In 1967 the NIEC wrote "Perhaps the greatest potential contribution towards achieving full employment (which is equated with economic growth) lies in changing the attitudes of all those who are engaged in the productive process at all levels. There has been no research into these attitudes nor is any serious research now proceeding into their causes; and the arts of bringing about changes in them are undeveloped".

In fact over the last 25 years very significant progress has been made toward understanding the attitudes that are associated with the development of different types of society, and in the last five years considerable progress has been made in techniques of encouraging people to be articulate about the goals they wish to achieve and thereafter pursuing them effectively. It is the purpose of this article to review some of this work.

As far as economic development is concerned it turns out that the NIEC is a little misleading when it says "The motivations for enterprise are complex and the balance varies between individuals and companies; enterprise may at different times be motivated by a desire to earn profits, to do things better, to provide employment, to contribute to the welfare of the community or to achieve independence, status, or social and personal satisfaction". It is misleading because the sort of enterprise which follows from a desire to make money per se tends to be qualitatively different from the sort of enterprise which is motivated by a desire to do things better than they have been done before. People concerned to make the most money tend to
disregard basic development and to utilize strategies to maximise short-term payoff. The individuals concerned tend to define the situation in which they are operating as a "zero sum game", (i.e. as a situation in which if A wins, B loses), rather than as a situation in which everyone can gain - as they can, for example, if they cooperate to ensure that size of the national cake increases while their relative shares remain constant. In contrast to a desire to make money, a widespread desire to do things better than they have been done before (rather than as they have been done before) tends to lead to economic growth - although those more infused with the desire do, sometimes, obtain a larger share of the growth than those less infused with the desire.

In fact it has been shown that the rate of economic development of a society is greater the more the following attitudes are widely diffused through it (although it should, of course, be recognized that in no society are these things present in the idealised form presented here; there is simply a tendency towards them).

1. A desire to do things better than they have been done before (rather than as they have been done before).

2. A concern with excellence. That is, developing societies tend to have a climate in which each individual tries to do the very best he can, and in which such things as producing slip-shod work or work in which defects are purposely concealed is unthinkable.

3. A willingness to admit to, and recognise, one's feelings of pride and delight in individual and cooperative accomplishments, and a concomitant willingness to admit to and notice negative feelings in the absence of success.
4. A tendency to set challenging goals and to anticipate taking pleasure in the success of having achieved them.

5. A tendency to make plans to achieve these goals (and to make realistic rather than over-optimistic plans).

6. A habit of anticipating the problems involved in achieving goals, including problems arising both from the outside world and from one's own human limitations.

7. A willingness to accept the help of others when it is necessary to achieve objectives as efficiently as possible.

8. An active desire to seek out and continually utilise information indicating how effectively one is pursuing one's goals.

9. A willingness to trust others, to think that strangers are trustworthy, and to think that trust is an important personal characteristic for oneself.

10. A willingness to do things when asked without have to be pressurised by such institutions as the church and the law.

11. A willingness to respond to people and situations in terms of the requirements of the situation rather than rigidly according to absolute rules laid down in the past.

It is not, of course, surprising that these characteristics should be associated with economic development; what is surprising is that they have so infrequently been singled out for special attention, and that other characteristics, which often have been singled out for attention (such as a desire for material possessions, a desire to make money or burning (unrealistic) ambition),
should not be included in the list. It is also surprising that education in the past has not paid more attention to these characteristics - although many of the best educationalists have, for years, been saying that their primary objectives were to encourage pupils to think about their goals in life, to develop a philosophy of life, to take initiative, to want to be masters of their destiny instead of pawns of fate, to develop self-confidence, and to be able to cooperate with others to achieve their goals. However, even those educationalists who have stressed these things have not been able to develop an explicit strategy to help them to achieve them: all they have been able to do is to hope that some of their own enthusiasm for their subject would rub off on their pupils; in other words that some of their own attitudes (such as insisting on high standards of performance for themselves) would be "caught" by their pupils even if they could not be taught to them. Finally they have been unable to assess whether they have, in fact, attained their objectives effectively.

It is against this background that the current research looks dramatic: for not only does it focus attention on these things and show that they operate cumulatively to foster economic development; not only does it show that other things which have sometimes been thought important are not important in fostering economic and social development; not only does it enable us to assess the extent to which people tend to do these things spontaneously, and the effect that education has in developing them; it also suggests ways in which the people can be explicitly encouraged to develop these characteristics and ways in which society can be modified so that people who have a spontaneous tendency to behave in this way can be more effective. Furthermore, it shows that these
changes can be brought about relatively quickly, not only in children, but in adults as well. You can teach an old dog new tricks.

The unusual effectiveness of courses designed to help people acquire these important characteristics derives from the fact that they are based on a number of psychological principles that have been established over the last 50 years or so but have not before been brought together in any one course.

The courses encourage people to:

1. Think carefully about what they want to do with their lives and, having clarified their objectives, commit themselves to achieving these objectives. In the process of doing this they look carefully at their past and consider and verbalise, perhaps for the first time, the factors that give rise to feelings of satisfaction and frustration. As a result, people are often surprised to discover that they really do enjoy making innovations or breaking with tradition and that the conventional wisdom which tells them that only objectionable people enjoy these things is wrong.

2. Think carefully about the obstacles they are likely to encounter in achieving their goals.

3. Break up the route to their goals into a number of challenging but realistic stages which they can commit themselves to achieving by specific dates.

