

**GUIDE TO THE USE OF THE
EDINBURGH COMPETENCY STATEMENT BLANK: KIT 1**

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INTRODUCTION

Many teachers do their best to harness the motives of all their pupils in order to nurture their distinctive talents, and many would like to be able to record the outcomes of this process. There are two reasons why they would like to record the outcomes. One is to make it easier for the future teachers of their pupils to build on what they have accomplished. The other is so as to make it easier for their pupils to build on their accomplishments in the course of their future education and careers.

Unfortunately, the concepts which are available to help teachers to think about the talents of their pupils and how they are to be fostered are extremely limited. Worse still, there are no tools to help them to identify their pupils' motives and incipient talents either as a basis on which to design educational programmes or to generate statements which can be passed on to future teachers or employers. The present research will help to fill these gaps.

The **Edinburgh Competency Statement Blanks** have been developed to introduce teachers to a recently-developed framework for thinking about human talents, their development, and their assessment.

This framework is presented in detail in *Competence in Modern Society* (Raven, 1984). This *Guide* does not attempt to summarise that book. Instead, the *Grid*, the *Follow-Through Questionnaire*, and this *Guide*, seek to ease users into the Framework.

The associated *Grid* and *Follow-Through Questionnaire* are not intended for routine assessment of all pupils. The hope is that, as a result of thinking carefully about the talents and developmental needs of a single student, users will come to think about people and their needs in a new way. The insights generated by the exercise are intended to be useful when planning individual educational programs, generating summative assessment (e.g. of portfolio work), and creating developmental environments. More generally, the exercise should stimulate new thinking about educational processes. It also has implications for staff appraisal, deployment, and development.

The *Grid* and *Questionnaire* discussed in this *Guide* form the first of a set of four kits, the aims of which are as follows:

Kit One will consist of a set of materials which will help teachers to re-consider their objectives and the adequacy of what they currently know about students' motives and talents. To achieve this goal teachers will be asked to review their knowledge of *one* student and to consider his or her developmental needs. It is anticipated that this exercise will lead them to want to study more carefully the available frameworks for thinking about students' motives, the nature of high-level competence, and the links between the two. It is envisaged that discussion between teachers who have been involved in this exercise will result in study groups being set up to consider ways forward.

Kit Two will enable those teachers whose use of *Kit One* has resulted in familiarity with *The Edinburgh Competency Framework* to more systematically assess the motives and incipient talents of all their students on a routine basis and thus provide a better foundation on which to build individualised, generic-competency-oriented, developmental programmes. It will include guidelines for teachers to follow when interviewing students and forms which will enable students to contribute more effectively to the process of clarifying their motives and needs. And it will contain guidelines for using this information when designing individualised developmental programmes.

Kit Three will consist of forms on which to summarise what has been learned about students' motives and areas of competence at the end of their programs of study. Summative statements about these outcomes are essential if both the students themselves and their teachers are to get credit for the talents they have developed. They are also essential if students are to be able to capitalise on their strengths and talents and obtain opportunities to develop them further in school, at work, or in the community.

Kit Four will provide a parallel set of procedures to help School Districts to identify the motives and talents of teachers so that they can be better encouraged to do the things they are good at and more readily get credit for having engaged in the difficult, demanding, and creative activities that are crucial to the success of individualised competency-oriented educational programs.

The Edinburgh Competency Framework

The Edinburgh Competency Framework has a number of distinctive features, based on the following observations:

- Most high-level competencies (like initiative, leadership, and the ability to evolve new ways of thinking about things) are difficult and demanding activities. People can therefore only be expected to develop and display them whilst they are doing things they care about. In other words, one can only make meaningful statements about people's ability to behave in these ways after one has discovered which activities they *value* - i.e which activities they consider important, attractive, or motivating.
- High level competencies are psychologically complex. They involve people doing such things as using their feelings as a guide to action, persuading other people to help, and persisting over a long period of time. An appropriate framework for thinking about such qualities must therefore recognise that these are, psychologically speaking, internally heterogeneous - not unidimensional -qualities. This conflicts with one basic assumption of most psychological and educational measurement theories. The Edinburgh Competency Framework tries to identify *components of competence* which are revealed whilst people are undertaking valued activities so that their particular developmental needs can be more easily met.

- Because people can only be expected to display high level competencies when they are working in situations which tap their values, meaningful statements about the competencies they display must be accompanied by statements about the kinds of values called for in, and elicited by, the situation in which the observations were made.
- A person's performance in a situation demanding certain competencies is dependent on the opportunities they have had in the past to develop such competencies. Failure to record a lack of such opportunities therefore discriminates against those who would be able, relatively easily, to develop the required competencies.
- The values people exhibit, and the competencies they have had the chance to develop, are to some extent dependent on the values of those they have been exposed to in the past. People may not value the same activities as those they live and work with and, to the extent that this is the case, it becomes increasingly unlikely that they will have had opportunities to develop high-level competencies. It is therefore important to compare the activities which people value with those valued by people who were important in their previous lives.
- Failure to display qualities like initiative or leadership is often due to people feeling that it would not be appropriate for someone like them - in the position they occupy - to undertake some activity which ought to be undertaken. To make meaningful statements about their competence, it is therefore essential to document their beliefs about society, how it works, and their role in it *as part of the assessment process*.
- If we are to help people to develop their talents, we must first find out what kinds of activity they value and then ensure that they have opportunities to practice and develop high level competencies whilst undertaking such activities. This means creating both (i) more *generally* developmental environments in which people can develop and display high-level competencies whilst undertaking activities they care about (i.e. environments which are conducive to well-being and effectiveness), and (ii) creating *individualised* developmental programmes which are designed to nurture people's incipient talents whilst they are doing things they care about.

