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WHY IS THERE A PARADOX IN PROMOTING CREATIVITY IN THE ASIAN CLASSROOM?

I've a problem with this pupil in my class. I notice that he is very creative but often has some mischief up his sleeves. He has a competitive spirit in him, thinking he's good in everything. He can be rather rebellious, stubborn, and attention-seeking. He gets bored easily, and is often distracted in class.

However, he's a creative boy. First, he can draw very well and loves art. Second, whenever there's a project on Science, making models, he can invent a very outstanding toy. He loves anything to do with using hands.

But when it comes to daily work, he's not interested, and it came to a point that he didn't even complete his homework. He will mumble when I'm teaching, disturbing his classmates. I was out of my wits on what to do with him. What would you advise me to do?

I received the above email from Elizabeth Ng, my former student who is now teaching in a primary school in Singapore. What is especially noteworthy in Elizabeth's email is not the creative student *per se*, even though she has spent the bulk of her email in describing his traits (e.g., rebellious, stubborn, attention-seeking) and behaviours (e.g., draw very well, invent outstanding toy).

Instead, it is the strained relationship that exists between him and the class as a whole: the creative student "disturbs his classmates" and his teacher is "out of her wits on what to do with him".

AN ANOMALY IN EDUCATION

Elizabeth's email highlights a certain anomaly in education: Asian students are encouraged to be creative, and this is enshrined in the

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school curriculum. For example, this is an important set of desired outcomes for students in Singapore, taken from the official website of the Ministry of Education (Singapore).¹

At the end of the basic twelve years of education, students should be resilient and resolute, have an entrepreneurial and creative spirit and be able to think independently and creatively.

Although there is a considerable focus on nurturing the creativity of Asian students, an ironical finding in the creativity literature is that many school teachers dislike personality traits associated with creativity.

One group of researchers asked elementary school teachers to rate their favourite and least favourite students based on personality characteristics associated with creative children.

They found that judgments for the favorite student were negatively correlated with creativity, whereas judgments for the least favorite students were positively correlated with creativity.²

In another study, it was found that creative children were seen as more disruptive than average children by both teachers and undergraduates. Teachers were significantly more likely than undergraduates to rate creative children as more disruptive than average children.³

Why do teachers dislike creative students? According to one psychologist, it is because they tend to have traits that are *obnoxious*.⁴ Examples of these obnoxious traits include a basic lack of courtesy, a stubborn refusal to take “no” for an answer, an egoistic attitude of “I am right, you are wrong”, as well as a personal tendency to be negativistic and critical of others.

Other common characteristics of the creative individual, although not deserving the label “obnoxious”, nonetheless may not be those most highly valued in a typical classroom. Examples are “determined”, “independent”, “individualistic”, “impulsive”, and “risk-oriented”.

Given the educational goal of maintaining order and discipline in the classroom, it is not surprising to discover that these obnoxious traits and common characteristics of the creative individual are not high in the teacher’s list of desirable student characteristics.

Instead, uncreative traits like “submissive”, “sincere”, “reliable”, “dependable”, “good-natured”, and “tolerant” would be high in the teacher’s list of desirable student characteristics.

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In the Confucian-heritage society of the East, the creative teacher who attempts to nurture the creativity of Asian students is caught in a bind. This is because (s)he faces the likelihood that mild-mannered students who engage in *desirable but uncreative behaviours* will transform into assertive students who engage in *creative but undesirable behaviours*, as shown in Figure 11.1.

This is known as the *paradox of promoting creativity in the Asian classroom*. It is a paradox because either way, the creative teacher is “damned if you do and damned if you don’t”, as the saying goes. Since this paradox goes to the heart of the Confucian way of life, the creative teacher must first develop a deeper understanding of the nature and context of learning in the East, before (s)he can resolve this paradox.

Figure 11.1 Two Types of Student Behaviours

Desirable but uncreative behaviours	Creative but undesirable behaviours
<ul style="list-style-type: none">• listen carefully to what the teacher says	<ul style="list-style-type: none">• is sceptical of what the teacher says
<ul style="list-style-type: none">• follow instructions of the teacher closely	<ul style="list-style-type: none">• question and argue with the teacher in class
<ul style="list-style-type: none">• do work obediently	<ul style="list-style-type: none">• do work only when it interests him or her
<ul style="list-style-type: none">• submit homework punctually	<ul style="list-style-type: none">• submit homework only when forced to
<ul style="list-style-type: none">• support the ideas and opinions of others	<ul style="list-style-type: none">• force his or her ideas and opinions on others
<ul style="list-style-type: none">• get along well with other students	<ul style="list-style-type: none">• quarrel with classmates frequently

THE NATURE OF LEARNING IN THE EAST

Learning occupies a central place in Asian society. The defining importance of learning originates with Confucianism, which promotes the idea of human perfectibility as a moral purpose through individuals’ lifelong dedication to learning.

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Indeed, the opening sentence of *The Analects of Confucius* refers to the significance and joy of learning: “Is it not pleasant to learn with a constant perseverance and application?” Close scrutiny of this ancient classic of the Chinese reveals that the term “learning” pervades the entire text, thus qualifying it to be called a book of learning.

This dedication to learning is not aimed at mere literacy, but more importantly, at cultivating one’s moral character, so that one can be *nei sheng* or “sagely within” and *wai wang* or “kingly without”.

That is, learners are not only exhorted to seek inner self-cultivation and virtue (*nei sheng*), but also to contribute their learning back to society by assuming “meritorious service” (*wai wang*).

Confucius puts it in this way: “The officer, having discharged all his duties, should devote his leisure to learning. The student, having completed his learning, should apply himself to be officer.” (Analects, XIX.13)

The high regard that the Chinese place on learning is reflected in the large body of aesthetically-appealing phrases, expressions, and metaphors in the Chinese language that refer to learning. For example, “long-term diligence is the road to the mount of knowledge; endurance of hardship is the boat to the boundless sea of learning.”

HOW THE CHINESE VIEW LEARNING

Li employed a two-step procedure to collect and analyze these learning-related terms in the Chinese language.⁵ First, a list of learning-related terms in Chinese was generated by two groups of Chinese respondents. Second, these terms were judged for their similarity in meaning by a third group of Chinese respondents.

The first basic group to emerge from this analysis contained the largest number of items. It was labelled as “heart and mind for wanting to learn”. This is a Chinese folk term to describe one’s desire to learn, which is often translated as “achievement motivation” in the West.

