

Creativity in Schools

Summary

This article examines attempts which have been made to define creativity. It is argued that creativity is a process rather than a set of discrete skills. This process can be applied in many types of organisations. The social cost incurred in doing this is the creation of certain managerial problems. As a result, creativity in organisations is often narrowly defined. In schools the situation is very different, since creativity can be embodied in the content, method and product of education. It is concluded that even in schools the quality and style of leadership is crucial to the development of an environment in which creativity may flourish.

Creativity Defined and Identified

Until the middle of the twentieth century creativity had been largely ignored by social scientists because 'intelligence' assumed an over-riding priority. The prevailing notion of intelligence was that of a monolithic ability within which other qualities, such as creativity, were subsumed. More recently, studies of creativity have focused on three main areas, the nature of creative thinking, the conditions which influence it and the abilities related to creativity. The same three areas of concern also reveal themselves in another way within the literature on creativity. Any list of definitions of creativity will show a preoccupation with the nature of conditions related to, and abilities associated with, creativity. Whitfield (1975) argues that creativity can be defined either in terms of 'a mental activity', when such activity produces unexpectedly appropriate solutions, or as a set of abilities which can be identified and developed. Similarly, Schein (1972), argues that creativity can mean new products or new solutions to organisational problems. Thus, it is now recognised that creativity is not a single discrete activity or an unrelated series of activities, but is 'the application of mental ability to an area with the creation or discovery of something new as a result' (Powell-Jones, 1972). It can be argued that creativity is a combination of flexibility, originality and sensitivity to ideas which enables the thinker to break away from usual sequences of thought into different, more productive sequences. Such processes, in turn, produce innovative solutions to a variety of problems. Creativity is thus not a characteristic vested in special people, but a general ability or set of abilities unequally distributed throughout the population.

The Creative Individual

The main characteristics of the creative individual are frequently identified by compiling a list of observed characteristics. Such lists frequently fail to distinguish between areas of creativity, such as, arts, technology and sciences. There is, as yet, no infallible checklist for identifying such individuals, although several lists of their characteristics do exist. Shapiro (1966), drew up a list of twenty-six such factors from a survey of existing research, including

self-centredness, impulsive, curious, uninhibited, intuitive, flexible, emotionally unstable, radical and dominant. Rogers (1959), points out that the entrepreneur, as opposed to the idea producing creator and the active innovator, may have special, task orientated, qualities such as risk-taking and a concern with wealth as a measure of success. What is clear from many such lists is that the creative individual required many strengths and abilities in addition to any special talents in a particular field. One way of representing such features is suggested by Lewin's Field Theory.

Lewin (1935) argues that a person is imagined to be subjected to forces in his environment which arouse tension within him. These tensions may be caused by, among other things, the presence of a novel problem. In this case, the tensions within the individual, will be those associated with solving the problem such as confidence, curiosity, intuition, knowledge and sensitivity. Lewin attempts to group the factors into three broad classifications; knowledge, intellectual abilities and temperament, and to assess the strength direction and degree of relevance of the various factors, thus adding a crucial element for operationalising these characteristics. This particular approach to the creative individual has a wider relevance than others which have been discussed here, since it may be used to identify elements of 'the creative organisation'. This will be considered fully below.

In compiling their lists of characteristics, several writers have indirectly pointed towards a related series of management problems. The creative individual is one who is likely to reject those organisational norms which are regarded as desirable for members to possess but are perhaps not essential. Thus the creative individual may, in some senses, be untypical of members of the organisation, and this in itself, requires that managers must understand the complexities of human motivation. They must recognise that fostering creativity and managing creative individuals may incur costs in terms of loss of security, comfort and congeniality of environment. Creative individuals may not be 'good', 'loyal' employees, since their relationship to the authority structure of the organisation may need to be different from that of other employees. Their orientation to the environment might be different, in that they may be committed to change rather than to stability. Their motivation may stem from the intellectual challenges which face them and may be more important than the achievement of organisational goals. This serves to highlight the fundamental management problem, how to reconcile the organisation's need for discipline and control with the creative individual's independence, flexibility, impulsiveness and relative deviance.

The Creative Process

Although creativity is generally seen as a single process, it has been argued that it may exist at several levels or be of a number of different types. Within each level there may be several phases through

which creative ideas are generated and progress. These phases, preparation, incubation, illumination and verification all appear to omit the one vital element which is the first insight, or the flash of inspiration, which often generates the whole process of creativity. This may occur only after long conscious preparation, during which data is collected and possible solutions are explored. It may require an indeterminate period of incubation during which the creativity of the unconscious mind is operating. Whatever causes it, the first insight will be closely related to the phase at which the creative process provides a solution in the form of an idea, technique or product. This is refined and the appropriate action taken during the verification stage. Such factors as imagination, commitment, detachment, receptivity and judgement, which are similar to the qualities of the creative individual discussed on the previous page, are said to be evoked by the creative cycle and are required if it is to be effective.