We may summarise these observations by saying that an adequate framework for thinking about competence and its development will involve a measurement model which is (i) value-based (rather than purportedly value-free), (ii) can assess qualities which are psychologically complex (rather than unidimensional), (iii) recognises the centrality of social and political beliefs, (iv) provides an opportunity to include an account of the qualities called for in the assessment situation, and (v) provides for an account of the opportunities the person being assessed has had in the past to develop high level competencies whilst carrying out activities which he or she cared about.

Such a framework will allow us to make distinctive *statements* about people, their values, their competencies, the situations in which they have lived and worked, and relevant features of the situation in which the observations were made instead of offering profiles of scale scores.

Brief Overview

Effective use of the Edinburgh Competency Framework is dependent on becoming familiar with a new way of thinking about motivation and the nature and development of competence. The *Edinburgh competency Statement Blanks* are designed to lead potential users to become familiar with this framework.

Users are first asked to use a Grid matrix to identify the values and potential talents of the person being assessed and the developmental potential of his or her present environment.

The user moves from the *Grid* to a Follow-Through Questionnaire intended to explore the validity of the assessment and some of the wider implications of the information obtained.

The assessment model proposed in this *Guide* is not fully developed. Ideally, those who wished to use the model would draw on a framework of descriptors of human values and competencies which would be as comprehensive as is the Periodic Table of Elements in chemistry. Unfortunately, such a framework of descriptors does not yet exist. Instead, users are offered a *tenative* framework which is greatly at variance with previous ways of trying to systematise the apparently endless varieties of competence. We make no apology for presenting the framework as it stands: the only way to refine it is for people to experiment with it and let us have feedback.

Limitations of Externally-Generated Statements about People

This is an appropriate point at which to note that the statements which people make about other people are inherently limited. An external observer cannot know with any certainty what kinds of activity the person being observed thinks it is important to undertake and what he or she thinks and feels. Furthermore, (i) a person's thoughts, feelings, and actions are very much determined by the situation in which he or she is placed, (ii) what observers *see* the person being assessed doing is to a considerable extent dependent on their own concerns and competencies. To get better information on the kinds of activity which might tap people's motives and make them enthusiastic, one would somehow have to get inside their heads and examine their motives, values, and perceptions. One way in which this can be done is by carrying out *Behavioral Event Interviews*. Another is through standardised questionnaires. A preliminary set of Questionnaires (*The Edinburgh Questionnaires*) designed for this purpose have been published. Unfortunately, as they stand, they are cumbersome for individual assessment purposes (although they have proved to be more useful for organisational surveys). Work is in hand to streamline the process by computerising them in such a way that the subsequent questions which people are asked can be tailored to their answers to earlier questions. In this way it is possible for them to skip over questions which do not apply to them.

Overview of Assessment procedure

The paragraphs which follow provide a brief map, or overview, of the activities the reader will undertake as he or she works through the *Edinburgh Competency Assessment Blanks*.

The user starts with Grid A. The headings across the top are to be used as a stimulus to thinking about the kinds of activity that are valued by the person being assessed. To clarify what these are, *Behavioral Event Interviews* (McClelland, 1978; Raven, 1984) may be carried out and/or the question may be discussed with friends or relatives of the person concerned. Additional valued activities may be recorded in the spaces provided. Possibly valued activities other than those printed on the Grid are listed later in this *Guide* in order to prompt the user to make additional entries.

After identifying the kinds of activity the person being assessed values, the user will be asked to indicate the competencies which he or she displays whilst carrying out these valued activities.

It is important to note that one can, in general, discover the kinds of activity a person cares about only by observing what they spend their time thinking about and what they persist in trying to do.

Having completed the Grid, the user moves to the Follow-Through Questionnaire. This is designed to provoke thought about what further information would be needed in order to make a valid assessment of the student, and what kind of individualised program would best meet his or her developmental needs. Supplementary questions investigate the implications of this whole exercise for educational change.

In order to make statements about individuals' needs, users will need to be familiar with the results of our research into the nature of developmental environments. These are summarised in an Appendix.

While the time required to go through these procedures is considerable, it cannot be too strongly emphasised that, as Burgess and Adams (1986) have underlined, replacing the activities which occupy most of the time of most high school students with more useful activities depends on greatly increasing the amount of time devoted to guidance and developing personalised placement and development programmes at age 12 or 13. They suggest that some two months should be set aside for this. In that context, the time required to work through these materials pales into insignificance.

The following sections of the *Guide* discuss the assessment procedure in more detail.

Grid A

The headings *Achievement*, *Affiliation* and *Power* are derived from the work of David McClelland (1958), who found that, out of all the possible "needs" identified by Murray (1983), only these three

were experimentally manipulable and assessable. This conclusion has been confirmed in our own research.

First, choose from your students *one* whose values and competencies you would like to think more carefully about. Ideally, you should know the student reasonably well, but he or she should be neither particularly outstanding nor pose serious problems.

Next, move across Row 1 inserting a check-mark each time you reach a statement describing a style of behaviour which *you* think the person being assessed tends to undertake spontaneously, enjoys doing, thinks important, or seems to be otherwise motivated to undertake.

