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CULTURE AND LEARNING: A DIVISIVE LINK

* Stephen Gibson

The experiences of individuals growing up in different cultural contexts may determine their preferred styles of learning and thinking in both formal and informal educational settings. This study looks at various theories and research concerned with cross-cultural differences and similarities in cognition and learning styles, and their possible impact on the educational aspirations and achievements of culturally different individuals.

1. INTRODUCTION

Among the many controversies associated with learning styles, perhaps the most explosive is the relationship being explored by researchers between learning style and cultural background.

The idea of learning style as developed by Witkin (1969) has considerable importance for practitioners in education, since such styles influence the learning of social material, the effects of reinforcement, the use of mediators in learning, teachers' instructional style and how teachers and students interact. From this study it is hoped to show how the link between learning style and cultural background has been gathering momentum over the last forty or so years and how this relationship has helped teachers understand differences better and to provide for those differences, thereby improving learning.

I feel it is most important to define clearly the major terms used in this paper at an early stage. One must first know that there is a bewildering array of definitions surrounding learning style conceptualizations.

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However, for the purposes of this study, I have decided upon the definition as put forward by the U.S.A. National Task Force on Learning Style and Brain Behaviour as outlined in Bennett's (1986) article. It states "Learning Style is that consistent pattern of behaviour and performance by which an individual approaches educational experiences. It is the composite of characteristic cognitive, effective and physiological behaviours that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment. It is formed in the deep structure of neural organization and personality which molds and is molded by human development and the cultural experiences of home, school and society".

The second major term that I feel needs defining is 'culture'. Shade (1982) uses these terms, "Culture is a rather abstract term but generally is defined as the rules, members of a particular group use to govern the interaction with each other and the environment. Berry (1976) considers culture to be a way of life or learned pattern of behaviour which is unique to a group of people. Cohen (1974) defines it as a process of adaptation."

According to some style theorists, knowledge that students from particular cultural backgrounds may be more likely to exhibit particular learning styles is potentially valuable to teachers, who may then modify their methods or curriculum. Others, however, resist efforts to generalise about culture and style in such a manner, worrying that it may result in discriminatory treatment or excuses for student failure.

From my readings, it is clear that one has to be very cautious when dealing with this particular topic. Some worry that the potential for misuse of the learning style - culture connection is high and that it could lead onto examples of racism and discrimination. Yet on the other hand there is the argument that understanding the relationship between culture and style is a valuable tool for teachers.

2. TYPES OF LEARNING STYLES

The concept of learning style has both promise and problems associated with it. Yet the need to improve educational practices is great and society today demands that schools must be accountable. Learning style can be an extremely important element in the move to improve curricula and teaching in education.

Consideration of styles can help teachers and educational administrators think more deeply about their roles in attempting to educate children with varying levels of intelligence and diversified cultural backgrounds.

Dun and Dun (1978 pp. 5-17) identify four basic stimuli of learning styles, those being - Environmental, Emotional, Sociological and Physical. They found that research data yielded at least eighteen elements that affect the way an individual learns. These are detailed as follows, "1) Immediate Environment (sound, light, temperature and design); 2) Own Emotionality (motivation, persistence, responsibility and need for structure or flexibility; 3) Sociological Needs (self, pair, peers, team, adult, or varied); and 4) Physical needs (perceptual strengths, intake, time and mobility).

Claxton and Murrell (1987) categorise learning styles into four models, which include Personality, Information-Processing models (describing how persons tend to take in and process information), Social-interaction Models (dealing with how students tend to interact and behave in the classrooms), with learning environment and instructional preferences constituting the fourth category.

The Personality model includes - Field dependence - independence. The Myers-Briggs type Indicator, Reflection versus impulsivity, Omnibus Personality Inventory and The Holland Typology of Personality.

The Information Processing Model includes Pask's Holistic and Serialistic strategies, Siegel and Siegel's Educational Set, Schmeck's Deep Elaborative and Shallow Reiterative Information Processors, Kolb's Experimental Learning and Gregorac's Four Patterns of Learners Preference. With the Social-interaction model the following are included; Mann's Eight Clusters of Student Behaviour, Grasha and Reichmann's Student Learning Style Scales, Fuhrmann and Jacob's Three Styles; dependent, collaborative and independent and Eison's LOGO (Learning Orientation, Grade Orientation). The Instructional-Preference models consist of Hill's Cognitive Style Mapping and Canfield's Learning Style Inventory.