This view of creativity does appear to present too simple a picture of an involved and complex activity, the parts of which are so interfused, as to make unrealistic any attempt either to separate them or to freeze them into a single sequence. This is especially true when that sequence is based on a linear model which implies a steady progress through the various phases. This gives the impression that all phases must be passed through in temporal sequence; that none will be returned to; and that each is of equal importance. In practice there is no reason why these phases should be viewed as discrete and unlinear. Conceptually, however, it is much simpler to view creativity in this way. This is equally true when creativity is placed in an organisational context. It tends not only to be viewed in this relatively simplistic way, but the notion of creativity itself has become redefined in an extremely narrow way. Much of the impetus for this movement has come from the need to develop a concept of creativity which fits easily into the traditional view of managerial functions and organisational activity.

The Creative Organisation

The continued success of some, if not all, organisations may demand that they harness and utilise the creative resources available to them. Maximising creativity is not the principal objective of any organisation at all times. A major managerial task, therefore, becomes that of determining the extent to which creativity is needed by the organisation and how it is to be encapsulated within the existing structure of the organisation. Creativity has different benefits and costs in different situations so, for clarity of discussion, it is necessary to see that there may be a distinction between producing creativity in the sense of fostering a creative environment and creating productivity in the sense of maximising output of a certain type of product. Similarly, there is a need to distinguish between encouraging people to be creative at all levels of an organisation, and encouraging creative people to be productive. This paper will concentrate on

organisations which try to foster a creative environment, encourage people to be creative and which, therefore, might be called creative organisations, although it is recognised that the distinctions are, to some extent, theoretical, since any organisation which contains a creative manager is creative, in so far as his talents are utilised.

It is, however, possible to attempt to identify specific characteristics which contribute to an organisation's creative process in terms of how they are organised and how they relate to the external environment. This is usually approached by either compiling a list of the characteristics of the creative individual and then relating these to organisations or by analysing the creative process and from this analysis deducing the kind of organisational characteristics which ought to foster an environment congenial to creative activity. Both approaches provide support for the view that organisational creativity depends not on a few highly creative individuals, but on organisational characteristics which may exist independently of the specific individuals within that organisation. Yet there are methodological inadequacies in this method of model building. It assumes that the similarities between creative individuals are greater than the differences between them.

It is based on argument by analogy rather than on empirical evidence, or on a coherent theoretical framework. Finally, and most crucially, it assumes that the given dimensions, decentralisation for example, are only capable of facilitating one type of desired activity, that of creativity. In fact, there is no reason to assume that decentralisation will necessarily encourage creativity. The same is true of many of the other organisational dimensions which Steiner (1965) lists. They may be *more likely* to foster creativity than their opposite, but there is nothing inherent in any of them which ensures that an organisation will achieve the optimal level of creativity for itself. An analysis of the creative process and the characteristics of the creative individual may give a useful guide to the functional requirements of an organisation which seeks to be creative, but it says little about the climate within such an organisation.

The Creative Manager

It is possible to be creative in all spheres of organisational activity, although in doing so the manager is faced with a series of problems, which include how to assess the organisation's creative resources; how to cope effectively with people who are not highly creative; and how to maintain the level of discipline, co-ordination and control necessary for the organisation to function without stifling creativity. The key, then, to creative management, is likely to be a manager who is always prepared to recognise that there may always be alternative modes of operations and solutions to problems which are more effective than existing ones. He will also be able continually to create a situation in which creativity is encouraged by

motivation, setting realistic objectives, creating a flexible framework, recruiting, selecting and training people and then actively supporting their creative activities by maintaining effective communication and rewarding appropriate creativity. In other words, the creative manager is one who is able to identify and remove those blocks to creativity which may exist within his own organisation.

Creativity is a high risk enterprise and any unit which attempts to innovate moves away from the comfortable context of existing practice. The more energy an organisation as a whole puts into fostering creativity, the less energy is available for work which is known to be productive.

The more resources devoted to creativity, the more success is likely in producing useful and creative ideas. Creativity is, however, only one characteristic of a successful organisation. It must be recognised that there is a limit to the amount of creativity which an organisation can endure. Creativity which involves relatively unstructured, undisciplined and often threatening activity, has to be balanced by an ordered and disciplined approach to management. In this sense, the creative manager, like the creative organisation, has to be capable of limiting as well as encouraging creativity and of constraining as well as liberating creative energies. Implementing those ideas which are generated by the exploration of the unknown, requires a much more controlled and disciplined structure, than does the initial development of the idea. This paradox has tended to result in most organisations operating with a very restricted view of what creativity is and what the role of creative activity should be within an organisation.