Statements describing activities which the person you are assessing does not value should be left blank, and there is no expectation that it will be necessary to check activities in each of the Achievement, Affiliation and Power clusters.

In the spaces provided under the headings *Achievement, Affiliation, Power* and *Other* record other activities which the person being assessed can be said to "value" in any of the senses just mentioned.

Possible examples of such activities are listed below, but the list is in no sense complete. Its sole purpose is to provoke further thought.

Achievement-Oriented behaviours

Other **Achievement** behaviours which the person being assessed might value include:

Adventuring into the unknown

Identifying goals which are shared by the members of a group but were previously not recognised

Improving the way an organisation works

Affiliation-oriented behaviours

Other **Affiliation** behaviours which the person being assessed might value include:

Putting people at ease and making them feel good

Making sure that people like and appreciate each other

Making sure that people treat each other pleasantly and with respect

Not being thought immodest by others

Not being "different" to others

Winning affection²

Power-oriented behaviours

Other Power-Oriented activities which the person being assessed might value include:

- Influencing other people's thoughts and feelings
- Leading people to consider the merits of suggestions
- Personal advancement defined as increasing control over others and the ability to determine their fate
- Inflicting punishment on others
- Being feared and treated with deference
- Being able to intimidate those with power

Other potentially valued styles of behaviour

Other types of behaviour which the person being assessed might value include:

Making progress in the field of public provision e.g. with regard to such things as:

- Quality of life
- Pollution
- Energy Consumption
- Inequalities in trade
- Inequalities in income
- Levels of transportation
- Crime
- Quality of education
- Quality of the environment
- Sustainable economics
- Sustainability of agricultural policies
- Quality of community-based health care
- Achieving advancement with minimum effort
- Fostering an enquiring mind in others
- Maximising the predictability of an organisation
- Being honest and upright without needing supervision
- Being able to fool others and tell lies effectively
- Being able to annoy people
- Being able to vary the impression one gives so as to be well regarded by everyone
- Sexual conquest
- Winning arguments without regard to the truth
- Playing intellectual games
- Being heroic
- Being stoical
- Not "letting the side down"

Setting up thorough checking procedures so that people do not get what they are not entitled to
Collecting things
Establishing intellectual or emotional contact with realities greater than oneself e.g. Nature, or the Universe
Not causing trouble; not making a fuss; fitting in
Accepting others for what they are
Working out what superiors want and then doing it
Doing whatever will gain approval

To bring to light activities the person being assessed may value but which you may not already know about, it will be necessary to talk to him or her, especially about occasions when things were going well and badly for them (Raven, 1984). You might discuss what led up to the activity, what they did, what happened, how other people reacted and what they did about those reactions. It might also be useful to talk to their relatives, friends, and other people who know them in order to obtain additional insights into what the person being assessed does at home and in non-working situations.

COMPONENTS OF COMPETENCE

You are now going to record the competencies which the student displays whilst carrying out the kinds of activity that you have identified as being important to him or her. Ideally, this would be done for *all* the activities you have checked. However, for this familiarisation exercise, the task will be more manageable if you focus on the kinds of activity that are *most* important to the person you are assessing.

There are a number of ways of establishing what these are.

First ask yourself whether some of the activities you have identified are undertaken with a view to carrying out other activities effectively, so that these other activities are, in some sense, more basic to the values and concerns of the individual. For example, someone may manipulate others because he or she wishes them to help him or her gain the teachers' approval. Put the other way round, some of the activities you have ticked hint at a deeper, underlying, more pervasive, or more dominant, motive in the individual. Motives do not necessarily have this hierarchical structure, however, and may co-exist, even compete. Should they form some kind of hierarchy, number the more fundamental or important motive '1' in row 2, and the other motives (or groups of motives) 2, 3, etc.

If the motives of the person you are assessing do not have a hierarchical structure, you should next consider whether any groups of motives go together to form a cluster which ought to be considered as a whole. Perhaps they even have some central focus. If so, bracket them together and, if possible, identify the central concern, using your own words if there is not an appropriate label on the Grid.

If the motives of the person you are assessing neither form a hierarchical structure nor have a central focus, it will make your initial foray into this field easier if you are able to place at least the 4 or 5 that are *most* important to the person being assessed in rank order, using 1 for the most important.

Now note that down the left hand side of the Grid is a list of competencies (or *components of competence*) which may be displayed by the person being assessed.

Once again, the list is not comprehensive and you should write in any important competencies displayed by the student you are assessing that are not identified on the Grid.

You should now confine your attention to those styles of behaviour you have prioritised in Row 1 as being *most* important to the person you are assessing. Move down the column(s) under the checks marking these styles of behaviour, and place a cross (X) in the appropriate cell for any component of competence displayed by the student you are assessing whilst carrying out these behaviours.

When you come to the second page check, in Row 1, the activities in relation to which you are recording the student's competencies.

If you find yourself wanting to indicate that the person being assessed displays some of these competencies whilst carrying out activities other than those you have said he or she values, this indicates a need to reconsider what you have said he or she cares about. We can only discern what people truly care about by observing what they think and talk about and how they behave. As far as this Framework is concerned, they can be said to value activities they put a lot of effort into achieving even if they deny that they value them, and they cannot be said to value activities they say they value if they never think about them, if those activities do not tap or release their energies or emotions, and if they do not spontaneously do things in the area.

