developing countries will be vitally affected as urbanization, industrialization, improved communication and better transportation come. As the products and processes of science and technology enter into the life and minds of the people, the ferment of change will enter into family life, caste, economic security, civic outlook, economics, and even religion and value systems.

Now let us see what effect change has on education.

**Effect of Change on Education**

Science and technology have set the stage for a new kind

of education. We need to examine how different stages of development demand different kinds of education.

### Simple culture, slow change

Primitive and tribal people do not need formal education. When a culture is simple and each succeeding generation lives like the last, children can learn all they need to know from their elders. Traditional ways of behaviour are passed on through the normal processes of growing up. The small changes that may come (a new hut, relocation of the village, loss of property, death of family members) are easily understood and require only incidental adjustment and learning.

### Complex culture, slow change

As culture grows more complex, education begins to become institutionalized. The first formal training often occurs at puberty when the young are indoctrinated into the beliefs and practices thought appropriate for adulthood. Special persons—priests—do the teaching through ceremonies and ritual. Systematic transmission of a simple cultural heritage begins.

As cultural complexity grows, more institutional education is necessary both to prepare the young to live in the culture and to maintain the level of development. Schools develop when the cultural heritage is too great to be dependably transmitted to the young by parents. Teaching functions are delegated to a special occupational group. The curriculum is the cultural heritage which the society thinks the young need to know to live in harmony with their group.

As culture becomes more complex, more precise tools of communication become necessary. Language and mathematics (the language of science) become more highly developed. Reading, writing, and other arts of communication become necessary for more people. As transportation and trade develop and movement of people becomes easier, circles of acquain-

tance expand and human contacts multiply. Appropriate ways of relating to others must be learned : honesty with strangers, cooperativeness, mutual respect. Information about the world and its people grows. Knowledge of geography, meteorology, science, literature, the arts, and history begins to accumulate. Specialists in these fields systematically organize the knowledge for preservation, use, and teaching to others. It becomes subject-matter.

Ways of solving problems, procedures for doings, relationships among people, attitudes, and most forms of human behaviour also become institutionalized. Customs, superstition, taboos, folkways, mores, habits, and beliefs constitute a major part of the cultural heritage.

As the cultural heritage grows, the period of schooling lengthens. The curriculum is expanded to include all elements of knowledge thought essential for participation in society according to the role expected of a person.

(I) *Beginning of Adult Education.* At this stage, adult education is necessary only for those who missed education as children. This is remedial education. The subject-matter content for adults is largely the same as for children. Schools are busy primarily in passing on knowledge, skills, habits, and attitudes from the past—the cultural heritage.

Note that, although the culture may be fairly complex, it is not rapidly changing. Tea, silks and spices may be sent around the world, but the trade routes and transportation may remain largely unchanged for centuries.

**Complex culture, rapid change**

As the tempo of change increases, a new dimension is brought into the educational picture. When several inventions and discoveries are made or introduced into a society within one generation, education faces a new problem. Some of the knowledge needed by adults in later life was not available when

they were children in school. The need for the knowledge arose after they left school.

Moreover, when cultures change rapidly, no one can predict very far in advance what changes will take place, or what type education will be needed in the years ahead. Schools can no longer be sure of including in their curricula all the knowledge, skills, habits, and attitudes which will be useful in the future. Alert teachers and educational systems keep as up-to-date as possible. At best, however, they will be geared to the recent past. Only with great effort and insight can they discard those parts of the cultural heritage which have become obsolete and replace them with currently-useful subject matter.[2] They cannot, with assurance, push beyond the present.

Schools and teachers, like other social institutions and people, have no special gift for keeping up-to-date. By tradition, formal schools conserve the past and pass on the cultural heritage. They suffer from cultural lag—sometimes a great deal of it. Much of the criticism of the schools and colleges of India, as in any country, arises because of their difficulty in keeping abreast of the times. Sometimes the subject matter taught was useful a century or more ago but has little functional use to-day. Students, somewhat aware of the contemporary scene, often recognize the situation but, being of inferior status, can do little about it. It takes great energy to change established courses of study, textbooks, and traditional procedures. Teachers usually have been students of the heritage instead of participants on the growing edge of knowledge.

(II) *New Role for Adult Education.* At this stage of development, adult education must take on a new role—that of keeping adults abreast of change. People must keep up with the times. Blacksmiths must learn to fix bicycles, then motor-

2. Read *The Saber-Tooth Curriculum* (Mc Graw-Hill Book Co., New York, 1939) for a clever satire of the predicament of schools.

cycles and automobiles. Automobile mechanics must learn to repair new models of automobiles which each year become more complex than the year before. Electricians must learn to fix radios. Radio repairmen must learn television repair. Displaced farmers must learn to run factory machines. Village women learn to work in offices.

New learning is required not only in occupations. With urbanization and industrialization, rural people must learn to live in cities and away from their kin. The security of the joint family weakens and new types of economic and emotional security must be developed. People must learn new ways of caring for their health, of procuring food, of living in money economy, of dealing with strangers, and of discharging their civic responsibilities. A whole new set of attitudes, institutions, and relationships must be built up.

Auxiliary educational services become more important. Guidance and counseling are needed to help adults decide about further education, occupational choice, and vocational training. Employment exchanges become necessary to help find suitable work. As old occupations die and new ones are born, caste occupational patterns break up. Educational and advisory services are needed to help make the transition from the traditional to the modern.

Education becomes a necessity throughout life. Transmission of knowledge from the past is no longer enough. People must acquire new knowledge as it is developed. As childhood remains the time to learn the cultural heritage, this lateral transmission of knowledge becomes uniquely the role of adult education.

*Adaptation of Change.* In a world moving from one stage to another, adult education must carry a further role—that of helping people understand and adapt to what is going on—what is happening to them.

In a rapidly changing world, change occurs on many fronts. Occupational adjustment must be made, but people must keep up with changes in other areas as well. In order to make wise and informed decisions as citizens and parents, people must know something about a wide range of developments. They must be able to grasp some of the significance of new scientific developments, new knowledge in the social sciences, and new political movements.

Greater complexity normally brings with it greater specialization. As people specialize, they learn more and more about ever narrower areas of knowledge. They must depend upon other specialists to supply the knowledge in other fields. This leads to compartmentalization and a narrowness of view. At the same time it broadens the interdependence of people and increases the need for coordination of specialized knowledge. Thus in a simple culture the family unit tends to be an economic unit. The whole family helps herd the flock or tend the fields or work at the cottage industry. Family life is unified and revolves around these activities. In a more complex society, men and often women work away, from home. Home life and economic life are largely split apart.

Likewise, the political unit moves beyond the tribe and the village to larger geographic areas. The individual's effectiveness in making himself felt politically depends upon his learning new organizational skills and working through groups independent of his family and occupational group. Thus we see home life, school life, work life, and political life becoming separate compartments in the life of one individual.

Recreation and religion may form still other compartments. This separation and compartmentalization extend to the relations between generations. They find it difficult to understand each other. Rifts tend to develop between parents and children, who no longer have the intimate understanding that comes from sharing in all aspects of each other's lives.

This lateral transmission of knowledge and education for understanding of and adaptation to change become responsibilities of education directly as a result of the rate of change.

### The Overflowing Storehouse of Knowledge

Another shift in the role of education comes about because of the rapidly increasing quantity of knowledge. In the summer of 1898 the late E.L. Thorndike read all the existing literature in psychology. Today a fast reader could spend all his time and not be able to keep up with the current production of literature in this field. This vast increase in amount of available knowledge raises a new problem :

*What Shall We Teach ?* Educators always face the problem of selecting those parts of the cultural heritage which they think will be useful in the future. When curriculum building is left to subject specialists, they find it easy to select content from their organized fields of knowledge. They easily overlook its usefulness in solving the problems of present-day living. The temptation is always to include more content than may have practical application in the lives of the learners.

Selection is often poor and must always be made for an unknown future. Yet, the selection is always influenced by values derived from the past—values notoriously slow in changing.

Whether the subject-matter selection is good or poor makes a very great difference in society. In India, for example, there is much work to be done and many unemployed and under-employed people available to do it. The shortage is in people trained to do the work, and people trained in organization and management of others to do the work. If recent high school and college graduates had been taught the kinds of knowledge, skills, and attitudes needed in present-day India, the "educated unemployed" problem would not exist. Their services would be in demand, and they would have learned attitudes which would enable them to do the jobs India needs done.

As greater masses of knowledge accumulate, the problem of selecting what to teach becomes more acute. Schools often try to meet this situation by crowding more subjects and content into the curriculum and lengthening the period of schooling. Fifty years ago in the U.S.A., eight years of schooling were enough to satisfy the educational demands of the day. Today every youth in America is expected to finish 12 years of schooling and most of them do so. In some states 14 years of education is becoming the norm, and eventually 16 years may become the aid of the majority. The culture has become so complex that there is very little work for illiterates and untrained people to do. Young people find it difficult to get employment without a high school diploma.

(See Fig. 2)

This lengthening period of schooling is largely an effort to teach more of the cultural heritage. However, knowledge is increasing much faster than people can acquire it even if they went to school all their lives. Specialization and rigorous selection of subject matter can resolve only a part of the difficulty.

(III) *Education Becomes Process.* The basic problem must be met by a new way of thinking about education. When knowledge is mounting geometrically, an extended period of childhood education combined with the lateral transmission of knowledge for adults are not a sufficient answer. Instead of trying to teach the youth and adult all the knowledge and skills he may need, we have come to look upon education as a *process*—the process of using intelligence in systematic and disciplined ways to select and acquire whatever knowledge, skills, habits, and attitudes are appropriate at the time.

Some of this new orientation to education as a process can and should be carried on in the primary and secondary schools. Schools need not confine themselves to teaching quantities of subject matter. Appropriate problem-centered methods and curricula can go far in teaching children and youth to utilize

education as a process. Happily, schools making these approaches need not sacrifice their function of teaching the basic skills and subject matter. The education-as-process can reinforce and need not conflict with transmission of the cultural heritage. However, the influence of tradition, textbooks, teachers, and teacher-training institutions often continue primarily to conserve and transmit the heritage.

Adults, however, for the most part live outside the academic world. Adult education can much more easily take a problem-approach. Indeed, it often must if it is to be successful.

The primary focus of adult education becomes that of teaching people to follow an orderly pattern of thinking—a systematic problem-solving process. This is a well-defined process which is variously called the educative process, the scientific method, or the method of rational thinking.

We know that in most of the problem situations in life, the adult will not have a teacher at his elbow to teach him what he should do. As a matter of fact, the answers to many problems do not exist anywhere in the cultural heritage. Likewise, answers may not exist in current knowledge. Solutions must be worked out by people who face the problem *now*. Instead of searching the cupboard for past solutions and finding it bare, we need to prepare people to assume the responsibilities that rapid change brings. They must learn how to solve their own problems now, to make their own decisions, and to learning whatever they need to learn when they need it.

The difference in the two approaches can be diagrammed as shown in Figure 3. The squares represent organized subject fields, while the circle represents a person with a problem. Under the traditional subject-matter approach, the person must learn the systematic subject matter, hoping that some day he will find it useful. Under the new approach, the person

| *Knowledge from the Past* | *Frontiers of Present Knowledge* | *Shaping the Future* |
|---|---|---|
| "Wisdom of the ages" Rich in variety and amount ; Many inadequate solutions ; much ignorance ; provincialism. | Keeping up with the times Best known practices need wide dissemination. Logistics and communications problem. | Belief in infinite possibilities for improvement. |
| Purpose : Acculturation | Purpose : Adapting to changing culture. Dissemination. | Purpose : Conscious shaping and increasing control of cultural and physical environment and of self. |
| Content : Organized knowledge and cultural heritage : languages, literature, history, religion, arts, crafts, folklore, customs, superstitions, etc. Subject matter organized into systems by scholars for preservation. | Content : Research findings, current experience, new developments. Knowledge applied as needed to problems. | Content : Arises from problems, frustrations, experience, imagination of people. Knowledge drawn from any source to help solve problems. New data gathered ; new methods tried. Subject-matter organized "in process." |
| Vehicles : Books, libraries, literature, songs, stories, drama. | Vehicles : Meetings, seminars, refresher courses, tours, radio, TV, current periodicals ; communication media. | Vehicles : Present life situations, persistent unsolved problems of past and present. |
| Methods : Lectures, reading, formal instruction, indoctrination, ritual, law, force, social pressures. | Methods : Discussion, exchange of experience; extension methods, demonstrations, reading, inquiry and consultation, professional association. | Methods : Guided practice in problem-solving process (defining problems, fact finding, analysis, projection of hypotheses, decision, action, evaluation) ; discussion ; group dynamics, interpersonal relationships. creative imagination, emotional resources ; multidisciplinary approach, cooperative inquiry ; teamwork. Knowledge built into open minds by experience. |
| Educators and priests determine curriculum and supply answers from pre-arranged bodies of subject matter. Adult education is remedial and gap-filling. | Educator arranges for communication and exchange of information ; assists in cross fertilization of current knowledge. Adult education is acquisition of available knowledge. | Educator teaches methods of learning, disciplined thinking, problem-solving process ; consults and advises on learning and research procedures. Adult educ ation isthe process of learning. |
| Learner listens, digests, and accepts. | Learner searches out, selects subject matter needed, determines his own curriculum, participates, and contributes. | Learner follows disciplines of educative and problem solving process ; arrives at own decisions, solves own problems ; questions ; imagines, creates, reconstructs institutions. |
| Discovery and invention are accidental, haphazard, by individuals. | A few engage in systematic research, expermientation, solution of problems. | Everyone consciously engages in research and problem solving. |

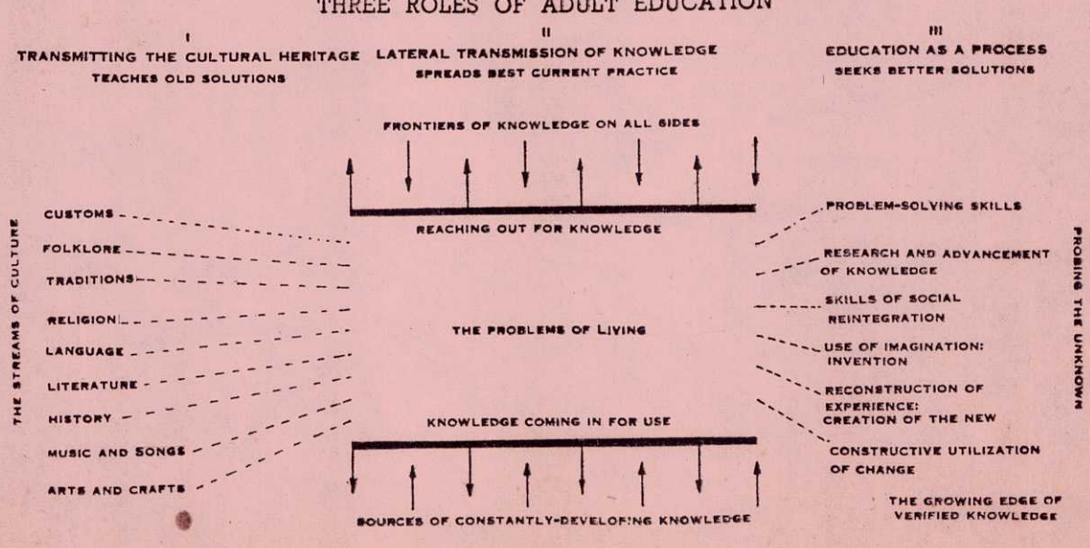
"In the fundamental sense, education is the cultural process by which successive generations of men take their places in history....Through education men acquire the civilization of the past, and are enabled both to take part in the civilization of the present, and make the civilization of the future. In short, the purpose of education is three-fold : inheritance, participation, contribution."

—R.B. Perry, *Realms of Value : A Critique of Human Civilization*

(Cambridge, Massachusetts : Harvard University Prses, 1954), p. 411.

Fig. 2

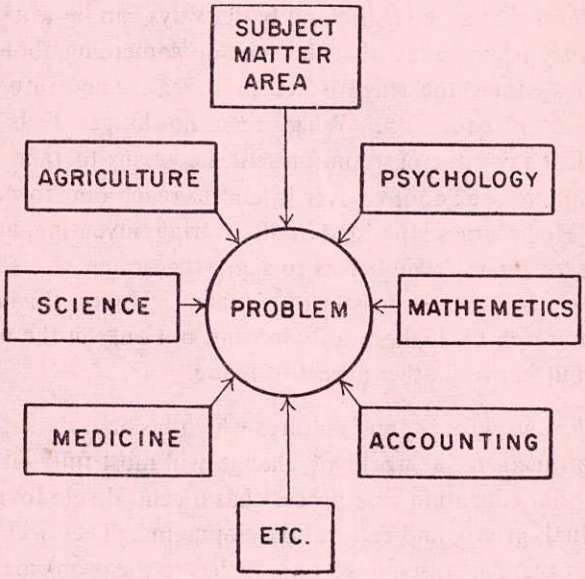
THREE ROLES OF ADULT EDUCATION



arns where and how to draw upon the various subject matter lds for the information he needs.

The older subject-centered approach often led to dissociation of education from life and the frequent inability to utilize nowledge in real-life situations.

Fig. 3




**The Investigative Attitude**

In traditional education, the teacher and learner assumed hat the student would be taught the correct answers. No natter how much curiosity a young child might have about his environment, he was often conditioned in school to wait for he subject matter to be brought to him by teachers and books. ome curiosity often remained, but traditional schools generally ncouraged a relatively passive attitude toward learning.

The problem-solving approach calls for an investigative ttitude akin to that motivating a researcher. It is commonly ssumed that research is done only by highly trained specialists

who explore the frontiers of knowledge. As soon as we recognized that not all of the desirable solutions exist in the cultural heritage but that new solutions must be worked out, we begin to acquire the research attitude. Whether the motivation is curiosity or dire need to solve a problem any one can re-acquire the investigative attitude.

When old solutions are no longer satisfactory ; when people believe that a better life and better ways can be worked out; when they begin to feel that they can do something about their problems—then the stage is set for a creative and future-looking kind of education. When man no longer feels wholly dependent upon the past and present, he begins to take charge of his life, to seek control over it, and to reach out toward the future. He becomes interested in discovering, inventing, and finding out for himself. He begins to shape the design of his life. Increasingly he becomes master of his fate. Under this concept man can reach his highest development, not only in the material sense, but in every other aspect of living.

Persons, groups, and cultures which become most successfully attuned to a world of change will most fully adopt the notion that education as a process has a central role to play in individual, group, and cultural development. They will recognize that there are disciplined approaches to the problems which individuals and groups face. Educated persons will be those who can most intelligently make use of the *discipline of methods* needed to solve problems. Education will be less concerned with crowding enormous amount of knowledge into people than in building competence in acquiring and using knowledge.

### New Role for Educators

Under these circumstances, education becomes a creative approach to living—a whole complex but integrated series of creative activities. In this type of education, the thinking and investigative processes become much more important than the

processes of memorization and routine habit formation. The procedural habits and attitudes of inquiry, investigation, and research become more important than habits of mechanical behaviour.

When knowledge was limited and books were few, the concept of the educated mind as a living storehouse of information may have made sense. Now, when knowledge is piled high in print, on microfilm, on magnetic tape, in research laboratories, and in the minds of specialists, the educated person is one who knows how to locate, select, evaluate, and utilize knowledge. He knows how to use the tools and processes. In addition, he knows how to find out new knowledge for himself.

Under this emerging concept, educators, especially adult educators, become less carriers of knowledge than trainers in methodology and the educative process. The traditional teacher possessed many of the substantive answers. The modern educator of adults often does not claim to know the answers ; they have yet to be worked out by the learners. Instead, the adult educator must be an expert in helping people go through the educative process in a disciplined way. His tools, techniques, educational methods, and points of view will be different from those of a traditional teacher of children.

*New Methods for New Roles.* Problem solving is often thought of largely as an individual matter. In a complex and rapidly changing world, many problems are recognized as group problems which can best be solved by group decision and action. This, too, has come about because of the increase in the amount of knowledge, as well as because of the increasing interdependence of people. No longer can any one person know all he needs to know to solve all the problems that confront him. The combined knowledge of a number of specialists is often needed. Among countries where democracy is advanced, the day of the autocrat is passing—when one man can independently make decisions affecting the lives of other

people. One of the new responsibilities of education is helping people master the process of decision-making, so that decisions may be rooted in fact and intelligence and satisfactory to the maximum number of people affected by them.

As the role of education changes, the forms and vehicles of education also change. The lecture method with a single trained teacher can suffice for the vertical transmission of knowledge. The teacher served more or less as a talking book for passing on the cultural heritage.

For the lateral transmission of knowledge, for problem-solving, and for group decision-making, new methods have had to be created. Extension methods, conferences, workshops, seminars, and other discussion methods and techniques have evolved. Consultation within the past few years has developed into a profession in itself. Supervision and inspection have been largely replaced by coordination and cooperation. Various coordinating services have developed such as vocational guidance centres, employment exchanges, reference libraries, and professional abstracts and digests. Microfilming has become necessary for handling the sheer bulk of reference material available.

**Education's Role in Social Re-Integration**

Science, technology, industrialization, urbanization, and similar forces inevitably will affect Indian institutions. Severe disturbances and major changes will undoubtedly come to village life, caste status and relationships, joint families, occupational patterns, and other socio-economic institutions. When change comes, people must learn new values, new attitudes, and new insights. As old institutions crumble, people are forced to modify them or to develop new ones so that society my continue as a harmonious whole. Otherwise, society will suffer irreparable harm and perhaps even decay.

As change comes, possibly the primary task of Social Education is to assist people to study the causes and effects of

both physical and social change, to understand why old institutions are no longer adequate, and to help them learn to create new ones. People must learn constantly to reconstruct their institutions to serve the demands of the changing times. Unless existing institutions are modified and adapted to new conditions and new institutions created to replace those destroyed by the forces set in motion by science and technology, a complex and fast-changing society will fall under its own weight.

In times of social change, the processes of institutional disintegration and reintegration go on side by side. The Social Educator must be concerned that disintegration does not far outstrip re-integration. The nature and rate of change determine the role, content, and forms of education. Fortunately, new sciences of human behaviour are emerging so that we may move easily and effectively maintain unity and harmony in a world of disrupting forces.

As culture becomes more complex and social changes come faster, it becomes increasingly necessary for adult education to change from a remedial role to the dynamic role of freeing people to make changes in their lives and to create and control those changes. Thus, in addition to its traditional content, education must teach

—approaches, methods, and techniques for the lateral transmission and acquisition of knowledge,

—attitudes toward education so that people will use the educative processess and approaches whenever and wherever needed throughout life,

—skills of working together in groups toward the constant re-creation, re-integration, and maintenance of unity and harmony in a world of change without the sacrifice of individuality and human values on which further progress depends, and

—methods of problem-solving and responsible decision-making which will increasingly give mankind more control over his future.

*Lifelong Learning.* Educational systems in a rapidly changing world must provide appropriate opportunities for learning throughout life. The cultural heritage concept—that education is primarily the preparation of youth for life—is no longer adequate. The needs of the Twentieth Century required that education be far more than the transmission of the cultural heritage.

For nearly a century the rapidity of change in the Western World has required an education that parallels the whole of life. In recent decades an accelerating rate of change has reached most other parts of the world. When significant change is crowded into one generation, people must be able to acquire from currently-developing knowledge those skills, insights, and attitudes which enable them to adapt and adjust to those changes.

However, in the present generation, even if education parallels the whole of life, it still is not enough. Education must be integrated *with* life. The educative process must become an integral part of the process of living. Indeed, it must become a "style of living"—a creative approach to most of the problems of life. Through the educative approach, using disciplined intelligence, man need no longer be limited to copying the solutions developed by his forefathers or his contemporaries. Man can define his own problems and literally create their solutions. The ideal is to give both men and nations control over their own destinies.

As this concept becomes more widely understood, systematic educational opportunities and training in the use of disciplined intelligence will be made available from an early age throughout life.

## Exercises

1. Where on the Curve of Change do you think the following remarks are appropriate ?

(a) "You can no more do that than you can fly !"

(b) "If it flies, it's obsolete." (About an aircraft)

(c) "It can be done !"

(d) "The difficult we do immediately ; the impossible takes a little longer."

(e) "It (a locomotive) will never start." (A few minutes later) : "They will never be able to stop it !"

(f) "Have you finished your education ?"

(g) "If there has been no change in a procedure in five years, that fact alone is evidence of a need for a change."

(h) Seeing an early automobile : "Get a horse !"

(i) "What good is that ?"

2. What kind of morale, social outlook, and attitude toward progress is reflected by each quotation ?

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# 2 CONFERENCE PLANNING

Social educators in modern India, as in any democratic country, need to be expert in conferring. In authoritarian societies, one-way flow of information—edict from the top—may be enough. In a democratic society information and feelings must flow in all directions.

Most of the content with which adult educators work cannot be disseminated by ordinary classroom methods. Often knowledge must be pulled together from many sources and applied to particular problems. Or the knowledge is so new that it exists only in scattered places and must be brought together by informed people who exchange their newly acquired knowledge with interested colleagues.

The focusing of widely scattered subject matter on

particular problems relates to the problem-solving role of adult education. The assembling and organizing of new knowledge relates to adult education's role in disseminating newly developing knowledge. Both of these tasks can be accomplished efficiently only through conferences. True, professional journals and written exchange can accomplish something. But they are too slow and do not provide the rapid interplay of ideas necessary for pushing further into new frontiers of knowledge.

Certain skills, such as group decision-making and group leadership, can only be learned in conference situations.

Certain development requirements, such as acceptance of new ideas, are best handled in group situations, where public commitment is the best assurance of carrying out promises.

Classroom methods often become regularized and habitual. Indeed sometimes they become so routine that they degenerate into formality and ritual. Everyone who has been to school is familiar with classroom methods even though he may not understand their use as a trained teacher might.

Untrained social educators, on the other hand, usually have had far less experience with conference methods. Ordinarily their experience has been scattered and casual. Often such conferences as they have attended or participated in have been poorly planned with little or no analysis of the method used. Because so much of the social educator's time is spent in talking with people and in arranging for assembled people to communicate with each other, it is highly important that he be trained in conference methods and discussion processes.

Reading this chapter and other materials cannot go far in developing discussion and conference planning skills. Reading, however, can provide certain theory and ideas which, if applied intelligently, can lead to self development of skills.

## Steps in Conference Planning

Conference planning usually requires about nine steps :

1. The recognition or delegation of authority.
2. The definition of membership or potential participants.
3. Determining time, place, and physical arrangements.
4. Determining the purpose. The *why*.
5. Planning the content. The *what*.
6. Planning the procedures. The *methods*.
7. Planning the human resources. The *who*—the people.
8. Promoting attendance.
9. Evaluation.

All steps will be discussed briefly except conference methods which will be discussed at length.

### 1. Authority

Conference planners need to be clear about the source of their authority. The source vitally influence their planning. Who is their boss ? For whom are they working ? Usually the planners are clear but not always.

Authority may come from the members of an organization. This is often true in a democratic society. In this case the planners are working for the total membership.

Or authority may come by delegation from a leader, a hierarchy structure, or a governmental office. In such cases the planners will want to find out, usually through interview, as much as possible about the intent, purposes, and ideas in the mind of the delegator.

Conceivably authority may arise within the planners. They may take the initiative to conduct a discussion or conference without authorization from either a membership group

or an outside authority. In this case, they may seem to have complete freedom. Certain advantages that come from group sponsorship or a higher authority, however, will be missing.

## 2. Membership

Who are expected to come ? Is the conference for a restricted group such as organizational members or delegates, or is it open to the general public ? Is attendance to be restricted by invitation or in response to public announcement ?

What is the educational *level* of the participants ? How much background and experience do they have ? How sophisticated are they in regard to the conference agenda ? Are they laymen or professionals ?

Answers to these questions will determine the level to which the programme content must be pitched and how fast it can move. They have a bearing on methods to be used. A programme for beginners is vastly different from one for experienced practitioners.

What diversity can be expected ? Will the conference group include both new-comers and old-timers ? If so, the programme should offer something of interest and worth to both groups. Separate sectional meetings or other devices may be advisable.

How many are likely to come ?