4. Study the research results relating to people who are successful in achieving their goals and relate these to their own behaviour in ways which will help them to improve their own performance. In particular they can practice thinking, feeling and acting in the same way that successful people think, feel and act.
5. Keep a record of progress made toward the goal so that they obtain continuous feedback as to how effectively they are achieving the standards they set for themselves.

6. Establish a network of friends who support them in their new role and who provide emotional support and help them out of their difficulties.

The general result of the courses is that the participants come to think a little more clearly about the life-goals that are important to them, to assess the extent to which such things as making innovations, being friendly and getting the best out of others give them satisfaction; to consider the long-term consequences of their decisions and actions a little more often and to pursue a little less haphazardly the objectives which are important to them and which will bring happiness to themselves and to others.

Courses for Businessmen

When businessmen are studied before and after one of these courses it is usually found that the sort of behaviour that is characteristic of only the best third of businessmen before the courses is characteristic of two-thirds of them afterwards. When financed out of Government funds the courses seem to pay for themselves in increased tax revenue alone (not counting the number of new jobs created or the gains arising from moving some people from the dole to productive employment) in about nine months.

Community Development

As confidence in the courses has developed they have been extended to whole communities. As yet it is too early to say exactly what the pay-off will be. However, what has been done in this case is as follows:
While standard courses are run for the younger members of the community, leaders come together for a special course. Firstly, an attempt is made to bring home to them the need for the support of others and an appropriate social climate if people who are motivated to achieve and develop their communities (which it is hoped that the young people are or will become) are to be able to function effectively. This is done by first familiarising them with the patterns of feeling, thought and action which are characteristic of individuals who are highly achievement-oriented. Then the oldest among them play the role of young achievement-oriented individuals in their community while the youngest among them play the role of a commission trying to solve the problem of emigration. This not only confronts the community leaders in a very dramatic way with the problems of their community but also leads to a discussion of the goals they have for the community. This in itself is often instructive in that the community leaders come to realise, often for the first time, that their neighbours share their desires, hopes and fears; that there had been a situation of pluralistic ignorance in which they and their neighbours each wanted to see the same changes in the community but did not know that the others also wanted the changes.

Once they come to mapping out a course to achieve these objectives the community leaders come face to face with conflicts which have in the past existed between them and prevented them operating effectively. In order to help them develop an effective strategy to deal with these conflicts educational simulations of real life situations are arranged so that a trial of a new tactic which ends in disaster will not have the irreversible effect it would have in real life. However, since the people being dealt
with are the people the participants will be dealing with in real life it is anticipated that effective strategies will be translated into real life behaviour. The likelihood that this will be so is, of course, increased when the group returns to its discussion of the real problems of the community and the route to remedying them. In the end some of the most pressing problems of the community are singled out for special attention and a challenging but realistic route toward their solution mapped out and adopted. Finally, ways of assessing and reviewing progress toward these goals are agreed upon.

Traditional Education

In addition to these experiments with adults experiments have been carried out within the traditional educational framework itself. Here the research results have been used in two ways. Firstly, they have been applied to the task of increasing performance in traditional school subjects, assessed in the traditional manner. Examples of such subjects would be mathematics or typing. Secondly, the research results have been used in direct attempts to generate the sort of character traits that were described earlier.

In the first case it was found that as a result of getting pupils to set their own performance goals and keep a record of progress toward those goals, not only did the pupils' performance in the subject improve but the teacher was able to change his role. No longer did he have to be an authority figure goading pupils on but could instead be a helper aiding pupils achieve their own goals. This had the advantage that the teachers were able to provide a much more effective role model for their pupils; there was a much higher chance that the attitudes they were
trying to communicate to their pupils would, in fact, rub off on them.

Programmes of the second sort have encouraged pupils to clarify their own life-goals and develop self-understanding. This was done by means of discussion lessons and essays written on a series of topics such as "My Favourite Daydream" and "The Sort of Person I Want to be". Essays were also written around prepared outlines which encouraged the pupils to think about the need to plan ahead, to anticipate obstacles, to set challenging but realistic targets, to monitor progress toward these targets, and to recognize feelings of satisfaction and frustration. The specially trained teachers went on to engage the children in games constructed around schoolwork (such as spelling and arithmetic) in which pupils could set their own goals but in which they were not rewarded if they set a standard they failed to attain and experienced no feelings of success if they set a standard which was too easy for them. Pupils were encouraged to seek the help of others in achieving their goals. Finally each pupil compiled a manual for each part of his work in which he and the teacher together set personal goals for his accomplishment, and he kept a record of his progress toward these goals, adjusting the goals where necessary. Throughout the course children were encouraged to introspect about what it felt like to succeed and what it felt like to allow oneself to be pushed around by the teacher or by anyone else. In indirect tests which were given before and after the course it was found that many more of the pupils spontaneous thoughts were afterwards concerned with seeking unusual accomplishment; setting realistic but challenging goals, anticipating obstacles, seeking the help of others
where necessary to achieve their goals, and thinking about
the misery of failure and the pleasures of success.

Ireland.

It seems almost certain that if community develop-
ment designed along these lines were run in Ireland they
would help the participants to clarify the sort of society
they would like to develop and map out a realistic but
challenging route toward achieving that sort of society.
Educational experiments along these lines should ensure
that children grew up more self-confident and able to lead
happier and more effective lives; and last, in its correct
place, courses for businessmen would help to ensure that
businessmen were able to operate as effectively as possible
to achieve continued economic development—particularly
if they were supported by changes in the society in which
they work—such as improvement in the quality of infor-
mation fed back to them concerning the response to, and
new markets for, their products abroad and in the quality
of some of the state services on which they have to rely.