On Grid A, the competencies that people may display have been grouped into **Cognitive** (thinking), **Affective** (feeling) and **Conative** (striving) categories, but the fact is that to carry out any activity effectively one has to engage in activities which have been grouped into all three categories. What is more, components from the different categories interpenetrate. Thus, to make much progress with anything, we have to become conscious of feelings which tell us we have a problem or the germ of a solution. We have to initiate hunch-based experiments to test emerging insights, and we have to persist in the face of frustration and obstacles.

COGNITIVE COMPETENCIES

This seems an appropriate place to note that, although psychology and education have become heavily cognitively oriented, this pre-occupation is unjustified. Even the thought process itself is not solely, or even principally, cognitive. It is therefore important to consider the nature of cognitive competence in slightly more detail before proceeding.

Important Note Concerning Cognitive Competencies.

(Refers to Note (1) on the Grid and in the Brief Instructions).

All competencies have interpenetrating cognitive, affective, and conative components. Thus, developing better ways of thinking about things involves persistence in monitoring one's feelings - in the process doing such things as waking up at night wondering what is bothering one and trying to make the reasons for one's discomfort explicit. It involves initiating - on the basis of one's feelings - hunch-based "experimental inter-actions with the environment" in order to test one's emergent "insights" (often non-verbalised impulses), "monitoring" the effects of one's actions (using one's feelings) in order to learn more about the situation, the problem, and the effectiveness of the strategies which have been employed - and thereafter using feeling-based intuition to initiate further experiments to "test one's (non-verbal) "hypotheses." Clearly, this whole process involves reliance on unconscious processes and a gradual growth in (often non-verbal) "understanding" over a long period of time. It involves oscillation between paying attention to one's feelings in order to learn more about the problem ("introverted awareness") and using one's feelings to develop new perceptions of the environment ("extraverted awareness"). In short, *cognitive activity is not primarily cognitive*, never mind verbal. (And we may note in passing that the monitoring processes which are required are in no sense captured by the term "meta-cognitive").

Those who use the *Edinburgh Competency Framework* are not asked to separate the various components of high-level competence one from another. They are merely asked to consider the components and may well enter the same observations under several categories. As far as cognitive activity is concerned, the question is whether the person being assessed does spontaneously display high levels of analytic and inventive cognitive skills whilst undertaking valued activities. Not only may these not result in formal understanding, they may not be verbalisable either. Knowledge *in action* (Raven, 1990) is often very different from knowledge *of action*. Someone who can show that he or she knows that, in a complex organisation, doing *this* here results in *that* happening over there clearly has an understanding of the way the organisation works even if he or she cannot explain the connections in words. The evidence one is looking for is whether they do things which indicate that they are in some sense striving to understand and, on some fundamental level, achieving a useful understanding.

Other Possible Cognitive Competencies

Shows awareness of the unexpressed thoughts and feelings which lie behind what people say

Develops skills by observing, analysing, and imitating other people's behaviour

Studies the effectiveness of other people's actions in order to reveal the nature of the problem or the strategies to be used

Notes other people's reactions to his or her behaviour and suggestions and uses this information to improve his or her performance

Recognises his or her own weaknesses and seeks help in these areas

- Identifies and gives priority to those activities which he or she most values
- Sifts information for good new ideas
- Initiates action on the basis of sifting information for good ideas
- Initiates and monitors pilot activities to further test emergent ideas
- Weights many factors subjectively when coming to decisions instead of becoming preoccupied with only one or two of the factors which bear on the decision

CAPACITY TO GENERATE COGNITIVE TRANSFORMATIONS: FORMS OF CREATIVITY

(Refers to Note (2) on the Grid and in the Brief Instructions)

An important component of creativity is the ability to *see* how people and things which others regard as irrelevant to the activity can be harnessed to assist in carrying it out. Indeed, the goal itself often could not exist if aspects of the environment had not already come to be seen by those concerned as resources instead of fixtures. For example, creative managers can find ways of engaging the energies of people whom others regard as deadwood. Creative teachers can find ways of using apparently grey urban environments as a basis for exciting educational programmes. People who are creative in these ways are much less likely than others to complain about the absence of resources.

OTHER EXAMPLES OF BELIEFS ABOUT SOCIETY AND THE ROLE OF THE INDIVIDUAL WITHIN IT

- Believes that the resources necessary for the task do not exist or would be too costly.
- Thinks it is appropriate for someone like him or her to seek to influence those in a position to introduce changes with a view to overcoming barriers to effective activity
- Thinks it is appropriate for someone like him or her to take initiative to try to do the things they value
- Thinks it appropriate to get together with like minded people to try to get something done about the constraints which limit their effectiveness in undertaking valued activities
- Thinks it appropriate for him or her to seek to initiate activities which would have long-term effects on the basis of judgements based on incomplete information
- Thinks it appropriate for him or her to initiate collection of forward-looking information to inform decisions about what should be done
- Thinks it appropriate for him or her to ask questions and expect answers

CONATIVE COMPONENTS OF COMPETENCE *(Refers to Note (3) on the Grid and in the Brief Instructions)*

It may be noted that fatalism, or the belief that it is wrong, or impossible, to interfere with the course of fate, is a characteristic of many individuals. Whilst fatalism itself would appear unlikely to lead to desirable consequences, such a belief does not necessarily lead to idleness or lack of initiative. It may, for example, be one's fate to become an over-working, under-paid innovator! People tend to

behave as if they can influence the outcomes of actions they care about e.g they may well be fatalistic concerning economic activity, but take very effective action in connection with establishing warm relationships with others. Thus they may be fatalistic in one area but not in another. We must therefore seek to discover the **kind** of activities in relation to which people *behave* as if they can have an influence rather than whether they actually feel they can have an effect.