In relation to this paper a major emphasis is in identifying learning styles that appear to be relevant from a cross-cultural, point of view. Obviously the field dependence-independence style using such tools as the rod and frame test, the body-adjustment test and Witkin's embedded

figures test is particularly relevant. Claxton and Murrell cite that this strategy has been used in a number of cross-cultural studies of people as varied as Europeans, the Eskimos of Baffin Bay and the Temme people of Sierra Leone .

3. CULTURAL STYLE AND LEARNING

The way in which sources of information are perceived by students, greatly influences the learning process as it determines the amount of mental effort or cognitive engagement the individual decides to invest in the accomplishing of the tasks assigned. More important, these perceptions determine the cognitive processes used by the students - eg. their learning style. Thus, the learning style for each group is indicative of the perceptual preferences developed within the culture.

Obviously the socialization process within a theme will transmit patterns of behaviour that a person learns to copy. However an extension of this thought is that different cultures produce different learning styles. Anderson 1988 (p.4) quotes Wilson (1971) who suggests that cultural influence not only affects learning style but the subtler aspects of perception and cognitive behaviour as well. It would therefore seem feasible that different ethnic groups with different cultural histories, different adaptive approaches to reality and different socialization practices would differ concerning their respective learning styles. Both sociocultural and environmental factors are important in the development of any cultural style and differences in these two factors may ultimately be reflected in a child's learning style.

This point is illustrated in the writings of Christie (1985 p.43) when he poses the question 'How do Aborigines learn?' It would appear that the everyday knowledge of Aboriginal people - fishing and hunting skills, food preparation, appropriate social behaviours and such things - are all learned informally during socialisation. Simply everything that an Aboriginal child needs to know (apart from secret sacred knowledge and Western knowledge), can be learnt through the day-to-day processes of socialisation. On the other hand much of what White people need for survival in a literate, capitalist society must be formally learnt at school. Once again I feel different socialization patterns are in evidence, which will mean differences in cultural style. From the latter differences, it should not be surprising that differing learning styles would tend to emerge between Aboriginal and White students as a generalised rule.

Bennett (1986) quotes research from Castaneda and Ramirez which suggests that learning style is related to a world view, that certain learning styles tend to be predominant in certain cultures. Castaneda and Ramirez believe learning style is a combination of both heredity and environment. I feel both are vital factors within one's culture and as such that cultural style is a most important determinant to one's learning style.

It is clear from many cross-cultural studies as mentioned earlier, that learning style (involving among other psychological skills, being able to perceive or orient oneself or certain visual stimuli, separate from a complex or disorienting background) is related to differences in culture and is an important factor in cultural adaptation. Every learner brings a prior history of learning to each task he/she undertakes. Shade (1982 p.237) cites such characteristics as; how well the student is able to learn from adults and under what conditions, the work habits to be used in the tasks, the attention to be paid to task demands and the set of likes or dislikes about people, ideas, subjects etc. as being shaped by ones cultural style. By recognising the cultural diversity within the educational setting one will quickly learn that not all children are alike and therefore cannot be treated in the same manner or exposed to the same instructional methods.

4. IMPLICATIONS FOR ABORIGINAL EDUCATION

The 220,000 or more contemporary Aborigines living in Australia have no one culture, but a diversity of cultures and life-styles ranging from contemporary traditional peoples (such as those living in more remote centres in Western Australia, South Australia, the Northern Territory and Queensland) to fringe dwellers in rural settlements, to urban Aborigines. Although a developing concept of Aboriginality is attempting to give some direction to Aboriginal Australians, one can not ignore the great diversity and differences that exist in Aboriginal communities throughout Australia.

Because of the cultural range that exists within Aborigines, some problems exist in attempting to establish a relationship between Aboriginal culture and learning style. Eckermann 1987 (p.56) writes that despite some excellent work in the field of Aboriginal Education by Fanshawe (1976), Watts and Henry (1978) and Watts (1981), attempts to identify significant trends in learning styles for Aboriginal students is very much

at the "learning/experimental" stage. Eckermann (p.67) feels that the best method in educating Aboriginal students is to simply experiment with various learning styles, share these results and from that basis plan further experiments. She does however add that such practices should be a professional commitment to all clients, Aboriginal as well as non-Aboriginal.