*Size of Conference Groups.* Conferences range in size from two people to almost infinity. While groups of a half million and upward are not common, there have been several such assemblages in modern times. Nehru, Eisenhower, Kennedy, Franklin Roosevelt, Khrushchev, and Hitler have been among those who have had face-to-face communication with such audiences. If mass media are included, audiences up to 100,000,000 have been reached by live radio and television. As size alone is an important determinant of conference design,

conference planners must know or settle early the numbers to be expected.

### 3. Time, Place, and Arrangements

*Setting the Date.* The simplest date-setting is by mutual agreement of two people for an interview. Date setting to suit the convenience of larger groups becomes geometrically more difficult if 100 per cent attendance is desired. Soon the impracticalities of trying to suit everyone leaves a choice : The convenor either (a) can arbitrarily select a date or (b) he can use some suitable technique for determining the date suitable for most potential participants.

Many conferences, of course, have traditional times and seasons. If the conference is a new venture, the convenor may want to take into consideration seasonal and holiday activities, customs, folklore, other meetings, and similar elements likely to affect attendance. If a fixed membership is not the basic group, an arbitrary date with the above considerations is often as good as any.

In formal organizations, where a fixed membership is the potential conference group, the planner may need to consult with a board, a committee, or representatives of the group. Spot checks or sampling surveys of the members can indicate desirable times. Such data gathering is an important early step in conference planning as it helps assure the attendance of the maximum number of interested people. Their response is likely to be more favourable because their wishes were taken into consideration.

*Picking the Place.* The geographic location of the conference vitally affects attendance. Convenient transportation is necessary for good attendance especially if the conference is short. Living accomodations, conference facilities, climate, scenery, historic interest, and sightseeing possibilities may be other attractions. Isolation is important if members are not to be lost to surrounding attractions.

If the location has not been fixed before other planning starts, it will need to be settled early. A mail query with a checklist of places to potential participants is one way to bring the matter to a vote.

If transportation is equally available to optional places and the location of all participants is known, the most economical center can be calculated. Cumulative mileage or fares from their homes to each centre in turn can be determined. However, other considerations may over-rule the principle of economy.

*Physical Arrangements.* While selecting the place, one needs to be aware of facilities, their suitability, and cost.

Hostels, hotels, and lodging accomodations.

Food services

Conference rooms for the type and size of meetings to be held

Exhibit space

Availability of space at desired times

Furniture and equipment in the rooms

Local transportation, types and availability

Postal and telegraph services

Recreation available

Availability of specific conference-connected equipment and services also need to be checked. They may need to be supplied by the conference management if not otherwise available.

Public address systems, if needed

Blackboards

Flipcharts and easels

Projectors

Typewriters

Duplicating equipment
Report writing and editing service
Messenger service
Typists and office help
News and photographic services.

## 4. Purposes

*Criteria for Purposes*

Purposes are all-important. Yet they are often poorly thought out. It is almost impossible for a good conference to emerge from an inadequately conceived purpose. Poor purposes lead to great waste of time multiplied, of course, by the number of people in attendance.

1. *No conference should be called until the convenor has clearly in mind what he wants to accomplish.* No purpose is clear until it can be written down. Writing down the purpose and revising it is a profitable mental exercise.

An unclear purpose sets the stage for a poor conference. A fuzzy purpose gives little guidance for method. In fact, the activities of a conference cannot be chalked out intelligently until the purpose is clear. Only when the primary purposes—and subsidiary purposes, if any—are clear, is the planner ready to map out methods.

This criteria holds for conferences of all sizes. No individual conference--often called interviews—should be requested unless the requestor has at least one specific purpose clearly in mind. As time is a major and limited component of life, no one should, by neglect in planning, waste another's time. Certainly no large conference should be called until those planning it know clearly what they hope to achieve.

2. *Every conference should have a worthy purpose.* A worthy purpose is one which is of high concern and interest to

the group. It is something that the group agrees is worth doing. It needs to be done because it is important. The good conference planner must know the priorities of feeling of his people. As these often change with time, timeliness is an important element in worthiness.

A group concerned with timely and worthy purposes will need only minimum orientation and explanation. With a clear and worthy purpose, no one need ask : Why did we meet ? What shall we discuss today ?

The range of worthy purposes is very wide. Among them are :

To explore a new or underdeveloped idea
To gather information
To pool data
To generate ideas along a specific line
To plan an activity or programme
To decide on a policy or course of action
To share ideas ; to enrich the common knowledge
To instruct
To build morale
To inspire
To get acquainted

3. *Every conference purpose should be one which can be best attained through a conference.* Many worthy objectives cannot be easily or economically accomplished through a conference or group meeting. Goals are often set for conference which can be handled better in other ways. For example, issuance of administrative instructions, at least to literate people, often can be done more clearly and economically through circulars, memoranda, or manuals of operating procedure. Report writing editorial corrections, and data gathering are examples of worthy purposes which often can be achieved through other techniques.

One example of a worthy purpose sought unwisely through a group conference was a staff meeting for mapping

out the forthcoming week's instructional time-table. A dozen faculty members assembled and sat for an hour or longer each week while the schedule-maker negotiated with each instructor in turn to arrange a suitable time for his classes. The salaries of the staff collectively amounted to more than Rs. 100 per hour. In effect the making of each week's timetable cost from Rs. 100 to 150. One clerk or instructor could have gone to each staff member in turn, filled out the form, and adjusted the timetable for a total time cost of Rs. 5.

4. *The purpose of every conference should be clearly understood early by all participants.* Once a clear, worthy, and attainable purpose has been decided upon, the appointment can be sought or the meeting called. Those invited should always *know in advance why* they assemble. Ordering or commanding a group to meet without announcing the purpose is not only undemocratic and insulting to peers, it is psychologically inefficient. It is poor administration, bad supervision, and ineffective training.

When people are called together without knowing in advance *why* they are assembling, they are placed on a par with slaves or animals. Monarchs, dictators, unthoughtful and crude leaders, disrespectful of people, often do this but it is entirely out of harmony with democratic philosophy. Only in rare emergencies or for quite brief and transitory purposes should people be called together without being told the purpose. Calling a meeting without announcing the purpose marks the convenor as a dictator or at least one who forgets democratic values.

If people are respected, they should be given an opportunity to think about the agenda or conference subject-matter in advance. They often can assemble data or at least bring what is readily available. Effective conference planners start the mental processes early among the participants by sharing the purpose with them. Democratic convenors want participants to come prepared instead of coming with minds blank from ignorance.

Democratic planners want *purpose* to provide the motivation to attendance and participation. They do not want to depend upon the compulsion of their own status. The merit of the agenda and its ability to interest people to attend sets the stage for a successful conference.

### 5. Content

Just as schools have curricula, conferences have subject matter. A conference is *about* something. Conferences may be either problem-focussed on subject-matter-focussed.

Problems of problem-centered conferences are usually selected from among those of its potential participants. One person or a planning committee can arbitrarily select such problems. If a committee is closely familiar with the problems of the field, they may make a relatively good choice. However, problems can emerge from a broader democratic base if appropriate techniques are used. Group meetings or local branches can discuss the potential conference agenda and send their suggestions to headquarters. Or a problem census can be taken by sending out a questionnaire or checklist to branches or to the entire membership. If results of a problem census are heeded, the conference should be of maximum interest to the greatest number.

"How can we induce more girls to attend school ?" is an example of a problem for a short conference or for a segment of a larger conference on "Increasing School Attendance."

The subject-matter centered conference normally deals with new developments which may be ascertained from people widely acquainted in the field. In some instances canvassing the field for new and successful practices may help determine the conference topics. A highly popular subject among educators might be "teaching machines" in which educators want to know what is going on in psychology and technology that can be applied to improve their teaching.

Registration in advance with a supplement questionnaire often can reveal the problems of the group. If the respondents know that the conference is being based on their problems, their interest will be heightened.

Sometimes it is feasible to meet with several small groups of potential conference members in advance. Informal-but-systematic inquiry can reveal their problems as a basis for conference planning.

Sometimes an organization will select several topics and assign them to a series of future meetings. These may be followed although with periodic review, unforeseen circumstances may require changes in some of the topics.

Once a problem or topic has been decided, the planners need to decide how to divide and arrange it for treatment and spread it over the conference schedule. They need to select or devise methods to use in tackling it. Selection and orientation of leadership and resource personnel are other steps to which we now turn.

## 6. Methods

Many conference planners know only one or two methods—often the lecture with "discussion." Every group meeting they organize follows the same pattern. Others who may have seen or experienced additional methods easily fall into a limited routine. Such conference managers are handicapped as severely and are as crude as a surgeon with only a knife and a saw. Even if the surgeon is extremely skillful, he needs more tools and skill in their use. Then he can use each tool according to the job to be done and the capability of the tool. A really good surgeon may even design tools better to do specific jobs.

So with conference planning. There are many conference tools having one or more uses. There is no more need to use only the lecture and "discussion" every time than to expect the

surgeon to use the same knife and saw each time. Both need to be *selective* of their tools. Both need to plan their procedures carefully, yet both need to be extremely flexible. Both need to switch from one tool to another as the task requires.

The purpose should determine the nature of the activity and the tool to be used. Certainly the tool should not dominate the scene. Tools should remain instruments—to be used as necessary.

**Tools for Individual Interviews**

Most individual interviews have one of three purposes although other purposes are possible :

a. *To find out some information*

In the information-seeking interview, the interviewer carefully formulates in advance the questions necessary to elicit the information. These are written down in full or in note form for personal use. If simple and few, they may be kept in mind. This assumes the straightforward approach. Circuitous methods may sometimes be necessary.

If the information is detailed and systematic, a questionnaire or survey schedule is likely to be used—as discussed in Chapter 3. Depth interviews may take several hours or even a series of appointments with a great deal of flexibility in questioning and probing techniques.

b. *To plan something new or to decide on a policy.*

Joint planning or policy decision, if both members are of equal status, usually consists of sharing ideas and data, evaluation, and reaching agreement through conversational means. Where status enters in, the "inferior" one is likely to defer to the judgement of his "superior." The higher status person may seek opinions of the lower or the lower may volunteer all data he thinks pertinent. They reach a consensus or acceptance of

a policy or plan regardless of who may have produced the major component.

A useful tool at this point is a "memorandum of understanding" prepared in triplicate by the one who took the initiative. The date carried should be the date of the conversation at which agreement was reached. Duplicates are submitted to the other person with a request to read the memorandum, correct anything not properly stated, and initial and return a copy. This leaves a copy for the other's reference and file.

Such a procedure has two virtues. Oral discussions between two people may or may not result in the same understanding by both parties. After the pleasantries and sometimes interruptions of conversation, two people may separate without a full and identical agreement of minds. If they think they agree, a written memorandum prepared by one and initialed by the other will show that both, in fact, did have the same understanding of the points covered. If either was not clear or thought otherwise, the written statement is a good tool to reveal that fact. Non-acceptance gives a signal to pursue the conversations further or to abandon them or, in any case, not to act under a false assumption of common agreement.

The memorandum signed by both parties also is a written reminder and permanent record for future reference. If one leaves his post and a successor takes over, the memorandum shows the policy or agreement and may need only oral renewal or confirmation. Likewise, if a new supervisor comes in, the memorandum shows approved current practice until changed.

When such procedures and policies apply to several people on a staff, they may well be consolidated into a loose-leaf book or binder variously known as

Operating Procedures

Standard Operating Procedures (SOP)

Administrative Handbook

Manual orders (MO)
Policy Guide
Handbook

They represent the conventional and agreed-upon policies or ways of handling various situations. Loose-leaf, any one can be easily removed and replaced as policies or procedures are changed.

c. *To change the behavior of the other person.*

Changes in behavior is the truest educational purpose. In authoritarian systems the simplest way often is by telling or commanding. If the speaker has status and authority or otherwise can induce or enforce compliance, new behaviour often can be initiated. If repeated often enough under supervision or inspection and approval and reward, the new behaviour can become habitual. Principles of character, religious and political belief, attitudes, social outlook, and routine modes of behaviour often arise from such sources in childhood. In authoritarian societies, adult behaviour and attitudes may continue to be controlled by persons in authority. This method of obtaining change in behaviour is especially common with children, as parents in most societies have authoritarian relationships to their children.

In democratic societies, mere telling often breaks down and becomes ineffective especially at the adult level among equals. Here persuasion prevails. It may be the persuasion of argument and reasons, of salesmanship, of contagion, or of internal conviction. Presumably the most enduring behaviour changes and attitudes are those based on well-thought-through principles. Certainly in a democracy, adult behaviour is more likely to be consistent when controlled by inner conviction than by unexamined habits.

In the democratic and permissive interview, then, he who wants to induce behaviour changes in another needs to be

skillful in leading him through the necessary mental processess to new insight or new internal conviction. In degenerate or unethical form, this may be skillful manipulation—as when Hitler misled a nation of highly literate people. At its best it is completely above board. One person essentially helps the other go through the problem-solving process or method of rational thinking. New data may be supplied as necessary although most of the data are likely to be known and accepted by the thinker. He is led to see new relationships, come to new findings, have new insights, and adopt new beliefs as a guide to action.

The tools then are : good questions developed in skillful sequences, pertinent data, and appropriate steps in the problem-solving process.

**Tools for Groups**

Tools for larger groups are similar in nature. However, as the numbers of people involved are larger, additional machinery and procedures are used.

A number of methods are described below. These methods differ somewhat by name and definition when used by various conference planners in different countries. They are given definite form here to enable the reader to make distinctions. Regardless of name, it is always important for the user to select the correct tool and adapt it to suit his needs. Rigid and awkward use of a tool is the earmark of an amateur. Flexible and artistic use is characteristic of the professional.

### 7. Small Group Methods

For convenience "small groups" here are considered to be between three and 25 or 30 people, usually 10 to 20.

Informal discussion exists in every culture. Wherever two or more people meet and are at ease with each other, they are likely to engage in informal discussion. The great majority of words spoken are said in informal groups.

**Leaderless Groups**

A great many informal groups and informal discussions have no leaders in any formal sense of that word. A sociometric test might reveal the "natural" leaders even though nobody had been elected or selected. Such groups are usually autonomous and meet because their members like each other. Subject matter is not the reason that leads to group formation. The range of subjects discussed is likely to be very wide. Some of the groups have met for many years with relatively little change of membership.

In recent years adult educators have related themselves to such groups in several ways. One way is to identify such groups and ask them to discuss a specified topic for a particular reason : to explore, to plan, to decide, to assess merit, or to pool their ideas. This type of purposeful discussion is likely to help the group make better use of time than would idle gossip or purposeless talk. Likewise, it may produce socially-significant outcomes.

Directors of adult education often provide such groups with discussion guides which give orientation to a problem, supply pertinent data, and suggest a number of questions and issues to be discussed. If the groups are interested in the same topic, many groups in a community can discuss the same matter simultaneously.

Especially convened groups may also operate without designated leaders. Such an arrangement may serve a number of purposes. Leaderless groups are useful

When it is desirable to stress the basic equality of all group members.

When it is well to avoid setting up status situations which may run counter to the natural leadership.

When natural leaders and/or competent leaders are not

known to the convenor (and for good reason he does not wish to serve as leader).

When the ritual and formality often associated with designated leadership is to be avoided.

When the convenor wants to remain neutral and avoid alignment with any faction.

When all should have an equal chance for leadership.

When it is desired to create an atmosphere of shared leadership.

**Round Table Discussion**

The round table is "a discussion in a group small enough for all to participate and in which all present are on a basis of equality." The convenor may serve as leader or another person may be recognized or appointed leader.

Discussion goes on in round tables when members are equal and no person holds authority over others. Likewise, if members are over-awed by status leaders or are inclined to depend upon the opinions of any experts present, such persons may interfere with discussion.

A round table often consists of the membership of a club but may be fewer. Five to a dozen make a good round table. Small numbers give liveliest discussion and most complete participation. Non-participation rises rapidly in groups above 10.

*When to Use :* A round table is useful when the group members want to discuss a proposition, problem, or common concern with some generally recognized outcome in mind. They may want to explore, listen and react to a report, exchange information on a matter, pool their data, generate ideas, plan an activity, or accomplish some similar purpose. The time required may be from a few minutes to several hours.

*How :* Ideally all participants sit at a round table big enough so that each can see the face of everyone else. They

can sit in a circle in chairs or on the ground although a table gives a convenient place for placing hands, arms, and belongings. With many groups "feet under a table" seems psychologically to support discussion.

In this type and other small group discussion seating arrangements are important. An oval table is almost as good as a round one. Square tables or small tables placed in a square prevent seeing about a quarter of the participants if they are equally distributed. Rectangular and long tables are progressively worse. Worst of all, of course, are people arranged in rows of fixed benches or seated so that most of them conveniently see only backs of heads.

The convenor, leader, or other member of the group has the responsibility of raising the opening question or of setting the problem, of keeping the discussion to the point, and of summarizing from time to time. Discussion flows freely among members of the group. If the members and leaders are skilled in group discussion the talk will not degenerate into a question-and-answer session between the members and the leader. The aim should not be to please or satisfy the leader but to seek the truth, develop consensus, to explore the idea, to plan an activity, or to share ideas.

If a group of 30 or more wants to hold a round table, they may allow a dozen who are most interested to sit in the inner circle with the remainder behind. While anyone may talk, most discussion will be carried on by the inner circle while everybody can benefit from listening.

Occasionally a round table is held on a stage or otherwise before a large membership or mass meeting. Good acoustics are required and every participating member must remember to speak loudly enough for the listening audience to hear.

A radio round table best consists of three ar four participants. A larger number confuses the audience who cannot see

the different speakers and may have mental difficulty keeping them separately identified.

*Why* : Round tables and similar forms of discussion gives every group member a chance to contribute his part. Theoretically all the ideas of every member are consolidated into a group product. Inasmuch as education is an activity, this participation is important.

Collective or group thinking probably reaches its highest efficiency in a small round table discussion. Six to 10 members are enough to yield a rich flow of ideas. All ideas can be considered on merit and fitted as appropriate into the group product. Universal participation builds maximum loyalty and attachment to its decisions. No arbitrary time limits restrict the process. The pace of discussion in small groups is relatively rapid which in itself tends to build morale and keep minds alert. Work can often be finished in one discussion period. Adult educators dealing with small groups can well consider the informal or round table discussion method when any of these benefits are desired.

*Shortcomings* : Critics of group discussion say it is often pooled ignorance. The round table itself utilizes only the knowledge, experience, and intelligence within the group. If all members have essentially the same general and specific knowledge (as tends to be true among members of similar status and background), the group product may be little better than the thoughts of any good member. A homogeneous group is not likely to be richly creative.

These shortcomings can be at least partly overcome by

(a) Making the group heterogenous—that is, made up of persons of different types of experience, knowledge, abilities, viewpoints, and motivations.

(b, Providing additional data from outside the group through advance reading, assignments, films, lectures,

and experts meeting and sharing their ideas with the group.

Round tables do not work well on artificial or unreal problems. They are at their best when dealing with problems of concern to all members. They are not especially good for opening up new areas of knowledge or experience, for instructing, or for habit formation. They vary in ability to induce everyone to behave and think alike. They are good for building morale.

**Seminar**

Good's "Dictionary of Education" defines the seminar as "a form of class organization in higher education in which a group of advanced students engaged in research or advanced study meets under the general direction of one or more staff members of the college or university for a discussion of problems of natural interest." A seminar need not be connected with higher education. The unique characteristics are the composition of the group and the method of problem attack.

A seminar normally convenes in a series of weekly meetings although they can be more or less frequent. A single meeting can be a seminar. The sessions are usually one to three hours in length.

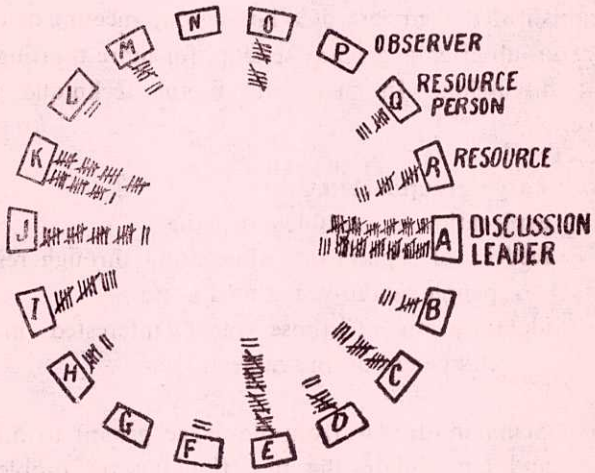
*Who :* A seminar is at its best when its members are deeply and personally involved in a problem or an issue and are under pressure for a solution. Secondarily, they can be a group which have considerable experience in and have done extensive reading on the subject. Their motivation should arise from the desire to advance their thinking, to arrive at better understandings or solutions, or to gain insight into better guiding principles.

By definition beginners or elementary students of a subject can never constitute a seminar. While the members may be unequal in their grasp of the subject and may indeed approach

the subject with quite different backgrounds, presumably each member can make a significant contribution to the discussion.

A seminar often is relatively small—from five to 15 members. Numbers may run up to 30 or so, however.

*How*: Under guidance a seminar uses essentially a problem-solving approach. Normally the members know in advance the problem, issue, or focus of discussion. At most, agreement on the nature of the problem would take only a few minutes. The group members proceed to contribute pertinent data, to project hypotheses, to test them at least in an armchair fashion, and to move toward some agreement, solution, or understanding.




Frequency of participation in a seminar which lasted 110 minutes.

Some effective leaders follow essentially a Socratic method by asking a series of well-thought-out questions which lead the group members to think for themselves. A skillful leader can induce the group to think its way to sound conclusions without any imposition of point of view.

Regardless of exact method or technique, it is the responsibility of seminar leaders to stimulate thought and to

help it develop into progressively refined insights. The method is almost purely discussion led by thought-provoking questions and a minimum of lecturing. Experts can be used to contribute information when called upon but not as speech makers.

Seminar members sit in a circle or around a table so that all face each other.

*Why* : A seminar is a serious educational attempt to move thought forward. The label should not be used for exploratory groups, get-acquainted meetings, or catechetical sessions.

Seminars can grow out of general meetings. Experienced and sophisticated members of a large group meeting can often wisely re-group after a general session for more thorough and relevant discussion. In fact, one useful technique is this sequence :

a. Large group meeting for
exploration of a problem or issue
feed-in of significant information through resource people, audio-visual media, etc.
identification of those most interested in and competent on the subject.

b. Seminar (drawn from the large group) to advance and consolidate the best thinking on problem or issue

c. Seminar return to original large group and (a) act as a round-table, or (b) serve as a panel
to develop the thinking sequentially in a reporting session
to provide for audience participation
to test soundness of seminar's thinking, and
to make further contributions.

**Workshop**

The workshop is a relatively new form of conferring and learning. It has come to be very popular in certain countries as it combines principles of democracy, participation, and self-development with good learning experience.

A workshop is an in-service improvement activity carried on by the group members using the assistance of outside specialists on problems of mutual concern. A workshop is problem centred. Both the motivation and the problem arise from within the group. These are the key characteristics of the workshop approach.

*When* : A workshop situation arises when a sufficient number of people in a similar line of work recognize a common cluster of problems. When enough are ready to collaborate on a problem, a workshop is possible. By definition, a workshop should not be imposed from above. Without full concern and active cooperation of the participants, a workshop becomes an institute.

The workshop began with teachers and is still most common among educators. However, it has spread to many other professions and semi-professional groups : nurses, social workers, librarians, labour leaders, revenue collectors, community development workers, accountants, writers and others.

*How* : Good workshop organization and management require the use of several techniques if maximum effectiveness is to be achieved.

Even though the curriculum of a workshop comes from a group, workshops are seldom organized spontaneously. Usually they are organized by a supervisor or someone at an educational institution. One familiar with the problems of the group is in the best position to help members define and pinpoint them. If participants are geographically scattered, the organizer may systematically interview potential group

members and draw up a list of problems as seen by them. In this survey of problems he needs to be careful and objective and not allow his biases or pre-conceived notions to enter in.

Possibly a better way is to inquire by mail and thereby require each possible participant not only to identify one or more problems but to start to define them. When a sizable number of returns are analyzed, the problems usually fall into several groups. Frequency of mention shows the priority listing.

Usually one problem or a closely related group of problems becomes the focus of the workshop. A suitable future time is set for the group to assemble. Before this time, however, good organizers carry on correspondence with the group members. They are asked to do several things before the workshop starts and in preparation for it. Among pre-workshop activities may be these :

(a) Further define and document the nature of the problem.

(b) Make local studies of the problem and bring data to workshop.

(c) Assemble illustrative materials regarding the problem and bring to the workshop.

(d) Do assigned reading in preparation for the workshop.

(e) Formulate questions and sub-problems to be worked on at the workshop.

If ample preparatory work is done, the organizer knows in advance much about the participants and their problems. A major advantage in this preparatory work is that it allows him to line up the right type of specialists to help with the problems raised. By analysing the problems, he can see whether he needs as resource people psychologists, sociologists, statisticians, reading experts, community organization special-

ists, artists, curriculum experts, economists, political scientists, or what. He can arrange for appropriate specialists to stand by to be called upon as needed in the workshop.

When the workshop meets, members of the group informally discuss their problems, explore common ground, and incidentally become acquainted. While they refresh their thinking, they build common bonds for moving ahead. Usually within a day they are able to form sub-groups for further study. The entire group maps out its own agenda and procedures and takes charge of its own progress. Sub-groups also meet and work on their special problems. As expert help is needed to provide information, give advice, lead thinking, or assist in any other way, the groups ask the organizer to bring in the appropriate persons. These do not make speeches but answer questions and contribute as needed and asked.

The outcome of a workshop is a better solution to a problem, a new course of study, a new syllabus, a new plan, new procedures, or an improved understanding of a situation. The group is not handed the solution; the members create their own. At the end sub-group products are shared with the whole group and everyone is richer. If the problem is a continuing one, the group can keep in touch and assemble again periodically to continue work on it.

*Why* : Workshops are among the best of small group procedures. They are based on high motivation, intensive participation, self-improvement, creativity, and sound psychology. Workshop meetings provide the highest form of learning.

The chief shortcoming is that not all people are properly oriented and motivated to do well under the conditions of freedom provided by the workshop. Nobody makes assignments to others. The success depends entirely upon the self-motivation of the participants. If they have not been used to freedom and self-discipline before, they may require considerable experience with other forms of discussion and conferencing

before they can succeed in a workshop. Considerable maturity and self-leadership are demanded.

**Working Conference**

When workshop techniques are used by members of an organization to explore problems and suggest solutions, the pattern is often called a working conference. The working conference is especially useful when delegates of several local branches of a state or national organization meet to pool their experience, define their problems, provide data, formulate and project solutions, and pass the results on to higher levels within the organization. Community development workers or political party officials can meet at district level in a working conference. Many such conferences could go on simultaneously or over a period of time with reports passed on later to a state working conference.

Working conferences operate best if leadership is provided from within the group. Outside or higher level leaders too easily dominate. Groups of peers under their own leadership work on their own problems. Work conferences can utilize a number of small group techniques and develop widespread participation and deep involvement of their members. In these respects they are high on the list of educative approaches even though outside experts and specialists may not participate. Work conferences are focused on problem-solving and build morale through the achievement which participants feel.

## 8. Large Group Methods

The boundary between small and large groups is not fixed. Ordinarily number beyond 35 to 50 are considered large groups with no upper limit. Some people, however, would classify groups larger than 1000 as mass meetings.

As methods of dealing with groups depends partly on their size, large group methods differ somewhat from those

effective with small groups. Many methods, however, apply to both sizes.

The most widely known large group methods provide primarily for a one-way flow of ideas. However, modern methods of conference planning build in much two-way flow as can be seen in some of the following methods.

**The Lecture and Forum**

A lecture is an organized oral presentation of facts and principles. A forum is a lecture followed by some form of audience participation. The lecture is probably the oldest and most widely used means for communication of ideas and transmission of knowledge. Forums were also used in ancient times although they have acquired new popularity in the last generation.

*Pros and Cons.* When well prepared and interestingly presented lectures, are an economical way of informing large numbers of people quickly. Among mature readers, who can read much faster than speakers can talk, lectures may be used when the information is not available in print or in quantity.

