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**FOSTERING A LEARNING CLASSROOM CLIMATE: THE ROLE OF THE  
CHRISTIAN TEACHER**

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## FOSTERING A LEARNING CLASSROOM CLIMATE: THE ROLE OF THE CHRISTIAN TEACHER

### Introduction

In the search for new ways to create more effective learning climates within classrooms there is a constant need to assess the quality of classroom environments and to introduce various strategies aimed at improving dimensions of this subtle aspect of learning<sup>1</sup>. The creation of rich learning environments must begin with effective teachers taking responsibility for the environments they produce Ayers writes:

‘ A large part of the work of teaching is constructing the laboratory for learning, it must be sufficiently broad and varied to challenge a range of interests and abilities, and yet focused enough to offer students some coherent rhythms and goals. The learning environment is a complex, living reflection of a teacher’s values : (1993:50).’

My personal experience of classroom climates started at The John Loughborough School in north London England. I joined the school in the mid 1980s when a wave of media attention was focused on the fact that a Seventh-day Adventist secondary school, with an intake of students of mainly Afro-Caribbean heritage, had pupils that were actually learning! These students many of whom had been failing in the state school system were outstripping their state school counterparts. Why? As the newspaper reports appeared and as the television cameras rolled, time and again the word ‘ethos’ crept into articles and television programs. Just what the John Loughborough ‘ethos’ was, is difficult to explain. It *was* our belief. It *was* our practices such as saying prayer before each class; it *was* the staff, the fact that they were not afraid to experiment; it *was* the Headmaster; it *was* the mission of the school. Was any single factor more important for the success of the school? I would answer yes. The school was established as a place where God was at the center. It was a God maintained school.

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<sup>1</sup>The word ‘environment’ will be used interchangeably with the word ‘climate’ in this essay.

Founded on the principles of Seventh-day Adventist educational philosophy the school's avowed aim was to educate the spirit, mind and bodies of its students. These factors helped to create the particular climate of the school which the then Head Orville Woolford coined as 'better different'.

The purpose of this paper is to briefly examine research based findings on the characteristics of effective teachers. Then strategies which may prove useful in creating rich Christian classroom environments from psychological and recent brain-based educational research are explored for the impact they might have on learning in a Christian environment. Educational reforms based on brain based research have taken on real significance. As Christian educators from a Seventh-day Adventist tradition how we relate to these findings is important, as this research in some respects may affirm our educational philosophy, practices and aid in the creation of better learning environments. As educators with one of the largest educational systems worldwide, we cannot afford to ignore the research. There is a realization that there can be no easy answers, no pat formulas that will solve our quest to establish the best ways for students to learn within our classrooms, to believe so would be simplistic. Yet to sit back and wait for others to make the 'changes' or until we know 'more' is not a viable option for effective Christian teachers. Research evidence by Fraser 1986, established that the nature of school and classroom environments had a significant influence on teacher satisfaction and how well students achieved. Christian teachers want the very *best* for their students, and in their attempts to *deliver* academic excellence and foster faith in their classrooms, they will continually assess their classroom climates, and after reflection they may have to change some methods and practices to fulfill the principle of 'true education . . . the harmonious development of the physical, the mental and the spiritual powers'(White 1923:13).

### **Characteristics of Effective Teachers**

The twentieth century has seen a wealth of investigation into the attributes of what makes an effective teacher (Borich 1988). By the 1960s a plethora of studies had examined various personality traits, attitudes and made attempts to predict what made teachers effective (Getzels and Jackson 1963). During the 1970s research identified teaching strategies that appeared to contribute to student achievement. 'Good teachers' it seemed not only asked questions but were good at asking them. 'Good teachers' monitored progress, their lessons were relevant and their lessons were appropriate for the students they were teaching. Research by Vacha 1977 suggested that to establish a positive social climate within the classroom the teacher would have to examine values, expectations, leadership and cohesion. If we turn to the teaching practices of the Great Teacher we find these in abundance.