Most writers and managers see creativity in a narrow sense, as a result of the managerial problems which creativity with organisations may engender. This narrow view helps to ensure that creativity can be contained within existing organisational structures. What appears to have happened is, that the very threatening nature of creativity has led managers to view it not as a complex process, but as one of its own sub-parts. Creativity has come to be regarded as nothing more than a special type of problem solving, characterised by novelty, persistence and the extreme difficulty of formulating the problem. Problem solving is one of the most widely understood and accepted ways of approaching creativity within organisations. It places a premium on defining the problem and incorporates five stages:

- 1) Obtaining the facts
- 2) Identifying the problem
- 3) Formulate alternative solutions
- 4) Select the best possible solutions
- 5) Put the selected solution into practice

The implication of this is that once the problem is identified, then solutions will be produced automatically.

A wide variety of techniques are available to optimise the use of creativity in problem solving and to stimulate creativity amongst those involved in

the problem solving process. Brain storming, for example, involves accepting four rules which combine to ensure that judgement of ideas is suspended; all ideas are welcomed; a maximum number of ideas is produced and a group chain reaction of ideas encouraged. More ideas do appear to be produced by this technique, but there is no evidence to suggest that it produces more better quality ideas. Synectics, the joining together of different and apparently irrelevant elements, covers most of the problem solving sequence. Its particular novelty is an enforced withdrawal from the problem and an exercise in free association which provides new ideas for solving the problem when attention is brought back to it. These are but two of a number of existing techniques, all of which tend to subsume creativity under the various phases of problem solving.

Such techniques and their implied notion of creativity are managerially convenient. Creativity in this context can be controlled, located within and constrained by, the organisational context. It can be focussed in particular directions by posing certain activities as problems and precluding from other areas, by not regarding them as problematic. Organisations are, from this standpoint, relatively immutable and exist within a stable external environment from which pressures for change may emanate but to which the organisation may respond in order to restore that stability.

Creativity and the School

It might be expected that the process outlined above may also be traced in schools, since schools share many features with other forms of organisation. The extent to which this is true will depend on how far schools are seen to be like other organisations. In fact schools are service organisations which provide education for pupils, employment for school staff and recruits for either the labour market or the next stage of education. They are not economic organisations which provide a product or a commercial service at a notional market cost. Schools are essentially about teaching and learning not about production. This difference is the basis of a type of organisation within which creativity in its wider sense could play a more important role than that already outlined. Without embarking on a detailed discussion of the application of organisation theory to schools, it might be agreed that in schools the agreed objectives which determine the organisation's structure are not always present in a coherent form. Instead views about schools and their activities may be based on relatively different conceptions of the nature of children, learning, teaching and knowledge itself. This disagreement about the central activities in schools, leads to a situation in which creativity could be seen to be important in separated but inter-related areas.

In common with most types of organisation, managerial style and the establishment of a particular kind of climate, are important for the role of creativity in schools. Equally important is the type

of structure and the constraints which it may impose on the creative individual or process. Teaching and learning by their very nature are more likely to be permeated by creative approaches than are activities associated with production. As for the content of what is taught and the pupils themselves, creativity has a role not paralleled in other organisations. Creativity can actually be included in the curriculum as part of the content of the organisation's activity. At the same time, the children themselves can be encouraged to be creative. Thus the role of creativity in schools is far more complex than in other organisations. It is no coincidence, therefore, that much of the literature in this area focuses both on creativity as content and creativity as a product of schooling.

Creativity and structure in schools

Pupils, teachers and areas of knowledge all have to be organised in more or less formal way, in order that teaching and learning can occur. Other types of scarce resources also need to be allocated within a relatively formal structure in order to cope with external pressure emanating from the selecting and examining functions of schools and from the need to meet a variety of societal expectations. Between these internal and external pressures it is possible for creativity not only to exist but, in some circumstances, to flourish.

Such creativity may exist because of the relative autonomy which teachers have over the content and methods associated with their work. It has already been suggested that schools rarely have precise objectives. Therefore, the teacher has the opportunity to take the type of decisions concerning content and method which may lead to creative teaching. It is not being suggested that a single set of principles or procedures can be deduced which will ensure the success of creative work within the schools. The discussion of creativity above, clearly precludes this. It is being suggested that, because of the nature of schools and the activities taking place within them, general considerations may be advanced which could foster creativity even within existing formal institutional arrangements in schools. This *may not* be true of other types of organisations. It can be argued that the most practical way to approach creativity in education is either place it within existing institutional arrangements in schools, or to create new, more appropriate ones. Creativity may be redefined and subsumed under another heading, similar to the way in which it became closely linked with problem-solving, but, in this case, as part of a sustained innovation. Hoyle (1974) suggests that since schools enjoy a high degree of autonomy in such matters as curriculum method and pupil grouping, they can be regarded as innovating units. He argues that the major concerns in schools should be not the nature of creativity, but the extent to which schools are 'capable of sustaining innovation'. This then, becomes his definition of creativity within the school structure. This approach leads to a discussion of strategies,

