

SLIDE 1 Confucius and Socrates

Confucius was born in, (551 BCE). According to Chinese tradition he was a thinker, political figure and educator. His teachings form the foundation of much of subsequent Chinese speculation on the education and comportment of the ideal man, how such an individual should live his life and interact with others, and the forms of society and government in which he should participate.

Authorities on the history of Chinese thought, compare Confucius's influence with that of Socrates who was born in in the West in 469 BCE.

=====

SLIDE 2

SOCIAL RESPONSIBILITY BACCUS WISE.

BY

Prof. David J. Bellamy, OBE, BSc., PhD., Hon; - FLS, DSC.
D.Univ., C.Biol., FIBiol., FRIN.

Whether we like to talk about it or not the world is in an economic and environmental mess, so I do not apologise for telling you this disgusting cautionary tale.

By the year 2040 there could be 10 billion people trying to make a living off this planet. If they all used as much toilet paper as we in the west use today, the annual roll would stretch from here to the planet Uranus.

SLIDE 3 Dunny

It would require over half a billion trees per year just to keep us all clean and tidy.

Anyone tempted to say switch to bidets, ponder on the fact that the world's most endangered resource is clean potable water.

Closely followed by the biodiversity that depends on structured soils and sustainable fisheries.

These are the bottom lines of environmental concern.

SLIDE 4 Vegetation -----

For the past 475 million years the native vegetation of the world has produced and stabilised organic soils cooled the air by evaporation, provided sunshade clouds while feeding the ravenous hordes of animals of every shape and kind.

This now includes over 6.5 billion human beings.

SLIDE 5 Highrise-----

The number of human beings trying to make a living from this once lifeless planet is increasing by around 75 million a year, which means that a city capable of supporting a million souls should be being built every 5 days.

We can only hope that each one will be a city worthy of the name and not a graffiti covered slum in which most people cannot develop the full capabilities of theirs, let alone their family life.

We can also hope that each one of them will have schools worthy of the best traditions of education.

SLIDE 6 Bacchus-----

The concept of the word baccalaureate comes from the Greek name of Baccus, the King of wine and Theatre and is all tied up with the rights and wrongs of celebration especially after a good harvest of grapes.

It was Leonardo da Vinci who informed the world that grapes were “water held together with sunshine” long before the corpus of science discovered the process of photosynthesis.

It is no secret that one of the IB’s marketing tools (or pillars of wisdom, if that sounds cooler) celebrates the IB Learner Profile.

SLIDE 7

As we all know IB learners strive to be:

- INQUIRERS
- KNOWLEDGEABLE
- THINKERS
- COMMUNICATORS
- PRINCIPLED
- OPEN-MINDED
- CARING
- RISK-TAKERS
- BALANCED
- REFLECTIVE

They and their families live in an environment where ‘credential competition’ (I think that is the politically correct term) in the ‘struggle to enter the world’s leading universities is higher than it has ever been.

Lauder, Brown and colleagues have advocated that students, and equally importantly, parents are willing to pay the price in effort and cash for these ‘golden standards’ and there is little doubt

that the IB Diploma is now a foundation of real hope across the world.

Indeed research by Hayden has shown that for parents in Europe the picking of the 'right' international school, i.e. one that offers the IB diploma, was extremely important to them.

There is little doubt programmes like the IB diploma that encompass these learner goals perhaps traits would be a better word are exemplary in those who set their sights on higher education.

However we must not forget that it is the diversity of that dynamic mix that produces the strength of the society in which your graduates will sink or swim.

SLIDE 8 IVY LEAGUE-----

There is little doubt that wanting to be a Sports Physiologist out of Beijing University, a Brain Surgeon from Oxbridge, or a Lawyer with an Ivy League cap to throw into the air is a worthy aspiration.

However we must reflect on the fact that even the highest flying pupil will not be able to reap the rewards of their chosen vocation without the teams of engineers, technicians, nurses, cleaning operatives etc etc etc, who service their livelihood and their needs and those of civilization.

One of my Presidencies is that of "The British Institute of Cleaning Science" which runs an annual prize for Primary Schools.

The truth of the matter is "there ain't no thing as a free lunch" in any walk of life. A point clearly set out in the Celtic fable of the Golden Bough.

SLIDE 9 GOLDEN BOUGH-----

As any student who has followed the “theory of knowledge course” will tell you, ‘absolute power is short lived because of the jealousy and greed of others’.