Lectures may also be used to stimulate thinking. However, audience interest often deteriorates faster with a single speaker than with multi-speaker forms of discussion. Aside from these two functions, lectures are useful in opening topics for conference discussion, in setting the tone of an occasion, and when skilfully done, in inspiring an audience to feeling or action.

Inherent in the lecture method is the risk that the speaker be poorly prepared, inaccurate, biased, and weak in scholarship. As the lecture is apparently simple and easy to stage, it often does not sufficiently challenge the speaker to make adequate preparation. Consequently, a great many lectures have a thin content of ideas and facts, are poorly organized, and are uninterestingly presented. If effectively delivered, a

lecture may seem to carry an authority which it does not have in fact. Or if delivered with flattery, wit, and platitudes, a lecture of thin content can please an audience without stimulating much thought. Lecturers often acquire a feeling of infallibility which is not justified. Unfortunately, this feeling often is transmitted to the hearers.

The lecture ordinarily requires very little mental activity of the audience. Because thinking is hard work, people often accept the lecture when other methods would be better. Without participation the audience develops little commitment to action. Experiments have shown that a lecture often makes little or no difference in behaviour of the hearers. As a result the lecture often is one of the most sterile ways of communicating knowledge, of stimulating minds, and of interesting people. It is educationally weak. A masterful speaker can move nations. A great many lecturers are mediocre bores.

*How to Use.* Because of the above weaknesses and others, it is recommended that the lecture be used sparingly and carefully. Yet the lecture does have a useful place in conference planning.

Ordinarily the lecturer should possess more knowledge about the subject than anyone present and a great deal more than the average listener. The conference planner should seek to obtain the best possible person on the subject who can speak authoritatively and encourage him to make adequate preparation. Speakers usually like to be briefed on the characteristics of the audience as well as on the nature and length of the talk expected of them. Persons invited to lecture should look upon their invitation less as an honour than as a serious responsibility for which they must prepare.

To be of maximum worth, the lecture needs to be intensively and comprehensively prepared (researched and organized). The content needs to be closely related to the

interests of the hearers and presented in a vital manner. Adequate fulfillment of these requirements is time-consuming.

Whenever possible the lecture should be accompanied or followed by a question or discussion period using various techniques described in this chapter. While the lecture may have great entertainment, inspirational, or fact-giving value, when used alone, it often is the most wasteful and inefficient of educational methods. The conference planner's job is to design discussion methods around the lecture in such a way that maximum benefits will result.

*Variations* : Several variations are useful to overcome some of the weaknesses of the lecture. *The Lecture-Forum* or *Open Forum* is a lecture followed by audience participation. The audience may ask questions or contribute ideas of their own in accord with rules agreed upon in advance and announced.

In the *Lecture-Panel*, a few informed people discuss the lecture before the audience afterward. The lecturer may or may not be present. The panel may carry on 30 minutes to an hour or longer.

After the lecture, a *Question Panel* or *Listening Panel* may interrogate the speaker on further points, seek clarification, and challenge any views he may have expressed.

A *Forum Dialogue* uses two well-informed speakers who converse on a subject before an audience. The audience participates afterward. Or, one may act as chairman and use agreed-upon questions to interrogate the other. Each may present new material. This dialogue presents the subject by a two-way question-and-answer method rather than by a straight lecture. The entire topic may be treated by the speakers first or they may clarify their views on each phase and invite audience participation before going on to the next phase.

In the *Lecture-Round Table* pattern, audience breaks up

into groups to continue the discussion in separate rooms or places. Each group has its own leader. The speaker may visit each group briefly in turn for answering questions or supplying facts. Round tables may meet immediately afterward or a few hours or days later. If they meet later, it is well to have written questions handed in before the assembly adjourns in order to capitalize upon the immediate stimulation of the lecture. The consolidated questions give the group leaders a basis for subsequent discussions.

In the *Question-Lecture* discussion, the informal discussion precedes the formal lecture. Questions may be written out in advance by members of the audience, by buzz groups, or by round tables and answered by the lecturer. In this way they set the "curriculum" of the lecture and use the speaker as a resource person to help with their problems. The usual participation can follow the main speech.

All of these devices encourage the lecturer to make adequate advance preparation.

*Forum Management.* The chairman of a forum plays a key role. He needs to decide in advance, either alone or with the forum planning committee, exactly what procedural rules will be followed. These may vary widely according to the size of audience, their sophistication in discussion, and the purposes to be achieved. The rules also need to be announced when the meeting starts.

Audience participation may be limited to questions directed to the chairman who, unless everyone has clearly understood them, should restate them for the audience and speaker. If the speaker heard the original question, this procedure gives him a moment to formulate his answer. If participation is limited to questions, the maximum benefits can be obtained from the speaker.

If comments from the floor are also allowed, the audience has opportunity to supplement the discussion. Time limits of

two or three minutes may be imposed in order that a maximum number have opportunity to participate and that long-winded speaker normally responds only to questions. By not responding to contributions, he avoids clashes of opinion. Questions may be both asked and answered from the floor. This period can become a free-for-all although it should be conducted under strict rules courteously applied.

The chairman, through his personality, must be *in charge* of the meeting from the first. He announces the procedures and limitations on participants and insists that they be adhered to strictly. By assuming pleasant but positive control of the meeting from the beginning the chairman lets it be known that he is in charge. Skill in handling an audience comes with evaluated experience. In time he can develop techniques for using the persuasive power of appeal to fair play, of humour, and of good will. Forum chairmanship is an art which can be learned through the careful study of experience.

**Symposium**

A symposium is a series of short, prepared speeches representing different points of view on the issue or problem under discussion. Symposia are conducted when more than two persons are needed to present a well-rounded informational picture. Symposia members may represent divergent, parallel, or unrelated interests or points of view.

A symposium usually consists of three to six persons each of whom knows something about the subject. The chairman often is not a member of the symposium. However, if he is acquainted with some facet of the subject, he can participate as a member.

Members are usually selected because

a. They know different things about the topics.

b. They represent different disciplinary approaches—e.g. artist, historian, sociologist, psychologist, etc.

c. They have had distinctly different experience with the subject or have different points of view.

*How to Use.* Symposia are planned to fit into the available time. Individual speeches may range from a very few minutes to a half hour or longer, Usually members are given equal time although this need not be so.

Participants face the audience. Speeches may be read or spoken although the latter usually is much more effective.

The primary purpose of the symposium is to transmit knowledge. Speeches should be thought out in advance and presented in an organized manner. The practices for good lecture preparation and presentation apply here.

A symposium may also stimulate thinking especially if information and opinions are not in agreement. In a pure symposium there is no particular attempt to harmonize the views of the different speakers. Each presents his facts and opinions as he sees them and lets them stand. There is no attempt at debate, rebuttal, or attack and defence of statements made. Each member of the audience is left free to accept or reject whatever he will. However, the symposium often moves into a panel or some audience-participation form of discussion to achieve other purposes.

The speakers selected should collectively treat the subject in a balanced and well-rounded manner. The symposium falls short of its rich possibilities if the speakers line up on one side or two sides of an issue.

If the chairman knows thinking of the participants well, he may clearly define or specify in advance the boundaries of their speeches, let everyone know the assignments of all, and give them ample time to prepare. If it is convenient, this division of subject and agreement on procedural rules can often best be done in a pre-session meeting.

Subjects may be divided into whatever ways seem intelligent : (a) by chronology, (b) by different points of view,

(c) by special interest or discipline, (d) by current common solutions, or (e) by other functional or logical divisions.

*Variations* : If it is desirable to seek agreement or a common ground, other discussion techniques may be employed. Symposium members are often willing to open the meeting to questions from the audience for further elaboration and clarification.

With large audiences, after the symposium speeches, the members often move into a panel discussion. Or, their speeches may be discussed by a listening panel.

A symposium-panel-audience participation sequence is common in smaller audiences. The symposium-buzz session is also frequently used.

A symposium requiring several long speeches can be divided into a series of separate meetings. If chaired by the same person and closely spaced, continuity breaks can be minimized. Meetings may be on successive evenings or in successive weeks.

The *chairman* opens the meeting, introduces the general topic, indicates the procedure to be used, and introduces the speakers. He may introduce each one as he is due to speak or he may introduce all at the beginning and let each arise and speak without further introduction. If the speakers are strangers, the audience often forgets the speakers introduced as a group unless there is a printed programme.

The chairman may attempt to summarize if there is any agreement in thinking.

*Pitfalls :* (a) A symposium may disappoint those who want agreement and unity of thinking.

(b) Unless areas of the subject have been clearly defined, or agreed upon in advance, there is

considerable likelihood of irrelevancy and duplication, especially if speakers have similar background.

(c) Speeches are only as good as their preparation.

(d) If the time limit on speeches is shorter than the participants would like, they may have to discipline themselves to brevity or submit to being stopped by the chairman.

(e) A symposium is not likely to be as good as a panel in stimulating the audience.

*Why :* A symposium is used to supply information, judgments, and interpretations. Collectively, several speakers are likely to avoid the bias and limitations of one and usually provide more interest.

Information in symposium presentations usually can be better organized than in panels and other informal methods.

A symposium is usually easier to organize and conduct than a panel.

*Illustrative Uses :*

1. Literacy Work
   Recruiting a Class
   Materials and Organization of the Class
   Methods of Literacy Instruction
   Maintaining Interest
   Ideas for Enrichment
   Follow-up Activities
   (Each symposium member can, in advance, supplement his own experience with inquiry among other workers in the field )

2. An instructional symposium in a camp, institute, or other training programme.

3. My views on Objectives for Next Year (After determining that the symposium members have different views and will not materially duplicate each other).

4. Summary reports of progress in literacy, community centre development, libraries, health, and other aspects of social education.

**Panel Discussion**

A panel is a presentation in which a small group discusses a topic or issue without making prepared speeches. It may include audience participation but need not. A panel is much like an informal committee meeting overheard by an audience.

An *exploratory panel* can be used to examine the nature and dimensions of a topic or problem. It may also identify and clarify issues and map out elements of a problem for later study.

A *problem-solving panel* brings the collective information and judgment of a small group into focus on a problem. The panel thinking together should be able to formulate a better solution than could any one individual.

An *evaluative panel* assesses the merits of an experience and plans modification of subsequent action.

Panels may also be established to serve other similar purposes.

Except on the simplest topics or problems (or those to be treated in elementary ways), panel discussions usually require 45 to 90 minutes with 30 minutes more if there is audience participation.

*Who :* A panel usually consists of three to six members. Two usually do not provide enough wealth of experience and more than six make an unwieldy panel.

The chairman may participate as a panel member if he is familiar with the subject ; otherwise he may want to confine himself to "running the show." Panel members are usually selected because :

(a) They have extensive information or experience

regarding the problem or topic,

(b) They are representative of the diverse interests within a larger group,

(c) They are able to present their thinking clearly, or

(d) They have specialized backgrounds of importance to the consideration of the topic—practical vs theoretical, different phases of the topic, different disciplines, etc.

*How :* A panel usually sits in a semi-circle about a table with the chairman near the middle. All members should be able to see each other easily and the audience should see their faces. Panel members can be scattered among a larger group sitting in a circle. In any case, the panel should be close to the audience if at all possible.

The chairman should orient the audience by outlining the problem or situation with a few well-chosen sentences. He usually initiates discussion with a question. One or more members may spontaneously respond. There is no set order of speaking. A panel is a guided conversation before an audience.

Nobody makes a speech. Informality is the rule. All talking is extemporaneous. Cooperative group thinking moves forward through questions and responses, inquiries and answers. Any panel member can ask questions of the group or of specific individuals. Anyone can respond whenever he has an idea to contribute. Brevity, specificity, and clarity in language give maximum opportunity for all to contribute their best. Courteous members take care *not* to monopolize time and attention. While the chairman gives general guidance, all members are responsible to see that the rules are observed.

Most panel discussions are a cooperative search for truth—for the best answer—for common ground. Panel

members seek to build a unified edifice. By words, attitudes, and gestures, all members should build on the strengths and truths that others may utter. Good points are agreed to and supported. Weak points can be ignored and dropped by the wayside. If there are differences of opinion, they are respected and examined for whatever merit they possess. While panel members may find themselves in considerable agreement, they are not a decision-making body. Therefore the panel has no pressure to carry any discussion to the point of decision or conflict. Its purpose is to bring out relevant information and examine its usefulness and to stimulate the audience to join with them in the problem-solving process. With such objectives, there is no place for debate tactics, destructive comments, or personal attacks.

After a definite pattern of ideas has been developed by the panel, members of the audience may be invited to participate with questions or contributions.

**Chairman's Responsibility :**

1. To open the meeting, to orient the audience, to announce the procedural rules, and to introduce the panel members.
2. To maintain a flow of relevant conversation by asking appropriate questions and making transitional statements.
3. To help keep the panel discussion "on the track"—by skillfully bringing wayward discussion back to relevant points.
4. To help discussion progress sequentially.
5. To open the discussion to audience participation (if that is a part of the plan), indicate ways of participation, and to chair the meeting.

6. To bring the discussion to an orderly close after the subject has been adequately developed.

7. To summarize or call on another pre-notified person to do so if a summary is useful.

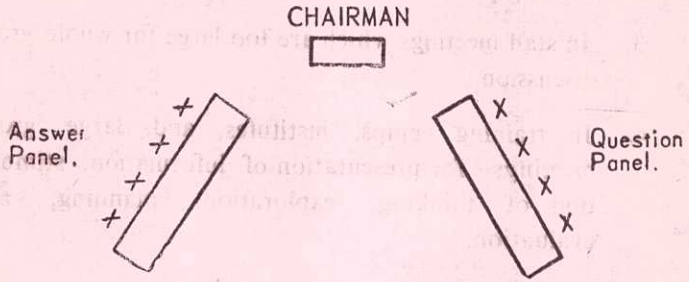
A *planning session* is useful. It permits the panel members to get acquainted, to define the boundaries of their subject, to map out a progressive sequence of points to cover, and to list some major questions to be considered. Thereafter each member and especially the chairman should think enough about the subject to develop additional questions. Each member can bring a refreshed headful of ideas, points, facts, and illustrations to be drawn upon as needed. Sub-divisions of the topic *are not* assigned to individual members. During the real discussion all members are expected to look at the total problem (or the phase under consideration) and to react to it from their own experience and background. In planning, the panel *should not* hold a preliminary discussion of the subject itself. They should confine their plans to procedural matters. A rehearsal is likely to kill the spontaneity desired in the main meeting.

*Variations :* The panel can be combined in various ways with many other forms of discussion : symposium-panel ; panel-buzz session ; buzz-session-panel ; panel-audience participation; lecture followed by panel etc. Design your own to fit the occasion.

*Listening Panels* scattered in an audience may be instructed to listen to a series of speeches or a symposium and later be called upon to give their reactions. Or the listening panel may keep its ears open for a whole day or week and at the end may summarize its findings or impressions about what people were saying.

*Question-and-Answer* panels may be set up. One panel may ask questions ; members of the other may provide the answers. A double panel—"experts" and "the public"- may

be arranged with the discussion adroitly shifted by the chairman between the two groups.




*Pitfalls* : A good panel discussion may not materialize

1. If pre-planning has been inadequate.
2. If members have not had sufficient time to collect their thoughts about the subject.
3. If participants mistake the panel for a symposium and make speeches.
4. If members are bigoted, have rigid personalities, and cannot let their minds interact freely with others—if they cannot cooperate in the search for the best answer.

*Why* : Several heads are better than one. The panel is a useful technique for pooling the intelligence of the most informed people to the solution of a problem in the presence of others who may learn from experience. A panel is useful where one person does not know all the answers—where several people have important contributions which they can make to a problem.

*Illustrative Uses* :

1. With Block Samiti—to explore reasonable targets in plan formulation, to assess progress of Social Education or Community Development, or to develop plans for solving some problem.

2. In village meetings—to get the opinion of several leaders before the entire village for discussion and making plans.

3. In staff meetings which are too large for whole-group discussion.

4. In training camps, institutes, and large group meetings—for presentation of information, stimulation of thinking, exploration, planning, and evaluation.

**Debate**

The debate is an ancient form of discussion which for many generations was widely used in educational circles. As the process of education has become better understood, the debate has declined as an educational method.

A debate is a formal argument between two or more people conducted according to agreed rules. The protagonists and antagonists support and defend fixed positions. Each side attempts to prove that its preconceived position is right and the other wrong. Problems cannot be debated. Only propositions, resolutions, issues, and alternatives are subject to debate.

The fundamental differences between debate and other forms of discussion lie in the attitudes and purposes of the participants. Debate is intentional and assertive. Discussion is reflective and a cooperative search for the best solution. The participant desires to weigh the merits of each possible solution regardless of any personal interests he may have in alternatives. A debater selects a single solution, marshals his arguments to support it, and is not open-minded to other points of view. Debate is rigid and admits only data favourable to one side. Discussion is flexible and admits all relevant data on their merit.

Debate has a place in parliamentary situations and certain other spheres of public and private life. However, in both

theory and practice, open-minded discussion of a problem and proposed solutions has a far better chance of creating the best possible answer. Problem-solving requires more social engineering than a duel of wits.

"Problem-solving debate" modifies the usual pattern somewhat. It consists of speeches which analyse a problem, followed by speeches giving contrasting answers or solutions. This phase is followed by a question period and final speeches which evaluate and seek areas of agreement. The success of this modified form of debate depends heavily upon the ability of the participants to assume a problem-solving rather than a defensive attitude.

Because debate normally is not concerned with cooperative solution of the problem, it has little place in education. Its most useful place is in the final stages of reaching a decision where two proposed solutions seem equally worthy. If both alternatives cannot be carried out, a debate can help sharpen the merits and weaknesses of each so that the decision-makers can make their choice.

**Institute**

An institute is "an arrangement for lectures and discussion sessions on a limited subject or theme, usually more intensive than *conventions* or *conferences* but less elaborate than workshops." An institute is relatively formally organized with a considerable amount of participation reserved to the sponsor or "those on the programme."

An institute is organized when considerable information is to be disseminated to a group with provision for enough questions and discussion to assure understanding. The group is essentially the receiver of the information and the staff the disseminator.

Time required usually is one, two, or three days although institutes of two weeks to a month are sometimes organized.

Institutes are usually arranged for specific and identifiable groups which need to receive information too complex to be disseminated in writing. Faculties, community development cadres, business and industrial employees, governmental servants, and military units are typical groups for the institute form of conferring.

*How to Use*: Institute programmes are planned ordinarily by the sponsors who usually possess the information to be disseminated. Oral presentations, audio-visual media, reading assignments, and demonstrations may be used to communicate to the audience. Opportunities for questions, clarifications, discussion, commitment, and morale building should be provided for the audience.

Lecturers or dissemination media are usually followed by questions and discussion. The pattern may be repeated with variations through the institute. Sometimes two cycles are held each half day although evening sessions are also common. Speakers may also appear for luncheon and dinner.

Large institutes of 50 people or more take on the nature of a convention. Attendance is usually well controlled in institutes because the management usually wants to be sure that specific people are exposed to the programme.

As communication is largely between the disseminators and the receivers, seating arrangements may be more formal with the audience in rows and the staff facing them. However, if the group is small and facilities permit, more informal seating is desirable. Certainly in discussion periods, it is better if members of institute groups sit so that everyone can see the faces of others.

*Why :* Where the communication flow is intended to be primarily one way, a well conducted institute is an effective instrument. It combines the lecture and mass media with techniques for inducing the receivers to participate and develop understanding. An institute is not normally used as a means

for the staff or management to learn from the audience although two-way flow techniques can be introduced. However, as they are introduced, the institute begins to change its form and nature.

## Public Hearing

A public hearing is an open meeting conducted usually under government sponsorship at which one or both sides of an issue are presented and discussed. It may also be a meeting at which suggestions or solutions to a problem are sought.

The need for public hearings arise from several occasions. A hearing at which an accused person or an official answers charges is often a legal requirement in judicial processess. Nominees for high office often have to appear before committees to reveal their views before appointment. When a public problem or crisis exists, governmental officials may invite expert witnesses or suggestions from the public through open hearings. Before budgets are adopted, public hearings are often held to encourage the expression of citizen opinion. Hearings provide an excellent strategy for the formulation of public policy. They are particularly effective if those concerned approach the problem openly and let the policy emerge from the discussion of various persons and groups.

*Sponsorship* : Most legal hearings are held before a member of the judiciary. Leadership in public hearings is often taken by legislative committees, regulatory bodies, or other governmental officials. While theoretically, anyone in a free country can arrange a hearing, in common practice hearings called by public bodies or officials have more acceptance and status than those arranged by private bodies.

*How* : Policy-formulating public hearings are announced and publicized well in advance. Experts and interested persons and organizations may be especially invited to present their points of view. If the hearing is on an open question or problem, many points of view and possible solutions may be

presented. If a two-sided issue is under consideration, the chairman should be particularly careful to be fair to both sides and give all a chance to be heard within the rules and time limits announced before the hearing starts. If speakers need a longer time than is permissible, they may be invited to leave papers, extended written remarks, or briefs. Often the chairman or some other official on the platform asks well-thought-out questions and elicits additional information from the speaker. When well done, public hearings get into the record all significant points of view and much information.

The audience at a hearing does not constitute an action group. Usually the sponsors have authority to act and do so later after considering all the information and attitudes expressed. Inasmuch as the hearing is concerned with a full expression of public attitude and information, it can be a good learning experience for all concerned—even the onlookers.

*Why* : The public hearing permits every citizens to have a chance to express his point of view and make his voice heard. The old Roman forums provided hearings for the citizenry. Whether the final decision goes for or against the views expressed, the participants can all feel that they have had a hand in shaping policy. At its best a public hearing is a first-rate exercise in problem-solving. Under poor leadership with little planning, it may degenerate into self-serving, publicity-seeking, and acrimonious debate. Properly used, the public hearing has an important role in democratic decision making.

**Convention**

A convention is an assembly of representatives or delegates from local branches of an organization. The delegates meet to discuss common interests, to explore and act on problems of common concern, to conduct business, and to plan the future course of action for the organization. They usually last from a day to a week.

*Who :* Some conventions are open to all members of the organization. Others can be attended only by official delegates although member-observers may be allowed to sit in the balcony or in other space reserved for them. Delegates are usually selected according to the number of members in each local branch unless each branch is allowed the same number. Sometimes the convention is made up only of branch officers. At other times delegates are elected by local branches.

Conventions usually are large meetings presided over by the organization's president or other high officer. They may, however, be as small as 20 or 30 people.

*How conducted*: Details of programme are chalked out in advance by the officers or a convention committee. The programme often consists of several thought-provoking or direction-pointing addresses by major officers or outstanding personages. Addresses may be interlaced with symposia, panels, debates, film show, entertainment, and a variety of small group activities. Small groups may be formed on the basis of delegate interest, function, or committee assignment.

A part of the convention time may be set aside strictly for business meetings which may be open or closed to observation by general organizational members.

*Why :* Conventions serve essentially the legislative or policy-formulation function of organizations. Important by-products are inspiration, morale building, and the education that comes with the exchange of information and interplay of opinions. The educational values depend largely upon the degree and amount of delegate participation provided. Conventions are often open to manipulation. Leaders must build democratic procedures into convention plans and delegates must insist on their rights of speech and participation if manipulation is to to be avoided.

**Mass Meetings**

Mass meetings are occasional large crowds of people assembled to receive information, inspiration, or direction from

a leader or official. They usually last a half day or less and ordinarily provide only a one-way flow of communication. Any return response is usually of an emotional type—cheering, mass, vocal or physical participation, or other signals of approval, anger, or support, to which the leader is responsive.

Mass meetings often arise out of historic movements, events, or incidents which arouse the feelings of large numbers of people. Skilled leaders or speakers, able to focus the thinking and feeling of the masses, can shape attitudes, build follower support, and inspire to action. Locale, timing, lighting, music and sound effects, public address systems, dramatic performances, parades, and processions are among the ingredients which can be combined by a skillful leader to give a total impact.

One danger of mass meetings is that they can degenerate into mobs and mob action. While mass meetings undoubtedly affect behaviour, they run the risk of minimizing rational thought and miximizing emotions. They are not notorious for sound problem-solving or resolution of tensions.

### 9. Participation Techniques

The educator in a democracy is interested in inducing maximum participation of group members. He knows that learning is an activity and that maximum learning takes place when participation is highest. The following techniques are useful in getting more participation and deeper involvement.

#### Buzz Groups

About 20 years ago Donald Phillips, then director of adult education at Michigan State University, perfected a technique for getting total participation in groups of nearly any size. It requires the total group to break up into small groups of six members each and discuss a matter for six minutes. He labeled it "Discussion 66." Others called it "Phillips 66.,' "Buzz groups" comes from the sound in a roomful of groups busily discussing.

*When to Use*: Buzz groups are useful whenever it is desirable to have complete participation or the contributions of all members of the group. Here are some such times :

1. After a speaker, symposium, or panel, to agree upon and screen the important questions to ask.
2. After a presentation to formulate the best thoughts or reactions of the group.
3. To discover a group's needs, desires, or thinking.
4. To obtain ideas for programme building.
5. To evaluate ; to assess the merits of the parts of a programme or a demonstration.
6. To nominate candidates.
7. To think up better solutions to try.
8. To make suggestions and recommendations.

The method can be used in a schoolroom, an auditorium, a great hall, or out of doors. All members of a group of any size can participate. Buzz groups have been used with audiences of up to 2,000.

*How :* A. The chairman asks the total group to break up into small groups of six each. Audiences which have never done this before need help or the groups will be irregular in size. If the people are seated on benches or in fixed rows, the chairman (with helpers in large groups) can pass through the audience and ask (and show) alternate threes on odd-numbered rows to turn facing the three in seats directly behind them. With movable chairs or groups seated on the floor, groups of six can be formed by turning and huddling together. The members of each group should lean forward so their heads form a rough circle.

B. After groups are formed, the chairman announces the *single question* so clearly, concisely, and well-worded that specific, single-statement answers are required, e.g.

1. What is the most important question you think

should be asked of the speaker ?

2. Who should be nominated as secretary ?
3. What topic would you like to have discussed next week ?
4. What disease do you want the lecturer to talk about first ?
5. What problem do you have most trouble with in your field work ?
6. Do you agree or disagree with the recommendations of the speaker ?

Only one main question should be asked. Sometimes the groups can be asked to formulate two answers—a best and second-best answer.

C. The chairman then instructs the group in procedure.

a. If strangers, they need to introduce themselves around the circle by name and place.

b. They pick a chairman who encourages every member to speak around the circle.

c. They pick a secretary-spokesman who records each person's ideas and the final agreed-upon idea.

d. They go around the circle with each person answering the main question in one sentence.

e. After all have expressed their best ideas in a sentence, they continue discussion in an effort to agree on the best answer.

D. The chairman announces that they will have only six minutes to finish their discussion with a warning at the end of five minutes. While six minutes has proved to be best for most questions, occasionally four or five or seven or eight minutes may be allowed according to the nature of the quesiton. Time pressure is important to induce concentrated use of time. The

time should be extended only when the chairman is very sure it is necessary.

E. At the appropriate time, the chairman blows a whistle and announces "Finish in one more minute !" When time is up, he stops the discussion decisively.

F. Spokesmen report. If there are 10 or fewer they can report from the floor by giving in one sentence the findings of their groups. This can be in rapid-fire order or there can be time for discussion. If a question is addressed to the speaker, he can answer it on the spot. Each group is taken in turn. Reports can be written on the blackboard as a list, as agenda, or otherwise tallied and made use of in any way indicated by the nature of the question.

If there are only a few spokesmen, they can come to the front of the main body and report as an informal panel. Discussion may be expanded as advisable.

If there are more than 10 or 12 buzz groups, the spokesmen can be pulled away to another room and themselves formed again into a second round of buzz groups. The main body can go on to other business. Later spokesmen from these groups can report as a panel to the main body.

This hierarchy can be built up through several layers according to the size of the total audience. Each level can distill the best thought of the preceding buzz sessions. For example :

An audience of 1200 can form 200 buzz groups.

The 200 spokesmen can meet in 33 new buzz groups.

Their 33 spokesmen can meet in six groups.

Six final spokesmen can report as a panel to the main body.

