
Title	Factors that influence the classroom environment
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Factors That Influence the Classroom Environment

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Introduction

The environment within a given classroom is influenced by a very complicated assortment of factors. Obvious examples may include the size, shape, lighting and temperature of the room. There are, however, many other more subtle, yet important factors that help create an environment that may or may not be conducive to learning. The teacher plays a tremendous role in creating the environment within his or her classroom. The first factor pertains to how the teacher structures the physical make-up of the room. Is there thought and effort to the placement of desks and chairs, what about accessibility to materials and creative use of wall space? Secondly, what type of atmosphere is created by the teacher? Is it a totally teacher dominated classroom with only one approach to teaching and learning or is there a variety of teaching styles that may suit a wider range of learning styles and abilities?

Physical Factors

When discussing the term classroom environment, the most obvious factor is the physical environment. Researchers have known for years that there are optimal conditions for learning that revolve around the right amount of light and temperature in a room. These conditions, however, do not lie under the direct control of a classroom teacher in Singapore. Perhaps controllable is the physical set-up of the classroom. Does the lay-out of the desks maximize the available space in the room? Do students all have equal access to the board and resource materials? Does the seating arrangement suit the teaching styles of the teacher? Is the seating arranged in such a way that students can move into group work with minimal distractions? As Novelli (1990) states: "The choices you make in designing your classroom can help you put your instructional goals into action." (p. 24) Another concern is the wall space. Is there an indiscriminate poster stuck here and there or is there well conceived, creative use of wall space. Walls can be sources of enjoyment, wonder, inspiration and learning if done properly. "Walls have to live" (Novelli 1990).

Theoretically speaking, all of this may make sense to teachers. The reality of the

Singapore schools may make implementation of these ideas more difficult. Many teachers do not have a “home base” classroom. They may be in several different classrooms that they share with several different teachers. This doesn’t make the situation impossible, but it does make it more difficult. The challenge may be to enlist fellow teachers to create a series of classrooms that are exciting and stimulating places to walk in to.

Supportive Environment

When discussing the classroom environment, there are many factors that come into play that may not be as obvious as the physical environment, yet are very important to consider. Part of the classroom environment is the atmosphere that the teacher creates physically, but also interpersonally. Is the environment positive and supportive, business-like and neutral or negative and threatening? Is there a feeling in the class that the teacher is aware of and cares for the individual needs of each student? The research on the importance of a warm emotional climate in the classroom is still debatable. What is clear is that a negative climate will inhibit learning significantly (Soar and Soar, 1979). A neutral, business-like climate may produce learning from capable, assertive students. This approach may, however, alienate insecure students, who respond best to teachers who encourage, praise, and have the patience to teach and re-teach until success is achieved (Brophy, 1980). When discussing the environment as being supportive and/or warm it often implies that the needs of the individual students are addressed often and effectively. Related to the concept of a supportive environment is the understanding that different people learn in different ways. Teachers who are interested in the individual needs of their students should be aware of this and allow for different methods of learning within their class. A most crucial piece to the environment within a given classroom is the type of teaching style that the teacher uses to approach content and the subsequent learning style(s) that students are asked to process information. As physical factors may or may not be in the control of a classroom teacher, styles of teaching and learning most certainly are controllable by the teacher. These factors will be in the focus of this paper.

Learning Styles

When discussing the variety of ways in which people learn, the research gets complicated. The reason for this is that one can look at learning from the perspective of how thoughts and processes are organized such as Sternberg (1990) has, or as Gardner (1985) has in his theory of multiple intelligences. A closer look at Gardner's work will show that he believes people learn in seven different ways or styles. It is important to note that people are capable of learning in any of these ways, but some people's strength will be another's weakness for any given style. (For a breakdown of each style turn to Table 1.) The question teachers should ask of themselves is how many of these styles of learning do they allow within their classroom. Are the learners asked to learn in the Linguistic style the majority of the time, with the teacher lecturing and the student memorizing facts or are other styles afforded the opportunity to present themselves? The assumption that the students learn in only one way for a given subject is also erroneous. Let's look at physical education as an example. Much of this subject is done through Bodily/Kinesthetic movements, however many other learning styles can be accommodated. Videotapes can be used to help explain particular skills and activities which will help the Spatial learner. Problem solving activities can be used to help the Logical learner. Music can be introduced during the execution of many movement patterns to help the Musical learner. Many activities within physical education are facilitated through small or large groups which helps the Interpersonal learner.

I believe it is difficult and not very realistic to test all of your students and try and accommodate each of their best learning styles in all of your lessons. Experts in learning styles do, however, believe that having knowledge of the various ways in which your pupils may learn and catering your classes to a variety of ways in which students are asked to process knowledge in the classroom may benefit your students in the long run. Directly related to variability in learning styles is the ability of the teacher to vary the approach and subsequent teaching style within a lesson.

Teaching Styles

Muska Mosston's spectrum of teaching styles (1966), from the Command style to the Learner-Initiated approach speaks to the wide range of choices that teachers have to conduct lessons. Mosston's styles can be placed into two separate clusters; those that encourage students to reproduce known facts, ideas, movements and solutions or those that produce novel (at least to the student) approaches to certain tasks. The spectrum is based on the presumption that decisions made in a class will come from the teacher, the students, or a combination of both. Those styles that fall the furthest to the left have the teacher making the decisions and those to the right have the students making most of the decisions (Table 2).