OTHER POSSIBLE CONATIVE COMPETENCIES

Willingness to tolerate, and persist in the face of:

- frustration
- punishment
- failure
- scorn
- ostracism

Gathers around him or her a supportive group of people who make it easier to tolerate the above

Persists in the face of the scorn which is often shown to innovators

Persists in the face of scorn incurred as a result of carrying out valued activities

INTERPERSONAL COMPETENCIES

Interpersonal competencies (like leadership or cooperativeness) should really be assessed by first indicating that the relevant affiliation and/or power behaviours are valued by the individual being assessed because they help him or her to carry out some activity which, in some sense, is valued at a more basic level and then indicating the components of competence displayed whilst carrying out those activities. Moving such valued styles of behaviour into a position that would lead them to be considered as part of an assessment of the competencies displayed whilst the person being assessed was pursuing more basic motives would, however, require a more sophisticated format to that adopted here. To ensure that interpersonal competencies which can be used to help to ensure that other activities are successful have therefore been listed down the side of the Grid.

Relevant interpersonal competencies include:

- persuading
- co-operating
- communicating (perhaps in scientific language, perhaps by allusion, innuendo, image-building and suggestion, perhaps through body language, perhaps by gesture)
- influencing
- intimidating
- compelling
- organising

The following competencies related to leadership and dealing with groups may be particularly important:

- Studies the behaviour of others and superiors with a view to understanding and influencing their thoughts, perceptions, feelings, values, and priorities
- Takes steps to deal with others who jeopardise group activities e.g. by fuelling disputes, pursuing red herrings, and undermining the credibility of other members of the group
- Studies the ways in which organisations and society work with a view to finding ways of influencing their operation
- Articulates group goals and how they are to be achieved
- Releases people's energies by giving them a sense of importance in the group e.g. by linking the task to be accomplished to their personal values or making them feel that they have made an important contribution to shared activities
- Provides feedback to others about their activities in such a way that it helps them to monitor their activities in such a way that it helps them to monitor their performance
- Motivates people to share information, offer help and support
- Communicates with other people using allusion and body language
- Monitors new activities to see whether they have desired effects rather than assuming they will be successful
- Monitors activities initiated *on behalf of others* e.g. assesses whether social and educational policies are working
- Creates an atmosphere of dedication, enthusiasm and innovation
- Gets people to work together effectively despite any personal differences between them
- Brings together groups in which one person's strengths compensate for another's weaknesses
- Listens to and respects the opinions of others
- Displays sensitivity to differences in opinion within a group, even if these are not expressed verbally
- Displays a willingness to compromise in the face of differing opinions
- Shows sufficient confidence in others' ability to entrust them with responsibility in shared activities
- Is willing and able to do such things as:
 - study the workings of social and economic systems
 - identify the values which prevent these systems achieving their stated goals
 - identify those points within those systems at which it would be possible to intervene to influence the way they work
 - get together with others to influence the workings of those systems
 - monitor the work of public servants who have responsibility for activities in this area

Note On Willingness To Take Personal Responsibility

If someone appears to be unwilling to take personal responsibility for some activity, one reason may be that he or she does not value the goal towards which the activity is directed. Nevertheless, there are many situations in which people *do* wish to achieve a goal, but are still unwilling to assume personal responsibility for doing so. This may be due to lack of self-confidence, to feelings that it is the job of some higher authority to intervene on their behalf, to a feeling that people whose approval they need will regard such behaviour as precocious, or to a lack of confidence in their ability to get others to work together to achieve the goal. In other situations, unwillingness to take responsibility

may be due to a disinclination to recognise and deal with the many factors involved - to a tendency to use over-simplified explanations of events. Such unwillingness makes it very difficult to see ways in which the situation could be improved, and leads to a tendency to disown responsibility for dealing with it - or even for thinking about it.

Lack of confidence in one's ability to take responsibility, lack of ability to develop a sufficiently complex understanding of issues, and lack of managerial skill may arise from a lack of experience of working in situations demanding effective action strategies. It is extremely likely, given the current tendency to distinguish sharply between academic and practical activity, that people will not have had this sort of experience. In order to counter this problem, one of the objectives of project work in schools is to encourage students to develop the habit of participating in problem-solving activity requiring integration of thought and action. Particular stress is laid on utilising the effects of action as one of the principal means to improving students' understanding of the situation. Such experiences are intended to impress upon the individual the value of analytic-action strategies as he or she observes their effectiveness in achieving valued goals. The satisfactions which arise from such activities will strengthen the individual's confidence and his or her tendency to engage in such behaviour in the future. This is particularly likely to be true if the work is directed towards accomplishment of societal goals, the attainment of which involves working with others, and dealing with the institutional management structures of society. Students would then be expected to develop a willingness to take personal responsibility for introducing changes into society as a whole.