G. Notes from recorders can be collected and consolidated if the entire richness and range of thinking is desired.

H. If time permits, minority reports or "second choices" can be allowed.

*Usefulness :* This technique can provide 100 per cent participation if there are no more than six in a group. Six is a group small enough for timid members to speak up. In fact, the would-be non-participator feels a pressure to participate. He is conspicious in his failure to speak. The circular discussion in the first go-round likewise stimulates each person to speak.

The reporter has a responsibility delegated by the group. Even timid members will perform this role.

The technique is a great time-saver for the entire group. It needed few minutes to organize the groups and the six minutes for discussion. The contributions of all have a chance to be thrown into the hopper. No time is lost in sending groups to various rooms.

The small group screens out the irrelevant, the nonsense, and the poor ideas. The idea reported is likely to be the best in the group and command the allegiance of all the members.

The small group minimizes personalities inasmuch as the spokesman is speaking for the group and not any individual. Autocratic group control is minimized.

The recreational needs of the group are at least partially met by the activity of getting into small groups and in discussion. They can all feel that they have had an active part.

The time limit and element of between-group competition encourages constant application to the problem at hand.

Buzz groups help develop leadership skills at the lowest level by providing numerous opportunities for practice. The technique fits completely into the democratic philosophy and help keep patterns of hierarchy under control. In a short time the technique becomes a favourite of conference planners.

**Circular Discussion**

Circular discussion is a polling technique for giving every member a protected opportunity to contribute to the group discussion.

The technique is used when

(a) the contributions of all members are desired.

(b) some members are timid and others are overly-aggressive in getting and holding the fioor.

(c) the ideas of all need to be on the agenda or in the summary.

**How to Conduct**

(a) Group members sit in a circle.

(b) A brief, clear, single-target question is announced.

e.g. "What price do you think we ought to charge ?"

"Which of the ideas do you think is soundest ?"

"What has been your experience in this regard ?"

(c] Start with a volunteer. Then call upon each member around the circle in turn, clockwise, until each has had his chance to speak.

(d) Each person has the privilege of

1. responding within the time limit by bringing out new ideas, combining ideas already given, or commenting upon previous answers.

2. Passing

(e) There are no interruptions, each person can speak when his turn comes.

(f) Go around the circle again to give those who passed the first time an opportunity to speak.

(g) Careful recording of all comments will provide adequate background for arriving at general conclusions.

*Why* : People vary widely in aggressiveness and timidity. Some people will never talk even in small groups without sensitive leadership and encouragement. Circular discussion is a technique which gives each person time which cannot be infringed upon by others. Under these circumstances even the most timid are likely to make their contribution. Circular discussion is based on the assumption of equality.

**Role-Playing**

Role-playing is "the assuming, either in imagination or overtly, of the part or function of another or others ; originally used by G.H. Mead as a tool in the philosophical analysis of personality and society, the concept of *role-playing* now has important theoretical and practical applications in psychotherapy, group dynamics, and education." (*Good : Dictionary of Education*).

Role-playing is play-acting. It is drama without a written script. A situation is given, and each person is given his "role," but he is not told what to say. He says whatever seems natural and acts accordingly. Other people are also saying what comes natural, so he is continually presented with situations in which he must make spontaneous responses "in role." Because of the unexpectedness of what he hears, he feels an emotional reaction somewhat as if he were the character he plays. What he says and does grows out of his emotional response as much as out of intellect. Role-playing thus comes closer to reaching the whole person than do types instruction or practice that touch only intellect. We are not only intelligent beings ; we are also emotional beings. Sometimes our emotional reactions are contradictory to what intelligence dictates. Moreover, much of our behaviour is beyond our conscious direction. We never "see ourselves as others see us." Just to

hear ourselves on a tape recording is often a humbling experience. We can judge our effect on others only by our observation of how others react to us ; and from the reports of our friends, who are likely to place friendship above honesty.

Behaviour is less easy to analyze than are physical things. Yet behaviour is what the educator is working with. His primary instrument is himself and his own behaviour. With these he tries to change the behaviour of others; to induce them to come to literacy class and to learn while there ; to start new organizations and develop the kinds of behaviour that will keep the organization alive ; to develop habits of reading and following written instructions systematically so that the door is opened to the whole range of new techniques for improving agricultural production and living conditions.

Yet use of self and behaviour as an instrument of change is very little understood. Traditional education has focused on intellect. Behaviour—use of knowledge in daily life—has been largely ignored. It is what the teacher teaches about but does not (commonly) teach. The educator must thus pioneer. The behavioural technique most used by educators—the lecture—is found singularly weak in bringing about the desired behavioural changes in others. Because he has never experienced other types of behaviour—he has never seen his teachers use other methods—he himself does not know more effective ways of behaving. He must therefore experiment with and analyze behaviour ; then practice new behaviours until they become enough of a habit to carry over to real life. To do this, he must have opportunities to see and "experience" behaviours that have been found eflective by successful workers. Role-playing helps him gain this new experience.

*Uses.* Role-playing can be used for

demonstration
practice
evaluation and diagnosis

experimenting with new ways of doing things

emotionally projecting one's self into another's feelings

*Demonstration.* Suppose you are teaching a group to become literacy teachers and want to show them a literacy method. You want to do more than *talk about* it. You want actually to show it. Yet you may not have time to take the student teachers out to a class of illiterates being taught by the method. Furthermore you want them to have a deeply involved experience with the new method—not merely an emotionally detached observation. So you say to them : "Imagine that you are illiterate. You cannot read and write. I will be a literacy teacher, and I will teach you how to read and write."

You then proceed to teach the group exactly as if they were illiterates learning to read and write by this particular method. In role, they speak and act as they would if they were illiterate. This is role-playing. (The above demonstration is most effective if you teach an alphabet which is foreign to the group. But they need to be reminded that there is some carry-over from previous alphabet-learning and study habits so that actual illiterates will take somewhat longer to learn, and may need more encouragement.)

Role-playing is better than simply showing how the method is used. By role-playing the method, you take it in the exact sequence of a real situation. The student-teachers get some of the feeling of being students on whom the method is used. In particular, they get the emotional reaction that comes from praise or criticism, which gives them some insight into the pros and cons of these stimuli. They also get some insight into what constitutes praise and criticism.

In social education, role-playing can be used to demonstrate such things as :

* discussion techniques

* teaching methods
* village canvassing
* how to approach villagers
* how to handle types of situations likely to arise, such as factionalism or negative reactions to family planning or vaccination.

*Evaluation and Diagnosis.* Before trainees are put into the field, you like to have some idea of how they will perform. You want to see where they may have misunderstood and where their weaknesses are. You can set up the situation they are likely to encounter and role-play it. This shows you how well the student can handle what he has been taught, gives you a chance to correct the misunderstandings and weaknesses, and at the same time gives the student practice.

*Practice.* Before encountering a new situation, it is good to practice it with friends or classmates. This gives valuable insight into areas where further preparation is needed. It also helps the new behaviour develop into a habit so that the new situation is not likely to make one stammer, forget, and do poorly.

When job-hunting, you can set up a table and two chairs, and have a friend pretend he is your prospective employer. Go through what you plan to say. Putting it into words calls your attention to parts that need further thought. If your friend can throw himself wholeheartedly into the role, he can help you get valuable practice in how to behave when a prospective employer tries to make you angry or trap you into talking foolishly.

Future SEO's can role-play with others about how to go into a village, whom to talk to first and what to say, and how to go about starting work in the village.

*Experimenting With New Ways.* Role-playing gives excellent opportunity to try out new ways of doing things.

This function is particularly useful in workshops where experienced people work together to improve their techniques. One says to the group: "I have an idea. Let's see how this method would work. I'll try it on you and you tell me your reaction." He then proceeds to try out the new teaching method or the new discussion leadership behaviour with the rest of the group playing the roles needed. After the role-playing, the group members report their feelings "in role" and also how they, as experienced people, think the new techniques would work. Someone else may then say, "I'd like to try a different version of that."

Needless to say, such experimentation needs a warmly supportive and permissive atmosphere. When fearing criticism or ridicule, people fall back on tried-and-true behaviour—out of which can grow neither change nor improvement.

*How to Proceed.* Role-playing should be carried on only long enough to cover the point to be made, to show what is to be shown. Someone should always act as director ready to say "Stop" and guide discussion of the role-playing so that maximum learning can take place.

**Brainstorming**

This is a 20-year-old technique useful for generating new ideas. It is the most widely used of several techniques intended to release creative imagination. It can be used with individuals but works even better with groups.

Brainstorming is an attempt of members in a small group to generate a flood of ideas under stimulus of a leader and limited time pressure. The ideas are usually new hypotheses, suggested solutions to a problem, a range of alternatives, or new avenues to explore.

Brainstorming should be used whenever it is desirable to break through traditional thinking and generate better solutions. As it is a time-pressure technique, it requires only a

few minutes. It may be used repeatedly within a few hours as needed,

The technique can be used with both lay or professional groups. Persons completely ignorant of a field or problem may be less productive of ideas than are those having some familiarity. Theoretically those knowing most about the problem should have the best ideas for its solution. However, persons of long experience often develop routine habits of thinking and may actually have few new ideas. Fresh minds often are needed to generate new hypotheses. Consequently the most productive brainstorming sessions often include a variety of people who have some acquaintance with the problem but are not necessarily experts in the field. A heterogeneous group usually is more creative than a homogeneous group.

Five to 20 often make a good size group for brainstorming. Larger groups will either pour forth more ideas than be captured by the recorders or will leave many members non-productive.

*How* : All members face the leader and recorders either in a semi-circle or in rows. Two recorders are appointed to jot the new ideas on blackboards which should be large enough to hold several columns of notes.

The leader formulates a specific question or problem and instructs the group somewhat as follows :

"How can we assure greater regularity of attendance at literacy classes ? That is the problem. We want every one of you to think of all the ways you can of assuring high attendance. Speak out all the possible solutions that come to your head—regardless of merit—the wilder, the better. Do not evaluate any ideas. Do not try to pass judgment on the merit of your own ideas. Also do not criticize, laugh at, or say anything about any other person's ideas. All right ! Let's go ! In three minutes you should give me at least 20 ideas on how

we can assure greater regularity of attendance at literacy classes ?"

The two recorders alternately copy down the key words of the ideas as they are spoken. To help the recorders the leader may repeat the key words from each member's contribution and assign it to a recorder by pointing to or touching him.

Stop at the time limit and observe aloud the quantity of ideas that came in the few minutes. Point out that some of them undoubtedly are very good.

(In individual use, set your own problems. Think freely and hard for five minutes. Jot down all the ideas that come. Add others later as they occur to you.)

*Why it works.* Psychologically the mind works better under time pressure. Two to four minutes is usually about right for brainstorm sessions. If more time is given, the pressure will be less and the flow of ideas will drag. The mind also works better if a job of definite size is to be done—thus the quota. Often 30 or more ideas will be generated in a couple of minutes.

Quantity is important. A list of 20 or 30 newly-hatched ideas is likely to contain more good ones than a list of five.

The NO EVALUATION rule is important. Most cultures teach people to screen their ideas and speak only those which make sense. Most minds constantly prejudge and evaluate what their owners are about to speak. Especially among strangers many people are in the habit of remaining silent until they have an idea which seems worth saying. The biggest problem in brainstorming is to induce people to unfetter their imaginations and let ideas—any ideas—flow freely. Usually by making it a game, the timidity barrier can be broken so that unusual and wild ideas come out. Often the wilder, the better. A review of the progress made by mankind would show the value of ideas that the masses of people thought would not

work. A premium is put upon generating unusual and rare ideas. In the search for better ideas, the old answers, by definition, are not good enough.

In the search for ideas the mind often assumes limitations that actually do not exist—or that can be overcome. Tradition is a strong force. Any device to capitalize upon and stimulate creative imagination should be tried.

*Follow-up.* The rule of no-evaluation while thinking up ideas is hard for some people to follow in regard to the ideas of others. In many cultures it is habitual for members of a group to review and evaluate any idea one of their number speaks. The brainstorming technique separates the two functions—thinking up ideas and their evaluation. If the group can freely think up ideas for a few minutes and evaluate later, the division of labour will bring benefits.

Consequently, after the ideas have been set aside to cool, they should be reviewed carefully by one or more committees. This should be an open-minded evaluation with a constructive attempt made to see the merit of each. True, many of the ideas expressed will prove to be traditional. Sometimes they can be improved. Others will be impractical for various reasons but they should not be lightly discarded for this reason at first approach. Electric lighting, human flight, and eradication of malaria at one time were thought impractical or impossible. If two or three new ideas in whole lot are worthwhile, the exercise has been very rewarding. Some very difficult problems have been solved through use of the brainstorm technique. Industrialists have used it for product improvement. Indeed some fortunes have been made as a result of ideas generated in brainstorming sessions.

### 10. The Human Resources

Aside from a planning group, every conference needs an operating staff. Several functions need to be performed while the conference is going on. While they often have been handled

by one or two persons, modern practice differentiates between the various functions and often assigns them to several different people.

**The Chairman**

The chief executive of any session is usually called the chairman. He represents the total organization or the management. He calls the meeting to order, makes announcements, orients the group to the task at hand, sets the guidelines or rule by which the meeting is to operate, announces the physical and time arrangements, sets the tone of the meeting, and generally is the stage setter. Especially if he is the president or leader of an organization, he is likely to be in charge of the business meetings. If he is not an officer, he may turn such meetings over to the officers.

While master of ceremonies, he often does not attempt to carry all the roles that good conference management needs. He is likely to use various helpers : a secretary or recorder, one or more observers, various consultants experts, and specialists, and other functionaries. He may use doorkeepers, messengers, a tape recorder operator, a public address system operator, shorthand reporters, projector operators, lighting-effects man, and others. If the meeting operates by parliamentary law, the chairman probably uses a parliamentarian unless he is sufficiently skilled in that field himself. In less formal groups, after the stage is set, the chairman is very likely to turn the meeting over to a discussion leader.

**Discussion Leader**

The key to good discussion is the leader. He picks up from where the chairman left off. If the chairman failed properly to orient the group members, the discussion leader does so. Usually he needs to make a few remarks to supplement what the chairman said regarding the problem or agenda. Assuming that the agenda is fixed, ordinarily it should not take more than five minutes and often less to orient the group.

If the agenda is to come from the group, as in a workshop, then the time may well take longer—up to a half day or so. In this case the discussion leader's first task is to induce the members to reveal their problems. He may do this through a problem census using the open discussion, circular discussion, or buzz groups.

After the agenda is agreed upon and the members understand the situation or problem under discussion, it is the discussion leader's job to induce others to talk. Probably the greatest failure of discussion leaders lies at this point. Anyone accepting the discussion leader's role is likely to be verbal enough to talk freely in a group. If he begins by announcing his views on every point that comes up, he is negating his very purpose. He misconceives his role which is to obtain as wide participation among group members as possible, to move the discussion forward, to keep it on the track, and to arrive at some destination in which everyone's point of view is shared. If a leader does more than fifty per cent of the talking, that in itself is evidence that he is not a good leader. Good leaders often account for less than 25 per cent of the total verbiage.

Good leaders encourage the timid, gently close off the over-talkative so that others may have a chance, pass the initiative around, ask guiding questions, occasionally summarize, pull wandering discussion back to the main theme, encourage the flow of ideas, and keep their own feelings and thoughts largely in the background. They consistently observe and enforce whatever rules of discussion they have set down.

Several authors in the *Selected References* treat the role of the discussion leader in detail. The following characterization point out the major differences between good and poor leaders.

| *The good leader* | *The poor leader* |
| --- | --- |
| is reluctant to announce his own opinion. | announces his own opinion first. |

| | |
|---|---|
| tries not to sway the group. | tries to influence the group to his way of thinking. |
| encourages all to express themselves. | favours those who support his side ; ignores the opposition. |
| summarizes in ways that reflect the consensus of the group. | upholds his side in summary. |
| is intensely interested in the discussion process. | is more interested in the content of discussion. |
| is more interested in how people feel. | is more interested in logic, facts, and knowledge at the expense of feeling. |
| exhibits patience with the timid. | exhibits impatience especially with the timid and opponents. |
| induces the group to produce most necessary data. | tries to supply all necessary data himself. |
| induces the group to do its own thinking. | tries to do the thinking for the group. |

Some of the leader's work can be planned in advance. A sequence of well-formulated questions can be mapped out as an aid to channeling the discussion along the main track. The opening statement can be thought through. Timing can be planned somewhat. Use of assistants can be planned. Some leaders, especially insecure ones, like to plant questions among friends in the audience in order to initiate or continue discussion. This, however, is likely to result in an artificiality that is unworthy of a professional. Intermittant summaries should not be thought out in advance or they will fail to summarize and give the leader's pre-conceived notions instead.

If the leaders will only try to facilitate group discussion, morale, group cohesion, productivity, and participation will be much stronger than if they dominate the group. Numerous scientific experiments, as well as experience, have shown the strengths of democratically-operated groups.

*Two Leaders.* Heavy agenda or fast moving groups may make the use of two leaders advisable. Great Books Discussions, for instance, often use two leaders with well-educated groups. Two leaders usually informally divide the substantive load. What one does not ask or say the other may. Each in turn on an irregular basis will step in and take the initiative. Experience in working together is usually necessary to develop smoothness.

Two leaders allow better attention to the content and progress of the discussion. If they can alternate in observing the discussion process, they can very naturally step in and modify any element that needs corrective action. Some groups think that the quality of discussion is higher with two leaders than with one. Two leaders are likely to provide more interest.

**Recorders**

The role of secretary, recorder, or record keeper is widely recognized although often poorly performed. Systematic, neat accurate, and consistently-kept records of the substantive content of meetings are the result of good training and pride of workmanship. The record may be a chronological list of ideas expressed, a summary of those ideas, agreements reached, minutes of the meeting, or other record of the ideational content of discussion. The customs of the group, the desires of the leaders, or the instructions of the conference planning committee should determine the nature and form of the record. The record may provide the basis for an oral or written report. It may be summarized in a daily letter or news-sheet cyclostyled and distributed next morning to the group. It may become a part of the permanent record if such is kept by the conference group.

**Observers**

The observer's role became recognized only recently when psychologists began to pay more attention to the dynamics of group behaviour. The observer notices what goes on rather than what is said or agreed upon. He is interested in discussion as a process, with its movement, with interaction among members of the group, with feelings and relationships, with group cohesion, producivity, leader-member relations, spread of participation, involvement, and such matters.

This observation may be for evaluation purposes—to make an assessment of how meetings progressed. More likely it is for immediate feedback to the chairman or conference management so that corrective action can be taken. The observer is often one of the group and sits and participates with the members. He is in a better position than is the chairman to reflect how they feel, what they think, and how the conference discussion is going. A good chairman wants significant information on such matters as soon as he can get it. If discussion does not go along in a suitable manner, the observer should be able to let the leader know why. Maybe more problem orientation is needed. Maybe group introductions are needed. Maybe the group is under a strain about which the chairman knows nothing. Maybe there are special customs and manners which have not been observed. Numerous other factors may construct or facilitate discussion.

The observer may be able to feed some of the important information to the chairman directly and openly in the course of discussion. Sophisticated groups will welcome light on how they are doing. Members became involved in substance and may forget process until an special observer reports what is happening. When members are helped to realize that they have been quibbling over definitions and not making progress in the discussion, they may agree to move forward. Or if they have been jumping to conclusions and developing

hypotheses before having adequate data, possibly they can be helped to look at their actions. While it is the chairman's prerogative to call any of these process matters to the group's attention, he may delegate such functions to a congenial and willing person who observes process and feeds appropriate information back to him. At times the information may be of such character that it should be given to the chairman only at intermission.

**Consultants, Specialists, and Experts**

The role of the expert has been emerging for some generations in democratic countries. Many people, still saturated with the heritage of authoritarian cultures, continue to think of the expert as the policy-maker or decision-maker.

In matters of health, for example, many people accept the physician's advice without question and act as if his recommendations were orders. Ultimately, however, each mature person is in charge of his own health and responsible for it. He should use the expert's advice only as data with which to think and should make up his own mind about the course of action. Once this fundamental notion is understood by individuals and groups, the role of the expert or consultant becomes clear.

Consultants may provide specialized knowledge regarding procedure, facts, plans, or other data. The engineer may provide data but he should not decide whether or not a bridge should be built. In a democracy, the latter decision should be in the hands of the people through their governmental channels.

Specialists, consultants, and experts of various kinds should be looked upon as resource people who are called upon by public and private general groups to provide their specialized information or assistance whenever needed. Consultants need to learn how to supply their data without seeming to claim the

powers of decision making or expecting that their advice will always be taken. Technical people know things that the general decision-making group should consider but the final decision should depend upon the broad body.

In practice then, experts are invited to contribute their knowledge at those points in the discussion or problem-solving process where it is needed. Normally they do not come into a meeting and rake over from beginning to end. The meeting is led by others. The chairman or discussion leader invites the expert to contribute either in a general way or specifically point by point as the discussion proceeds. When all questions are answered, the expert is through.

**Staff Training**

Good conferences do not just happen. Their staffs are trained. In simple conferences this training may be little more than detailed agreement among those conducting the various sessions on their respective roles. In large and complex conferences, however, the chairmen, discussion leaders, recorders, observers, and others may meet one or two days in advance for

1. Overall conference orientation

   General plan, overall and detailed scheduled, conference administration, registration, the communication system, conferences services available, the flow chart, evaluation methods and feedback.

2. Role assignment and delineation

   Understanding of specific responsibilities, coordination with other conference staff, timing.

3. Job training

   How-to-do training for discussion leaders, recorders, observers, and other operating staff; forms, procedures, routines, schedules.

Responsibility for training rests in the conference planning committee. Usually a member of the committee, thoroughly familiar with the conference in every detail, conducts the training sessions.

### 11. Promoting Attendance

Official deputation with expenses paid is the surest way of assuring attendance. It does not necessarily result in participants with the highest interest.

Many conferences, however, are attended voluntarily. These have to be promoted. People have to be induced to leave whatever else they may be doing and come to the conference. Promotional methods may range all the way from modest news announcements to multi-media advertising.

Good promotion depends upon a few fundamentals :

1. Good programmes, interesting agenda, and competent persons on the programme are the basis for effective conferenee promotion.

2. Define the audience. It may be as broad as the general population but usually persons desired at a conference are a much more select group. Once the group is defined, the promotion target is fixed and can be approached with a rifle-shot aim. Mailing lists, periodicals, and special appeals are then possible.

3. Multi-media approaches are usually better than single-media. Most amateurs publicize and promote too little and get poor results. Often newspapers, magazines, the radio, direct mail, and many other means must all be used to induce attendance.

4. Personal contact is best to assure the attendance of particular persons. Often, however, people can be reached through others—their village leaders, club officers, or friends—with a multiplier result. If key group leaders were consulted

in the planning of the conference, sizeable attendance may be assured thereby. Wise conference planners often use such techniques to assure attendance.

5. Timing—the right season, the right date, the right hour—make a lot of difference. Wise decisions on these points helps assure attendance.

Essentially, attendance at a voluntary conference depends upon informing and involving a sufficient number of those likely to have an inherent interest in the conference subject matter. If sizeable numbers of potential participants are involved in preliminary planning and have a part in the conference, attendance of a core group is assured. They will also be among the best promotors on a personal basis among their friends and associates.

## 12. Evaluation

### Evaluation and Feedback

Conferences and group meetings can be improved through evaluation. If continuous evaluation is planned and built into the programme, the early results can often be fed back in time to improve the remainder of the same programme. End-of-conference evaluation is useful primarily in planning future conferences.

The best evaluators of a conference are the participants. If they get out of the meeting what they came for or something equally valuable, the meeting has been successful. Conference evaluative techniques then provide for audience and participant reactions.

(a) *Post-Meeting Reactions* sheet can be used to get 100 per cent feedback. A simple form must be planned and reproduced in advance. Five minutes before dismissing the session, the chairman requests the members to fill out the half-sheets which his assistants quickly pass out to the members. When filled out without any signature, they are

passed to the aisles and collected before dismissal or at the exits. A sample useful for a public address is shown.

**Post-Meeting Reaction** (for large group meetings)
Tick how you feel in each item.

1. The speaker
   - talked over my head.
   - spoke at my level of understanding.
   - treated the subject too simply.
2. I would rate the address as
   - very worthwile to me.
   - of average value to me.
   - of little benefit to me.
   - a waste of my time.
3. The chairman allowed
   - too tittle time for discussion.
   - about the right time for discussion.
   - too much time for discussion.
4. My other reactions are (tick as many as you wish)
   - I wanted to ask a question but did not get a good chance.
   - The chairman let some people talk too long.
   - We should have broken into small discussion groups.
   - The subject was badly chosen for us.
   - I feel good about the meeting.
   - I feel disappointed about the meeting.

Results are immediately tallied. As the address is over, the vote on items 1 and 2 cannot change it. However, the reactions might provide guidance to the same speaker if he should appear on the later programme or be a warning to other speakers. Reactions always reveal something about the nature of an audience.

Item 3 can give the chairman some idea of whether he allowed a balanced time for discussion. If not, in future meetings, he can be more aware of audience reaction and adjust his timing and behaviour accordingly.

Item 4 is a catch-all which can reflect various elements in audience feeling. Some of these items reflect specific elements. The two on feeling good or disappointed reflect general morale. They may be repeated in subsequent sessions and results plotted to show rise or fall of group morale. In large groups meeting several times, attendance is also likely to reflect morale. A fast drop in voluntary attendance is a signal that something is seriously wrong with the conference.

A Reaction Sheet for a small discussion group might look like this :

Check the item in each pair which you feel is true about the meeting just ended.

It was a worthwhile discussion.
It was largely a waste of time.

The chairman expressed his opinion too often and strongly.

The chairman kept his opinions largely to himself and encouraged others to speak.

We largely finished the discussion.
The discussion was not nearly finished.

A few members monopolized the discussion.
Most members took part in the discussion.

I had a full chance to participate.
I did not have a full chance to take part.

No PMR sheet is intended to fit all meetings. Each should be tailor-made to ask the questions and serve the purposes desired by the conference management. The PMR sheet should call for objective response and require a minimum of

writing—only checking or underlining. Absence of signatures and identifiable handwriting frees each person to respond more honestly than if he were fearful of displeasing somebody.

b. *Process observers* may be instructed in advance and seated in the audience or group. They may be given specific things to watch for—sensitized to reactions of the group. They can be used in either of two ways :

1. They can merely observe carefully and catch remarks and evidence of satisfaction, dissatisfaction, feeling tone, and interest. These data can later be reported to the management for use in adjusting subsequent parts of the conference. If the audience gets bored by long speeches, restless from long sitting, or sleepy because of lack of ventilation, the observers can report the facts. Better still, they might be able to remedy the situation directly or by passing a note to the chairman about something on which he can take action.

2. During the meeting, observers can, if skilled in conference management and discussion, act as participants and give guidance to the chairman by asking questions or making suggestions which would help change procedures. They can make sub-summaries and point new directions. In this capacity, they are really acting as floor assistants to the chairman and in effect extend his sensitivity to the audience. They become assistant leaders or communication pipelines between the chairman and the audience. Sometimes the chairman and others skilled in group discussion can easily develop into an effective working team.

c. A team or small group of *interviewers* can make a spot check of the audience at intermission. If all ask similar questions, they can each accumulate a set of remarks which reflect the attitudes, interest, and reactions of the audience to

the meeting just finished. By reporting their findings to the conference committee or chairman, they can provide information on which changes in plans can be made.

**Exercises**

1. Try role-playing on these two situations. Let the people involved analyze and describe their feelings afterward.

   A. Shri Kapur as a SEO for three years, had some success in building up literacy classes with the aid of four good Basic school teachers. He thought that a part of the success was due to using the same teachers as village librarians. Two months ago he was promoted to be DSEO and a new man from outside the Block was made SEO. One day Kapur accidentally meets the best teacher at Block Headquarters and asks him how the literacy work is getting along. The teacher reports a reduction of interest and blammes it on the new SEO who gave the library work to somebody else because he felt the library (in another building) ought to be open during the same time the literacy work was going on. The SEO is also available at the Block Headquarters that day.

   As the SEO is also at Block Headquarters that day, the DSEO calls him in and the conversation continues.