### The Blue-print

The Master-class in teaching held by the Master Teacher not surprisingly illustrates many 'new' findings. Christ asked searching questions, used culturally relevant material, monitored the progress of His students, and conducted lessons that were relevant to current issues. In showing how to create an ideal learning environment; the Master Teacher led the way. He was faced with situations that were not ideal and students with learning difficulties but, He used a variety of methods to combat these problems. And, He never forgot He was dealing with individuals. His students seldom grasped concepts on first hearing them, even after He had explained, He often found himself having to reinforce their learning using assorted strategies. He dealt with a diversity of students using often simple but effective approaches. He held one to one tutorial session with students who felt unable to speak out in class, sessions where He could speak directly to the individual needs of his students. He asked probing questions in a climate where

students could feel comfortable in revealing their failure to understand difficult ideas. “You must be born again - but how can a man enter the womb of a woman? .’ We need look no farther than Nicodemus (John 3:1-21). Sometimes he accepted students for tutorials, without them making an appointment - the paralytic student (Mark 2:1-12) . He even went to the homes of his students and taught the value of just listening. (Luke 10:38-41). He held lectures, whole class sessions such as the Sermon on the Mount where the gospel writer says He taught them, using the culturally relevant material of his day, material that engaged His mixed ability classroom (Matthew 5,6,7 ). He held practical sessions where He used miracles, nature to demonstrate concepts, and once just a few words written in sand to teach and show a lesson on true love (John 8:3-11). Jesus, saw his teaching as a mission to redeem lives. Ellen White in the book Education says that ‘ the work of education and work of redemption are one . . . ’( White, 1923: 29-30). As educators we are called to recreate the image of God in our students. Called to reflect the nature of God in our classrooms, we are involved in a life saving mission. In a variety of ‘classrooms’ Jesus created the optimum temperature for learning. As practitioners of the vocation of teaching we aim to emulate the teaching practices of Jesus. Christ becomes the blue print for all our actions:

Christ is the greatest teacher, the greatest educator, that the world knew. If you come into close relation with him, the atmosphere surrounding your soul will exert an educative influence wherever you are. Unless you have Christ formed within, the hope of glory, all the education that you may obtain in Greek, in Latin, in the languages, or in anything else, will be of no value in securing eternal life. You must bear in mind that Christ cooperates with you when you cooperate with him. Constantly you are to be learning of the Master Teacher ( E .White: The Advocate, February 1, 1902, paragraph 1).

### The need to foster learning climates

Because we are serious about creating better learning environments our Christian world view permeates how, what and why we teach. The November 16 Issue of Newsweek Magazine 1998 in an article ‘*Where are the Children?*’ by Velisarios Kattoulas cites that Japan, long regarded

by many in the West as a role model for academic excellence was heading toward a crisis among its young people:

‘The drive for academic excellence as the goal of society has to some extent created an underclass’. Japan according to this article is ‘suffering from soaring juvenile crime which many in Japanese society attributes to:

‘Society and parents who ‘sacrifice’ children to a life without spiritual goals and values. They have been sacrificed to wishy washy adults with no vision.’

Sadly, this description could fit many other countries around the world. The Christian teacher may be the only contact that some students have with spiritual goals or Christian values. The Seventh-day Adventist world view should force educators to face head-on issues that deal with the deeper meanings of life. The realization that our students evaluating critically all their facts of experience define their own world views, through the values and philosophies set before them, amplifies the need to constantly examine them. Sin has brought alienation, the wisdom of the world has become the accepted wisdom of many people. The need to ensure continual guidance and reaffirmation of student value systems is a constant challenge. A simple method for getting students to think more deeply about who they are and where they are going in life is the following:

- In a relaxed setting, usually a form period with students that I have developed a relationship with and who have a good relationship with each other, I ask the simple question ‘*who are you?*’ The student usually responds with a bemused expression, ‘*has their teacher finally lost it?!*’ They invariably start by saying their names. Then I reply ‘*yes*’ but *who are you?* This leads to deeper thought. As the game goes on the students’ attempts at answering the questions become more and more revealing about themselves and the meanings they attach to life. It is the teacher who guides this game. It can be as short or as long as you wish it to be. The teacher aids students in answering the questions about the deeper meanings of life. The teacher may vary the questions. ‘*Where are you going?*’ Or ‘*why are you (we) here?*’. The teacher must have a valid point to make. They need to have a plan in mind where the questions might lead and what answers they may give.