The rich concept in this Chinese folk term can be gleaned from other items contained in this basic group. They include “lifelong pursuit”, “there is no boundary to learning”, and “upon great achievement, make still further progress”. In unison, they reveal the Eastern conception of learning as an ongoing, never-ending process that involves the whole person.

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A second basic group that complements “heart and mind for wanting to learn” is labelled as “quartet”. It is so called because it is subdivided into four related clusters of terms, under the headings of “diligence”, “endurance of hardship”, “steadfastness”, and “concentration”. Although each cluster is distinct, in unison they constitute a coherent whole regarding how learning takes place.

“Diligence” connotes the notion that learning is an activity that requires much time and practice, as the following examples demonstrate: “Wang Xizhi, known as the sage of calligraphy, practised with his fingers on his clothes so that they were all damaged” and “if well-versed in three hundred Tang poems, one will be able to chant if not compose poems”.

“Endurance of hardship”, the second cluster, focuses on overcoming difficulties, especially physical drudgery and poverty. An example is the following: “Zhu Maicheng studied while woodcutting – too poor to go to school”.

This emphasis on enduring hardship during the learning process contrasts sharply with the Western notion of learning. In the West, learning is frequently conceptualized as a fun activity that one enjoys doing. For example, interesting activities are designed for students to stimulate their creativity.

In contrast, in the East, learning is a disciplined activity that involves the overcoming of hardship. According to Confucian tradition, those who can achieve great learning by enduring hardship possess personal and moral strength and are upheld as examples of wisdom. As Mencius, a famous disciple of Confucius, has pointed out:

When Heaven is about to confer a great responsibility on a man, it will exercise his mind with suffering, subject his sinews and bones to hard work, expose his body to hunger, put him to poverty, place obstacles in the path of his deeds, so as to stimulate his mind, harden his nature, and improve wherever he is incompetent.

The third cluster is “steadfastness”, which refers to an enduring orientation to learning that is expressed in such phrases like “filing a block of metal into a needle”. The importance of “steadfastness” is due to the Confucian belief that there is no shortcut to learning.

Knowledge does not come about overnight, but accumulates bit by bit over a long period of time, to the enduring learner with “steadfastness” who perseveres in spite of hardship.

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“Concentration”, the last term in the “quartet”, emphasizes studying with consistent resolution and dedication without ever swerving from it. It is expressed in such phrases like “put one’s heart into one’s study”.

A good example of “concentration” is found in my account of a group of Japanese students who checked into a hotel with their families during the New Year holiday to concentrate on preparing for their college entrance examination (see Chapter 1).⁶

In unison, these four terms in the “quartet” present a coherent account of learning in the Eastern tradition. First, they all presume a great desire to learn, because without the “heart and mind for wanting to learn”, these learning behaviours cannot be sustained.

Second, they are interrelated: “Diligence” without “enduring hardship” does not amount to serious learning. Likewise, if one is not “steadfast” in one’s “concentration”, one’s learning will end up being half-hearted.

In this arduous path of self-cultivation, the individual is motivated by stories of great learners in the past. These stories are widely available in the oral literature, as well as in children’s textbooks and popular illustrations of the Chinese. One example relates a story about digging a hole in the wall to borrow the neighbour’s light:

Kuang Heng, a famous essayist during the Ming Dynasty, was very poor in his childhood. His family could not afford light. To study, he chiselled a hole in the wall to borrow the neighbour’s light. This is how he acquired his knowledge. Later he became a prime minister.



THE CONTEXT OF LEARNING IN THE EAST

The nature of learning in the East is closely related to the context of learning in the East. Traditionally Chinese teachers enjoy a great deal of authority, and are treated with respect and deference by their students.

This is because in the Confucian tradition, teachers are far more than personnel hired by the state to impart information to students. More crucially, they serve as moral embodiments that students are to

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emulate; they are entrusted to guide their charges on the journey towards lifelong learning.

Hence, when Chinese parents send their child to school, it is not merely to ensure that (s)he acquires literacy. In addition, and more crucially, Chinese parents are concerned with providing their child with the moral way to develop as a person in society. This traditional respect for the teacher, as a revered elder transmitting knowledge and wisdom to a subordinate junior, is brought out clearly in a study of British and Chinese secondary school students.⁷

The British students characterized a good teacher as one who is able to arouse the students' interest, explain clearly, use effective instructional methods, and organize a range of activities: these are very much the "teaching skills" taught in typical Western teacher training programmes.

The Chinese students, on the other hand, prefer their teacher to have deep knowledge, to be able to answer questions, as well as to be a good moral model. In return, students show their respect to the teacher by their meekness and obedience in class. This is expressed in the notion of the "docile student".

This term is not used in a negative, derogative sense, but in its original sense of being teachable: Chinese students enter the classroom believing that their teachers are exemplars in learning who have valuable knowledge which is their duty as students to learn. In return, the teacher also has a high expectation of the students' diligence, perseverance, endurance of hardship, concentration, and self-cultivation.⁸

This shows up clearly in the style of student questioning: whereas Western students ask questions based on their ignorance, Chinese students ask questions based on their knowledge. That is, they would read up on a topic first, and then pose questions to their teacher to fill in missing gaps in their understanding.

Chinese students studying overseas often consider their Western classmates rude for asking questions based on ignorance. In turn, Western teachers cannot understand why Chinese students do not ask questions earlier in the learning process.

THE PARADOX OF PROMOTING CREATIVITY IN THE ASIAN CLASSROOM

In Chapter 8, we saw that the creator faces much social resistance from the community, because his or her creative behaviour threatens the conventional manner of doing things. Instead of succumbing to this insidious pressure to conform or toe the line, the creator stubbornly clings on to his or her radical idea. That is, (s)he behaves in a *dogmatic* manner.

This provocative notion of the dogmatic creator, which stands the conventional notion of the creator as an innovative person on its head, is backed by many historical examples, from Galileo Galilei to the Wright Brothers. It also leads to another controversial insight: “nice” people are not creative and creative people are not “nice”.

The reason is as follows: “nice” people are agreeable individuals who go along with what the group says, instead of upsetting everyone by doing things their own way. In contrast, creative people are not “nice” because they insist that others should do as they say, no matter how strange or eccentric their ideas are.

This provocative thesis on the relationship between culture and creativity leads my colleague Ian Smith and I to reason that there is a paradox in promoting creativity in the Asian classroom.⁹ The origin of this paradox stems from the intrinsic character of creativity on the one hand, and the nature and context of learning in the Confucian tradition, on the other hand.

Specifically, the teacher in the Confucian tradition acts as a moral guide to students. In return, students show their respect to the teacher by their meekness and obedience in class. The relationship between teacher and student is highly authoritarian in character. The teacher imparts knowledge and wisdom to students by personal example. The students accept what their teacher has imparted to them without questioning.