Other more mundane, activities require willingness on the part of the individual to accept responsibility. Yet these activities may be no less important, for their cumulative effect will probably be to produce major consequences for the individual's society. If people seek to pass on their responsibility to higher authorities, such as bureaucrats or God, they are, by the same token, likely to avoid taking responsibility for dealing with people who choose to disrupt group processes. People who delight in dragging red herrings through discussions, in competing for the role of chairperson, in undermining the credibility of other members of the group, or in creating difficulties for their own sake, are as correctly described as vandals as those who damage transport systems and social amenities. They distract the group from the attainment of group goals, and the only way to deal with either type of vandal is for every citizen to be prepared to play his part in curbing their activities. They can only be dealt with if all other members of the group take personal responsibility for refusing to co-operate with them. If an individual is to be able to achieve goals which can only be realised through group action it is necessary for everyone in the group to be willing to take on this sort of responsibility.

POSSIBLE KINDS OF EXPERIENCE-BASED CONFIDENCE

In the course of our work it has emerged that one of the most important ways in which effective parents, teachers, and managers promote the development of the competence of their children, pupils, or trainees is that they create situations in which those concerned realise that they can

exercise high-level competencies to undertake activities they want to undertake. In some cases they learn that they are able to do things they never dreamt they were capable of doing.

If the person you are assessing has demonstrated the willingness and the ability to do such things as lead, invent, and find resources in the course of undertaking valued activities this will probably already have been recorded. However, he or she may well have had experiences which lead him or her to be realistically confident that he or she can successfully carry out activities which have not shown up so far. Such areas of confidence may, like many valued activities, be very specific to the individual.

What we would like you to record under this heading are, therefore, areas of experience-based self-confidence that are characteristic of the individual you are assessing but which you have not actually had an opportunity to see him or her undertaking. Examples include:

- Confidence, based on experience, that he or she can pull off something which he or she has not done before - and which perhaps no one has done before.
- Confidence that he or she can develop new ways of doing things
- Confidence that he or she can obtain the assistance of others
- Confidence that he or she can learn sufficient from an activity initiated on the basis of incomplete information to decide what to do next
- Confidence that he or she can cope with new situations and new people
- Confidence that he or she can learn sufficient from arguments and disagreements to reconcile them and keep the activity on course; views disagreements a stimulus to new thoughts and activities instead of being frightened by them
- Confidence that he or she can learn sufficient from an adventure which goes wrong to justify the activity: knows about the need to pilot innovations etc. - knows that things frequently do not turn out as expected but does not regard this as a barrier to undertaking them

Information on the domains in which students lack confidence in their ability to do things they would need to do to undertake activities they care about successfully is of the greatest importance when trying to define the kind of developmental experience they need, and we will return to it later.

THE FOLLOW-THROUGH QUESTIONNAIRE

Having completed the *Grid*, the user should turn to the *Follow-Through Questionnaire*. This is designed to provoke further thought about the assessment you have made and about the implications for educational change.

The *Questionnaire* begins by examining the validity of the type of assessment you have been asked to make, particularly with regard to the limits of the information at your disposal. To make a meaningful assessment of any individual's values and competencies, one would need information in at least the following areas:

- i) The opportunity the individual has had in the past to develop high-level competencies whilst undertaking activities which he or she cares about. As part of this set we need information on the competencies, incapacities, and dysfunctional beliefs fostered by the activities he or she has been expected to undertake in the past.
- ii) The nature of the influences brought to bear on the individual by those significant in his or her lifespace. Exposure to other peoples values and competencies is one of the principal influences on development. People are more likely to develop high level competencies if they are exposed to others who share their values and make explicit the, normally private, thoughts and feelings which contribute to competent behaviour in such a way that the "learner" can observe and emulate the behaviour and if guidance, support, and encouragement are offered.
- iii) The values elicited and competencies fostered by the tasks set in the assessment situation. Clearly, one can only expect an individual to express particular values and display particular competencies if these values and competencies are called for in the assessment situation.

The questionnaire continues with an exploration of the individual developmental needs of the person you have assessed. It might be useful, in this context, if the user were to read the Appendix to this *Guide* concerning the nature of developmental environments (Appendix 1: *Promoting the Growth of Competence*).

Appendix 1 PROMOTING THE GROWTH OF COMPETENCE

This appendix will describe ways in which the growth of competence can be promoted by creating "developmental environments."

Developmental environments provide people with opportunities to practice and develop high level competencies whilst undertaking activities which motivate them and which they care about. They also provide those concerned with "role models" who portray the thoughts, emotions, and behaviours which give rise to competent activity in ways they can emulate. And they offer support from tolerant colleagues who encourage and assist as those concerned haltingly develop new competencies.

These features of developmental environments are described in more detail below, using observations from our research in homes, schools, and workplaces.

Before looking at what we found in a number of specific settings it is useful to outline the main features of developmental environments in slightly more detail.