Surely being part of a team is much more fulfilling than the loneliness of a lone achiever. Indeed isn’t teamwork and understanding, something that the IBO actively encourage.

George Walker – the former director general of IBO – stated that the IBO were looking to develop student appreciation of their own cultures but at the same time value the traditions and perspectives of others.

Something the IB label as being ‘open-minded’

SLIDE 10 CHARLES DARWIN-----

One only has to look back through the annals of natural history to realise that division of labour and symbiotic teamwork have been the main drivers of the fitness of survival of all living things including humankind.

Eve squatted down somewhere in Africa and gave birth to the first definitive member of our species some 125,000 years ago and began to explore the planet.

Like all living things the growing populations of people contained the traits of hawks and doves. The former would always stand and fight the latter would avoid conflict. Both of these groups had a 50 :50 chance of survival.

However the winners in the race for fitness and hence survival, were those who sized up the competition before standing their ground or running away.

With the whole world at their disposal (and I use that term with great care), there were plenty of resources available.

After a slow start the Diaspora of the descendants of Eve began to take the world by storm. They were real naked chef's testing their taste buds and their teeth on every plant and animal they met en route.

It is of great interest that the only continent that still has most of their Big Hairies (that is their Big Game animals) is Africa. Their numbers are of course diminishing but viable populations of most of them are still extant.

All the other continents lost their big mammals and birds soon after the arrival of humankind. Fire made things tastier and digestible and stone tipped spears and knives allowed the killing and butchering of even Mammoths. So it was that the world's cuisines and herbal pharmacies came into being.

There were all sorts of hiccups en route but Homo sapiens began spread out across the world and a mere thousand years

ago they began to change the face of the last large slice of available farmable landscape New Zealand. Sending the Giant Moa's and all their lesser kin to the wall of extinction. Just think of the potential of all those giant drum sticks to world agriculture if only they had survived.

SLIDE 11 MOA -----

They had spears and clubs and the sense to trade their sovereignty not their resources to the Europeans who followed on. They brought iron, and gunpowder and the scourge of feral mammals and plants that trashed the sustainability of their solar powered soils and ecosystems.

Right now thanks to the infernal combustion engine the greatest man made extinction of animals and plants is happening before our very laptops.

Not because of man made global warming but because of the still mounting destruction of what were called the decades of destruction.

These have, and still are, eroding ever more soils, clear felling forests of every type, overgrazing scrub and grasslands whilst polluting and over-fishing estuaries, seas and oceans across the world.

SLIDE 12 MEAL -----

Today there are over 6.5 billion of us trying to make a living off this planet which means the soils of the Earth must be sustainably managed to provide around 19 billion meals a day.

A figure that is set to double, in the lifetimes of your students.

Little wonder then that food security is now high on the agenda of social responsibility as it was in the time of Joseph and his coat of many colours.

Yes soil in all its colour variations is one of the world's most precious resources and yet we are trashing more and more of it every year. While hanging their hopes on the dubious claims of genetic engineering.

Removing the organic carbon that gives it living structure leaving only the bare bones of slightly acidic aluminium silicate of which the crust of Mother Earth is made.

SLIDE 13 EROSION-----

With the loss of biodiverse structured soils the need for irrigation water, fertilisers and other farm chemicals escalate.

This is the greatest challenge to world peace let alone sustainable development, and the more we spend on wars and

rumours of wars the less there is to solve the environmental problems

Providing every local family with potable water, health-full food and adequate access to reproductive healthcare doctors and dentists is at the root of the answers.

These traits are the very stuff of humaneness the foundation of real civilization.

The traits that bound ecosystems, families, encampments, villages and in more recent times, towns, cities nations and of course schools together.

Traits that were much more obvious before the invention of money and the love of it became the root of all bankruptcies.

Before this barter was the ruler of the solar driven corn and stock exchange.

SLIDE 14 Durham Cathedral-----

In the days when the Maoris were hunting the giant Moa birds and my local world heritage site, Durham Cathedral was being built, the sweat of human bodies well laced with pheromones kept birth rates well ahead of death rates.

At that time both herb women and shamans were welcomed by the corporate religions for their healing and family planning skills.

SLIDE 15 ARCHIBALDS SLIDE-----

That was until the good times of the Roman and Medieval warm period was swallowed up by the little ice age.

Then faced with catastrophic harvests and falling populations the bigots of the same religions indulged in hunts against

witches, shamans and even scientists like Copernicus, Galileo etc etc.