There is a harmonious fit between teacher and student, even though their relationship is hierarchical in nature. However, when we promote creativity in the Asian classroom, we disrupt the harmonious fit that pertains to this hierarchical relationship. We disrupt this “harmony in hierarchy” on account of the intrinsic character of creativity.

In particular, when students start to behave in a creative manner, two tendencies are set in motion simultaneously. Specifically, there is

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a decrease in student tendency to behave in a “nice”, passive, and submissive manner in class, in proportion to an increase in student tendency to behave in an individualistic, sceptical, and egoistic manner in class. The more creative a class of students becomes, the more difficult it is to control and manage them. This is especially so for those teachers who are steeped in the Confucian tradition of learning.

THE CLOSING OF THE ASIAN MIND

To resolve this paradox of promoting creativity in the Asian classroom, we need to revisit the Confucian tradition of learning. We have seen that this learning tradition encourages “diligence”, “endurance of hardship”, “steadfastness” and “concentration” in the learner. This is not a bad thing in itself. As the saying goes, *no pain, no gain*. In addition, the exhortation to cultivate one’s moral being, as well as to contribute one’s learning back to society, is laudable. No reasonable person would argue against this.

However, there is an aspect of learning in the Confucian tradition that we can take issue with, namely, its authoritarian nature. According to Ho, Peng, and Chan, this is due to a set of dogmas or basic assumptions concerning the enterprise of learning.¹⁰

One dogma asserts that education is the acquisition of correct knowledge, not the discovery and generation of new knowledge. Effectively, this leaves creativity out of consideration, as creativity involves making a new invention or discovery. Incidentally, Confucius regarded himself to be a transmitter of ancient wisdom, not a discoverer of a new way of life.

A second dogma asserts the superiority of the written word over oral discourse. Once written and accepted as orthodox, a text is enshrined with authority that cannot be challenged. Instead, it should be silently committed to memory. As a result, to exercise caution in speech is considered a virtue, whereas spontaneity in action is equated with recklessness.

A third dogma asserts that the teacher is the repository of knowledge, to be passed on to students. The older the teacher, the greater this repository of knowledge, and the more (s)he is to be



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revered by students. This is reflected in the polite form of address for the teacher in the East, namely, *lao shi* or aged teacher.

Together, this set of dogmas justify the authoritarian nature of learning in the Confucian tradition. As an expression of ideological conservatism – which stresses security, conformity, and tradition rather than creativity, autonomy, and self-direction – these dogmas of learning promote the development of a closed mindset in Asian teachers, and through them, in Asian students.

One important avenue in which this closing of the Asian mind is effected is via the relationship that exists between teacher and student. In Confucianism, this teacher-student relationship is modelled after the father-son relationship. This modelling can be gleaned in the Chinese term for a venerated teacher, *shi fu*, or teacher-father. It is also reflected in this popular saying: “One day as a teacher amounts to a lifetime as a father.”

The relationship between teacher and student in Confucianism is marked by its imperative nature: pervasive, stringent, and intolerant of deviation. It constrains, even inhibits, the student’s freedom of action, self-assertion, and development of individuality. It impedes free exchange between teachers and students essential for creative teaching and learning.

Teachers are supposed to act as a stern disciplinarian in class, instead of allowing their authority to be challenged by students, as captured in this saying: “Rearing without education is the fault of the father, teaching without strictness is the negligence of the teacher.” In turn, students are supposed to be meek, diligent, and absorb everything that their teachers say, without being sceptical of it, or subjecting it to critical analysis.

The Chinese terms for learning are *xue-wen* (learning-questioning) and *xue-xi* (learning-exercise). So this inhibition of student questioning implies that rote learning, drill and practice (*xue-xi*) is emphasized, at the expense of critical thinking and argumentation (*xue-wen*). Many scholars have criticized this abject emphasis on *xue-xi* at the expense of *xue-wen*.

For example, in a provocative book *Dragon Gate: Competitive Examinations and Their Consequences*, Zeng Kang Min argued forcefully that the competitive system of education in the East has produced mentally-skewed students who are good at passing examinations, but flounder at creative problem-solving.¹¹

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TEACHERS' ATTITUDES TOWARDS STUDENTS

To open up the closed Asian mind and liberate the creative spirit in Asian students, the creative teacher needs to transform his or her attitude towards students, from one that is conservative and autocratic in nature, to one that is liberal and democratic in nature,¹² as shown in Figure 11.2.

Figure 11.2 Teachers' Attitudes towards Students

Conservative-autocratic teachers ...	Liberal-democratic teachers ...
<ul style="list-style-type: none">• maintain a rigid and authoritarian attitude	<ul style="list-style-type: none">• maintain a flexible and democratic attitude
<ul style="list-style-type: none">• behave in a formal and hierarchical manner	<ul style="list-style-type: none">• behave in a warm and personable manner
<ul style="list-style-type: none">• exert control over student behaviour	<ul style="list-style-type: none">• support the personal autonomy of students
<ul style="list-style-type: none">• make decisions all by themselves	<ul style="list-style-type: none">• empower students to make decisions
<ul style="list-style-type: none">• expect students to do what they say	<ul style="list-style-type: none">• trust students to do the right thing
<ul style="list-style-type: none">• scold and punish misbehaving students	<ul style="list-style-type: none">• use reason to counsel misbehaving students
<ul style="list-style-type: none">• reinforce the desirable but uncreative behaviours of students	<ul style="list-style-type: none">• reinforce the creative but undesirable behaviours of students
<ul style="list-style-type: none">• focus on developing students' character and discipline	<ul style="list-style-type: none">• focus on realising the creative potential of students

Conservative-autocratic teachers believe in the traditional authority of the teacher in class; students must respect this authority without fail. Misbehaving students are punished to inculcate a sense of morality in them. A firm discipline in class is maintained through a consistent use of rewards and punishments.

Conservative-autocratic teachers do little to encourage the individual autonomy of students. Instead of asking students to identify their personal goals, they prescribe what to do in a certain situation,

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and expect students to work hard to achieve these goals which have been set. They reinforce those student behaviours that are desirable but uncreative, e.g., obedient, submissive, and quiet.

In contrast, liberal-democratic teachers believe that every student has an inner potential to be realized, and assist them to actualize this inner potential. They behave in a warm and personable manner towards students, and encourage them to set their own goals. They use reason and moral persuasion to deal with misbehaving students, instead of scolding or punishing them. They reinforce those student behaviours that are creative but undesirable, e.g., sceptical, argumentative, and inquisitive.