The questioning and clarification process involved in examining and establishing values by the teacher on themselves and their students leads to growth. In teenaged students this helps with their realization of self. Psychologists have written much on the role of 'possible selves and 'most feared selves' in the lives of young people. To ensure that students do have positive views of themselves and what they can become, is a great necessity, we never know just where our students are coming from as to good and bad life experiences. Stephen Guptill concludes:

'As the knowledge, relationships, and experience grow they affect the things a person holds dear, and values are formed, expressing and reinforcing faith. Finally it all comes together to affect everything that is thought or done. Patterns develop that form explanations of why things are the way they are and give meaning to life's experiences. Altogether, it forms a world view as an expression of faith' (1998:3).

In fostering a comfortable learning climate there is a need to keep repeating and believing that God loves each of them as an individual. Love must be the center of every classroom, and if 'God is love whoever lives in love lives in God, and God in him.' (1 John 4:16).

### Climates of sincerity

As teachers our aim must be total sincerity. Research by Macmillian, Singh, and Simonetta (1994) suggests that educators who attempt to reinforce a positive self-image in students verbally by repeating phrases which are inconsequential and meaningless such as 'you're great' create the opposite effect. Students are aware of the superficiality of such statements. As Christian teachers the aim to provide acceptance, affection, limits and expectations and to create a climate inductive of high self-worth must be done with fidelity. Credibility will be lost if we give praise where it is not due. Students decipher easily that which is not 'entirely' true. We undermine trust, and this is detrimental especially for those students already suffering from low self-worth.

### Learning from each other

Learning is not a one way street. Students have often taught the teacher. As Christian teacher our values must be questioned, and our personal attitudes re-evaluated constantly. Research has shown that strategies for promoting attitude change usually involve interesting the individual to acquire a positive attitude towards the attitude object, the following have been found to engender attitude change in students, modeling, example, reinforcement, and enthusiasm (Fontanta 1995).

I once had a student in whom I could not find anything 'good'. I tried hard, but all I saw were faults. This caused me to devise the following game:

1. I asked the student to leave the room
2. Then asked three students in the room that are not particular friends of the student to say three pleasing things about the character of the student.
3. I wrote them out on the board.
4. I Invited the student back inside, and asked him to guess who said what about him.

The result of this game is that one learns a lot about the students, and they learn that their peers think well of them. So what did, I learn about the 'obnoxious student'? Rather perceptively, one student had said ' he always forgives you when you tell him off'. I felt heartily ashamed. It was true. He had the gift of forgiveness. He did not hold a grudge. The student always came back to me with a smile, the negative experience seemingly forgotten. I learned to love the student, and I hope he learned to love me. Perhaps there is a place in teaching to remind students that we are human from time to time, and that we need them, as much as they need us. It appears important to attempt to get students to express their thoughts and feelings verbally and for teachers to listen to and show in some way that they value the opinions of their students.

The sifting of values, and ideas, the opinions given and exchanged by the teacher often



appears to have borne no fruit. Still, we can take heart, the Master Teacher had students who did not, or took a long time to appreciate and act on His teachings. Some flowers take longer to bloom than others; ‘The impressions made on the heart early in life are seen in after years. They may be buried, but they will seldom be obliterated’ (White 1893:149).

### Supportive and positive climates

The climate of a Christian classroom should be a supportive and positive environment. Research by psychologists claims that students will succeed in this kind of climate ( Vacha 1977). Personal experience suggests that ‘even history teachers’ are witnesses to strong attitudes and emotions from their students. The nature of the topic may lead to the elicitation of emotions that can range from incredulity to anger. Certain topics by their very nature involve the emotions. For example teaching the holocaust to Jewish children, a teacher of history may place it in the context of other atrocities, not to belittle the suffering, but, to prepare the students emotionally by emerging them slowly into a difficult topic. When covering ‘the Peculiar Institution’ I use examples of ‘slave prayers’, which although written in a seemingly ‘inferior vernacular’ are often profound in content. These are juxtaposed with statements by notable individuals such as Thomas Jefferson, which claimed that certain races were incapable of complex thought. The students examine the evidence and draw their own conclusions, in a climate that is inquiring rather than confrontational. The teacher who comes across a taciturn student, or a noisy student, may need to be aware that the students may well be trying to come to terms with feelings about a particular topic that have surfaced during the lesson causing discomfort.