   B. A VLW visited a village for the first time. He met with three panchyat members and asked them to consider what improvements the village was interested in making. They briefly discussed roads, water supply, literacy classes, several improved agricultural practices, and the establishment of a small library but left the decision

open until the panchayat had time to talk with some of the family heads. Upon his return a week later, the panchayat head indicated that the village seemed satisfied and didn't need much outside help except money. He ended up with : "Of course, we realize that you are a well-paid government servant who has to show some results to hold your job."

Continue the conversation from this point.

2. The four plans below were developed for training a group of 40 office-bearers and management committees of new multi-purpose cooperatives. The objectives were the same for all : (a) orientation, (b) provision of practical ideas in co-op management, (c) training in elementary techniques appropriate for their work, (d) building morale, and (e) building strong motivation to do their best as leaders of new co-ops.

On the basis of the information given, *rank* the four training courses in order according to how well they attained the *last* objective—motivation. In this rating, ignore all other objectives. Place the rank numbers (1, best ; 2; 3; and 4, worst) in the blanks provided at the left of the descriptions. Use the worksheet to help analyse the training courses.

—A. *Monday* :

An inspirational speaker from the State Co-op Headquarters told trainees that they were key people in building the new India and had a great work and opportunity ahead of them. The group divided into four sub-groups to identify their most important problems. These were reported to the general group when it reassembled before noon.

The group agreed that they ought to break up problems into three divisions and work out best solu-

tions possible for them. The group divided to work on them during the remainder of the afternoon.

*Tuesday* :

Solutions were reported back at general meeting on second morning. Some differences of viewpoint appeared. Some trainees thought a co-op was entirely an economic organization while others thought it also had other purposes and values. The Training Officer was only partly successful in integrating the viewpoints.

In the afternoon six experienced officers from four nearby well-established co-ops participated in a symposium on *Problems of a Young Co-op aud How to Solve Them.*

The training course ended with a talk by a district co-op official who gave "service certificates" to three of the six visiting officers who had 10 years of office service in co-ops.

—B. *Monday* :

Training Officer led group discussion on *What Do You Want Co-op to Achieve During its First Year.* Some hopes and aspirations expressed were realistic and some were not.

Block Co-op Extension Officer (CEO) told of problems and solutions of several co-ops which had started within the last four years. Questions and answers followed.

Training Officer lectured on *How to Get the Most Service Out of Co-op Members.* This was followed by discussion.

Training Officer lectured on *Duties and Responsibilities of Management Committees and Officers.* Questions and answers followed.

*Tuesday* :

CEO, TO, and two visiting co-op heads sat for 90 minutes as an Answer-Panel for questions. Many good questions came forth.

Presidents and each other category of office-bearers met separately in respective groups to discuss problems and formulate questions to ask in next session.

CEO, TO, and two visiting co-op heads sat again for 90 minutes as an Answer-Panel. Many questions of What-Is-My-Responsibility type were covered.

On the second afternoon a symposium of four experienced co-op officials talked on *What Services Members Like to Get from Co-ops.* Discussion followed.

At mid-afternoon the group divided into four groups to agree on *What Are the Five Most Important Ideas We Picked Up in this Training* Course. Spokesmen for each group then reported to the whole group. Adjournment followed.

C. The TO invited two speakers—one co-op specialist from the Reserve Bank of India (RBI) and a well-known but retired MP who had worked on co-op legislation. A two-day programme was set up as follows :

*Monday* :

Series of talks each followed by discussion-and-question hour both days.

MP—Philosophy and Importance of the Co-op Movement

RBI—How to Increase Co-op Services

TO—How to Get More Members

Answer-panel of RBI, MP, TO, and three visiting heads of neighbouring co-ops.

Questions of participants were answered.

*Tuesday* :

RBI—Problems of Extending Credit in Co-ops

MP—The State Cooperative Law

TO—How to Organize Your Office and Books

Study of an exhibit of model set of books and records
Short inspirational talk by MP followed by adjournment.

D. The TO and the Block CEO in the Community Development Programme organized this programme:

*Monday* :

90 minutes : Discussion meeting in which everyone around the circle was given opportunity to say what he thought a good co-op should do and how it should serve its members.

90 minutes : CEO introduced heads of five nearby very successful co-ops which started years ago. In 40 minutes they related their early problems and how they overcame them. They also told of new ideas and plans they were developing for the future. Participants asked a lot of questions. Small groups formed around them during lunch hour.

90 minutes : TO, sensing high interest aroused by the three co-op heads, abandoned a talk-and-discussion on co-op law and let the group ask further questions. Meeting ran 30 minutes overtime.

60 minutes : Group discussion led by TO on *How to Expand Membership and Build the Organization.* Three co-op heads also took part.

*Tuesday* :

90 minutes : Group discussion led by CEO on *Working with Members.* Main point made was need for keeping members fully informed and keeping their needs fresh in the minds of the officers and management committees.

90 minutes : By pre-arrangement, management committee of nearby co-op, which had been operating 12 years, came to training course and conducted its regular monthly business meeting which was observed by trainees.

Afternoon, 120 minutes : Managing Committees and officers of each co-op attending the training course met separately to consider : *What New Plane and Ideas Can We Develop During the Coming Year for Our Co-op ?*

60 minutes : Head of each participating co-op reported their agreements to General Meeting which ended with a talk by a District Co-op Official who had attended the second day and listened to the reports. He gave specific encouragement to a number of ideas expressed.

**Characteristics of Good Motivational Practices—A Worksheet**

This worksheet may help in judging which of the four training courses was best in *motivating* the management committees and office-bearers. To use this worksheet, estimate how well Characteristic no. 1 shows up in each of the four training courses and rate them :

0—if *not at all* ; 1—if only a *little* ; 2—if *average* or *some* ; and 3—if *much*

Repeat with each other characteristic and total the columns.

| GOOD MOTIVATION— | Training Courses | | | |
|---|---|---|---|---|
| | A | B | C | D |
| 1. Develops maximum understanding for action within individuals and groups. They know *why* they do something (or are asked to do something) and accept it. | | | | |
| 2. Primarily serves the purposes, interests, and welfare of the participant rather than those of an outsider. | | | | |

Worksheet (contd.)

| GOOD MOTIVATION— | Training Courses | | | |
|---|---|---|---|---|
| | A | B | C | D |
| 3. Is done *by* and *with* people rather than *to* or *for* people. | | | | |
| 4. Helps people bring out and resolve problems, doubts, and internal conflicts. | | | | |
| 5. Uses satisfaction and understanding rather than force. | | | | |
| 6. Gives people methods they can use in solving problems later on. | | | | |
| 7. Gives necessary skills and knowledge. | | | | |
| 8. Develops habits and attitudes of sharing responsibility. | | | | |
| 9. Lets people arrive at voluntary decision and commitment. | | | | |
| 10. Helps people make a start on the work itself. | | | | |
| 11. Uses real experience rather than symbols for experience ("talk about"). | | | | |
| 12. Uses activities geared to trainees' level of aspiration, development or involvement at the time. | | | | |
| 13. Seeks to raise the level of aspiration. Appeals to higher parts of man's nature. Ethics. | | | | |
| 14. Recognizes that people may do things because of one or several motives. | | | | |

Worksheet (contd.)

| GOOD MOTIVATION— | Training Courses | | | |
|---|---|---|---|---|
| | A | B | C | D |
| 15. Recognizes that different people may do the same thing from entirely different motives. | | | | |
| 16. Recognizes that the motives of people are most clearly revealed through their actions. | | | | |
| *Satisfies one or more basic needs :* | | | | |
| 17. Physical needs—food, drink, exercise, rest, sex, etc. | | | | |
| 18. Growth needs—continuous maturation throughout life stages. | | | | |
| 19. Security—self-preservation ; safety ; religion ; comfort ; physical, social and economic security both now and later. | | | | |
| 20. New experience—adventure, excitement, challenge, new ideas and friends. | | | | |
| 21. Affection—friendliness, love appreciation, belonging to groups, and sharing—rather than isolation, hatred and loneliness. | | | | |
| 22. Recognition—attention, admiration, praise, prestige, power, rather than reproof, punisment, being ignored. | | | | |

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# 3 SURVEYS

Surveys are systematic inquiries. They are a form of research. In purpose and principle surveys are usually simple. Ordinarily their only purpose is to gather facts or opinions although another purpose may be to bring about action.

The assessments in evaluation are often surveys. Base line or bench mark surveys, such as made in 16 blocks in 1954 by the Programme Evaluation Organization of the Planning Commission, are sometimes called preliminary surveys. Further assessments of conditions or of progress in these same blocks would be follow-up surveys. Much data gathered in the fact-finding stage of the problem solving process is often of survey type.

**Uses**

In the last 50 years systematic surveys have become the most common method for gathering many types of socio-economic information. Sampling surveys were early used in England to gather information about the economic conditions of the working classes, housing, unemployment, standard of living in relation to nutrition, and intelligence in relation to fertility. Before and during World War II, surveys of spending and saving patterns, propaganda, rationing, art, sports, the cinema, religion, music, buying habits, and public opinion were made in Britain.

Parallel developments occurred in the U.S. The biggest public interest was aroused in sampling surveys during the 1936 Presidential Elections. In that year a relatively small sample based on interviews predicted correctly the outcome of the election. A poll of over 2,000,000 returns by mail conducted by a national magazine picked the unsuccessful candidate.

Today a number of private organizations in at least a score of countries are engaged full time in making surveys for both public and private agencies. Numerous government agencies have established their own organizations for the continuous gathering of information. In India, both the National Sample Survey of the Indian Statistical Institute and the Indian Institute of Public Opinion conduct surveys in the public interest. Both organizations have staffs of interviewers spread over India. The NSS makes both regular and special studies of various economic and social problems. Many of the findings are fed directly to the Planning Commission and to other departments of government. The IIPO specializes in surveying the opinions, attitudes, and social outlooks of the Indian people.

Surveys can provide information much faster, more frequently, and at less cost than can a complete census or election. For this reason sampling surveys have become an important tool in the conduct of democratic affairs.

Among the many types of areas covered by modern sampling surveys are the following :

| | |
|---|---|
| Health conditions | Economic conditions |
| Population and vital statistics | Income |
| Information possessed | Public image of an agency or political party |
| Fertility surveys | |
| Plans for spending and saving | Election prediction |
| Public opinion and social attitudes | Newspaper and magazine readership |
| Standard of living | Radio and TV audience research |
| Crop yield forecasts | Advertising readership |
| Unemployment | Changes-with-time in all these areas. |

## Planning the Survey

**Purpose :**

The first step in planning a survey is establishment of the objective. Why are you making the survey ? What do you want to find out ? What type of information do you need ? You must have a clear and worthwhile purpose. It must be worth all the energy later required in making the survey. This purpose should be written down in a clear sentence or paragraph. This written formulation helps clarify the mind and serves as a guide for all future survey activity.

This step may sound easy but it hides a trap. One may begin by listing all the information it would be nice to have. Soon the list is too long. The survey easily grows too big. This trap requires disciplined thinking. While many items of information may be "nice to have," usually the time and energy available do not permit such an extensive survey. Incisive thinking is necessary to cut out many items not really

needed. For each item you should ask : "Why do I need this information ? What good purpose will it serve ?"

Ordinarily one should end up with a severely trimmed list of questions the answers to which are really necessary to serve the purpose of the survey. Other people familiar with the problems can often help narrow down the range of informa tion needed.

Only occasionally in short inquiries can one afford the luxury of asking questions not strictly needed. If only two or three bits of simple information are needed from each respondent may be additional purposes and questions can be included at little extra cost. But more often the survey tends-io become too big rather than too little.

**Population** :

The second step in planning is to decide upon the *population*. For survey and statistical purposes, the *population* is the entire group of individuals or units from which samples are taken. Within a village, block, or other area, the population may be *all* the people, or men within a certain age group, heads of families, married women, members of youth clubs, merchants, landless labourers, or any other group from which data are to be obtained. Such a population needs to be clearly identified. Also some notion should be obtained about its numerical size and geographical distribution. Often the definition will include boundaries of age, sex, family status, occupation, educational level, the geographical area, and other characteristics. These boundaries constitute the definition of the population and should be written down clearly as specifications.

## Construction of the Schedule

### Framing the Questions

Schedule construction begins by noting down the items on which information or opinions are to be obtained. This

list should be reduced by discarding questions

(a) which make no direct contribution to the objective of the survey,

(b) which are so personal or embarrassing that they would offend the respondent, (or else be devised in a non-offensive way)

(c) the answers to which can be obtained more easily or accurately elsewhere,

(d) which the average respondent is not likely to be able to answer,

(e) which are likely to yield inaccurate information,

(f) which require too much work by the respondent, and

(g) which ask opinions, unless it is an opinion survey.

*Wording of Questions.* The attention given to phrasing depends somewhat upon (a) whether opinions or facts are sought, and (b) whether questions will be carefully read by an interviewer or to be used primarily as a reminder to him. Opinion questions especially and questions to be read without variation need to be most carefully worded. They need to be so clear and straight forward that they cannot be misunderstood by persons of low intelligence, low motivation, or little education. They are best expressed in the vocabulary and idiom of the vernacular used by respondents.

In opinion surveys the wording of questions should be the same for all respondents. In some fact-finding surveys the interviewer can be allowed some leeway provided he includes the essential points. Thus : *How many daughters* have you *in schoot today* ? has four essential elements. If any are forgotten, the answer is likely to be wrong.

Simple words and simple sentence structure familiar to all respondents should be used. Questions should be as concise as possible. They should be framed to yield the exact infor-

mation and none other. Avoid questions with two parts and those with double meanings.

Leading questions are a major trap. A leading question is one which, in any way, suggests an answer or induces a biased answer. All are not as evident as the salesman's reverse lead : "You don't want to buy any rugs today, do you ?"

Questions reflecting on personal prestige, knowledge, and alertness are very likely to yield biased results. People like to associate themselves with approved social behavior, generosity, respectability, with persons of prestige, and with success. Because people like to be agreeable, they often give a great many more Yes-answers than the facts warrant. The question writer must examine his schedule most carefully to spot leading questions and re-write them or leave them out. One technique is to avoid Yes-No questions and instead repeat the alternatives within the question itself. e.g. Was your last child a son or a daughter ?"

Another technique is to use an indirect question. One study of homeless men found that most of them answered, "No," to "Are you married ?" When "Where is your wife ?" was used, a much higher percentage revealed that they were married.

*Form of Questions.* Researchers and surveyors like objective questions. Such questions yield answers which can be recorded by a tick mark, underlining, encircling, a number, or a word. Such answers are easy to record and to analyze. They may take several forms :

Do you use a smokeless chula ? Yes No

Do you approve or disapprove of giving alms to beggars?

Approve Disapprove No opinion

Which political party do you think would treat poor people best ?

Party A B C D E No opinion

How many bullocks do you own ?——

Whic crops did you plant in the last 12 months ?

| | |
|---|---|
| —Wheat | —X |
| —maize | —Y |
| —rice | —Z |
| —W | —Other (what ?) |

(Rank order) If you were given Rs. 100 and had to spend it on *one* of these four things for your family, on which would you spend it ? Second choice ? Third choice ?

—a radio —clothing

—A holiday trip to a city —better food

(Rating scale) Is your family income higher or lower than it was 5 years ago?

higher same lower

What do you think of the idea of cooperative farming ?

Like very much | Like | Neutral | Dislike | Dislike very much

Especially during exploratory phases of a survey, open-ended questions may he necessary. Open-end answers are best written verbatim but may be taken down as notes. Analysis of narrative answers often can suggest a structured form for the final schedule. Answers to open-ended questions are difficult and time-consuming to categorise and analyze. For this reason extensive use of open-ended questions is somewhat impractical in most surveys. Nevertheless, for intensive "depth interviewing" focused on one area, they may be quite useful. Such an investigation usually permits informal questioning and the addition of questions to fit the trend of unfolding story.

**Identifying Information and Social Background**

In addition to the substantive questions, the schedule must carry certain identifying information such as : title of survey, sponsoring agency, name of individual or family interviewed, village or city or other address, block, district, date of interview, and signature of interviewer. Most of these data are usually placed at the top of the first page but some of them may be at the end.

Social background data usually desired includes age, sex, size and composition of family, marital status, educational level, religion, occupation and sometimes income, political preference, amount of real property owned, membership in organizations, employment status, etc. A major criterion for including an item is whether or not it will be the basis of any analysis. Thus, if the answers in the survey are assumed not to vary by educational level and no analysis is to be made of answers by that variable, that question can be omitted unless one wants to include education in the description of the population. Socio-economic data, too, often are placed at the beginning of the schedule. However, some answers are more easily obtained after the main interview is over and can well be at the end.

**Field Tryout**

Inexperienced surveyors seldom fully appreciate the value of testing their questions in the field. Experienced formulators of questions never become so proficient that they can safely forego field tryouts.

The benefits of tryouts are several : Field trials expose the schedule to realism. Questions too far removed from the experience of the respondents come to light. Useless, impractical, and unnecessary questions are detected. Poorly stated questions or those awkward to express orally are discovered. Under the stimulus of talking to different types of persons, questions become better phrased. The need to rearrange

questions often becomes apparent. New questions become necessary. New ideas for analysis occur. Other defects hard to anticipate in any other way and ideas for improving the schedule come to light. Often from 15 to 50% of the schedule is changed as a result of field tryouts.

A progression of steps is useful in this schedule improvement process. Initial writing of questions is usually done by one person. However, soon, ideas of two or three others experienced in research should enter into the schedule. A committee can go over it with every member freely expressing his hunches. The item writer should not be on the defensive ; all can be searching for the best questions and phrasing.

A second step is to interview a few friends. Each one should be asked to assume the role of a person of low intelligence, an illiterate, a slightly suspicious person, a skeptic, a timid person, or a know-it-all. The interviewer remains alert to how the questions stimulate various people and tries to devise ways of improving the schedule.

After further revision, the schedule may be tried on strangers in the vicinity—persons thought to be representative of the population later to be surveyed.

After this revision the questions are ready for real field trial. A sample of 10 to 15 representative people within the area to be surveyed should be interviewed and careful observations made. One person can do this although it is better if two or three field-test the schedule. If two or three interviewers do it, they should compare notes and jointly make the revisions.

Another field trial may be necessary, and another. Larger groups may be necessary on later tryouts. Important surveys managed by professionals often go through several successive field trial-revision cycles. Four to seven are not uncommon; over a dozen, on occasion, have been useful.

**Physical Design and Reproduction**

The form of questions, the placing of the answer and lay-out of the schedule are important matters. When answers are scattered throughout the page, tabulation and analysis are likely to be difficult. These processes go much more smoothly if answers can be arranged along the right or left margins. Pre-coding of answers, in which each possible response to each question is given a number printed on the schedule, further simplifies tabulation and analysis. The schedule should give a good artistic appearance and not be too cluttered and congested.

Lucky is the surveyor who can put his whole schedule on one side of a normal sheet of paper and carry it in the field on a clipboard. Carrying in an office folder is not nearly so convenient. Short, postal-card size schedules, which can be carried in a pocket, are even more convenient. A schedule on both sides of the same sheet is probably next best. While it must be turned over, information cannot become detached and lost. Oversize sheets are convenient when they can be spread on a table, a situation not often possible in the field. Some long schedules are put in booklet form but the inconvenience in use and analysis is considerable.

Normally cyclostyling is the reproduction process used in small surveys. Multilithing and printing give clearer impressions and enable condensation of more questions on a page. From 30 to 50 per cent more copies should be reproduced than the sample requires. Extra copies will be needed for instructing interviewers, introduction of the survey to officials, tallying, and replacements. White paper is usually preferred to be used with a soft lead pencil or ink if the paper will take ink.

**Preparation of Analysis Forms**

The best time to think through the analysis of data is while the schedule is being developed. The process should be closely related; benefits are mutual. While thinking through

the analysis, the surveyor faces the questions of whether he really plans to use all the data he is seeking. Can he use it ? Does it fit into the survey and serve a worthwhile purpose ? Important refinements in the schedule are likely to result from this critical thinking.

While schedule making is fresh in mind is the best time to decide on what types of analysis to make. If heads and stubs of tables are made out early, six months later questions like these are less likely to arise : "Why did we gather these data ?" "Why didn't we use a different classification system ?" "Why did we ask this question ?"

If analysis forms and tables are chalked out before the schedule is finalized, one can be sure the two will fit. Instead of unthinkingly setting arbitrary categories in the schedule, they can be made to agree with the stubs and heads desired in the tables. Categories and groupings by age, occupation, employment status, marital status, urban-rural residence, and income may best agree with a standard pattern long established by other surveys or by recurring statistics gathered by government. So, a good rule is : Develop the schedule and the analysis forms at the same time and avoid trouble later. The empty tables should be ready before any data are collected.

## SAMPLING

**The Census :**

Theoretically a survey or complete count can give complete information without error. Actually, except with very small groups, it is difficult to make a complete census without omissions. Even the national census taken every ten years is known to fall short of the actual number. However, while a census may undercount the total population by a small percent, the distribution of population characteristics in a census is likely to have only insignificant statistical errors. Most deficiencies in census data arise from faulty questions, inept interviewing, awkward procedures, and other human errors.

In social science surveys, a complete census by individual count is usually not worth the effort if the population runs larger than 100 or so. A complete count is both easy and normal in a class, a discussion group, or in an audience. Otherwise it is likely to require considerable leg work and time.

Fortunately, social information often does not need to be 100 per cent complete and accurate. To greatly reduce the time and cost of a complete census, most sponsors are willing to accept a slightly less accurate result. Instead of gathering data from 200 family heads, alternate heads may be asked. Instead of testing 1,000 adults, a good picture of the literacy situation can be obtained if one in five or ten is tested. In such cases the results will be only a little less reliable than a complete census provided systematic sampling procedures are followed. Sampling always introduces the possibility of errors. If the errors are predictable and understood, they often are acceptable.

**Spot Checks** :

The simplest sampling survey is the spot check. It is also the crudest ; it gives least refined and least reliable results. However, when gross information or a good impression is all that is necessary, a spot check is a very useful and time-saving device. A spot check in a village can tell you rough answers to questions like these :

What proportion of families use the smokeless chula ?

What per cent of the families today have sickness in the home ?

What per cent of the homes have kitchen gardens ?

What proportion of the villagers use libraries ?

Are the inhabitants chiefly vegetarian or non-vegetarian ?

Who are some of the village leaders ?

A spot check is usually based upon 10 to 20 brief interviews or observations.

The VLW, SEO, or other interviewer usually has only one, two, or three questions to ask or points to observe. Instead of asking at the first dozen open doors or of the first 10 to 20 men seen, the interviewer decides to use some system in his interviewing. If the village seems to have 50 to 100 houses, he may ask at every fifth house. He keeps asking at every fifth house until all the streets have been covered. He keeps a simple tally like this :

| | | |
|---|---|---|
| Smokeless chula | : Yes // | No 𝍸 𝍸 𝍸 |
| Sickness in home | : Yes /// | No 𝍸 𝍸 /// |
| Kitchen garden | : Yes 𝍸 / | No 𝍸 𝍸 |

From this half-hour spot check, the interviewer knows that the village has very few smokeless chulas, sickness is in about 20 per cent of the homes, and about a third have kitchen gardens. For his purpose at the moment may be no more accurate information is necessary.

Spot checks can be made by asking questions of a scattering of people found on the streets. While the results may be of some value—especially if all answers agree—experience and research both show that such checks often have much bias and unreliability. The use of a controlled systematic approach requires only a little more time and gives a much truer picture of conditions.

**Role of Sampling**

Research, applied statistics, and experience have shown that a wide range of social information can be assembled through appropriate sampling methods. Such data can be almost as reliable as data from a complete census. The major advantages of sampling are :

1. A great saving of time. Much more extensive

information can be gathered. Surveys can also be repeated more often to detect changes in a dynamic society.

2. A great saving of money and energy.

3. A simpler and smaller organization.

4. More attention given to each case reported and greater accuracy in components of the statistics.

The disadvantages are :

1. A sound sample design must be constructed.

2. The sampling design must be carefully executed if the results are to be dependable.

3. When the characteristics being measured occur rarely, small samples do not give enough cases upon which to base safe generalizations. Thus, a sample of 200 adults may not have enough unmarried men above age 50 to justify firm conclusions.

4. With small samples, internal sub-group breakdowns and comparisons are statistically unstable or impossible to make. For example, a representative sample of 300 adults will not include enough male and female college graduates to compare the two groups.

5. From a statistical and theoretical standpoint, no sample can give results as accurate as those obtainable through a complete census.

6. Each of the different types of sampling has its own limitations which must be understood if sound findings are to be obtained.

7. Complicated sampling plans may generate more work and trouble than they are worth. This is especially true if the population is small or the sample is large. Al lsampling plans are more complicated than a sample census.

8. Large sampling surveys require expert professional help or at least careful study of sample design, survey methods, and elementary statistics.

All elements considered, sampling, when done skillfully, is generally considered to have great advantages over the census. The problem is to design the sample well and to execute the survey carefully.

This chapter is intended to outline only some of the major concepts and notions. It should make the student aware of some of the problems of sampling and surveying. A thoughtful and intelligent persons can acquire the necessary skills by careful study of some of the Selected References and by experience. In most cases, however, a trained person should be consulted on drawing the sample, building the questionnaire, and in organizing and conducting the survey.

*Desirable Characteristics of Sample Design.* Samples need to be large enough to yield statistically reliable and acceptable results. While the acceptable margin of reliability is a matter of preference for which no fixed rule can be laid down, ordinarily a sample should not include fewer than 100 cases. With such small samples the design must be most carefully developed and executed if satisfactory reliability is to prevail. A much more reliable sample can be obtained from a few hundred cases.

The sample should give an unbiased cross-sectional picture of the entire population being studied.

The sample should be the most efficient possible to design. This means that it should give maximum reliability and maximum information for the funds, energy, and time available.

The sample should, in so far as possible, be drawn in the office. Field workers should be given the fewest possible choices. Office control of the sample can give greater objectivity. Field workers are easily influenced by many personal and non-statistical factors which bias the results.

The sampling design should lay down procedures for handling cases :

—where the desired respondent is not available.

—where the respondent does not cooperate.

—where a group is present and participates in the answers.

—where the responses are obviously false.

If no internal breakdowns are necessary, the sample should be as small as possible and still within the desired limits of statistical reliability. Well designed and executed small samples of 100 to 300 cases can yield results as reliable as not-so-well-designed samples several times larger.

**Random Sampling :**

A randon sample is one in which each unit has an equal chance of being selected. Examples :

1. Marbles of uniform size in a bowl withdrawn one at a time and thoroughly mixed before each successive drawing by a blindfolded person.
2. Playing cards of uniform thickness, size, and weight shuffled thoroughly before drawing the top card.
3. Tossing a coin so that it spins in the air before falling to the ground. (Heads and tails would have an equal chance of falling face up.)

The requirement that every unit in the population has the same chance of being selected is not easy to achieve in sociological surveys. Without careful planning, bias is difficult to avoid. An interviewer attempting an unplanned random sample inevitably, and possibly unconsciously, will be influenced in his choice of cases by smiles, friendliness, appearance, gestures, sex, accessibility, and innumerable other factors.

A conscious effort must be made to pick the specific cases

in the required number without regard to these factors. This can be accomplished easiest if such factors are hidden from the selector—if they are chosen in the office. Favourite ways for obtaining a random sample of a population group are :

1. List the total population alphabetically, serially, or in some systematic order.

   a. Blindly choose a case from the list and every nth case on either side. For example, to draw a sample of 100 from a list of 500 men, select one at random and pick every fifth name on the list in both directions, or

   b. Select numbers of fixed positions. For example 3, 8, 13, 18, 23, 28, etc., or

   c. Use a table of random numbers.

2. Write the names of the population on uniform cards or slips of paper. Thoroughly mix and draw, re-mixing before each draw.

3. If names are in a directory of many pages, select one or more names from fixed positions on pages of a fixed order, e.g. 7th and 14th name in right column of pages with numbers ending with 3, 6, and 9. The system should be determined in accord with total number of pages and size of sample required.

4. If the population is spread somewhat evenly over a geographical area, plot all cases as numbers on a spot map. Cover with a transparent grid (of uniform squares) and select cases falling into pre-determined squares or in squares determined by chance.

Random sampling works best where there are many units of relatively the same general characteristics.