DIFFERENT FORMS OF POWER

Asian teachers who are steeped in the Confucian tradition of learning may balk at this drastic switch of attitude towards students. If the teacher behaves in a liberal and democratic manner towards students – as the reasoning goes – it will result in a gradual erosion of his or her authority in class. In turn, this will make it more difficult for the teacher to assert his or her control over students.

But this is an erroneous view. To understand why this view is not correct, we need to take a closer look at the nature of power, as well as the way it operates on people. We tend to associate power with tyrants like Shi Huang-ti or Saddam Hussein, who have absolute control over the fate of the individual.

However, this is only one form of power, namely, coercive power. There are other forms of power, and they operate on the individual in different ways.¹³ This is shown in Figure 11.3.

The conservative-autocratic teacher who establishes a hierarchical and authoritarian relationship with students is more inclined to rely on the first three types of power to maintain control of the class. That is, (s)he is more likely to use coercive, reward, and legitimate power to motivate students to do something.

In contrast, the liberal-democratic teacher who establishes a reciprocal and egalitarian relationship with students is more inclined to rely on the last two types of power to maintain control of the class. That is, (s)he is more likely to use expert and referent power to motivate students to do something.

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Figure 11.3 Different Forms of Power

Type of power	How power operates on a person	Classroom example
Coercive power of A over B	When A forces B to do something by threat of force	Teacher threatens misbehaving student with no recess
Reward power of A over B	When A entices B to do something by use of reward	Teacher gives coveted award to top-scoring student
Legitimate power of A over B	When A orders B to do something by virtue of higher position and status	Teacher instructs student to submit their assignment by a certain deadline
Expert power of A over B	When A persuades B to do something by a superior display of knowledge and argument	Teacher informs students to correct mistake, after showing them the right solution in class
Referent power of A over B	When A motivates B to do something by means of B's attraction and liking for A	Student takes the advice of a teacher whom (s)he respects and admires

WHO EXERCISES GREATER CONTROL OVER STUDENTS?

Who exercises greater control over the students in a class? It would appear to be the conservative-autocratic teacher, rather than the liberal-democratic teacher, since the former tend to be harder on students, whereas the latter tend to be softer on students.

But let us examine this question more closely, by considering the critically-acclaimed Hollywood movie *Dead Poets Society*. It revolves around a group of students in Welton Academy. This is a private college preparatory school for boys, and its mission is to train them to become future lawyers, doctors, and scientists.

The headmaster of Welton Academy is Mr Nolan, whose stiff, uncompromising manner towards students reflects the school's

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oppressive teaching philosophy, which is based on four pillars, including tradition, honour, excellence, and discipline.

Mr Nolan is a fictitious example of a teacher who adopts a conservative-autocratic attitude towards students. This is seen at one stage in the movie when he spanked a mischievous student for his antics – an example of the use of coercive power.

In contrast to the “no-nonsense” headmaster is Mr Keating, a Welton alumnus who has returned to the school to teach poetry. He is a fictitious example of a teacher who adopts a liberal-democratic attitude towards students. This is seen in his soft and friendly manner of counselling the mischievous student who had been spanked by the headmaster – an example of the use of referent power.

Students of Mr Nolan may obey his instructions, but they are not likely to treat his desire as their desire. This is because the teaching style of Mr Nolan is hard and imperious; students are likely to feel resentful towards him, because of his tendency to use coercive power over them – the mischievous student did not repent as a result of being spanked by Mr Nolan.

In contrast, students of Mr Keating not only obey his instructions; in addition, they are likely to treat his desire as their desire. This is because the teaching style of Mr Keating is soft and seductive; students are likely to feel love and affection towards him, because of his tendency to use referent power over them – the mischievous student toned down his behaviour, as a result of Mr Keating’s friendly advice.

From this analysis, we can see that those teachers who adopt a liberal-democratic attitude towards students (like Mr Keating) have more control over them, in comparison with those teachers who adopt a conservative-autocratic attitude towards students (like Mr Nolan).

CREATIVE BEHAVIOUR VS INDIVIDUATED BEHAVIOUR

This “good news” should spur the creative teacher to establish a reciprocal and egalitarian relationship with students. Relating to students in this liberal-democratic manner will not erode the authority of the teacher in class. Instead, it will enable him or her to exercise “friendly authority” over the students.

The creative teacher can use this “friendly authority” to attenuate the negative aspects of creativity in students. For remember that when the creative spirit of students is liberated, two things occur

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simultaneously. There is a decrease in student behaviours that are desirable but uncreative, at the same time that there is an increase in student behaviours that are creative but undesirable.

If this process is not managed carefully, the creative teacher risks transforming a class of docile and teachable students, who behave in a “nice”, passive, and submissive manner, into a class of chaotic and rebellious students, who behave in an individualistic, sceptical, and egoistic manner.

Both extremes should be avoided assiduously. The creative teacher can assist students to avoid these extremes by explaining to them the difference between individuated and creative behaviour.

Individuated behaviour is so-called because it is distinctive and conspicuous. For example, if a student stands up in an auditorium suddenly, and starts talking loudly and gesturing wildly, (s)he would be engaging in individuated behaviour, *vis-à-vis* the rest of the students in the auditorium.

In contrast, *creative behaviour* is not merely distinctive in character, since it must meet other criteria of creativity, such as practicality, elaboration, and so on (see Chapter 3). For example, if a student delivers an original paper on a certain topic to a packed auditorium, (s)he would be engaging in creative behaviour, *vis-à-vis* the rest of the students in the auditorium.

The task of the creative teacher is to nurture students who engage in creative behaviour, *not* individuated behaviour. Unfortunately, students tend to confuse creative behaviour with individuated behaviour. That is, they believe that as long as they are acting in a distinct way from the rest of their classmates, they are behaving in a creative manner.

This confusion stems in part from the intimate relationship that exists between individuated and creative behaviour, as expressed in this maxim: *all creative behaviours are individuated, but not all individuated behaviours are creative.*

The creative teacher needs to impress upon students that creative behaviour involves not just the attribute of distinctiveness. It involves other attributes as well, such as practicality (does it meet a felt need in the environment?) and elaboration (is it filled with the necessary details and facts?). Ultimately, creative behaviours are more difficult and challenging to engage in, compared to individuated behaviours.

AN ENCOUNTER AT SPEAKER'S CORNER

In promoting creativity in the classroom, the creative teacher must be careful not to throw out the baby with the bath water, so to speak. That is, the creative teacher needs to discourage students from engaging in individuated behaviour, especially those that disrupt the learning process in class. However, (s)he must do it in such a way that the student is not discouraged from engaging in creative behaviour.