In developmental environments people:

- have an opportunity to consider their values and resolve value conflicts in an open and supportive atmosphere in which their views, concerns, and decisions are respected;
- have an opportunity to experience the consequences of behaving in different ways, confident that mistakes will not bring ridicule at the time or have serious undesirable consequences (such as loss of income) in the future;
- are encouraged to evolve and practise new styles of behaviour in the course of undertaking activities which motivate them;
- think about their organisations and their society and come to understand and perceive the operation of both in ways which have implications for their own behaviour;
- are given (or can evolve) new concepts to help them to think about their behaviours, the world, and the consequences of alternatives;
- are exposed to role models - either in real life or in literature - which enable them to see, and share in, other ways of thinking, feeling, and behaving, and to see and experience the consequences. (Exposure to others whose behaviour brings satisfactions one would like oneself is a strong incentive to engage in the behaviour!);
- are encouraged to set themselves challenging goals which are at the same time both realistic and measurable so that progress toward them can be monitored and used as a stimulus to finding ways of improving performance;
- are helped and supported by others when things go wrong or when they are unable to live up to their own expectations;
- are provided with support, encouragement, and help when they *make mistakes*. Under these circumstances, it is particularly important for colleagues to identify and encourage that which was worthwhile in the activity, and to refrain from threatening inquisitions into personal causes of failure. Colleagues should *not* imply that they knew better than the person concerned what he should have

done. After all, the person who undertook the activity knew more about the situation in which he was working, and about his own abilities and limitations, than did others; are encouraged by having their accomplishments recognised and commented upon.

Some results from studies in homes.

In our research at the pre-school level (Raven, 1980) we found that mothers who valued the development of initiative, independence, self-confidence, and the abilities required to make one's own observations, think for oneself, and achieve personal goals effectively, explicitly and systematically set out to foster these qualities in their children. The developmental environments they created permitted their children to practise a wide variety of styles of behaviour whilst undertaking activities they cared about. They created opportunities for their children to find out what interested them and what they were good at, and discussed their children's feelings and behaviour with them. They did not interfere in what their children were doing, but reacted sensitively, with a specific view to promoting the development of their abilities, only when they were having difficulties which they could not overcome on their own. They rewarded their children's success by sharing in their feelings of delight at accomplishment and by helping to create more opportunities for them to do the things they enjoyed. They encouraged their children to set goals, plan the sequences of activities which would be required to achieve them, and to monitor their own performance. They gave their children a vocabulary for thinking about these processes; they talked to them about planning, experimenting, and the implications of what had happened, what had gone wrong, and how to do better next time. And they discussed the future consequences of those actions - including their probable long term consequences for society (i.e. they encouraged their children to think about social processes and to resolve moral dilemmas). They encouraged their children to *evolve* goals as they went along.

These mothers also set out to demonstrate competent behaviour to their children in a way that it would be easy for their children to copy. They tried to create opportunities for their children to see them behaving competently and they discussed their own behaviour with them. They created opportunities for their children to see them taking responsibility, managing others, and making discretionary judgements. They created opportunities for their children to share in *their own*, normally, private, thoughts and feelings. To this end, they would talk about what they were doing, why it was important, and how they felt about it. They would create opportunities for their children to participate in their own attempts to clarify their goals and the route to be taken to reach them. Their children, therefore, shared in the process of clarifying values, prioritising goals, considering the long-term consequences of their actions, and reconciling value conflicts. They shared in the process of anticipating obstacles to goal achievement, and planning strategies to avoid them. These often involved getting help and cooperation from other people. They learned how to adventure into the unknown on the basis of initial insights and partial understandings, monitor the effects of their initial actions to learn more about the situation and the effectiveness of their strategies, and how to take corrective action where necessary. They shared their feelings of frustration and misery at failure and delight in success with their children.

The parents also set out to *earn* their children's respect instead of simply demanding it. In order to achieve this goal, they found themselves discussing the long-term social consequences of their own actions with their children. This involved sharing their understanding of the world, how it operated, and what they believed to be right and wrong. In order to justify their children's respect, they found it necessary to try to behave in ways which were above reproach. They, therefore, found themselves discussing not only the constraints on their behaviour, but also the whole complex of factors which influence decisions and the relative weights which must be placed on alternatives (instead of relying on prescriptive moral codes which typically do not relate directly to day-to-day decisions).

The effects of attempting to treat children with respect - as people who were entitled to their own views and opinions - were also significant. They discovered how serious-minded and competent their children really were. This reinforced their tendency to rely on their children's competence rather than confining them to a regime of teaching and discipline. An ascending spiral of progress was established in which they were able to create demanding opportunities for their children to adventure on their own, exercise discretion and initiative, and take responsibility for their own behaviour. Ultimately, this led to further growth in their competence without the need for demeaning restrictive rules.

Primary Schools

Work in British primary schools has indicated that the majority of classroom practices fail to promote the growth of high-level competencies (Raven, 1977; Raven and Varley, 1984; Raven, Johnstone and Varley, 1984). However, a number of teachers do manage to do so and the kinds of things that are involved may be indicated from the work of one teacher.

In order to foster qualities of the kind we have been concerned with in this *Guide*, the teacher based her pupils' entire programme of studies in project work grounded in the environment around the school. Thus she was able to cover "traditional" primary school subjects whilst discovering the individual interests and competencies of her pupils - interests which might lie either in valued styles of behaviour or in particular subject content. This allowed the teacher to create opportunities for pupils to practice and develop high level competencies whilst pursuing their own interests - and it also enabled her to tap different motivations in different pupils so as to create enthusiasm for developmental activity in the classroom. By generating an overall atmosphere of enthusiasm and dedication, she was able to draw on a wide variety of motivations (which schools typically fail to tap), both within and between pupils.