professionalisation, authority and the social system of the school but no consideration of wider definitions of creativity, the creative individual or the creative process. The narrowing down of the concept into a more easily manageable notion which was noted earlier has its parallel in schools and is equally restricting. Far more illuminating and, perhaps, useful, is the notion of creativity embodied in content, method and product.

In schools, creativity may permit a wider range of daily activities than is possible in some other forms of organisation without creating problems of balance referred to above. Not only can teaching methods be creative, but creative techniques can be taught and, therefore, pupils can be encouraged themselves to be creative. The formal organisation of the school does not necessarily mitigate against this. It should be noted however, that content, method and product are so inextricably linked as to be practically inseparable.

It is possible to identify the various areas of the curriculum and to assess their creative potential and appropriate methodology, although these tend to be related to problem solving again. A school environment which produces the background of understanding, information and skills essential both to the posing and the solving of problems creates an ideal climate in which techniques, such as brainstorming, can be introduced to children. A much more general way of introducing and encouraging creativity is by the sensible planned, structured introduction of discovery and experientially based learning which demonstrate to pupils that a subject, task, problem or activity can be multi-faceted and should be treated as such. It must never be overlooked, however, that creative thinking must at times be related to logical and methodological applications and to rational objective evaluations.

The content has thus already become the method, since it involves the introduction of particular types of educational experiences to pupils. Further consideration of methodology reveals more specific activities in this area designed to promote creative thinking. Creative thinking requires creative teaching. This involves encouraging pupils to have original ideas. Originality must be respected but also treated on merit, since it is only one of a range of desirable qualities. The teacher should sustain the pupils' natural delight in novelty and so temper the more conservative and conventional attitudes which external constraints bring. Yet new ideas should be examined on merit and neither dismissed as fanciful nor accepted without question. This fostering of inventiveness, curiosity and inquiry, will enable pupils to follow the implications of their own ideas. This will result in them becoming acutely aware of their environment, an awareness which should be encouraged and its value made explicit by the teacher. Ultimately, therefore, the creative teacher will produce the creative product, that is the creative pupil. The creative pupil will be self-directed, be capable of self-initiation, self-sustained learning and

self-evaluation. This will be the result of living and working in a creative school or, at least, with creative teachers who are able and willing to allow the pupil to learn from the insights which come from making mistakes; are prepared to help pupils try a range of approaches rather than just one to a range of problems; will encourage pupils to follow ideas and pursue the implications of notions which may not at first sight seem promising. The creative method applied by the creative teacher will produce the creative pupil. In this very profound sense, then, the school is quite different from other forms of organisation. Its product, the pupil, can be self-fulfilling, whilst at the same time, the process of producing such a pupil can be self-fulfilling for the teachers involved.

Conclusion

For creativity to be adopted on a large scale in schools would require a significant set of changes in a range of complex relationships. Creativity, it has been suggested, is not so much an entity in itself as one product of a series of interactions between individuals within organisations, the structure of the organisations, the content of the organisation's activities, the management style and the possible scope for creativity. The extensive incursion of creativity into a school requires a modification of the traditional organisation of the school into a subject-based curriculum. An over emphasis on subjects distorts experience because it focuses on a narrow segment of real life at a high level of abstraction. In real situations ideas, questions and solutions transcend formal subject barriers and requires that a school be flexible in terms both of teaching/learning groups and of the curriculum.

To achieve such an environment, a creative, outward-looking, leadership based on general consensus about desirable future states would be required. This could only exist in a particular kind of managerial climate which is based on the view that the most effective teachers and pupils will be self-motivated, self-directed and self-controlled. Both pupils and teachers would be regarded as self-actualising, that is motivated not only by the extrinsic, economic rewards but by intrinsic rewards obtained for the high quality performance and creativity itself. This type of climate would require a related structure which grants a considerable degree of autonomy to individual teachers and pupils and will tend towards power equalisation. The conclusion which must be drawn from this, therefore, is that if creativity is to be further stimulated in schools, the starting point must be with leadership styles and their related types of organisational climates. In the complex of factors which combine to form a creative school environment, leadership and climate may be the keys to change since, even within existing structures, creativity can flourish. Once the climate begins to change, under the auspices of a managerial style which seeks to foster self-actualisation, the structures within the institutions may well also change.

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