Concerning this subtle balancing act of the creative teacher, let me share a personal experience I had. This was an unusual encounter with a female student from a top school in Singapore. I was not her teacher, and we did not meet in the classroom, but in the middle of an open field.

My unusual encounter with this female student can be traced to the unexpected decision of the authoritarian government in Singapore to move with the times by setting up a Speaker's Corner, to enable Singaporeans to air their views about various matters in life.¹⁴ On that fateful day, I visited the Speaker's Corner, an open field located strategically next to a police-post – one may question how “sincere” the Singapore government is in moving with the times – to check out the brave souls who took this opportunity to speak up under the watchful eyes of the police.

The female student was there with some friends, and egged on by the crowd, she took to the stage to air her views. She was an eloquent speaker who captured the attention of the audience. This was not surprising, since she was from a top school in Singapore. She spoke on a topic that I was intimately familiar with, namely, the training of school teachers in Singapore. However, I was not pleased with what I hear, because she was making many unjustified accusations about the way teachers are trained in Singapore, for example, that they do not go through a proper selection process, that they are not trained rigorously, and so on.

Although I personally frown on certain policies of the Singapore education system, such as streaming and school ranking, and I also appreciate the possibility that the female student may have had some unpleasant experience with newly-trained teachers who were posted to her school, I certainly did not agree with the sweeping statements that she was making against trainee-teachers in Singapore.



Although I do not agree with what this student has said, there is something that I admire about her: She showed courage in taking to the podium to address the crowd on an issue which was close to her heart, even though she is only a secondary school student.

– Letter-writer Ng, an NIE lecturer, on the speech made by Maureen Tan, at the Speaker’s Corner.

No sweeping statements, please

LAST Friday, I visited the Speakers’ Corner at Hong Lim Park. A student from a secondary school made a speech that condemned the teacher-training programme in Singapore.

She made three accusations about trainee teachers which I felt were unjustified.

Firstly, she asserted that would-be teachers were not screened carefully before they were selected for the teacher-training programme at the National Institute of Education (NIE).

Secondly, she said that their training was not rigorous. Finally, she said that once they became

teachers, they were left on their own - to sink or swim.

As an NIE lecturer, I took offence at these sweeping statements. I had to respond there and then.

Otherwise, I would be letting my organisation, my colleagues, as well as my students down.

I pointed out to her that NIE screens its would-be teachers carefully, puts them through a rigorous training process, which includes theoretical and practical components, and that it does not leave them in the lurch when they graduate.

NIE has a lot of in-service programmes to help

our teachers upgrade themselves professionally. The staff at NIE, including myself, try our best to assist our students, the trainee-teachers; in turn, they have to work hard to graduate from the teacher-training programme.

I am recounting this incident for a reason: Speakers should not make sweeping statements at Speakers’ Corner. They should be responsible speakers.

A responsible speaker can appraise the situation critically, and make fair and balanced statements instead of letting his/her emotions (for example, unhappiness with the

present educational system) dictate what he/she says.

Finally, although I do not agree with what this student had said, there is something that I admire about her: She showed courage in taking to the podium to address the crowd on an issue which was close to her heart, even though she is only a secondary-school student.

There is much that I, a university lecturer, can learn from her.

I applaud such idealism of youth, and I hope this letter will not quench the fire within her.

NG AIK KWANG

SPH – The Straits Times, September 11, 2000

After all, I instructed some of these trainee-teachers myself, and I made sure that they understood what I taught them, by setting them challenging assignments to do. Some of them submitted creative lesson plans that are so good that I have sought their kind permission to publish it in this book of mine. So I took to the podium myself to rebut the unjustified accusations of this female student.

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As I was also concerned that the newly-established Speaker's Corner should not become a Corner of Complaints, I wrote a letter to the local newspaper.¹⁵ In it, I revealed my unusual encounter with this female student, expressed my disagreement with what she had said, and argued that speakers should not make sweeping statements at the Speaker's Corner, but back up their assertions with the relevant facts.

However, I was afraid that my letter would quench the desire of this female student to take to the podium to air her views in future. It was not my intention to silence her with my letter to the press – remember that as a creative teacher, we should *discourage* individuated behaviour, but *encourage* creative behaviour. So I made a personal confession at the end of the letter, namely, that I admire the courage of this female student, in standing up to air her views on a subject close to her heart. There is much that I could learn from her. She should continue to speak fearlessly in future, based on the facts of the matter. I hope that she got my message.

NURTURING CREATIVE STUDENTS WITH A HEART OF GOLD

To promote creative rather than individuated behaviour in the classroom, the creative teacher should stress to students the importance of using one's creative talents to serve society.

This emphasis on social responsibility is congruent with the Confucian notion that learning is not aimed at mere literacy, but more importantly, at cultivating one's moral character, so that one can be *nei sheng* or "sagely within" and *wai wang* or "kingly without".

The creative teacher can impress upon students the importance of putting back what they have taken from society, by citing the behaviour of exemplary creators with a heart of gold. A good example is Mr Sim Wong Hoo, the chairman of Creative Technology.

Mr Sim is the brainchild of Soundblaster, a highly popular software program found in computers. At the same time, he is also an extremely kind man with a heart of gold. This aspect of his character can be seen in the following incidents.

During the Asian economic crisis, Mr Sim had to retrench some staff in Creative Technology, to cut costs and keep his company afloat. Besides giving his staff a generous retrenchment package, Mr Sim also

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took S\$500,000 out of his own pocket to assist them to cope with their impending unemployment.¹⁶

Mr Sim did not restrict his generosity to his former staff. In addition, he lent a helping hand to needy strangers. Once, he read a heart-rending newspaper report about a group of foreign exhibitors who had each paid S\$8,200 to come to Singapore to sell their porcelain products.¹⁷

But a combination of misinformation and ill-luck had left them high and dry with all their goods. As these foreign exhibitors were stranded in Singapore, penniless, Mr Sim decided to assist them, by buying a bit of their products. “A bit” turned out to be five thousand pieces, which is equivalent to a third of all the porcelain products on sale.

What did Mr Sim do with these pieces of porcelain products? He put them on display at his company’s premises, and invited Singaporeans to take a look and buy any of them which caught their fancy. He would, in turn, donate the proceeds from this sale of porcelain products to charity.