The teacher's own behaviour was in itself a crucial source of stimulation for her pupils. By sharing her thoughts and feelings with her pupils - by sharing her planning and anticipations, her concern for innovation and effectiveness, her sense of independence and control of her own destiny, her disdain for petty regulations, and by sharing her ability to utilise available resources rather instead of complaining about the lack of them, she communicated her values to her pupils and gave them a

model of thinking and competent behaviour which they could emulate. By doing such things as eschewing the role of expert, trying to tackle problems which she did not, initially, know how to solve, and by accepting her pupils' suggestions and taking account of them in her decision-making, she managed to change their perception of authority figures from being providers, organisers, and people who issued commands and made demands into people who are there to help others articulate and achieve their goals.

Similarly, her pupils learned how to develop *partnership* in learning. Aided by a vocabulary supplied by their teacher, they began to recognise and value a much wider range of contributions from others, and they came to learn from, and to rely more upon, their fellow pupils. By enlisting the help of her pupils in tapping the motivations of others in the class, she stimulated in them the idea of group activity whilst helping them to develop leadership and managerial skills.

There can be little doubt that these processes led the pupils to develop a wide range of valuable modes of thinking and styles of behaviour. They learned to appreciate others values and their contributions to group processes, to recognise the importance of research, to take calculated risks and to treat bureaucratic rules as guidelines rather than requirements. They came to believe that it was right for them to ask questions, and learned *how* to ask questions rather than simply answering them. They learned how to discuss, how to speak effectively, and how to communicate with others through a variety of means e.g. presentation, allusion, and gesture. They developed a sense of independence, a belief in their ability to learn on their own, to offer opinions and contribute ideas. Learning itself was de-mystified.

This process is described in much more detail for elementary school students in *Opening the Primary Classroom* and for high school students in *Education, Values and Society*.

University Level

In the most important study yet published of the ability of higher education to promote value change and the development of high level competence, Winter, McLelland and Stewart (1981) compared the effects of the methods used in several different types of college. Unlike the researchers who conducted many earlier studies (summarised in Jacobs, 1956), they used measures which were both tailored to, and sensitive to, the effects which the educators desired and to effects which could be anticipated on the basis of examining the nature of the programmes. The study showed that different colleges had very different effects on their students - even after differences in the students' initial attitudes and abilities had been taken into account. Ivy League colleges bred a sense of importance, destiny, and leadership which was, in fact, followed through in later life into activities which conferred major benefits on society. They fostered the willingness and the ability to think critically and handle cognitive complexity, especially with regard to social problems.

These colleges achieved these goals neither through academic course work nor through dormitory residence ("the enemy... of critical thinking is student social life centered in dormitories or other living units") but by:

- exposing students to diverse experiences. These came, in particular, from contact with, and working with, people who had very different backgrounds, values, and pre-occupations. However, these experiences were effective only if college staff insisted that the students analyse and integrate their experiences instead of merely "accepting" them, chatting about them, and compartmentalising them;
- ensuring that their students cope with new, unfamiliar, and, particularly, challenging experiences involving diversity, variety, and confrontation with their assumptions and accustomed modes of thought. It is important to note, however, that such demands were only useful if they were made in relation to activities which the students cared about;
- creating a wide variety of opportunities for students to engage in types of activity (leadership, innovation, research, etc.) which were new to them and providing support while they experimented with these activities in pursuit of valued goals;
- insisting on high standards in *independent* academic work e.g. in preparing theses, conducting seminars, and participating in original research with faculty members;
- avoiding prescriptive rules which prevented students from acquiring particular types of experience, or demanding that they cover prescribed content for vocational reasons. Time to explore, day-dream, reflect, and integrate is a crucial component in any effective educational programme and is too often missing due to pressure for results

It will be readily apparent that many current trends in university education are away from, rather than toward, the provision of the features which make for the growth of competence.

It would appear that we can again abstract from this study the importance of providing opportunities to explore and clarify values, to practise new styles of behaviour, and to develop high level competencies in the course of independent study. We can also underline the importance of developing unique combinations of *specialist* knowledge (instead of mastering bodies of common, low-level, non-specialist information), and of contact with appropriate role models. One thing which does not appear here, but which is underlined in our own research, is the importance of opportunities to make a personal analysis of the workings of socio-economic systems.

The Importance of Value-Clarification

It is worth concluding this discussion by drawing attention to the importance of value-clarification in the development of competence (Miron and McClelland 1979). Value-clarification involves exploring the consequences of alternative styles of behaviour. It involves experiencing and appreciating the personal satisfactions and social consequences associated with undertaking different types of activity. It is the experience of such satisfactions which reinforce the tendency to engage in the activity. People will only put up with the frustrations involved in carrying out novel, difficult, and demanding activities if they have experience of the satisfactions which such activities

bring. Willingness to engage in such behaviour is also influenced by the images which people have of those who do these things, the compatibility of those images with their self-images, and their understanding of society and their own role within it. Once again, such perceptions change as a result of engaging in activities which promote values clarification.

Barriers to Creating Developmental Environments in Schools

It would be a mistake to give the impression that it is easy to create developmental environments in schools. As more than a century of experimentation with the ideas of Progressive Education show, nothing could be further from the truth. In our own work we have uncovered about a dozen major barriers. Resolution of some of these requires fundamental change in the way the educational system is administered and beliefs about equality in public education. Others require new tools to help teachers to administer the programmes and accredit the outcomes. A short summary of many of these barriers has been published as *The Barriers to Achieving the Wider Goals of Education* in the *British Educational Research Journal*, 1990. A more detailed discussion including the steps which are needed to overcome the problems will shortly be published by Trillium Press, New York.

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