### Creating climates for attitude change

Psychological theories imply that held attitudes almost certainly do shape learning, prompting

change in study behavior and thus ultimately achievement (Rosenberg 1965). By promoting attitude change using a multiplicity of strategies such as modeling, example, reinforcement and enthusiasm, students are immersed more fully into an atmosphere conducive to better learning:

The influence of every man's thoughts and actions surround him like an invisible atmosphere, which is unconsciously breathed in by all who come into contact with him. This atmosphere is frequently charged with poisonous influences, and when these are inhaled, moral degeneracy is the sure result ( White 1882 :733).

One way of creating climates which are supportive, and may produce positive attitude change, research claims is to foster collaborative learning and group work. The following are strategies that I have found useful for group work among college students but which will also work for younger students:

#### Working in groups

1. Assign groups and give out a sheet which has about five 'imaginary' characters that are typical to groups. For example 'silent Stephen' who knows a lot but does not say anything - perhaps he is shy, or English is not his first language. Then 'do it all Dorothy' she takes over and will do it all if you let her. Then 'know it all Keith' who is a fount of knowledge and won't let the others get a word in edgeways. The students are asked to work out together in their groups to work out strategies to accommodate these individuals within a group setting. They then report their findings. They discuss the ideas and they select those they find most useful. At the end of this exercise it is envisaged that they will be better prepared to work in groups.
  
2. Give the students a list of topics with a variety of dates when they are to present them. The students then have the choice of choosing which dates and the topic they will present. If they don't like the topics and can come up with one which fits into what they are studying, then allow them to do that. Give ideas how they might tackle the subject but leave the ultimate decision with them. They sort out meeting times, etcetera, You may give advice, but they are on their own. (Moreover, I do not award grades or marks. Explaining to the students the difference in intrinsic and extrinsic motivation, and deep or surface learning, they accept this with little questioning).

The results of this have been rewarding to me and to the students. For example they have made documentary style films depicting an era in the history of the USA. They have produced short

musicals based on topics that they have been studying, using their own words to popular tunes. They have held game shows with 'prizes' (provided by them) for 'contestants' (other class members) when they have answered correctly. Personal agreement is found with many findings that support cooperative learning, which, it is claimed can lead to better student involvement, increased learning, enhanced self-worth and a more positive classroom environment ( Klemm 1993).

Many components appear to makeup the characteristic of effective Christian teachers, and in the learning process they hold a privileged position. I am in awe when I consider the 'power' we have to create climates in the classroom that help shape lives. Holmes, 1975 says:

The most important single factor in the teacher is the attitude toward learning. By virtue of what a teacher is, his (her) students can stand on his (her) shoulders and peer further in their day than he(he) did in his (hers). From the teacher the alluring contours of the mind begin to emerge.

It is to this, the 'alluring contours of the mind' that we now turn.

### **The Brain And Learning Environments**

If a person died in 1976 and awoke in 1999 the changes that have taken in the realms of technology are staggering; Fax machines, microwaves, personal computers, growing skin for burns' victims, mice with human ears growing on their backs, the eradication of Small Pox and the cloning of sheep are but a few examples of what we might find. In education the findings have been no less dramatic.

#### Creating better climates through brain-based research

Reform of the 'factory model of education' is a natural outcome of brain-based educational

research. Students becoming actively engaged in their learning and in guiding their own instruction is paramount. Teachers, who aim to teach for understanding, and meaning and to create learning environments that are high in challenge and low in a threat, the goal. These views seem in harmony with those of the Bible and Ellen White who wrote in Education:

Everyone who has to do with educating the younger class of students, should consider that these children are affected by, and feel the impressions of, the atmosphere, whether it be pleasant or unpleasant ( :260).

And, biblical, because ‘God’ the generator providing warmth to the classroom ‘is love. There is no fear in love. But, perfect love drives out fear’ (1 John 4:18).