Mr Sim is no stranger to charity. He donated one million dollars to a fund which gives children from low-income families S\$1 a day for transport or recess; he gave two million dollars to pay for provisions for two thousand needy families for a year; in addition, he disbursed S\$20 million worth of his own shares in Creative Technology to start an education fund.

We encourage our students to be creative by setting tough challenges for them to accomplish. We should also set a tough challenge for ourselves, by nurturing creative students with a heart of gold, like Mr Sim Wong Hoo.

SUMMARY

Although students are encouraged to be creative, research has shown that teachers dislike creative students, as they tend to behave in a disruptive manner. This leads to a paradox in promoting creativity in the Asian classroom: the more creative students become, the more they engage in undesirable behaviours.

To deal with this paradox, the creative teacher should relate in a reciprocal and egalitarian manner with students, exercising “friendly authority” over them.

The creative teacher should discourage students from engaging in individuated behaviours, especially those that disrupt the learning

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process in class. However, (s)he must do it in such a way that the student is not discouraged from engaging in creative behaviour.

Finally, the creative teacher should strive to nurture creative students with a heart of gold, by stressing to them the importance of using one's creative talents to serve society.

Albert Einstein: A Misfit of Education Who Proved his Critics Wrong

We have seen that creative individuals often have a hard time fitting in with other students in class. Their penchant to engage in creative but undesirable behaviours, such as being sceptical of an established authority and doing things in one's own way, is the bane of those who believe that school is a place where students learn to behave properly e.g., be respectful to a teacher, or follow a given instruction.

Reading *Einstein: A Life* by Denis Brian, I felt that nobody fits this image of the misfit of education better than this renowned scientist.¹⁸ From young, Einstein had retreated into his own world, being a late and reluctant talker. He informed a biographer: "My parents were worried because I started to talk comparatively late, and they consulted a doctor because of it. I cannot tell you how old I was at the time, but certainly not younger than three."

Einstein's own explanation was that he consciously skipped baby babbling, waiting until he could speak in complete sentences before he began to utter his first words. His account is contradicted by developmental psychologists, who found that we develop our ability to speak in a gradual manner, beginning with the infant stage of cooing and making eye-contact with our caregivers.¹⁹

But there is no doubt that from a young age, Einstein was something of a loner. He clearly hoarded his words, doling them out at rare intervals to a favoured few: the child equivalent of an introspective adult who shuns small talk. On the rare occasions when Einstein mixed with children his age, he was quiet and withdrawn – the onlooker. Relatives thought of him as a dear little fellow who never joined in the other children's squabbles, except to separate the combatants.

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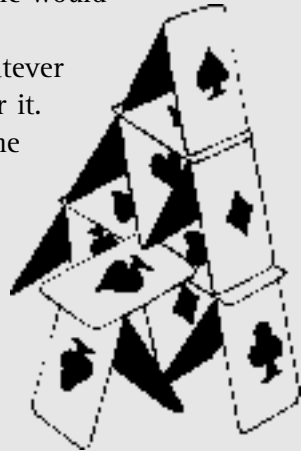
Pauline Einstein kept her son at home until he was seven years old, hiring a tutor to teach him the three Rs (Reading, wRiting, aRithmetics). She accepted the tutor's inflated assessment of Einstein as a whiz kid proudly, not realizing that this prolonged isolation from other children in school had created a misfit, the odd boy out, which Einstein was inclined to be in any case, by his own temperament.

Two year later, when Einstein began elementary school, his teachers, far from rating him a thinker, revived the early fears of his parents that he was mentally retarded. Classmates regarded Einstein as a freak because he showed no interest in sports. Teachers thought him dull-witted because of his strange behaviour.

Einstein never gave a snappy answer to a question like the other students, but always hesitated. And after he had answered, he silently moved his lips, repeating the words. The school is partly to blame for this strange behaviour of Einstein, with its emphasis on rote learning.

If a student had not done the memorizing in a thorough and diligent manner, as evidenced in the wrong answers that (s)he gives to a teacher's question, (s)he would be punished with a painful whack on the knuckles. To avoid pain and humiliation, Einstein played for time until he could conjure up the proper reply. After giving it, he silently checked himself to make sure he had got it right, and perhaps to ensure he would not forget it.

As a student, Einstein ignored whatever bored him, making no attempt to master it. But if something caught his interest, he embraced it with the purposeful concentration of a watchmaker. Once, his sister Maja watched him slowly and carefully build a house of cards. She had seen others do it and tried it herself, but these houses never reached more than four stories before collapsing. Her brother stuck at it



until his house of cards grew to an astonishing 14 stories.

In school, Einstein displayed his talents in those subjects with a logical bend, like Mathematics. For example, he referred to a book on Euclidean geometry as “holy” and embarked on a study of higher mathematics on his own. He also examined the intricate suppositions of Immanuel Kant, which many people had a hard time understanding.

Kant – the tiny, fragile philosopher from Germany who was awakened from his dogmatic slumber by David Hume, the English philosopher and sceptic – argued that time and space are not products of our experience but concoctions of our minds which clothe our sense perceptions. This argument intrigued Einstein considerably, who was to revolutionize our understanding of time and space in his special and general theory of relativity in later years.

Although Einstein excels in a logical discipline like Mathematics or philosophy, he was hopeless in a fuzzy language like Greek. Indeed, his failure to grasp it so exasperated his high school Greek teacher that he conducted the class as though Einstein was not there. Sitting at the back of the room, Einstein did not always catch what was said and probably would not have understood it anyway. Bored and uneasy, aware of his teacher’s animosity, Einstein just sat there, smiling dumbly.

Whether the smile was the scornful, derisive kind or grin-and-bear-it variety is uncertain, but it turned his instructor’s tongue from Greek to plain German, in which he infamously told Einstein that he would never amount to anything, that he was wasting everyone’s time, and that he should leave school immediately. When Einstein protested that he had done nothing wrong, the teacher complained: “But you sit there in the back row, smiling. And that undermines the respect a teacher needs from his class.”

In fact, Einstein longed to fulfil his Greek teacher’s wishes, and provided his own creative solution to this challenge of getting himself out of high school. First, he got a sympathetic doctor to write a to-whom-it-may-concern letter, warning that unless Einstein was allowed to recuperate with his family – he was at that time living in a boarding house by himself in Germany, while

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his whole family had moved to Italy because of his father's business – he might suffer a complete breakdown.

To strengthen his hand, Einstein showed the doctor's letter to his Mathematics teacher at high school, who obliged by writing a note to the principal, saying that Einstein was so proficient at Mathematics that there was little more he could teach him. The doctor's letter and the teacher's note did the trick, and Einstein was free from school to join his family in Italy. There he had a heated argument with his father on what he should do next.