Once selected, it is important that every case in the sample be used—every person drawn be interviewed. Accessibility, convenience, friendliness, absence from home, and other

factors should not be allowed to interfere with fulfilment of the sample.

Whether a random sample or some other type is chosen depends upon the balance of advantages and disadvantages in each case.

Advantages of the random sample are :

1. No detailed knowledge of characteristics of the population is required in advance.

2. A random sample is likely to reveal the variability of the population better than any other type.

3. Sampling errors follow laws of chance and can be known. The most statistically reliable data can be provided at the least cost.

4. The representativeness of samples of various sizes is known according to the laws of probability.

The advantages are :

1. Complete listing of the population being studied may be costly. Where source lists of the desired people or population already exist, a procedure for drawing a random sample is often self-evident. Because considerable labour is required to draw up new complete lists of the population being studied, modifications are usually arranged. For example, if 120 villages in a block are roughly of the same size and general characteristics, a 5% or 10% random sample of villages may be drawn. Then a complete list of the appropriate population (farmers, family heads, mothers of children age 6-11, etc.) in each selected village can be made. A random sample can be drawn from each such list in each village. Actually if villages can be divided into quadrants without bias, listing of one randomly-selected quadrant and random sampling within that quadrant can cut the work further.

2. If the sample drawing method requires numbering, costs are further increased. Regular-interval drawing, however, may often be used, thereby avoiding numbers.

3. The possibility of drawing a biased sample is always present. Laws of chance operate with known probable error according to size of sample and distribution of characteristics being assessed.

4. The size of a sample necessary to obtain a given statistical reliability is usually larger in random sampling than in stratified sampling.

5. Random sample cases are likely to be spread geographically and thereby incur a higher field cost than stratified sampling, cluster sampling, or other methods.

**Stratified Sampling**

A stratified sample is often recommended where the population is known to be made up of relativaly heterogeneous elements. Likewise when characteristics are skewed or when sub-groups are markedly different, stratified sampling may be the most efficient procedure. An illustration will show why :

*Problem :* To select a 10% random sample of places in Delhi State.

*Conditions* : Delhi State contains Delhi/New Delhi and a few hundred villages of varying sizes.

*Possibilities* : If one wanted to select a 10% random sample of places for study, he would need to make a complete list of such places. In selecting a random sample of every tenth place on this list, the Delhi/New Delhi metropolitan area would have only one chance in 10 of being selected. Thus the chances are 10 to one that the great majority of people in Delhi State (those in Delhi/New Delhi) would not be represented. The omission of the largest city would be tragic in that the 10% sample of villages would not provide a truly

representative base for any random sample of the population of Delhi State.

A much better way would be to stratify the total list of places by size of population. In this way Delhi/New Delhi would be in a separate stratum and could be sure of being selected for further sampling within the stratum. Two or more other strata could be provided.

Here is how another problem might be solved :

*Problem :* To design an efficient and economical sample of family heads in a block of 100,000 people living in 89 villages.

*Conditions :* The villages range in size from 9,000 to 21 people. The characteristics for study are thought to be distributed very differently among people in small and in large villages. Average size of nucleus families is known to be five. The surveyors are willing to accept the statistical margin of error inherent in a sample of 200.

*Possibilities :* A. A purely random sample of the 20,000 heads would require laborious listing or some other way of assuring all an equal chance of being chosen. The one per cent sample would call for about two family heads from the average size village, more from larger villages, and only one case or none from small villages. Much scattered travel would be required.

B. If the 89 villages were listed and sample of them taken, say 10%, only nine villages would be selected. The danger of under-representation of the few big villages would be great. The sample would probably be biased.

| | | | |
|---|---|---|---|
| 9000 | | 960 | 315 |
| 5250 | Big | 950 | 310 |
| 5225 | Villages | 920 | 305 |
| 4415 | | 915 | 300 |
| 4110 | 4,000 | 860 | 295 |

| | | | | |
|---|---|---|---|---|
| 3600 | | 820 | | 285 |
| 3300 | | 800 | | 275 |
| 3200 | | 790 | | 265 |
| 2940 | | 755 | | 245 |
| 2760 | | 740 | | 240 |
| 2490 | | 715 | | 240 |
| 2460 | | 705 | | 225 |
| 2415 | | 700 | | 195 |
| 2410 | | 680 | | 180 |
| 2300 | | 630 | Small Villages | 175 |
| 2250 | Middle- | 620 | | 175 |
| 2015 | size | 550 | | 170 |
| 1925 | Villages | 525 | | 165 |
| 1750 | | 520 | | 150 |
| 1550 | | 500 | | 145 |
| 1500 | | 460 | | 130 |
| 1410 | | 455 | | 125 |
| 1300 | | 430 | | 110 |
| 1150 | | 410 | | 95 |
| 1140 | | 410 | | 85 |
| 1070 | | 400 | | 60 |
| 1040 | | 375 | | 55 |
| 1020 | | 340 | | 45 |
| 1005 | 1,000 | 325 | | 39 |
| ——— | —— | 330 | | 21 |

**Fig. A. 89 village arrayed by size and stratified into three groups.**

C. The list of villages could be stratified by size and a random sample taken within the strata. Figure A shows the array of villages by size with numbers somewhat rounded for ease of observation. The sample designer calculated a bit and noticed that there were five villages with more than 4,000 people, 24 between 4,000 and 1,000 in population, and 60

below 1,000. By drawing the boundaries at 1,000 and 4,000, he had three strata : big villages, middle-size villages, and small villages. Table 1 could be started.

**Table 1. Stratified Sample Block of 89 villages with 100,000 people (One percent sample desired.)**

| A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|
| No. of Villages | Average Pop. | Total Pop. | Est. No. of Families | Fraction of villages selected | Number of villages selected | Interview needed in each stratum |
| 5 | 5,600 | 28,000 | 5,600 | 1 | 5 v | 56 |
| 24 | 2,000 | 48,000 | 9,600 | ¼ | 6 v | 96 |
| 60 | 400 | 24,000 | 4,800 | 1/10 | 6 v | 48 |
| 89 | | 100,000 | 20,000 | | 17 v | 200 |

Column B shows the average size of the villages in the three strata. Column D was obtained by dividing the total population in each group by the known average family size—5.

Column E calls for judgment. The sampler might have taken a fraction of the five big villages. A one-fifth sample would likely have omitted the largest village with whatever unique (and often unknown) bias it might have had. Any other sample would have left troublesome fractions of cities. As the group was small and included more than one-fourth of the people in the block, the sampler decided to include all five villages. Within these larger villages one out of every hundred family heads was interviewed. Total population of each village divided by five gave the average number of family heads and this figure divided by 100 gave the number of interviews for the village.

How many middle-size villages should be included ? To take all would give no advantage. Too few would risk too much bias. Half would eliminate trips to 12 villages—not enough. Either one-fourth or one-sixth would divide evenly. The designer choose one-fourth. The six villages should be selected under some system whereby every village initially has an equal chance of being chosen.

The 60 small villages are geographically scattered. A smaller sample of these can be taken. Again an easily divisible fraction would work best : 1/3, 1/4, 1/5, 1/6, 1/10, 1/12, 1/15. Small fractions would give too few villages to be representative of the stratum. A larger fraction would require extensive travelling. A compromise was struck—1/10.

This sample of 17 villages is less than 1/5 of the 89 villages. Being stratified, it is likely to give a much truer picture than 17 villages taken at random. Within two strata, of course, the villages were selected at random, by taking every fourth or tenth village in order through the list arranged by size. This procedure assured an equitable distribution by size within the strata.

Column G derives directly from column D. A one per cent sample of family heads gives 200 cases. The middle-size villages, for example, with nearly half the total population of the block must provide 96 interviews to represent the middle stratum. Instead of taking only 1% of family heads, the sampler at his desk calculates four times as many interviews in each of the six villages. This 4% is really .008 of the total population (4% divided by five members per family). By multiplying the population of a village by .008, one calculates the number of interviews to take in that village. Eight interviews would be taken in a village of 1040 people and nine in one of 1070. Minor fractions are dropped and major ones added.

Among the six villages in the small-village stratum, the sampler wants 10% of the family heads. Why ? The popula-

tion of any village in this stratum multiplied by .02 gives the number of interviews required. Why ?

**Controlled Stratified Sampling**

The above sample design is a *proportional stratified sample.* That is, the cases in each stratum were drawn in the same proportion as they occurred in the entire block.

If the sampler, for reasons of economy, had drawn only one-half as many interviews as he did from the middle stratum, 48 cases, he would have had to multiply the findings by two before combining them with the other strata. This would have been *disproportionate stratified sampling* or *controlled sampling.*

Sometimes proportional stratified sampling results in a widely different number of cases in each stratum. This is not bad in itself. However, each stratum then has a different margin of sampling error and, where cases are few, the error is likely to be rather large.

If the sampler wants a more dependable result in each stratum (instead of only in the whole), he may increase the number of cases in the smaller strata. Each stratum can be arbitrarily assigned the same number of cases or they can have varying numbers so long as the margin of error is kept within desired limits. Table 2 shows an identical number in each strata to simplify an illustration. (See page 137)

Because the cases (Column D) are no longer proportional, results have to be weighted. The big city accounts for 55 per cent of the total population of the district. Results from the sampling of 200 should be weighted accordingly—multiplied by 55. All 432 small villages account for only 10% of the district population. Results from 200 interviews from this stratum should count only 10% in the total. Other strata work out as shown. This weighting factor is calculated by dividing the population of the stratum by the total population of all strata and expressing the result as a per cent.

TABLE 2.

**Stratified Samples of a District of 537 Places Having a Total Population of 20,00,000**

| A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|
| No. of villages, towns, and cities in strata | Total Population in stratum | Cases needed in proportional stratified sampling | Cases desired in each stratum, controlled stratified sampling | Weighting factor (% of total) population | Per cent found to be literate in each stratum | Per cent literate x weight factor |
| 1 | 11,00,000 | 550 | 200 | 55 | 45 | 2,475 |
| 4 | 1,50,000 | 75 | 200 | 7½ | 40 | 300 |
| 28 | 3,00,000 | 150 | 200 | 15 | 37½ | 562½ |
| 72 | 2,50,000 | 125 | 200 | 12½ | 20 | 250 |
| 432 | 2,00,000 | 100 | 200 | 10 | 15 | 150 |
| 537 | 20,00,000 | 1,000 | 1,000 | | | 3,737½<br>37.375% |

In application to a literacy survey, let us assume that 90 of the 200 respondents in the big city were literate. This is a 45% literacy rate. Multiplied by the weight factor (55), the product becomes its proper weight in the total sample. Responses in other strata were converted into numbers shown, multiplied by the appropriate weight factors, and the products added. As these are per cents, the decimal point is set over and the rest is a literacy rate of slightly over 37% for the entire district. The average of literacy rates in column F would have been in error because all strata were not of equal size.

Where there is reason to believe that different subgroups of a population possess different characteristics, samples should be stratified. Common variables used in stratification are age, sex, geographical area, size of place, ethnic background, educational level, economic level, and religion.

Theoretically, the number of variables used for stratification is unlimited. Practically two or three variables are about all that the usual investigator can include within a design without unduly complicating it. In order to stratify intelligently, the investigator needs considerable information about the population. By experience, preliminary analysis of existing data, or by pre-test, he can determine the factors to which he needs to give greatest priority.

Strata should be as mutually exclusive as possible. Some factors, such as sex, clearly fall into different strata. Lines dividing variables such as size of village and age often must be drawn arbitrarily, yet with judgment. The number of cases in strata is less important than that cases within a stratum be relatively homogeneous.

The advantages of stratified sampling are :

1. Greater representativeness is assured with less danger of bias than may occur with purely random sampling.

2. With homogeneous populations, greater precision can be obtained with a small number of cases, minimum energy, and cost.

3. Where field workers make the selection, stratified sampling sets up better controls than does random sampling.

The disadvantages are :

1. The sampler needs to know a great deal about the population in order to chalk out a good design.

2. Controlled stratified sampling introduces weighting and its extra arithmetic and greater chances of errors. Informed estimates must be available on characteristics of the population.

3. Locating cases to fit specifications may become difficult especially if stratification and sub-stratification are carried out in considerable detail.

*Mixed Sampling.* We have seen how stratified sampling also uses random sampling within strata. It is quite common to use two or more types of sampling in the same survey, especially if it covers a large population. Regardless of the complexities introduced, the governing rule is that the procedures at all steps must be systematic and planned to avoid bias. Unplanned and unsystematic inquiry, no matter how many cases are included, is most likely to give biased results.

**Area Sampling**

One more example of mixed sampling is *area sampling.* An illustration should suffice. Assume that a sampling survey of an entire state is to be made. The following steps would be required :

1. In a state, select a 10% random sample of districts (or some other per cent). List the selected districts.

2. Select a 10% (or some other per cent) random sample of blocks within the selected districts. List these blocks.

3. By random or stratified methods, select a sample of villages within each block so selected.

4. Superimpose a square grid upon a map of each village and select every nth square, maybe every 10th or 20th.

5. List the cluster of households having a front door falling within each designated square.

6. Canvass every one of these households.

7. Multiply the findings by the appropriate factors at each stage in reverse to expand the estimates for the entire state.

**Size of Samples to Use**

Persons unfamiliar with the statistics of sampling often fail to understand the significance of sample size. A common error is to assume that a much larger sample is needed than is actually the case. Untrained persons often assume that reliability of findings is related to the spread of the sampling ratio. To them, anything less than a 10% sampling ratio appears full of error. They do not see how a sample of 1,000 or even 100 can begin to be representative of 100,000,000. But such is the case. Formulas for measuring the margin of error clearly indicate that emphasis should be on the size of the sample rather than on the size of the population being sampled. Actually sampling errors are in proportion to the square root of the sample as can be seen by comparing the standard errors of samples of 100 and 400 in Table 3. (See Page 142)

Several factors should influence sample size. Only three are discussed here.

1. Homogeneous populations require fewer cases than heterogeneous populations. Thus, if the mother tongue is the same for a great majority of people in a district, a small sample could find that out. If many languages are spoken, a larger sample would be required to give the approximate picture.

Stratification would enable the picture to be obtained with a smaller sample than would a purely random approach, provided a proper base for stratification were known.

2. The number and size of internal breakdowns of data vitally influence sample size. If only a gross result is desired, a relatively small sample may suffice. If subgroups are to be analyzed, a larger sample is necessary. Thus a picture of educational level of an entire block could be obtained with a sample of 400. However, the educational level of women past age 70 in this block could not be reliably obtained because of too few cases in the sample.

3. If data are difficult to collect, the sample should be enlarged beyond the minimum efficient size. If long schedules, a high refusal rate, wide geographic scatter of cases, absentees, inexperienced interviewers, incomplete schedules, and other factors are likely to cut into the sample, it should be materially enlarged to offset anticipated losses. One technique is to draw a sample twice as large as optimum. A sample 50 per cent larger than necessary can be assigned to field workers. If it falls short, interviewers can still go back to glean enough cases to fill the original sample. Surplus cases in any stratum can be discarded—on a random basis. Data must be obtained and handled according to prior plan. Data should not be used merely because it is available.

Usually sample size is a compromise between available time, energy, and funds on one hand and the desired accuracy and completeness of information on the other. Every extra case costs time and energy. In every survey there comes a point beyond which additional accuracy is not worth the extra cost.

Without presenting mathematical formulas or indicating all alternatives, Tables 3 and 4 are presented to show the margin of error to be expected from purely *statistical* causes. Beyond these errors, faults in question interpretation, interviewing procedures, rapport, execution of samples, calculations,

and such factors increase errors by unknown amounts. *It is widely recognized by surveyors that the major errors or bias are much more due to human factors than to statistical causes.*

TABLE 3.

**Standard Errors of Various Percentage with Given Sample Sizes (2 chances in 3)***

| Size of sample | 1 99 | 5 35 | 10 90 | 20 80 | 25 75 | 30 70 | 35 65 | 40 60 | 50 50 |
|---|---|---|---|---|---|---|---|---|---|
| 100 | 1.0 | 2.2 | 3.0 | 4.0 | 4.3 | 4.6 | 4.8 | 4.9 | 5.0 |
| 150 | .8 | 1.8 | 2.4 | 3.3 | 3.5 | 3.7 | 3.9 | 4.0 | 4.1 |
| 200 | .6 | 1.5 | 2.1 | 2.8 | 3.1 | 3.2 | 3.4 | 3.5 | 3.5 |
| 250 | .6 | 1.4 | 1.9 | 2.5 | 2.7 | 2.9 | 3.0 | 3.1 | 3.2 |
| 300 | .6 | 1.3 | 1.7 | 2.3 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 |
| 400 | .5 | 1.1 | 1.5 | 2.0 | 2.2 | 2.3 | 2.4 | 2.4 | 2.5 |
| 500 | .4 | 1.0 | 1.3 | 1.8 | 1.9 | 2.0 | 2.1 | 2.2 | 2.2 |
| 600 | .4 | .9 | 1.2 | 1.6 | 1.8 | 1.9 | 2.0 | 2.0 | 2.0 |
| 800 | .3 | .8 | 1.1 | 1.4 | 1.5 | 1.6 | 1.7 | 1.7 | 1.8 |
| 1000 | .3 | .7 | .9 | 1.3 | 1.4 | 1.4 | 1.5 | 1.5 | 1.6 |
| 1250 | .3 | .6 | .8 | 1.1 | 1.2 | 1.3 | 1.3 | 1.4 | 1.4 |
| 1500 | .3 | .6 | .7 | 1.0 | 1.1 | 1.2 | 1.2 | 1.3 | 1.3 |
| 1750 | .2 | .5 | .7 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | 1.2 |
| 2000 | .2 | .5 | .7 | .9 | 1.0 | 1.0 | 1.1 | 1.1 | 1.1 |
| 2500 | .2 | .4 | .6 | .7 | .9 | .9 | .9 | 1.0 | 1.0 |
| 3000 | .2 | .4 | .5 | .7 | .8 | .8 | .9 | .9 | .9 |
| 4000 | .2 | .3 | .5 | .6 | .7 | .7 | .7 | .8 | .8 |
| 5000 | .1 | .3 | .4 | .6 | .6 | .6 | .7 | .7 | .7 |
| 6000 | .1 | .3 | .4 | .5 | .6 | .6 | .6 | .6 | .6 |
| 8000 | .1 | .2 | .3 | .4 | .5 | .5 | .5 | .5 | .6 |

* Table is read : Where a variable in a population divides 80/20 per cent, a sample of 100 cases would, 2 times in 3, yield a result within an error of 4 percentage points from the true or complete-census finding. Or, the sample result would have 2 chances in 3 of falling between 76 and 84 per cent where the true census finding would be 80 per cent.

TABLE 4

**Size of Sample Necessary to Be Fairly Sure of Accuracy (19 chances in 20) to Within Specified Limits**

| For a Limits of error ± % | If Sample Breaks | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1<br>99 | 5<br>95 | 10<br>90 | 15<br>85 | 20<br>80 | 25<br>75 | 30<br>70 | 35<br>65 | 40<br>60 | 50<br>50 |
| | One needs a sample of: | | | | | | | | | |
| 1 | 380 | 1,825 | 3,457 | 4,898 | 6,146 | 7,203 | 8,067 | 8,739 | 9,220 | 9,604 |
| 2 | | 456 | 864 | 1,224 | 1,537 | 1,801 | 2,017 | 2,185 | 2,305 | 2,401 |
| 3 | | 203 | 384 | 544 | 683 | 800 | 896 | 971 | 1,024 | 1,067 |
| 4 | | 114 | 216 | 306 | 384 | 450 | 504 | 546 | 576 | 600 |
| 5 | | 73 | 138 | 196 | 246 | 288 | 323 | 350 | 369 | 384 |
| 6 | | | 96 | 136 | 171 | 200 | 224 | 243 | 256 | 267 |
| 7 | | | 71 | 100 | 125 | 147 | 165 | 178 | 188 | 196 |
| 8 | | | 54 | 77 | 96 | 113 | 126 | 137 | 144 | 150 |
| 9 | | | 43 | 60 | 76 | 89 | 100 | 108 | 114 | 119 |
| 10 | | | 35 | 49 | 61 | 72 | 81 | 87 | 92 | 96 |
| 15 | | | | 22 | 27 | 32 | 36 | 39 | 41 | 43 |
| 20 | | | | | 15 | 18 | 20 | 22 | 23 | 24 |
| 25 | | | | | | 12 | 13 | 14 | 15 | 15 |
| 40 | | | | | | | | | 6 | 6 |

How to read this Table. If sample breaks 40% to 60% (40% showing characteristic versus 60% not having characteristic) and one wants to be fairly sure that the actual limits in the total population be not more 5% from those figure (35-45% versus 55-65%), one needs a sample of 369.

*Interpretation and meaning of Table 4.* This table is particularly useful where the survey questions call for Yes/No answers or other alternatives. Let us assume a survey which seeks the presence or absence of literacy. If approximately half the population is literate and the other half illiterate and if the surveyor wants to be "fairly sure" that the survey

results are "right" within one per cent, a sample of 9,604 cases is required to give him that accuracy. If the division on literacy/illitreracy were around 75/25, then only 7,203 cases would be required.

Number of cases drops rapidly as the limits of error are relaxed. If the sponsor is wiling to accept a 5% margin of error (with 19 in 20 chances of it being within the 5%), then 384 cases would be enough where half the population is literate. Only 288 cases would be required where 75% are literate.

With 65 or 35% literacy, 87 cases would be enough to keep within a 10% error (19 chances in 20).

Another way to use the table is to know or estimate the number of cases that will be in a sample, and then note about what margin of error to expect. Thus if there can be only 300 cases, it means that the statistical error (19 in 20 chances) will be within approximately 4 per cent at the 85/15 division or around 5½% at the 40/60 division.

In as much as social policy can be made on information that is not accurate within small percentages ,many significant surveys and much useful data can afford a margin of error of 3, 4, or 5%. Narrow limits of error are necessary primarily in evaluative surveys and other research designed to assess amount of change in relatively short time spans.

## Organization and Field Work

The actual conduct of a survey after the questionnaire schedule has been prepared and the sample has been selected is a complicated business. It requires good organization, administration, training, supervision, and coordination if the survey is to be successful.

### Selection and Training of Interviewers

Ordinarily the person who has prepared the questionnaire and drawn the sample will direct the field work. If not, the

director of field work should be brought into the planning early. He and all field supervisors need to be completely familiar with every detail of the survey.

Interviewers are normally selected after the survey design is complete. Graduates are preferred for socio-economic and opinion surveys. M. A's in sociology, psychology, social work, and other social sciences are likely to be better. Whenever possible, interviewers should be of ethnic, religious, and socio-economic background similar to those to be interviewed. Interviewers need to be extroverts, able to talk easily with all types of people, have keen powers of observation and regard for details. They should be persistent and thorough, able to establish rapport quickly with strangers, conscientious, honest, reliable, quick of wit, resourceful, have legible handwriting, and be of inquiring mind. They need to grasp instructions readily, have an interest in research, and usually be available for work on irregular schedules. Relatively mature people of age 25 to 40 often make the best interviewers. Because of better mobility and accessibility to all classes of people, men are usually preferred to women, except where women are required to interview women.

The number of interviewers needed depends upon how many interviews can be finished in an hour or day and, how much time is avilable for the survey. Number per day depends upon length of questionaire, number of call-backs needed, geographic distribution of the respondents, and whether or not there is any flexibility in selecting the respondent. Normally about twice as many interviewers should be initially selected as will be needed for the job. People who find that they cannot approach strangers and start asking questions will drop out. Others will prove inept in training. Substitutes will be needed on any sizable survey. A few will prove unsatisfactory in quality of work and will have to be dropped.

Training usually starts with a thorough explanation of the purposes of the survey, sponsorship, characteristics of sample,

and other general information. Usually at the first meeting the questionnaire is gone over carefully and explained in detail. Every item in the questionnaire, of course, should be explained in detail and written "Instructions" given to the interviewers to study. All possible answers should be considered and reviewed. After a period of study, often a day or two, a written objective examination is given to see how well the interviewers understand the questionnaire and how to mark it. Only those who do well on this examination should be retained for further training.

The next stage is demonstration of the interviewing process. This is done by role playing before the entire group. The director acts as interviewer and another person as respondent. The director explains the process as he goes along or immediately after. Then two or three trainees each in turn act as interviewers under the watchful and advisory eye of the director. Next students pair off and interview each other. Their questionnaires are scrutinized carefully and errors called to the attention of the individuals and common errors reviewed with the group.

Field trial is next. The director takes groups of three to five with him to interview respondents similar to those in the sample. Each trainee marks his questionnaire while one asks the questions. Each case and all questionnaires are reviewed while fresh. Each trainee interviews at least one person under expert supervision. Those who do satisfactory work can be retained and assigned regular work. No survey can afford to use inefficient workers.

*Supervision.* Training is not enough. A force of interviewers must be supervised constantly. Usually this is done on a "crew" or "squad" basis with five to eight interviewers in a supervisory unit. A field supervisor cannot successfully supervise more than 10 men. The crew leader assigns the interviews, collects and receives the completed questionaires,

reviews them carefully in the presence of the interviewer, and makes suggestions for their improvement. With new inexperienced interviewers, the supervisor will find it best to go over each questionnaire as it is finished. This review and correction should continue until the worker can turn in perfect work. Only later can he collect and review the whole day's accumulation at once.

The supervisor should spend most of his time with his men observing in turn each one at work. While he may correct errors and suggest improvements after every interview observed, he also keeps a tally of common errors. These he discusses in crew meetings which can be profitably held every night with inexperienced interviewers. Even experienced interviewers on a new survey should meet frequently with their supervisors.

**Interviewing Procedures**

Detailed instructions are usually written out as a guide or manual for interviewers and as a source of reference on any point. In addition to giving the general approach to be made by the interviewer, this guide should solve a number of problems in advance.

1. *Not at Home.* Many surveys require calling at specific homes or interviewing specific persons. What does the interviewer do if the appropriate person is not available ? There are several possible answers to this. The best is to make *callbacks* until the proper person is home. Others in the family or neighbours can often tell when the respondent will be home. Callbacks are expensive especially if they have to be repeated several times in order to keep the original sample unbroken.

A second way is to select the house or person next door. This practice introduces an unknown bias. If this part of the sample is completely omitted, still further bias is introduced. A better way is to have an alternate house or person selected for each item in the sample. This alternate should be selected

at the time the original sample is drawn. The interviewer should be given the least possible opportunity to make the selection because bias almost inevitably will be introduced.

2. *Vacant house.* Samples based on dwelling units may include empty houses. Shall the house on the right or left or across the street be taken ? The instructions should indicate the solution. If the respondent is allowed to substitute *any* other house for it, he will inevitably introduce a bias—often in favour of higher economic classes. Instructions must direct his selection and not leave it to his choice.

3. *Substitutions.* If a specific respondent is not available, can a substitute be used ? Often substitutes are ruled out because they are likely to introduce an unknown bias. In some surveys a wife can answer for her husband. Occasionally some other family member can respond adequately ; it all depends upon the content of the survey and the degree of precision required.

4. *No response.* Because of suspicion or other reasons a few people will not properly answer questions put by strangers. What should the interviewer do in such cases ? Non-cooperation is visible but the interviewer should also be trained to detect false answers and know what to do. Can he build confidence in the respondent and induce honest answers ? Should he seek a substitute respondent ? Who ?

5. *Group influence.* Often the respondent is in a group—his family or friends. Also a group is likely to assemble around any stranger. Often a man's friends will begin to answer questions for him, throw him hints and ideas, or assist in other ways. Most surveys, however, want the facts or opinions from one man—not from an assortment of individuals. In such cases the interviewer has three alternatives : (1) Ask the others in the group to remain silent and give the respondent alone a chance to answer. In such cases he may not answer sensitive questions in the same way he might answer them if away from

his friends. (2) Try to arrange for the man to withdraw from his friends so he can answer the questions in relative privacy. (3) Terminate the interview or ask for one later under circumstances assuring privacy.

6. *Probing.* Many surveys include questions which must be asked exactly as written. In some cases questions may be asked in any of several ways without altering the meaning. Whether question-wording should be strictly followed or loosely followed should be indicated in the instructions. Especially in exploratory and depth surveys, questions are asked which require probing or asking of questions as necessary to uncover the respondents true feeling or knowledge. Instructions should not only indicate when probing is desirable but should suggest some of the types of questions to ask.