In reading on this particular subject, a great deal of uncertainty of findings quickly came to the fore. However, all research quickly established one point, that variations in learning style within Aboriginal people exist because their backgrounds are different and this will exert very diverse effects on the specialised learning habits of each learner. Bell (1986 p.30) stresses this point to some length in her article before making some observations on Aboriginal learning styles. She feels that in traditional Aboriginal communities (a non-literate culture) learning is generally based on imitation, observation and a visual orientation. Bell also feels that many of our teaching practices are based on another learning style (learning from print) and as a result many educators are unable to capitalise on the learning strategies favoured by Aboriginal students.

In his book, Christie (1985) is quick to highlight the importance of the day-to-day processes of socialisation of an Aboriginal child in determining a possible preferred learning style. He does however refer to Harris (1980) in outlining five major characteristics of traditional informal learning for the Milngimbi Aboriginal people. These include learning through observation and imitation rather than through verbal instruction, learning by personal trial and error rather than through verbal instruction and demonstration, learning in real-life activities rather than practice in contrived settings, context specific learning rather than producing generalisable principles and, finally learning is always person oriented rather than information oriented. Christie concludes that Aboriginal children often arrive at school with little facility in the language or learning styles emphasised by formal education and this is no doubt due to three major differences between Aboriginal and White Australian learning. Firstly, in Aboriginal education, the role of language is reduced. Secondly, this predisposes Aboriginal people to think and perceive in a way that is not constrained by the serial and sequential nature of verbal thinking. Thirdly, in some Aboriginal cultures there is little need for formal education, all the learning which is necessary for effective participation can be learnt in the day-to-day activities of that particular group.

What needs to be emphasized once again is the great diversity that exists within the Aboriginal communities in this country. Yet despite such differences, even such groups as the English-speaking Aboriginal people in our cities and country towns, they all maintain a distinctive Aboriginal lifestyle. It would therefore be reasonable to assume that a significant number of Aboriginal children do not see schools as the White middle-classes do and writers such as Eckermann whose advice to experiment with various learning styles with these children, is most pertinent. This is indeed a formidable challenge to both our educational decision-makers and our educational practitioners.

5. THE AUSTRALIAN SCENE - ARE OUR SCHOOLS GEARED TO THE STUDENTS' LEARNING STYLE NEEDS ?

Probably the major influence on the cognitive and learning styles in the numerous ethnocultural groups within Australian schools is the Western education system to which they are now exposed. Bagley and Young's (1983 p24) research quite clearly shows that education itself can have a large influence on learning and cognitive style.

In localising the learning style concept to Australian schools, Bell (1986 p32) highlights some problems inherent in the cross cultural teaching context. Specifically she raises issues that tend to reveal that Aboriginal students are best served by Aboriginal teachers. Whilst acknowledging the problems associated with such a statement (eg. the diversity within the Aboriginal population, insufficient Aboriginal teachers etc.) she does provide five factors which need careful consideration in the training of teachers for Aboriginal children. I think these factors should not be limited to Aboriginal children but have a very real application to the many ethnocultural groups within Australian schools.

In Australia, the "Anglo-Saxon white middle-class child" can gain more through the educational system via a style that follows a linear, self-forcing course. Other children who don't fit the above description (and there are many due to Australia's multi-cultural make-up) are often expected to be bicultural, bidialectic and bicognitive. Such children can often be castigated whenever they attempt to express and validate their indigenous cultural and learning styles. Although writing about the U.S.A. education scene, it is Anderson (p5) who probably provides the best summary of this situation when he states "Under such conditions cognitive conflict becomes the norm rather than the exception".

Certainly in my own particular setting, a Queensland Primary School, I tend to feel we look for emotional reasons to explain why a child is not learning, we look for an emotional block or a conflict or a learning disability. As a result we have an array of professionals who counsel, remediate or analyse the child in an effort to rectify the problem. Perhaps Australian schools ignore the possibility that children are not learning because they are not given the opportunity to use their own style of learning in the classroom.