At first, Einstein considered being a teacher of Kantian philosophy in an academic setting. But his father, an entrepreneur in the new industry of electricity, ridiculed this "philosophical nonsense" and pushed his son to work in the practical profession of electrical engineering.

Practical-minded father prevailed over idealistic son, and Einstein agreed to apply to a technical college for a course in electrical engineering. He set his sights high – on Zurich Polytechnic, a technical college with an international reputation. Its other big attraction was that he had merely to pass the entrance examination; he would not have to finish high school (which he did not).

Einstein *flunked* this entrance examination to Zurich Polytechnic. He was floored by French, chemistry, and biology, subjects which he had neglected through lack of interest. However, Heinrich Weber, the Polytechnic's professor of physics, was so impressed with the high scores that Einstein has obtained in Mathematics and Science that he invited Einstein to audit and sit in his lectures.

The principal of the Polytechnic also noted that at age 16, Einstein was two years younger than most students taking the examination. He took this fact into consideration and promised to admit Einstein the following year. Einstein would not even have to take the entrance examination again. He just had to get a high-school diploma from any school of his choice.

Encouraged by these two men from the Polytechnic, Einstein enrolled in a Swiss school at Aarau, renowned for its liberal climate of learning, in which teachers and students relate to one

another in a reciprocal and egalitarian manner. It turned out to be one of the wisest decisions that Einstein made. Not only did he get his diploma in this school; in addition, in its relaxed environment of learning, he also had his first inkling of the theory of relativity (see Chapter 13 for more details).

Emboldened by his golden days at Aarau, Einstein approached his learning at Zurich Polytechnic with the same breezy informality. Unfortunately, his new school was an intellectually-numbing institution of learning, and his easy way did not go down well with the autocratic bureaucrats who taught there.

Einstein was partly to blame for antagonizing his professors at Zurich: he regarded many of them as irrational or ignorant, and showed this in his attitude and behaviour. For example, Einstein infuriated Physics instructor Jean Pernet, who saw him dump the official instructions on how to conduct an experiment into the wastebasket without a second glance.

Pernet complained to an assistant, who daringly replied that Einstein's methods were interesting and his solutions always right. Pernet disagreed, and informed Einstein: "You're enthusiastic, but hopeless at Physics. For your own good, you should switch to something else, medicine, literature or law".

Einstein's casual study habits also irritated Heinrich Weber, who had invited him to audit in his classes. Weber had expected great things from Einstein. Instead of living up to his expectation, Einstein irked this professor of physics by calling him "Herr Weber" rather than the more respectful "Herr Professor".

For his part, Einstein was disappointed in Weber for excluding from his history of physics the stunning ideas of James Maxwell. Weber's failure to include the breakthroughs of Maxwell is like a modern-day physics teacher's failure to include the theory of relativity in surveying the history of physics.

Einstein cut Weber's classes to read Maxwell's innovative theory that light and electricity were different aspects of the same phenomenon, and that electromagnetic action moves through space in waves similar to light waves and at the same velocity. Maxwell based his research on Faraday's pioneering work, but his equations were uniquely his own. Maxwell's equations, as they are

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known, soon became a mathematical key to unlocking many of the mysteries of electricity and led to radio, radar and television. It also assisted Einstein in developing his theory of relativity.

Cutting classes to engage in a more engrossing pursuit is one thing. Remaining a student at the institution by passing its annual examination is another thing. Luckily, the dreamy Einstein had a diligent classmate named Marcel Grossman, who attended every lecture and took clear, detailed notes. Whenever an examination loomed, Grossman would lend these notes to Einstein. With his help, Einstein was able to continue his studies and concentrate on the work that led to his astonishing discoveries.

To be fair to Einstein, he was not the only one to antagonize the teachers at Zurich Polytechnic. A student argued with her Physics instructor about his “impossible” requirements for writing up laboratory experiments. Einstein sympathized with her situation, and offered to write a report for her, using her notes.

When she hesitated, Einstein guaranteed that it would placate the Physics instructor. She took the chance, and the outcome was as Einstein had predicted. The Physics instructor – not in the know – remarked that despite his “impossible” demands, she had somehow produced satisfactory results. This incident showed that Einstein could give his professors what they wanted, provided he chose to.

However, by then, it was too late: Einstein had strayed into the forbidden zone in antagonizing his professors. As he was preparing for the final-year examination at the Zurich Polytechnic – a very important examination, because failing it would mean that he cannot apply for a job as a teaching assistant in the polytechnic – his one-time mentor Professor Weber jeopardized Einstein’s chances, by making him rewrite an entire article, because his first submission was on non-regulation paper.

This mean-spirited enforcement of a petty rule took up much valuable pre-examination study time. Nevertheless, Einstein crossed this final hurdle, like many of the students in his cohort. They went on to be appointed as teaching assistants at the Zurich Polytechnic, except Einstein. He alone had been singled out for rejection by Weber, who had become disenchanted with Einstein,

informing him: “You’re a clever fellow, Einstein, but you have one fault. You won’t let anyone tell you a thing.”

Weber’s disenchantment with Einstein made him act in an irrational manner. Although Weber needed two assistants, he avoided hiring Einstein, a fellow physicist and former student. Instead, he looked far afield and took on two mechanical engineers.

By then, Einstein was engaged in a serious relationship with Mileva Maric, a classmate four years his senior, whom his mother does not approve of, as she was a foreign lady, and walked with an awkward gait caused by a congenital dislocation of the hip. But Einstein insisted on marrying Mileva, much to the consternation of his mother. He needed to find a job desperately to start a family with Mileva.

But Einstein had talked himself out of a job; his outspoken, sardonic manner, which delighted his friends, annoyed his professors, especially Weber. Used to the respect due to the guardians of scientific absolutes, they resented this young heretic, with his rigorous mind and don’t-give-a-damn attitude.

Einstein later defined his professor-baiting views as follows: “What we learn up to age twenty is taken for primordial truth accepted once and for all and inviolate, what we meet after that is pure speculation without form and weight.”

Einstein mailed job applications to scientists throughout Europe and anxiously awaited replies. But his efforts were in vain, and he got more desperate as the days rolled by. Luckily, Marcel Grossman, his former classmate at Zurich Polytechnic, came to know of his plight. Sympathizing with his friend’s predicament, Grossman persuaded his father to recommend Einstein to Friedrich Haller, director of the Swiss Patent Office in Bern.