7. *When to call.* The director should be familiar with the work and recreation habits of the sample. Instructions can well give suggestions about when to make the calls in order to find a maximum number of respondents. Certain days and certain seasons may also be best.

8. *Explanations.* Respondents often have questions about the sponsorship, purpose of the survey, or other aspects of the matter. Insofar as possible the suggested introductory remarks and manner of approach should satisfy such questions but some respondents want to know more. The instructions should give all the information necessary to answer these questions properly.

Likewise instructions should tell how to handle situations where the respondent wants to postpone the interview, to avoid it, to answer only if required by law, and such circumstances. Wherever necessary respondents should be assured that the questionnaire has nothing to do with their intelligence, knowledge, or integrity. It is not an inquisition or examination.

9. *Approach.* Most interviewer interviews are made "cold". That is, the interviewer approaches the stranger,

establishes rapport, and goes ahead with the questioning. Wherever it can be arranged, introductions are very helpful in fulfilling a sample. Often word can be passed down through governmental or organizational channels urging cooperation with the survey. Sometimes friends can introduce the interviewer to the respondent and vouch for him. If this cannot be done, radio or newspaper publicity can sometimes be given to it so that respondents will feel prepared and will be secure because they know about it. In some cases, of course, cooperation can be required. The survey director should explore and arrange for his field staff to have the best possible introduction. They in turn will identify themselves as a part of the survey which has been publicized. Interviewers should carry some proper identification.

**Spot Checking**

Good survey procedure and quality control requires that supervisors make spot checks back on possibly three to 10% of the respondents. The supervisor needs to satisfy himself that the person was actually interviewed and that the responses recorded essentially reflect the facts and opinions supplied by the respondent. If interviewers know such check-backs are made, they will be less likely to fall to the temptation of doing carelesss work. Evidence of having not seen a person for whom an interview was reported is grounds for dismissal. Discrepancies in response should be carefully checked. If much unreliability shows up, the interviewer should be dismissed. An occasional interviewer, after some experience, may unconsciously introduce his own bias, may become careless, or may think he can anticipate answers well enough to fill out reports without doing the work. The supervisory check-back will uncover such instances and prevent most of them.

**Tabulation and Analysis**

Every questionnaire should be reviewed carefully for completeness when it is returned by the interviewer. Interviewers

should be given credit only for questionnaires which pass a high standard.

At the same time questionnaires can be edited for completeness, legibility, and consistency while in the presence of the interviewer. Tally clerk should have no reasons for making mistakes.

*Analysis.* As indicated earlier, the analysis forms including table heads and stubs should be completed before the field work starts. In fact, they should be set up at the same time the questionnaire is finalized. Tables and analysis sheets will indicate the class intervals into which data are to be tallied. The class-intervals often follow the pattern used in government or other surveys although other patterns may be useful.

Ordinarily most socio-economic surveys provide for a breakdown by certain major characteristics such as age, sex, educational level, rural-urban residence, marital status, economic level, employment status, and occupation. The nature of the survey may indicate that other classifications would be useful. Data are classified by these categories and analyzed for whatever significance they may show.

On most small surveys and on many medium-sized ones, hand tabulation is quite common and most economical. Large samples of several thousand responses may require the use of punched cards or other types of mechanical or electronic devices. However, even these may be hand tabulated. Machines are most useful in analyzing a complete census.

*Statistics.* Most surveys require no mathematics beyond percentage. However, where samples are small and the division of data is close, tests of significance may be necessary. Those tests and other more complicated treatment of data can be found in most statistics books but are beyond the scope of this book.

*Sources of error.* As the conduct of a survey is a complicated process, there are many opportunities to make errors

and introduce bias. Most of them are under human control. Random, chance, or accidental errors arise from factors not under human control. In the end, they tend to nullify each other. However, their presence and estimated size need to be recognized and considered in reporting any conclusions and findings.

Human errors may be constant and noncompensating. Often their magnitude is unknown. Consequently every effort should be made to keep them to a minimum. Care at every stage is the essence of a good survey as in other types of research. The main sources of error or bias arise from :

Biased source list. The list may not truly represent the universe or population.

Drawing the sample. Exact control is desirable but often difficult to carry out in selecting the sample from the universe or from the list representing the universe.

Non-random field selection. This arises when the interviewer is allowed to make his own substitutions for missed respondents in the field.

Poor question framing. Great care, extensive field testing, pilot surveys, and other techniques can reduce this error but probably cannot eliminate it altogether.

Poor assignment. This may represent unwise judgment or clerical errors in the office.

Faulty interviewing. Even experienced interviewers usually do somewhat less than a perfect job.

Untruthful respondents.

Absent respondents. Office selection of substitutes may largely overcome this weakness but may not completely do so.

Refusals and other omissions. Office substitutions cannot completely eliminate bias due to non-cooperation. Persons who refuse are different from others by unknown and possibly significant amounts.

Errors in coding, tabulating, addition, and arithmetic.

**Exercises**

1. Prepare five questions suitable for surveying villagers' attitudes toward specific social reforms.

2. If you had 5000 names on a list, describe three ways in which you could most easily select a two per cent random sample from them.

3. In table 2 is the second item down in column 2 correct ? (The 75) Why or why not ?

4. (a) In table 3 if a variable in a population divides about two to one, about how many cases would be needed to assure a standard error of two per cent (two chances in three) ?

   (b) What standard error (two chances in three) would be present in a sample of 200 cases if a bi-polar characteristic being measured divided about 75 to 25 ?

   (c) Within what lower and upper limits (two chances in three) would you expect the survey results to fall if 1000 cases were drawn and a complete census would have shown a 50/50 division of a characteristic being measured ?

5. (a) What is the smallest size sample necessary if a surveyor wants the results to be correct within a 10 per cent error (19 chances in 20) and the characteristic being measured divides 40/60 ? (See table 4)

   (b) (Also table 4) If a characteristic is distributed 25/75 in the population, what are the outside limits of error (19 chances in 20) in a sample of 200 ?

   (c) What would the sample have to be if the size of the error were cut in half ?

6. A survey in a town has identified 100 houses in which the heads of the household are to be interviewed. What instructions would you give interviewers to follow (a) When they found no one at home ? (b) When the head of the household was not at home ?

7. Block X has 120 villages and 80,000 people. They can be grouped as shown. Assume that a list of inhabitants is available for each village and that you want to make a sampling survey of ability to read and years of schooling. Design a stratified sample limited to 200 interviews in no more than 30 villages.

| | Villages by size | | What% of v to include | Number of v in sample | How many interviews in each stratum |
|---|---|---|---|---|---|
| I | 5200<br>4400<br>3600<br>2800 | 4 big villages<br>16,000 20% | ..... | ..... | ..... |
| II | 1900<br>down<br>to<br>510 | 84 ordinary villages<br>56,000 70% | ..... | ..... | ..... |
| III | 490<br>down<br>to<br>35 | 32 small villages<br>8,000 10% | ..... | ..... | ..... |

8. If you wanted to find out the chief concerns or problems in a block of 161 villages and could interview only 100 persons, what might be the best way to select the 100 ? Design a sample.

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| | |
|---|---|
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| Samalkot, Andhra Pradesh | Rajpur, Madhya Pradesh |
| Arunachal, Assam | Erode, Madras |
| Pusa, Bihar | Malavalli, Mysore |
| Kolhapur, Bombay | Bhadrak, Orissa |
| Manavadar, Bombay | Batala, Punjab |
| Pounta, Himachal Pradesh | Bhadson, Punjab |
| Chalakudy, Kerala | Bhathat, Uttar Pradesh |
| Morsi, Madhya Pradesh | Modh Bazar, West Bengal |

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# 4 PROGRAM EVALUATION

"How well are we doing ?"
"How well did the plan work out ?"
"Was our decision the wisest one ?"

These are the kinds of questions answered by evaluation. Programme evaluation is the process of assessing the degree to which activities are achieving the desired results. Careful evaluation is necessary if we are to derive most benefit from our experience. Let us examine several worthwhile functions of evaluation and a common but poor one.

## Why Evaluate ?

### For Programme Improvement

When a village leader camp is to be conducted, a complex set of activities gets under way. The camp staff is agreed

upon and assignments made. Physical arrangements are planned. A schedule is chalked out. Appropriate village leaders are notified and everybody does what he thinks he should to make the camp a success.

If the experience of this camp is to be used to make the next one better, the staff, and preferably the participants too, will need to evaluate. They will want to examine wherein improvements could have been made so that results might have been better. By seeing what turned out well—and poorly—and why, the staff can learn to conduct a better camp next time.

This illustrates the most important outcome of evaluation —*continuous programme improvement*—improvement in the educative process and in the activities designed to achieve an objective. By taking an analytical, constructively critical, and fair-minded look at what happened we can see deficiencies in method. We can discover unmet needs. We can reformulate our purposes and define our persistent problems more clearly. Through evaluation, questions are raised and the search for answers is stimulated. New ideas come to mind to be tested. New research is indicated. Out of such activity comes growth and improvement of programme. It is hard to overestimate the improvement that can come to the programme through continuous and careful evaluation.

**For Professional Growth**

Systematic and careful evaluation is an excellent way to insure professional self-improvement. Whether we are paid staff members or volunteers, knowledge that our efforts are bringing desired results gives us confidence and higher morale. We respond with more vigour and intelligence when we know the degree to which our efforts are effective.

By going through the evaluative process, we learn wherein our approaches, methods, and techniques failed or succeeded. We learn why. Next time we can avoid error and

follow more successful practices. Thus, through critical and open-minded evaluation, especially self-evaluation, Social Educators can best insure their own growth in professional competence. The biographies of great men often reveal that they early formed the habit of carefully evaluating their efforts and procedures. Ordinary men often neglect evaluation or do it poorly.

**For Programme Planning**

Leaders need evaluative information as a basis for determining further policy, for expanding or contracting the programme, for modifying its direction, for changing the staffing pattern, and for fixing budgets. When questions are raised about the worth of women's clubs, community centres, or radio listening groups, they need to be answered. Budgets need support and programmes often need defense. Impressions of success or failure in attaining objectives need to give way to facts. Sound and careful evaluation provides these facts. Through evaluation we can supply the Planning Commission, Members of Parliament, Members of the Legislative Assemblies, Development Commissioners, BDOs and all interested officials with evidence of the merits of our work.

**For Public Relations**

Social Education can serve its functions best when not only the policy-makers but everyone is aware of its effectiveness. If Social Education is to enjoy broad public support, a high proportion of the beneficiaries must feel that they are making satisfactory progress toward desirable goals. The participants in Social Education, of course, should inherently feel the benefits. However, they will become more sharply aware of the benefits if evaluative results are properly interpreted back to them. Panchayat members, other village leaders, and the villagers themselves can be of most help in supporting, defending, and justifying a programme if they know for sure how beneficial it is.

**A Poor Use of Evaluation**

Sometimes evaluation is done to see which village or block has the largest Social Education programme or can show most results. Such evaluation may serve an excellent purpose if it is a part of a carefully controlled experiment designed to throw light on the effect of different methods of techniques. If not, such comparative evaluation is likely to be infantile. It is as helpful as a child saying, "My father is bigger than yours." If evaluation does nothing to analyse reasons or casual factors, it may satisfy curiosity but is not likely to lead to improvement.

This comparative evaluation is often a waste of energy because the crucial elements are not really comparable. People in different villages and blocks differ widely in historical background, habits and customs, educational needs, social outlooks and attitudes, and dozens of other factors which influence the results of any Social Education effort. Careful research would be necessary to reveal these differences.

Comparative evaluation based on such different circumstances makes impossible anything but a superficial rating which is usually grossly unfair. In itself it does nothing to improve the situation. A much better type of evaluation is the comparison of one stage within a developing programme with later stages. Here growth can legitimately be charted and further improvements planned.

**The Structure of Evaluation**

The basic theory of evaluation is easy to understand. The structure of programme evaluation is simple.

Note the definition : *Programme evaluation is the process of assessing the degree to which activities are achieving the desired results.*

Three elements are needed :

1. An objective—$0^1$.

1. Objective, gol, aim, purposes, and target are used interchangeably in this chapter.

2. Knowledge of conditions at one time—Assessment I.
3. Knowledge of conditions at a later time—Assessment II.

It is much like target shooting. In the beginning the bullet is at I. Later it is at II. If I and II are lined up properly in relation to the bull's-eye, the gunner should hit the target. A comparison of the relationships of I, II, and 0 will show what changes are needed to improve the aim. In actual practice the gunner fires and notes where the bullet hit. Knowledge of the effect—feedback—enables him to correct his aim and improve his performance.

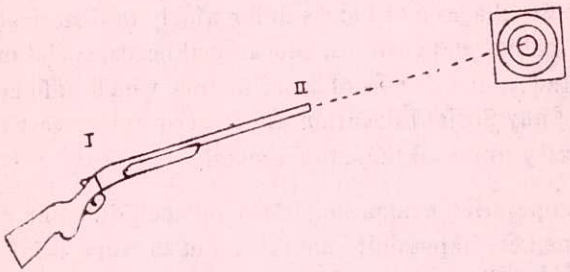



Figure I

A travel example can also illustrate : You may want to reach Agra—0. You must know where you are before you start—Delhi—Assessment I. By comparing 0 with I, you can find out the direction and distance you need to go. You do things intended to move you toward your Objective. You check again later and find yourself at Mathura—Assessment II. You note the distance travelled—progress—and the remaining distance and direction.

You may be satisfied with your progress. Knowledge of progress may induce you to modify your route, adopt more efficient methods of travel, or apply more energy. If you become discouraged with the progress made and do not value the goal highly, you may abandon the trip—Objective. In

either case you have used evaluation and the results thereof as a guide to decision and further action. You have used the principle of *feedback* to improve your process.

Problem Definition Fact Finding Analysis and Projection Decision Action Evaluation

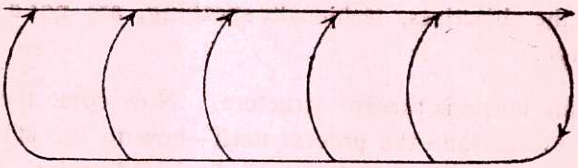


Figure 2. Results of evaluation can improve the process only if there is *feedback* into a continuing activity or one which will be repeated. Feedback comes out of the answers to such questions as these :

Wherein could the problem be better defined ?
What additional or better data are needed ?
How can the data be better analyzed and the hypotheses improved ?
What would have been a better decision ?
How can action be strengthened ?

After three years in a block, a BDO caused a sample survey to be made of Social Education among women. It showed a 15 percent literacy rate, 22 women's clubs in operation, and nearly 30 percent of school age girls in school. Knowing that these figures were better than those for the state as a whole, he was very proud of the findings. He talked widely of the progress made during his tenure until a DSEO pointed out a crucial consideration. The Bench Mark Survey of the block in 1954 had shown a 13 percent literacy rate among women and 31 percent of the school age girls in school. The SEOs reports showed that at one time 29 women's clubs were in operation. The BDO had overlooked the fact that two assessments are necessary to show gain or loss. He had indulged in comparative evaluation with another situation.

A teacher who gives only a final examination and no comparable one at the beginning does not know how much his pu-

pils learned under his instruction. After the initial assessment subsequent assessments, of course, can be repeated as often as desired.

The programme activities which go on—the methods, procedures, materials, energy, and time organized in effort to achieve the objectives, technically speaking, are not a part of evaluation.

This much is theory—structure. Now come the dynamics of evaluation—the process itself—how to use effectively the various elements of evaluation in Social Education.

## The Evaluative Process

### Objectives

Evaluation must always be in terms of objectives, goals, or targets. An objective is the desired outcome. In Social Education the outcome sought is a change in individual or group behaviour. Unless the goals, objectives, or desired behaviour changes are known, evaluation is impossible.

The first task in evaluation then is to know what the objectives are. Whether they have been set democratically or not? They are most useful in evaluation if they are clear, specific, and measurable.

"Developing more intelligent citizens" is almost impossible of evaluation until it is translated into behaviour changes which people can understand and want to make. One must ask :

"What new knowledge, skills, habits, interests, attitudes, and ideals are to result ?"

"What are we trying to accomplish ?"

"What behaviour changes are we trying to bring about ?"

A breakdown of the "intelligent citizenship" objectives may yield these intermediate objectives : To increase the per-

centage of adults who vote, to increase the participation in community organizations, to increase the number of contributors to the new community centre building, to increase the number of parents who send their girls to school, and any of 100 other objectives.

*Activity or Accomplishment ?* Two types of objectives are generally stated for purposes of assessment :

1. *Effort, activity, and energy spent.* e.g. Numbers enrolled, size of budget, number of women's clubs operating, number of libraries in the block, number of community centres, number of night halts made, miles travelled, meetings attended, films shown, leader camps held, etc., etc.

2. *Results or Accomplishment.* e.g. Amount and quality of activity of women's clubs, new members attending, number who passed the literacy test, extent to which the libraries are being used, young leaders who have come forward, growth in leadership among women, improvement in efficiency in literacy classes, improvement in quality of panchayat meetings.

*"Don't confuse activity with accomplishment !"*

The difference between measuring effort and results in evaluation is illustrated by two men engaged to tear down two similar stone walls. One worked all day with great energy but awkwardly and with poor tools. By night-fall he had dislodged only a few stones. The other, with less energy but greater skill and useful tools easily tore down his wall. Are some Social Education workers as awkward ? Or as skillful ?

Statements of objectives in terms of effort are much less useful than those expressed in terms of results. Objectives indicating effort or activity or energy spend, however, are widely employed because they usually are tangible and easy to use. Results, especially those of qualitative nature, are often avoided, because they are difficult to assess. Anyone can count the number of libraries, books on shelves, number of Social

Education classes, and number of youth clubs. How can you assess, though, the effect of the libraries on the public, the value of the Social Education classes, or the citizenship development which took place in the youth clubs during the last six months ?

It is questions like these that make the evaluation of Social Education difficult. Animal husbandary officers can report the number of cattle vaccinated. Agricultural officers can show increased yields. The midwife can report number of babies delivered. The irrigation officer can count the increase of irrigated acres. In and of themselves, these are recognized as worthwhile accomplishments.

The SEO can report concrete and visible items too : Literacy classes going, community centres established, libraries opened, training camps held. The worth of these tangibles, however,often is open to question. The physical facts lie the intangibles which are often difficult to demonstrate. Insofar as the objectives of Social Education often are relatively intangible behaviour instead of concrete objects, the SEO often finds it difficult to prove his worth. He finds it difficult to show clearly the growth in civic responsibility, in leader development, in changes of outlook, in skills of citizenship, or in the development of interests. Yet he must. Let us see how he can do it.

**Assessment**

*Activity.* Social Edacators should not avoid counting and reporting the concrete elements of their programmes. Numbers attending classes, numbers of libraries opened, number of women's clubs functioning, and such data are important and useful. Official reports often call for them. As such data require only ordinary effort to assemble and report, we will not discuss further details here.

*Results.* If objectives have been clearly defined in terms of behaviour we need to assess the behaviour changes of people.

Such assessment is usually not too difficult if we know clearly what we are looking for. Much behaviour can be directly observed or otherwise detected through the senses. Most behaviour changes can be seen. Others can be heard, tasted, smelled, or felt.

Taste is the test of a good cook. "The proof of the pudding is in the eating."

We listen to a musician or speaker and judge his performance at different times.

We can feel and see the results of training in cottage industries. We can see the increased earning power which follows occupational training. We can see and smell the results of training in sanitation and personal cleanliness. With the aid of laboratory instruments, we can see or otherwise detect the improvements in cleanliness in water and milk supplies.

Ultimately, in one way or another, most real changes in behaviour, if not all, can be observed. Even changes in such "intangibles" as attitudes, love, interests, character, personality, and outlooks are usually expressed through overt behaviour. At least the pragmatist would insist : "If an experience hasn't changed his behaviour, he hasn't learned anything." This is true whether we are concerned with learning to read, to cook, to use a library, to cooperate with members of a different caste, or to make intelligent decisions.

*Instruments and Procedures.* Physicians, engineers, and mechanics often use various mechanical tools and instruments to aid in systematic observation. The educator likewise, needs to use instruments as aids to observation. Many of the educator's instruments are of the pencil-and-paper type although others can be used. They help him obtain, record, and analyze information about behaviour.

The Social Educator is interested in several types of

educational outcomes. He will need several types of instruments and many procedures to collect the information desired. He will want to assess information, skills, habits, attitudes, and outlooks or aspirations. Let us look at one example of instruments and procedures usable in the assessment of each type of outcome :

A. *Test of Knowledge. Objective :* To teach 45 village leaders the rights and responsibilities of panchayats and panchayat samitis under a new democratic decentralization law in such a way that the essential information will be retained.

*Assessment.* Immediately after a village leader training camp was over, the SEO and the camp staff wrote out a dozen questions which they thought covered the most important items of information taught during the camp. All the questions could be answered by a Yes or No. Six months after the camp was held the SEO and VLWs interviewed those who had attended the camp. They orally asked the questions and checked the answers given on cyclostyled schedules. They were compared with the key giving the right answers.

*Results :* 14 answered perfectly; only 5 missed 4 or more questions. Average score was 10.8. Considering the nature of the questions, the SEO was reasonably well pleased with the amount of knowledge retained. Tabulation of items most often missed showed three areas where information was weakest. These, the SEO vowed, would be given greater attention and taught with greater clarity at the next such camp.

Knowledge or information is often assessed either through oral inquiry and conversation or through pencil-and-paper tests. Schools of all grades make much use of such tests or examinations which may be either teacher-made or standardized. (Note that this example was only of assessment and not of a complete evaluation. Only one assessment was indicated.)

B. *Test of Skill. Objective* in 12 literacy classes in a block : In three months to teach adults to sign their full names, to read and write within a 250-word vocabulary, and to add and substract numbers up to 100.

*Assessment :* The DSEO prepared and reproduced two equivalent tests. They both contained arithmetic problems and a few connected sentences of equal difficulty within the desired objective. They required signing of the full name. The reading part required written responses to questions to check comprehension and writing ability. One test was given when the adults first enrolled to detect any who had already achieved some part of the objective. The other equivalent test was given later and improvements noted. Errors or weaknesses were diagnosed to show what needed further instructional attention.

Here the instruments again were paper-and-pencil tests. The same test can be used before and after if teachers do not teach specifically for passing the one test.

While the overall results of the literacy tests in the various classes were indices of progress, they provided no sound base for comparative evaluation of different classes or the effectiveness of different teachers. Teaching effectiveness could not be fairly compared because the classes might have differed widely in internal motivation, background, learning ability, and many other important factors which could not be assessed by achievement tests of literacy.

C. *Test of habits. Objective* : To improve the environmental sanitation of villages in a block. A number of specific evidences of environmental sanitation were agreed upon (specific objectives) : flies, open drains and wet places, exposed garbage, open latrines, trash in lanes, uncovered food in shops, evidence of rodents, dust and dirt, and other important indices of public sanitation.

*Assessment* : A rating scale was designed for each item. The several desired scales were cyclostyled on both sides of a single sheet. Figure 3 shows samples of rating scales which an SEO or health worker might make.

**Flies**

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Swarms of flies in many places | Many flies around homes and shops | Average number of flies found | Very few flies found anywhere | No flies seen anywhere |

**Exposed Garbage**

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much garbage found all over the village | Considerable exposed garbage found | Exposed garbage found in several places | Exposed garbage found in 1 or 2 places | No exposed garbage seen anywhere |

**Dust and Dirt**

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Dust and dirt everywhere | Considerable dust and dirt | Some dust and dirt found | Very little dust and dirt | No dust or dirt |

Figure 3.

**Flies**

| | | XXX | XX | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

Figure 4. One scale of a Summary Sheet on which the ratings of five inspectors are consolidated. Combined Average Rating : 3.4 (Three inspectors checked 3 and 2 checked 4. The sum of these products is 17 which divided by 5 gives the average rating.)

On the same day from three to six raters in each village went around, inspected their villages, and checked the scales according to conditions observed. The independent ratings of several people should be averaged to reduce bias and to broaden the inspection sample. Local villagers made the inspections. This was sound as long as there was no competition with other villages to influence their judgment. This is a situation wherein each village can best compete with its own past record. Within some villages, in order to obtain broad citizen participation and build better civic responsibility, the panchayats let different groups take turns making the inspections. Even adolescent children can be taught to inspect. When occasional inter-village competitions were arranged, a team of inspectors completely unconnected with any of the villages made unannounced inspections.

The rating system becomes most effective if

—inspections are irregular and unannounced and made from a week to a month apart,

—notes of bad conditions are written on the rating scales to serve as a focus of further instruction. e.g. Certain neighbourhoods, lanes, or shops may be especially in need of cleaning up,

—the several ratings each time are consolidated on a Summary Sheet,

—the results are fed back in detail to panchayats and their health committees.

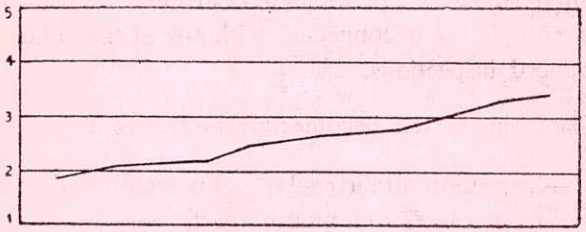
—the ratings are posted prominently on a public wall or black-board for the entire village to see.

—a continuing and enthusiastic sanitation campaign is carried on.

Under such an evaluation-cum-education system improvements in village sanitation ought to become visible and spur

the villages to still greater achievement. Eventually better habits should be formed and civic pride built in having a clean village, However, experience in even the cleanest villages shows that continuous and conscious educational pressure must be exerted to maintain sanitary surroundings. This job, like most others, is never done once for all.

Note in this case that no test of knowledge or skills was made. Instead, certain habits of the villagers in a whole block were assessed, They were assessed not by watching what people did minute by minute, but through observation of conditions which they created.




**Flies**

| Jan. 9 | Jan. 15 | Feb. 10 | Feb. 28 | Mar. 6 | Mar. 13 | Apr. 21 | May. 1 | June 3 | June 16 |
|---|---|---|---|---|---|---|---|---|---|

Inspection Dates

Figure 5. Progress in environmental sanitation in a village can be shown in a series of charts like the above—one for each item rated.

Rating scales were used here to help in making judgment where several degrees of quality could be measured or detected. Scales can have more or fewer than five points as desired. Fine distinctions often are hard to make or justify beyond seven or eight points. Three points make a coarse scale : good-average-bad.

*Checklists.* If one is checking the presence or absenee of a condition, a checklist may be useful. A checklist is

not good to assess the above conditions for a whole village as can be seen in the following items :

| *Yes* | *No* | |
|---|---|---|
| — | — | Did you see flies anywhere ? |
| — | — | Did you see exposed garbage anywhere ? |
| — | — | Were the streets dusty and dirty ? |

A "yes" check would be required whether the inspector saw a few or many flies. A single checklist item does not help in *grading* quality. However, the sum of many Yes-No checklist items can give an overall picture of quality.

A checklist might work better to check individual food

| *Yes* | *No* | |
|---|---|---|
| — | — | Is all food covered from flies ? |
| — | — | Is stored food rat-proof ? |
| — | — | Is garbage kept covered until removed from the premises ? |
| — | — | Are used dishes sterilized in boiling water before re-using ? |

D. *Test of Attitudes-in-Practice. Objective* : To help the people in a village, block, or district acquire social attitudes and practices more in harmony with modern times. The objectives will have to be identified specifically. The following are illustrative of some attitude-and-practice changes which may be desired :

(a) To increase the practice of sending girls to school.

(b) To castrate scrub bulls.

(c) To limit size of families.

(d) To increase use of trained midwives.

(e) To reduce the consumption of alcohol.

(f) To eliminate purdah.

(g) To eliminate the practice of giving and receiving dowry.

(h) To eliminate untouchability.

(i) To eliminate caste restrictions.

Note that these all have been expressed in behaviour terms even though attitudes, beliefs, and centuries-old customs lie back of most of them. Even so, some of them need further definition and specificity before useful assessments can be made.