Removing ‘threats’ from the atmosphere of the classroom may prove more difficult for some in higher education. However, we may provide some relief, for example, by using ‘student contracts’ where they decide how, and when, they wish to be assessed from a given choice. Threats, can be limited. Much is useful in brain-based-educational research, although a long way off knowing how the brain works, recent research gives enough information to make significant changes in the way we teach (Jensen 1998).

Changes made to foster learning environments need not be large. Simple but effective is the introduction of water to the classroom. Neuroscience research suggests that nutrition affects the brain. A lack of water can be damaging to the brain because, it needs eight to 12 glasses a day to function at an optimal level. Thirst, is caused by the fall of the water content in blood, making the blood more salty, thus releasing fluids from cells into the blood stream, which raise blood pressure and increase stress. Drinking water decreases the levels of some hormones that cause stress. Teachers could create better learning environments by simply allowing or encouraging students to drink more water, giving them reasons based on Seventh-day Adventist health principles, and affirming scientific findings. The actual provision of drinking- water in classrooms if possible would prove beneficia (Jensen 1998). The advantageous nature of water is well documented in Seventh-day Adventist literature.

Other areas of brain-research have uncovered much about the effects of sleep on the brain, nutrition, memory, and brain laterality. The examples of brain-based educational research are many. Although it has its critics who claim that neuroscience findings are too crude to be scientifically or practically useful (Bruer 1998), the length of this paper will not permit a full discussion of the dissenters. Instead the writer concentrates on what we *do* know and can support as Seventh-Day Adventist educators as opposed to what we *do not* know concerning the brain and learning.

### Brain growth and environments

Previously thinking held, that the brain was 'hard wired', that it could not be changed. Now it is claimed that positive environments *can* produce physical changes in the brain (in Kotulak 1996: 46). Heredity gives about 30 to 60 per cent of the brain's wiring, and 40 to 70 per cent is from the effect of the environment (Jensen 1998). If as educators we take this aspect - that nurturing our young people can make a significant difference to the development of their brains, the possibilities are almost mind blowing, but not entirely new. We have a long tradition of 'conversion' changing inherited tendencies and the effect of environments; as long ago as 1893 Ellen White wrote in *Mind, Character, and Personality Vol. 1*, 'A genuine conversion changes hereditary and cultivated tendencies to wrong' (White 1893:145). The work of Marian Diamond at the forefront of brain-based research on the effect of environment on the brain demonstrates that the brain grows new connections with environmental stimulation, reaffirming Seventh-day Adventist educational principles about environs. She says:

When we enriched the environment, we got brains with a thicker cortex, more dendritic branching, more growth spines and larger cell bodies' (Healy 1990:47).

Her findings suggest to educators that the possibility of changing the IQ measures of individuals

in different ways, perhaps as many as 20 points up or down, based on environment (Kotulak 1996). Knowing all of this effective Christian educators are using a variety of strategies based on strong Christian principles combined with the new knowledge to create better learning opportunities in their classrooms. These strategies include curriculums designed with Howard Gardner's theory of Multiple Intelligences in mind. Melvin Campbell Professor of Curriculum and instruction at La Sierra University in Riverside California in the October/November issue of *Adventist Education* 1996 maintains that MI does the following:

- It provides empirical proof for the educator's hunches about how people learn.
- It provides a wider framework for planning and teaching.
- It affirms the individuality of students.
- It affirms and encourages various cultural groups to experience learning within their own traditions. It begins to undo the damage done by the IQ approach (:3).

With this in mind creating the best learning environments may well involve restructuring our curriculums to incorporate the multiple intelligences of our students in order to enhance their learning. Further research points to two main areas which appear highly significant for educators interested in fostering better learning climates, these are the areas of challenge and feedback.

#### Creating climates of challenge and effective feedback

Findings in neuroscience based research suggest that mental challenge is a necessary prerequisite for effective learning. Challenge can be made less threatening for students if a variety of strategies are utilized. The introduction of new materials, limiting time and access and varying expectations or support in the process of learning all provide challenge which many students find stimulating. Apparently the best way to grow a better brain is to challenge it through problem solving. Even more interesting is the finding that the brain does not 'care' whether it ever finds the answers. Neuron growth happens because of the process not the solution. One method for challenging preconceptions that I have used is the following:

- ◆ I assign a historical problem to a 'problem page format' Dear Aggy. The student then has to write out the problem and the response. For example the problem of George III and his rebellious colony of America. This allows the students to empathize with an individual, to attempt to see things from his point of view and to work through what is a complex topic.