Grossman’s intervention landed Einstein with a clerical job, and saved him from intellectual oblivion. This is clear from the letter that Einstein wrote to Grossman’s wife, many years later, when he learnt that his good friend had died from the complications of multiple sclerosis

... I remember our student days. He, the irreproachable student, I myself, unorderedly and a dreamer. He, on good terms with the

teachers and understanding everything, I a pariah, discontent and little loved. But we were good friends and our conversations over iced coffee in the Metropole every few weeks are among my happiest memories. Then the end of our studies – and I was suddenly abandoned by everyone, standing at a loss on the threshold of life. But he stood by me and thanks to him and his father I obtained a post later with Haller in the Patent Office. It was a kind of salvation and without it, although I probably should not have died, I should have been intellectually damaged.

Einstein's main task at the Patent Office was to sort out the proposals of budding inventors. He became adept at this exercise, zeroing in on the fundamental aspects of a promising invention, checking to see if the model matched the creator's claims before sending it on to a higher authority for a final yes or no decision.

Although Einstein's clerical job was low in status and meagre in pay, he appreciated the perks of this job: a constant and diverse flow of the creative thoughts of others that stimulated his own ideas; friendly workmates; and a congenial atmosphere. The job also left Einstein with eight free hours a day and uninterrupted Sundays to pursue his own interests. He stretched those hours of freedom by stealing moments at the office to work on his ideas. At the director's approach, he would hurriedly stuff his notes into his desk.

Einstein came to think of the Patent Office as "a worldly monastery" in which its director, Friedrich Haller, with his "splendid character" and "good brain", could pass for God the Father. It was here – moonlighting as a scientist – that he produced a stunning set of scientific papers, one after another, in the briefest possible time. The first three were on the photoelectric effect, Avogadro's constant and Brownian movement, in that order.

The last one – *On the Electrodynamics of Moving Bodies* – is to gain fame in the annals of science. This is because it contained Einstein's special theory of relativity, which is a totally wacky way of looking at such basic notions like time, space, mass and energy which every one of us takes for granted – I will not even try to describe it here! But I encourage the reader to read it up for

himself or herself, by consulting other books on Albert Einstein and his theory of relativity.

Einstein became the most famous man in the world, and everywhere he went, people mobbed this scientist who had overturned the Newtonian view of the universe. He was headhunted to teach in the most prestigious universities in Europe and America. However, Einstein never let his success go to his head, but kept his two feet planted firmly on the ground.

As a teacher, Einstein was unassuming in his ways, which endeared him to students. Their first sight of this new professor of physics was of a scruffy young man whose pants were too short, holding what looked like a visiting card. It turned out to be a scrap of paper with the main points of the lecture on it.

Einstein encouraged his students to interrupt the lecture if anything was not clear, and during the breaks he would continue the discussion in a most comradely manner with a small group of students who wanted to hear more of his musing on the subject, answering their questions in a patient and friendly manner.

Many of his students had fond memories of Einstein. Esther Salaman, a terribly nervous Physics student, had to give a seminar presentation to a coterie of lecturers in a dimmed and hushed auditorium. Einstein was in the audience. Salaman began to discuss a recent problem of radioactivity that had arisen in the field of physics.

A lecturer interrupted, suggesting a solution in such a long-winded manner that Salaman was unable to follow the argument. As she recalled, "Einstein came to my rescue. 'Clever but not true,' he said of this lecturer's idea. Then he restated the problem, and said what we knew and did not know about it so clearly and simply that everyone was satisfied."

Max Herzburger had unforgettable discussions with Einstein as they walked in a park, impressed because "he took nothing as certain truth because it was written in books, and was always asking questions which led to a deeper understanding of the problem." Gabor had "never known anybody who enjoyed science so sensuously as Einstein. Physics melted in his mouth!"

Wigner noted that "Einstein could have made a great show of

his own importance. He never thought to do so. He did not want to intimidate anyone. On the contrary, he accepted that ... human intelligence is limited; that no man can find everything alone; that we all contribute. Perhaps that is why I never felt nervous ... Einstein made me feel I was needed.”

While many students loved Einstein, as we can see from these reminiscences, some of his colleagues resented his egalitarian ways as a threat to their privileged status. They enjoyed being treated as exalted beings by their “inferiors”, while he behaved as if he had none. He spoke in the same way to everybody. The tone with which he talked to the leading officials of the university was the same as that with which he spoke to his grocer or to the scrubwoman in the laboratory.

Einstein would have to change his style to avoid clashing with his superiors at the university. But he refused to *kowtow* to anyone above him, just so that he could keep his job and advance his career. Luckily, by now, his situation has changed for the better, and he could easily find a new job in an even more prestigious university (which he eventually did).

From this review of Einstein, the creative teacher should gain two things. First, not all students would be able to fit into the typical school system. Some students with an individualistic and sceptical bend in their personality would positively abhor its rigour and discipline, and long to get out of this prison of the mind. The creative teacher should not write off these misfits of education, but find an innovative way to instruct them.

Establishing a liberal climate of learning, in which students relate to their teacher in an egalitarian and reciprocal manner, and are provided with ample opportunities to pursue their own interest in a certain area of learning, would be ideal. Remember that Einstein had his first creative breakthrough when he moved to the Swiss school at Aarau, which was renowned for its liberal ethos.

Second, it is highly possible that like these students, the creative teacher may find it difficult to fit into the school system, perhaps because (s)he is an easy-going instructor who has a disdain for social rules and regulations, and is more interested in assisting students to develop a love for the subject, rather than in

helping them to score good grades in the examination.

For example, we have seen that in the Confucian tradition of learning, the teacher is a revered authority, and must be treated with respect and deference. The creative teacher who adopts a liberal-democratic attitude towards students, and asks them to address him or her in an informal way, may be taken to task by a superior with a conservative-autocratic attitude, who feels that it erodes the respect that students should have for their teachers.

What should the creative teacher do? (S)he should *not* make compromises to keep a superior happy, if (s)he is certain of the rationale which leads him or her to behave in a particular manner.

After all, our superiors are only human. They fart occasionally, and make mistakes, like the rest of us. They surpass us in the quality and extent of their misdeeds on earth: history is a record of the follies and foibles committed by those who wield power over us, from Shih Huang-ti to Saddam Hussein.

This refusal to *kowtow* to an established authority should *not* translate into a clash with the superior, as far as the creative teacher can help it. Differences in opinion between two individuals are part and parcel of life, and should be presented in a rational and calm manner.

But if the situation becomes intolerable (e.g., the superior is more interested in obtaining a good school ranking rather than in realizing the creative potential of students), the creative teacher should evaluate the alternatives, like Albert Einstein did.