*Assessment of results.* An opinion survey of what villagers think about these matters has limited validity. Research shows that people often tend to give answers which they think the questioner wants. Anyway there is often a difference between what people say and what they do. Data reflecting real behaviour are much more indicative of genuine attitude changes than are words. What are some useful indices?

(a) Girls to school: Year-by-year enrollment data in specified grades. If compared with the total number of girls of school age, the percentage of girls enrolled in school should be the most useful figure.

(b) Castrate scrub bulls: Percent of scrub bulls and bull calves castrated each year should be an index.

(c) Family limitation: Birth rate per 1,000 females of specified age range. Number of vasectomies per 1,000 males within specified ages. Decade-by-decade data on number of children per family.

(d) Trained midwives: Percentage of live births each year attended by trained midwives.

(e) Alcohol consumption: Figures on amount sold within a territory are reasonably good indices unless intoxicants are made locally. Such data may be hard to obtain. Number of

villages with liquor shops. Number of arrests for drunkenness.

(f) Elimination of purdah : Systematic observation at spaced intervals. What per cent of public meetings are attended by women ? Per cent of women in purdah in public meetings of same general type year by year. Sample observation of grown up women in purdah around village, converted to percent.

(g) Dowry : Observation at marriage ceremonies may give some idea although dowries may be hidden if the practice is under attack. Attitude survey based on inquiry.

(h and i) Caste and untouchability : Specific behaviour practices in relation to eating, drinking, visiting, intermarriage, worship, and other caste-connected behaviour will have to be observed at spaced intervals and the percentages of the practice compared.

E. *Test of Outlooks and Aspirations. Objective* : To assess the readiness of village leaders to move ahead on Community Development. This readiness is determined by several things, but for illustration, we will limit ourselves to one dimension : the past-orientation vs future-orientation of the leaders. That is, are the leaders backward-looking or forward-looking in outlook ?

*Assessment* : Undoubtedly there are several ways of detecting this orientation. One method is by analyzing what the leaders say in group discussion. Their remarks, when analyzed, can be classified as past-oriented or future-oriented. In order for an observer to develop the necessary speed and reliability to interpret and code the remarks, he will need to practice in advance.

Let us assume that a SEO goes with a VLW to a village and meets with a half dozen village leaders. The SEO sits in the background where he can listen and take notes while the VLW sits with the group although he does not lead the discus-

sion and tries not to influence the members in any way. The village leaders may discuss a problem of their own choice or something like "the improvements we ought to make in this village." The desired dimension can be assessed best if the topic draws out "past" and "future" references.

The SEO quietly sketches out the seating location of each man on some scrap of paper and begins to note down in code his interpretation of the remarks of each leader. Here is a code he might use :

| | |
|---|---|
| / | Supports new idea |
| RC | Tells about Recent Changes he (or village) has made |
| FP | Talks about Future Plans |
| OM | Remark showing an Open Mind |
| R | Ridicules suggestion for change |
| GOD | Talks favourably about Good Old Days |
| CBD | It Can't Be Done |
| LP | Likes Present—the way it is |
| – | Opposed to new idea |

When finished the sketch might look like this :

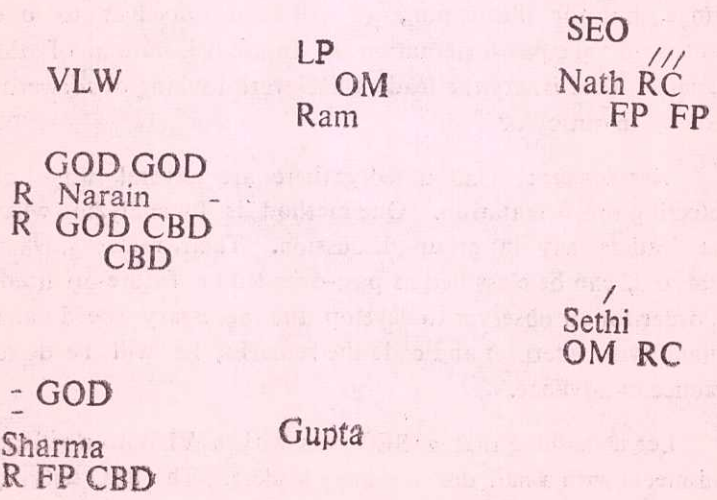



Figure 6

In analyzing these observations, we can readily see that Narain and Sharma today—in this situation—tended to be past-oriented while Nath and Sethi seemed to look towards the future. Ram and Gupta, while not saying much tended to be negative. We can not take everything at face value, however, until more is known about the situation.

How deep is the felling back of the remarks ?

How close is the verbalization to the real feeling or behaviour ? (validity)

Is there competition for dominance ? Some men may have taken opposite sides because of rivalry rather than because of real feelings about the subject.

These questions can be answered either by long acquaintance or rather quickly by other systematic observation of this type. Repeated observation of these men in other situations would increase the reliability of findings.

After the initial assessment, the VLW and SEO might decide to go ahead with further development or seek greater readiness in other villages. In the latter case, they might plan some systematic way of inducing more of these leaders to acquire a more forward look. Such ways might include study tours, more visitors from outside, social-problem dramatic performances, films, and many other stimuli. It might take two, three, or five years before a second assessment would show materially improved outlook.

*Develop your own instruments and procedures.* The evaluator of Social Education programmes should design his own instruments and procedures. They are likely to be better than those copied from some other evaluation. The reason is simple : If you adopt others, you automatically are adopting the objectives and criteria set by another—an outsider. Like trousers, they are not likely to fit as well as a pair made especially for

you. If you design instruments and procedures to measure progress toward the specific objectives desired in your programme, misfits can be avoided.

In developing instruments and procedures, it is often helpful to think along these lines :

What are the objectives, we are trying to achieve ? For example,

(a) Widespread adoption of specified housekeeping practices.

(b) More extensive use of the library.

What are *indicators*, or *indices*, or *evaluative criteria* of achievement ?

(a) Per cent of homes in which specified practices are in use.

(b) Per cent of people in village who take books from library.

What *instruments* are necesssary in gathering the data ?

(a) List of homes and check-space for each practice.

(b) Cumulative list of different people to whom books have been issued during specified period of time.

What are *procedures* for getting the necessary information ?

(a) Count the number of different homes in which each practice is used. Divide by number of homes in village. The per cent is an index.

(b) Examine library records covering a specified period of time. Count number of different people to whom books were issued. Calculate the per cent of villagers using library.

The Social Educator can often benefit by having a kit of assessment tools from which he can select and adapt to fit his particular needs. A professional worker will accumulate a variety of samples in his files. If he cannot alter old tools to fit the new needs, he may have to design entirely new ones. The Selected References at the end of this Chapter show a number of sample instruments. Among the more common type of indices, instruments, and procedures useful in assessing Social Education are the following :

**Indices**

Per cent (of people, families, villages, etc.) possessing an item or following a specified practice

Frequency of behaviour during a defined period of time

Speed of performance

Quantity of material produced

Quality—expressed in numerical terms

Test scores

Payment received; income

Combined judgments of several people regarding behaviour : ratings, rankings, scale points

List of characteristics or descriptions of behaviour

One should always attempt to make indices as specific as possible. Most adjectives and adverbs convey impressions crudely. Science comes only with refinement of observation. As arithmetic permits a much more precise description of behaviour than does language, indices should be expressed in numerical terms whenever possible. The last type of index suggested above is least satisfactory. Note the difference between the ordinary and the scientific way of reporting observations : "He reads rapidly." "His reading speed is 375 words per minute on this material which is sixth standard in difficulty." And "The sarpanch dominated the meeting." "The sarpanch announced his opinion and invited reactions. Only

two of the 14 men said anything and they supported his views."

**Instruments**

Tally sheets

Checklists

Rating scales (graphic, man-to-man, "guess-who," etc.)

Questionnaires

Interview schedules of questions to ask orally

Records of behaviour during defined time periods (with aid of watch or calendar)

Tests and examinations, especially of the objective variety.

- Intelligence
- Performance
- Achievement
- Aptitude
- Personality
- Interest
- Attitude and outlook
- Projective tests
- Situational Tests
- Sociometric tests

Cumulative records of work experience, education, tests and examinations, leadership positions held, health, biographical data, personality descriptions, significant experiences, cultural experiences, travel, etc.

Case histories

Self-descriptive tests

Instruments should be as reliable as possible. By reliability we mean the instrument's ability to yield the same result when used by different observers. For example, a woolen string, because of its stretch, is a less reliable measuring instrument than a wooden ruler. Research has shown that both essay and oral examinations are highly unreliable because different evaluators assign widely different values to the responses. Different readers can agree much more closely in grading an objective test. Objective data are likely to be much reliable than subjective and impressionistic observations.

Even more important is that instruments be *valid* measures of whatever we are trying to assess. *Validity* is the degree to which the instrument actually measures what it is meant to measure. Steel yardsticks are almost perfectly valid as measures of the width of a desk but are totally invalid in measuring germination of seed. Clinical thermometers are valid measures of body temperature.

In education, psychology, and the social sciences, we want to measure many intangible things. No yardstick or thermometer can be designed to measure directly such abstract concepts as intelligence, personality, feelings, social attraction, and character. Consequently instrument makers have to be ingenious in gathering indirect evidence which comes as close as possible to measuring what they want. Vocabulary tests and puzzle-solving tests, although far from perfectly valid, are more valid instruments for measuring intelligence than are tests of muscle strength or reading speed.

**Procedures**

Examine the data already available : census, surveys, reports, accounts, files, books, diaries, etc.

Make surveys : complete census, sampling surveys, spot checks.

Observe behaviour in its natural setting. Make records

(films, sound-tapes, stenographic records, checklists, and other instruments) for later analysis.

Administer tests and examinations : Stimulate behaviour in controlled and standardized situations ; record and observe performance.

May be timed or untimed.

Collect opinions (ratings, rankings, etc.) of informed, and preferably trained, observers or judges.

Inquire directly of people or indirectly of their associates.

Make case studies ; collect case histories.

In addition to validity and reliability, procedures and instruments should

1. be chosen for their educative value. Many tests and exercises have a considerable teaching value in themselves. Others can be applied without the respondent ever knowing he has been observed.

2. be economical of cost and time ; be within the practical limits of facilities, personnel, and resources available. Many otherwise excellent ways of getting data are too expensive.

**Principles of Programme Evaluation**

1. *Self-appraisal is usually of more value than appraisal by outsiders.* The first principle in evaluation is "know thyself." Evaluations by outside experts which do not sufficiently involve local people usually result in little improvement. Survey reports are usually read by only a few but the recommendations often are not acted upon by anybody. This neglect is largely because the people in policy-making positions were not involved in the appraisal. For them it was not self-evaluation. They did not develop much understanding of or commitment to the recommended changes.

As evaluation *is* a process, it has most value to those who

go through it. The people most deeply involved will grow most. This fact accounts for the popularity and effectiveness of self-surveys. In self-surveys the participants have an opportunity to develop a clear understanding of the facts, analyze them, and see the implications. In the process of arriving at recommendations, they will develop an emotional commitment to them. Having arrived at the decisions themselves, it is only natural that they will do all they can to put them into effect.

This is the key point. Outside consultants, often brought in for technical help, need to be aware of it. The prime strategy of evaluative activity is to involve people in the process in ways that will bring about desirable changes. This strategy must be injected into the initial planning otherwise it may be overlooked. Potential resistance to change must be identified and the details of the evaluation so designed that those involved will accept their findings, emotionally as well as rationally.

While self-appraisal induces growth, a combination of self and outside appraisal can be still better. Even though outsiders cannot go deeply into the local situation, they can see us as we cannot. The interaction of outsiders and local people results in maximum stimulation and growth.

*Cooperative Evaluation.* This discovery has led to the development of a scheme of programme evaluation that has gained wide usage among educational institutions in the USA. It offers great potential benefit to both formal and extension-type educational programmes elsewhere.

In cooperative evaluation, a secondary school, college, university, or Social Education programme will first spend several months gathering essential data about itself—how well it is accomplishing its objectives. Many people will participate : the board of control, the faculty or professional staff, the students, and to whatever extent practicable, the whole public clientele.

After this self-study has been done, an outside team of people well acquainted with the *type* of programme is invited in to examine the data and visit the programme in detail. They take a constructively critical and stimulative look. The team may interview an extensive range of people connected with the programme. After from two to five days of intensive examination, the team usually sits down for some hours with the responsible leaders of the local programme. They engage in a cooperative analysis of the total situation and try to find places for improvement. The cooperative report often results in several more months of intensive activity aimed at improving the programme. While this type of evaluation may assess the quality of the programme, its greater value lies in programme improvement.[2]

Self-appraisal encourages the building of tailor-made instruments and procedures for assessment. This construction of instruments and design of procedures is a highly creative activity. It is likely to result in invention of new educational approaches, new teaching methods, and other improvements in the educative process.

2. *Comparison of achievement with objectives within a programme leads to more improvement than comparison of one programme with another.* By definition evaluation is the process of assessing the degree of finding out how well activities are achieving objectives. This evaluation must be within the same programme. If progress is being made, repeated evaluation will show increments of growth toward accepted objectives.

We have already discussed the futility of inter-village and

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2. For further information see *Cooperative Study of Secondary-School Standards, Evaluative Criteria,* 1950 Ed., Washington, D.C. : American Council on Education ; *Documents for Schools Seeking Accreditation,* National Home Study Council, Washington, D.C. : "Evalution of Adult Education," *Baltimore Bulletin of Education,* 25 : 156-248, January-March, 1948.

inter-programme comparisons. Measurement of growth cannot be made against objectives in some other programme. A boy best measures his growth by comparison with his own past height—not by comparison with the size of other boys.

Comparison of one programme with a group likewise is not good evaluation even though the original situations may have been similar. Such comparison, are often made with the average or midpoint as an objective. If one village or block finds itself above average, everyone feels happy. If below, they may strive to reach the average. Averages seldom provide worthy goals. Furthermore, in times of rapid change and growth, present averages soon recede into the past and become still less adequate as objectives.

3. *Everyone concerned with the educative process should be involved in evaluation.* Evaluation can be at any and all levels. National, state, and district people evaluate. The BDO evaluates. The entire block staff can be brought into the process to its benefit. More benefits will result if a wider range of interested persons are brought into the process—the block committees, panchayat samitis, local panchayats, village leaders, and members of participating groups. The general public, too, evaluates, as it forms its opinions about the worth of Social Education activities.

Whether we plan it or not, everyone evaluates; i.e. makes judgments about the effectiveness of Social Education upon such information as he may have. Since this is so, it is only good sense if those in charge positively plan to bring all interested people into the evaluative process. Participation in making valid and reliable assessments is good public relations. Participants believe in what they share.

Not only will participants in evaluation become better able to help improve the programme, they will learn how to make a more disciplined and rational approach to their own problems. This involvement which assures maximum growth

and development of the participants is the heart of Social Education.

Board participation is also democratic. Everyone should have the right to help set his goals and to assess the worth of his activities.

4. *Evaluation offers greatest benefit if it is a long-term, continuous, and built-in part of the total educational process.* An artillery-man cannot afford to observe his first shot, reset his sights once, and keep firing away without further checking. He can develop accuracy best if he knows the results of each shot and redirects fire as necessary. This is especially true with moving and emerging targets such as are found in a developing country.

While certain types of assessments may need to be taken at specific times, evaluation should be continuous. At best it is integrated into all other phases of the educative process. If results of evaluation are fed back to help in the redifinition of goals and improvement of approach, method, and technique, the whole process can benefit. Constant testing and checking can help develop maximum perfection in the educational activities.

5. *Evaluation should always be directed toward measuring results.* In Social Education assessment of changes in behaviour in people is more important than counting of machinery and energy spent. Number of participants, listeners, meetings held, and average daily attendance are easy-to-collect data but provide little evidence of changed behaviour. Mobs have many participants : dog fights are well attended ; and the average daily attendance of factory employees may be high. These indices, however, provide only indirect evidence of changes in behaviour.

The evaluator in Social Education can better be concerned with outcomes, with results, with changes in people.

"Do Harijans associate more freely with higher castes ?" "Do the villagers apply more knowledge and intelligence and less folklore and tradition in the solution of their problems ?"

## A Village Checklist

Here is a Social Education Checklist for use in villages.

Village.....Block.....

| *How does your village stand ? Is it making progress ?* Put a check (√) in Column 1 after every question which can be honestly answered YES. Be sure every requirement in the question is met. *Leave the other blank* Then help the village pick out targets it would like to achieve. Next year use the *Checklist* again and put your check marks in Column 2. See how many more checks you have next year. | Column 1<br>196... | Column 2<br>196... |
|---|---|---|
| **Education** | | |
| 1. Are at least *3/4* of all males *above age 11* literate ? | | |
| 2. Are at least *1/4* of all females *above age 11* literate ? | | |
| 3. During the past year did a Social Education or literacy class for men provide at least *150 hours* of instruction ? | | |
| 4. Did a Social Education or literacy class for women provide at least *150 hours* of instruction ? | | |
| 5. Did one other class or discussion group for men meet at least *30 hours ?* | | |
| 6. Did one other class or discussion group for women meet at least *30 hours ?* | | |
| 7. Did a follow-up literacy group meet *weekly* or oftener for at least *15 weeks ?* | | |
| 8. Did a radio listening group meet at least *three times weekly* for *30 weeks ?* | | |

| | Col. 1 | Col. 2 |
|---|---|---|
| 9. Did a radio discussion group meet *20 minutes* or more at *least weekly* for *30 weeks ?* | | |
| 10. Do at least *3/4* of all boys *age 6-11* attend school regularly ? | | |
| 11. Do at least *3/4* of all girls *age 6/11* attend school regularly ? | | |
| 12. Do you have a library (with at least *1 book for every 5* people) open at least *10 hours weekly* throughout the year ? | | |
| 13. Did at least *1%* of the villagers attend a village leaders camp ? | | |
| 14. Did at least *1/4* of the day-school teachers lead Social Education activities ? | | |
| 15. Do at least *4%* of the village population attend middle school ? | | |
| 16. Do at least *2%* of the village population attend secondary school ? | | |
| **Organization** | | |
| 17. Is there a men's club which meets at least *weekly ?* | | |
| 18. Is there a youth club or young farmers' club which meets at least *weekly ?* | | |
| 19. Is there a women's club which meets at least *weekly ?* | | |
| 20. Is there a bal mandal dal which meets *daily ?* | | |
| 21. Is there a music or dramatics group which meets at least *weekly ?* | | |
| 22. Is there a sports or physical welfare group which meets at least *weekly ?* | | |
| 23. Is there a community centre with at least *three activities* going on *daily ?* | | |
| **Economic Development** | | |
| 24. Do at least *1/2* of the families belong to a cooperative ? | | |

| | Col. 1 | Col. 2 |
|---|---|---|
| 25. Do at least *1/2* of the families each have *100 square feet* or more in kitchen gardens ? | | |
| 26. Is the per-acre yield of the main foodgrain at least *10%* above the *average yield of your state ?* | | |
| 27. Are at least *1/2* of the cows bred by artificial insemination or improved bulls ? | | |
| 28. Have at least *1/2* of the poultry-keepers introduced an improved breed of fowl ? | | |
| 29. Do at least *1/2* of the farmers use compost pits ? | | |
| **Citizenship** | | |
| 30. Is there a Panchayat (or Village Development Committee) which meets at least *monthly ?* | | |
| 31. Can *all* Gram Panchayat (or VDC) members read a newspaper ? | | |
| 32. Has the village an *active* committee working for improvement of education ? | | |
| 33. Has the village an *active* committee on women's welfare ? | | |
| 34. Has the village an *active* committee on health and sanitation ? | | |
| 35. Has the village an *active* committee on cultural and recreational activities ? | | |
| 36. Are Harijans welcome at *all* village meetings and do they *actually attend* some of them ? | | |
| 37. Is the village free from purdah ? | | |
| 38. Does the village raise for its own use through local taxes or gifts, money equal to *Re. 1* for every man, woman, and child in the village ? | | |
| **Health** | | |
| 39. Is the village completely sprayed against mosquitoes *twice* a year ? | | |
| 40. Are at least 3/4 of the children free from *sore eyes, boils, and lice?* | | |

| | | Col. 1 | Col. 2 |
|---|---|---|---|
| 41. | Does the village have a sanitation and cleanliness drive at least *monthly* ? | | |
| 42. | Has *every* child reaching the age of *12 months* been vaccinated ? | | |
| 43. | Are the *majority* of villagers inoculated against cholera *annually ?* | | |
| 44. | Are *all* public wells disinfected at least *4 times a year ?* | | |
| 45. | Do at least *1/2* of the homes have soakpits or better ways of disposing of waste water ? | | |
| **Home and Family Life** | | | |
| 46. | Do at least *1/2* of all homes have a place to protect food from insects ? | | |
| 47. | Do *more than 1/4* of the homes use smokeless chullahs ? | | |
| 48. | Do at least *2/3* of the married women have *no more than 4* children ? | | |
| 49. | Is *every* boy and girl married in the village at least *15 years old ?* | | |
| 50. | Are recreational activities provided in the village for *all age groups ?* | | |
| | Total | | |

*Its Constructions:* A long list of items was made up from suggestions from several Social Education workers. All items were rated by about 20 Social Education instructors and organizers as being of considerable importance (2), of some importance (1), or of little or no importance (0). The first revision was submitted to 72 DSEOs, SEOs, BDOs, and Panchayat Officers from nine states. They were asked to apply it to the village they knew best. From memory and specific knowledge they were asked to fill in specific information for all items based on quantitative data.

In the light of this field trial, many definitions were revised. Numbers in many items were adjusted so that they would be a stimulating challenge to the average village with-

out being too high. If they were fixed too high, they would be out of reach and would discourage rather than inspire.

*Usage.* A village can be checked by VLW, SEO, Sarpanch or anyone. However, the *Checklist* is much better used if the whole Panchayat, or a Social Service or Education Committee uses it. Several responsible persons—not just one —should make the assessment.

Thecommittee should make an honest judgment, based on facts and figures, on each item. Does the village honestly say YES to each item as defined ? Put a check in Column 1 for each question answered YES. If the answer is not clearly YES in every respect, *leave it blank.*

Add up the checks to see the village score.

Then help the village establish its targets for next year. Keep the people reminded of their targets so that they will keep working on them. Post them on a wall of the Panchayat Ghar or in some other public place. Refer to them frequently.

Use the *Checklist* again next year and each year thereafter to see how much the village grows in Social Education.

*Make your own Checklist.* It is impossible to make a *Checklist* equally good for all over India. Villages differ too much. Therefore every village committee which uses the *Checklist* should first examine it carefully. They should cross off any items which they think are unimportant or not applicable to their village. For example, if the village has no Harijan item 36 may be discarded. But do not cross off an item just because the village does not meet it. If it is a desirable and worthy goal, keep it and work toward it.

Each item discarded should be replaced by a better item —some desirable goal which is important to the village. All items retained should be targets accepted by the village. Some may be distant targets, of course, and not reached next year. The new items should not be things the village is already doing.

They should be challenges—goals the village could reach with effort.

Below are examples of additional items which have been suggested by field workers. They may be more important to your village than certain ones already on the *Checklist*. However, it is better to think up, discuss and adopt your own than to copy others blindly.

**Suggested spare items**

Is the drinking of alcoholic beverages prohibited in the village ?

Do more than 1/4 of the families use sanitary latrines ?

Does the village maintain a wall chart with up-to-date information on it ?

Did the shramdan this year average 10 hours for every man, woman, and child in the village ?

Do at least 1/4 of the families supplement their income with cottage industries ?

Do the several parts of the village work together well without factions ?

Do at least one-half of the women do their own sewing ?

Are livestock and people kept separate at night in at least 1/2 of the households ?

Are at least half the weddings arranged without dowry ?

Are at least one-half of the new babies born delivered by a trained dai or midwife ?

*Best Use.* The chief value of the *Checklist* lies in how it is used. It should be a useful device to stimulate village discussion and thinking. It can be the starting point for village planning. When it has been thought through carefully,

the list of items should be the targets toward which the village is willing to work. Every new target reached is worthy of village pride—public recognition—may be a celebration.

Once accepted, the *Checklist* becomes a *yardstick* by which a village can measure its progress in Social Education year by year. However, if the *Checklist* is used only as a measuring stick without the discussion and educational techniques, it will lose much of its potential value.

*Shortcomings.* Many of the targets were set reasonably low. They can be reached by many villages with moderate effort. As India makes progress, these suggested targets will become out-of-date and will need to be raised.

Most of the questions assess only effort : physical facilities, activities, or possesssions. While libraries, schools, organizations, committees, and compost pits are desirable, it is *results* that count most. What is the benefit ?

Bare literacy, for example, is not enough. Do the people read ? What do they read ?

What use do the people actually make of the library ?

What benefits come from taking part in a woman's club ?

What good work is the Health and Sanitation Committee doing ?

Is membership in the cooperative of real benefit ? How much ?

Is the Panchayat truly representative of the village interests ? Does it work sincerely and effectively for all the people ?

These are the kinds of questions which should be answered before you know whether you have a truly good programme of Social Education. How is the behaviour of people changing ?

Some questions such as Numbers 26, 36, 37, 38, 40, 42, and 49 and a few others try to assess results. Item 48 does not ask what effort the village is putting forth to limit the population. Instead, it attempts to assess the *effects* of family planning efforts. This target might take years before any big cut is noticed in average size of family.

*Use it.* Reading about this *Checklist* will not help much. Its benefits come with use.

**Exercises**

1, A Woman VLW has taught members of a Women's Club, which meets two hours every afternoon, several simple processes in sewing. In addition, the women spend about one-third of their time in singing and chanting local folk verse. Outline a plan for evaluating this club's programme.

2. a. How would you assess the effectiveness of a village library ? List the five best evaluative criteria (or indices) you can think of and indicate how you would get the necessary information ?

b. Repeat the above for a community centre, a health centre, and a radio listening group.

3. Visit a village and gather the necessary information to fill in the *Checklist* on pages 185 to 188. Note the *Checklist* items which are not objectives in the village.

a. What additional items should be added to fit the village objectives ?

b. Under what circumstances, if any, should a village be scored on objectives about which it is doing nothing ?

4. An SEO and VLW worked closely for a year in a half dozen neighbouring villages on a special "community organization and discussion programme" designed to help the

villagers prepare for the changes likely to be brought on by the anticipated introduction within the next two years of (a) electricity, (b) four new industrial plants nearby, (c) a new highway, and (d) an army camp within 7 miles. They wanted the villages and families to be able to adjust to the changes likely to occur, to reduce caste barriers, and to get the villagers into the habit of facing, discussing, and tackling their problems in a realistic manner.

Which of these procedures is likely to give the soundest evaluation of the special programme ? Rate the best as 1 ; the second best, 2 ; third best, 3 ; and worst, 4.

—A. The BDO was invited to talk with leaders in the villages and acquire an impression about the special programme. He was carefully briefed on the aims of the intensive work and the methods used by the SEO and VLW. The SEO and VLW also discussed the year's meetings with numerous villagers and shared their impressions with the BDO.

—B. Before the project started, the SEO and VLW found out how many organizations existed in the villages, what meetings were held in the first month, how many attended, age and sex breakdown, etc. They made another count of these criteria after a year and compared results. They interviewed a representative sample of 10 men in each village during the 12th month to find out what changes they thought had been made in the thinking of the villagers during the year.

—C. The SEO and VLW analyzed by caste the attendance of all village-wide meetings for a month (meetings of caste groups and small spontaneous meetings were omitted). They selected the 10 most representative and influential leaders in each village and through indirect conversational methods and observation rated their attitudes on intercaste meetings. They attended and kept notes on all

village-wide meetings and of panchayat meetings, and women's, men's, and youth group meetings for a month and tried to observe how well they followed some problem-solving procedure. They repeated all this during the 12th month and analyzed the changes they observed.

—D. The SEO and VLW took a primary teacher in each village into confidence and interested him in making observations and noting down evidence of changes in outlook and attitude. Together they worked out a list of things to watch for. The data were compiled at the end of the year. The teachers attended most village meetings and attended a lot of smaller group meetings as well.

5. One job of the SEO is to "train village people for leadership." Break this general objective down into at least 10 clearly-stated and reasonably attainable specific objectives which can be assessed.

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*Sixth Report,* June 1959, and more recent reports
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