The Command style is mostly frequently seen when teachers lecture to students. The Practice style can be seen when students are asked to do individual work at their desks. Reciprocal teaching occurs when students are asked to help each other out on a given task. Self-check is seen when students are given opportunities to assess their own work. The Inclusion style refers to teachers or students being able to adjust the task given by making it more challenging or easier to complete. Again, these first five styles are all involved in reproduction.

Moving further to the right of the spectrum we have Guided Discovery. This style can be referred to as the Socratic approach to teaching whereby the teacher guides the students through a series of questions and discoveries that lead to the students learning through discovery rather than being told something. Depending on your philosophy you may say that this approach "wastes time" as it is a process that takes time, or is a great way to learn as students become more interested in an area that allows them to discover on their own. The Problem Solving style has the teacher present a problem (either to individuals or groups) and has the students solve the problem without interference from the teacher. At the far right end of the spectrum we find students initiating and developing learning on their own.

A quick look at learning styles and teaching styles will show some obvious connections between the two. The Command style of teaching accommodates Linguistic learners very well. Logical learners would flourish under the Problem Solving teaching approach. Reciprocal

teaching would fit the style of an Interpersonal learner. Learner-Initiated, and the Practice styles of teaching would cater to an Intrapersonal learner.

It is important to understand how a certain teaching and subsequent learning style affects the atmosphere or environment in a classroom. If a teacher chooses to stay with the Command style of teaching they are creating an environment that is totally teacher dominated. The teacher decides what, where, when, and how to teach and how the students will learn. Students have no say in any of the decisions made in the class and do not have opportunities to learn within different styles. The message here is that the students are not important. What is of importance is the teacher and the content. If other styles are incorporated as well, however, students may feel some ownership over the learning process. When a person learns something, there is also an attitude that surrounds the learning. If there is some joy or excitement that accompanies the learning, which often occurs within Guided Discovery or Problem Solving approaches, then there is a chance that the learning will be more meaningful and complete, and therefore stay with the learner for a longer period of time. John Dewey, one of the most influential educators of all time felt that people learned best by doing. Most of Gardner's styles of learning enable students to learn by physically doing. One that does not do this very well is the Linguistic style which correlates with the Command approach to teaching.

By and large, the teaching style that is most often used in schools throughout the world is that of the Command style, with the teacher lecturing and the students conceptualizing what's been said and at some point regurgitating back on an assignment, test or examination the information they have been given. Learning and teaching which occurs in this manner has as its goal the reproduction of facts. Teaching and learning solely in this manner has great limitations in that students are never asked to be producers, only reproducers of information. The problem is that once formal education is finished, many employers want their workers to be problem solvers, decision makers and creators of new and better ways to do and think about things. Are we doing students justice if we stay to the left side of Mosston's spectrum of teaching styles? As a regular reader of *The Straits Times*, I am constantly reminded that the government is calling for schools to "promote innovation and creativity in school students" (25 August, p. 40). Singapore Polytechnic has introduced a German model of vocational training to help

acquire life-long habits including “teamwork, punctuality, responsibility, independence, and an eagerness to learn and explore” (3 September, p. 31). Very significantly, I think, “the curriculum will not change, the polytechnic’s teaching methods will change to emphasise self-directed learning and exploration.”

Teachers throughout the world, and in particular Singapore, feel pressure and have a responsibility to prepare their students for important examinations. The content of the curriculum does not need to change, but when possible, variability in the use of teaching and learning styles can benefit the students. Teachers who create warm, supportive learning environments where students needs are catered to will help bring out the very best in all of their students and prepare them for a society that asks for creative, innovative thinkers who will not only be interested consumers of knowledge but also producers of knowledge.

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SEVEN STYLES OF LEARNING

Table 1

TYPE	LIKES TO	IS GOOD AT	LEARNS BEST BY
LINGUISTIC LEARNER "The Word Player"	read write tell stories	memorizing names, places dates and trivia	saying, hearing and seeing words
LOGICAL/ MATHEMATICAL LEARNER "The Questioner"	do experiments figure things out work with numbers ask questions explore patterns	math reasoning logic problem solving	categorizing classifying working with abstract patterns and relationships
SPATIAL LEARNER "The Visualizer"	draw, build, design and create things daydream look at pictures/slides watch movies	imagining things sensing changes mazes, puzzles reading maps	visualizing dreaming using the mind's eye working with colors/ pictures
MUSICAL LEARNER "The Music Lover"	sing, hum tunes listen to music play an instrument	picking up sounds remembering melodies keeping time	rhythm melody music
BODILY/KINESTHETIC LEARNER "The Mover"	move around touch and talk use body language	physical activities (sports/dance/acting) crafts	touching, moving interacting with space
INTERPERSONAL LEARNER "The Socializer"	have lots of friends talk to people join groups	understanding people leading, organizing, communicating	sharing, comparing relating, cooperating interviewing
INTRAPERSONAL LEARNER "The Individual"	work alone pursue own interests	understanding self focusing inward, being original pursuing interests/goals	working alone, individual projects, having own space