Other methods include assigning readings from various schools of thought about a particular subject and getting the students to work out a personal opinion on the subject. Again the results are rewarding one student wrote:

*I particularly enjoyed studying the different philosophies of historiography. The debate on how we should evaluate history is fascinating for me, and the more I learned about different schools of thought on the subject the broader my own understanding became. This enabled me to assess my own thoughts and feelings from a new perspective.*

This well articulated comment seems a fitting comment to introduce the second factor - that of maximizing feedback. Feedback is essential for the student and the teacher. At the start of every course taught it is essential that students understand what is expected of them and teachers also need to understand student expectations of them. It is probably not enough to hand out a module outline and expect students to grasp fully what is expected of them. If the outline is too comprehensive or not comprehensive enough it may create its own problems. We need to communicate, converse with our students about our expectations and alleviate perhaps ill founded fears before we begin any course of study. Our students need feedback as this reduces uncertainty and increases their ability to cope. Feedback lowers the pituitary-adrenal stress responses. Even when the individual has no control over the situation feedback is still valuable. Ultimately the brain appears to be an organ which decides what to do on the basis of what it has done, it is a self referencing organ and without our system of feedback learning would be impossible. In order for feedback to be most effective it needs to be specific and not general. We have all noticed the allure of the Internet and the popularity of video games amongst the

young, these give immediate feedback, feedback which can captivate the individual for hours. When we mark the work of our students we are giving specific feedback, the interaction amongst students in group-work provides a wealth of feedback, whether non verbal or verbal. Creating better learning environments must provide students an opportunity to assess their course and the way it was or is being taught. In the main feedback which is given immediately is at its most useful (Jensen 1998).

What happens if we don't cultivate better classroom climates? Well, among other things one suggestion is boredom. Work by Diamond suggests that boredom is more than just a teenage disposition. 'Teenaged' rats when exposed to boring environments their cortex became thinner, interesting environments thickens their cortex (Diamond 1998:31). Of course there are problems with accepting these theories as with any assumption. However, the 'proof of the pudding is in the eating'. Too many of us as educators, have had teaching experiences that support these findings. It may seem a long way to jump from experiments on rats to humans, but can we afford to ignore the research? I think not.

### **Conclusion**

Effective Christian teachers must follow the example of Jesus in creating enhanced classrooms that foster good learning practices. Classrooms tempered with intellectual integrity in the search for truth. Classrooms where students and teachers learn from each other in an atmosphere of avid expectancy, trust and sincerity. Classrooms where restructured curriculums enhance the learning of their students. Effective teachers build effective enriched learning environments through the cultivation of surroundings that are probing, comfortable havens of study for students. Such educators give each student an equal



opportunity to develop, and be successful in this world and more than likely a belief in the next. If the aim of education is to recreate the image of God in a fallen world, then, fostering climates for learning is not only a goal, but a sacred trust:

By wisdom a house (school/college) is built, and through understanding it is established; through knowledge its rooms are filled with rare and beautiful treasures (Prov. 24:3-4).

As I write this essay, I sit in a room where the air-conditioning is working a little too well. Though I was born and raised in a climate that is well known for its vagaries - I find myself wearing my coat in the middle of a sweltering Michigan July day. If only the temperature was just a few degrees warmer, I muse, how much more comfortable I would be. Yet I know full well that if the room were too hot I would find it difficult to work in also. What I need is the optimum temperature, one that is neither too hot nor too cold but like the little bear's porridge in the tale of Goldilocks 'just right'. Christian classrooms must be places where the temperature is 'just right'. Failure to foster, and enrich the environments in which we teach will prove detrimental to the integrating nature of education. Our students need to be given the opportunity to learn in the way best suited to them. Learning must take place in enriched environments such as displayed by the Master Teacher and recent research, or we may find our students wearing coats of boredom and failure as they sit in intemperate classrooms, wishing that someone would, or could, adjust the temperature.

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