Are our schools geared to the students' learning style needs? Well not yet they aren't. Perhaps the learning style movement will gain greater influence in the next few years, and perhaps this influence will affect such things as teacher training, the selection of support services and curriculum developments. It is only when this scenario takes place can we honestly talk about Australian schools effectively catering for its diverse student population.

6. CONCLUSION

The purpose of this paper was to investigate a possible relationship between learning style and cultural background. Due to the controversy associated with the concepts of learning style, this investigation quickly encountered some concerns. Despite these concerns, certain research findings about learning styles in schools did surface. We know that style exists and it is possible to apply it to all areas of education - curriculum, instruction, staff development, leadership etc. Often this application in accommodating for individual learning styles can produce impressive gains in achievement.

Also research showed that there is a relationship between culture and style and that cultural values or the socialization process do impact on a learner's style. Models emerged, yet each of the models advocated acknowledging and honouring the diversity among individuals. I felt that this advocacy virtually dismissed many of the studies which attempted to link a particular learning style to a particular ethnocultural group. The diversity within such a group effectively means that to produce a statement that a particular style is to be found within a particular culture, is somewhat fragile. To engage in such an activity is to label and stereotype, which are criticisms that the learning style movement has had to face.

Learning style certainly has implications for the schooling process, none greater than for the teaching profession. Because the learning styles concept is different to their initial training, teachers generally do not know about the impact of style on children's achievement and attitudes toward school. Learning style can help teachers in a practical way to

value diversity. It can help them honour individual approaches and help teachers find ways for every student to be successful. The power of learning styles can certainly be a contributor to rethinking education in Australia. It can give us direction for changing schools in line with the perceived needs of student population whilst at the same time advocating that we are not going to find the one right way to design or restructure schools .

Overall, I feel that there is a relationship between learning style and cultural background. Yet one should be somewhat wary about specifying a learning style for a particular cultural group because of the diversity that is sure to exist within those groups. The relationship is more likely to be *based* on the socialization processes within a group and the influence of those processes on the preferred model of learning for the group's inhabitants. One only has to look as far as this country's Aboriginal people for an illustration of both points discussed in this paragraph.

BIBLIOGRAPHY

- Anderson, J.A. (1988) 'Cognitive Style and Multicultural Populations' *Journal of Teacher Education* Jan/Feb pp. 2-9.
- Bagley, C. & Young L. (1983) 'Class Socialisation and Cultural Change: Antecedents of Cognitive Style in Children in Jamaica and England', in Bagley C. and Verma G.K. *Multicultural Childhood*, Gower Publishing, Hampshire, U.K. pp. 16-25.
- Bell, H. (1986) 'White Teacher, Black Learner', *Australian Journal of Adult Education*, Nov.
- Bennett, C. (1986) 'Learning Styles: Interactions between Cultures and the Individual' in *Comprehensive Multicultural Education*, Allyn and Bacon, Massachusetts .
- Christie, M. (1985) 'Aboriginal Perspectives on Experience and Learning. The Role of Language in Aboriginal Education', Deakin University Press, Aust., pp. 40-51.
- Claxton, C.S. & Murrell, P.H. (1987) 'Learning Styles - Implications for Improving Educational Practices' ASHE-ERIC Higher Education Report No.4, Association for the Study of Higher Education, Washington
- Dunn, R., Dunn, K. (1978) 'Teaching Students Through Their Individual Learning Styles - A Practical Approach' Restons Publishing, Reston, Virginia.
- Eckermann, A.K. (1987) 'Learning Styles, Classroom Management, Teacher Characteristics and Rural-Urban Aboriginal People: Some Thoughts' *Discourse* April pp. 55-68.
- Harris S. (1980) 'Culture and Learning. Tradition and Education in North-east Arnhem Land', Education Dept., Darwin.
- Shade, B.J. (1982) 'Afro-American Cognitive Style: A Variable in School Success?' *Review of Educational Research*, Summer 1982, pp 219 - 244
- Witkin, H.A. (1969) 'Cognitive Styles Across Cultures' *International Journal of Psychology*, Vol. 2, No. 4, pp 233-250