They had not learned the lesson from the Druidic story of the golden bough that absolute power is short lived because even the strongest at the boardroom table must sleep and in that sleep comes death, for jealousy and ambition reigns supreme.

The same is still true in this our throw away world of makeovers and takeovers.

In consequence more and more people have and are losing contact with their real roots in agriculture and the management of the countryside by well-trained gamekeepers and ghillies.

I am proud to be the patron of Britain's Gamekeepers and a Vice President of the Wild Trout Trust.

The biological importance of sex, local food and extended family life have become lost in the (we must be seen to have status) thanks status symbols in a lifestyle replete with gadgets from automobiles to cordless blackberries, snap happy phones and the fastest of out of season food.

We in the West may never had it so good but the future is clouded with what are best called insurmountable opportunities.

SLIDE 16 PLYMOUTH HOE-----

Just before Mr Blair handed No 10 over to Mr Brown I was invited to hear him speak on a Naval Ship in Portsmouth Harbour. The quarterdeck had been piled with weapons of attack and the large audience included a group of Sixth Formers.

With no notes or auto Q he gave one of the most provoking 60 minutes I have ever heard. He said "I want your help to this question. Should we be a nation of peacemakers with or without

teeth. The military showed their teeth and the youngsters gritted theirs around ethics and cost.

I also remembered that Tony Blair and Mr Bean had gone to the same prep school and wondered what it would have been like if Rowan Atkinson had made No 10?

The question that you as educators, you as international travellers, you as the shapers of young lives, you as leaders and example setters must ask yourselves is, 'are we actively encouraging the 'must have' society?'

Are you as teachers, are the schools you work as IBO curriculum providers really encouraging the students to be responsible citizens of tomorrow by playing their part in social responsibility.

Are you teaching socially responsible sustainable development? Have you built it into your curriculum at all levels? Or are you just paying it lip-service and doing nothing more than satiating your 'customers' by producing excellent examination results?

SLIDE 17 OLYMPICS-----

The stakeholders of this great city have just enthralled, educated, and entertained the world with a multi cultural preview of what a peaceful world could look like.

Every member of every team rejoicing in the excellence of having taken part

Beijing pulled out all the stops to reduce the threat of air and water pollution that could have caused problems with the performance and health of athletes and spectators alike. Pollutants such as sulphur dioxide, nitrogen oxides, soot, heavy metals, fertilisers and other agricultural chemicals.

A job very well done they then handed the flame of hope on to London the city in which, I was born.

A city that had, along with many others, suffered the problems of acidic smogs that killed tens of thousands of residents and shortened the lives of countless others.

All thanks the burning of wood and low-grade coal in open grates and coke ovens.

The killer of 1952 (when I was a 19 year old in London) had to take their dreadful toll before a clean air act banned such poor practice siting a new breed of coal fired power stations out in the country whose broad acres. Bringing the power of coal into stricken cities by wire

China is now leading the way with new age coal fired power stations and are investing in new technologies that reduce the pernicious pollutants ever further.

Good news indeed for their example shows that the much discussed “Asian Brown Cloud”, a haze of debilitating pollution sometimes covering an area as big as Australia. Can be cured with modern technology.

SLIDE 18 AFRICA-----

The real good news is like other farmers and foresters the stalwarts of China are benefiting from the increase in atmospheric carbon dioxide which allows many plants including trees to grow faster while keeping their stomata closed for longer periods so slowing the rate of water loss.

Little wonder that 300,000 sq k of the Sahara including part of the infamous Sahel are now well stocked with trees and farmers who returned to their once stricken land are producing good crops in their shade.

That is why I am proud to be a global warming sceptic along with the Pope and 31,000 scientists and rejoice in the fact that at least in England Al Gore's film cannot be shown in our schools unless the other side of the argument is presented too.

So, back to basics, whichever way climate change goes in our children's and grand children's life times what do IB graduates really need in their curriculum to prepare them to surmount all those insurmountable opportunities?

MAY I SUGGEST

SLIDE 19-----
Hope for the future; a fitting goal for all **INQUIRERS**

SLIDE 20-----
Sufficient water to drink and cleanse themselves and their living space a fitting goal for the **KNOWLEDGABLE**

SLIDE 21-----
Enough health-full food for need not greed
a perfect foundation for the **BALANCED**

SLIDE 22-----
Access to modern reproductive healthcare, dentistry medicine into a ripe active old age long live the **THINKERS**

SLIDE 23-----
Quality time and space in which to live, play and develop their talents; hooray for the **CARING**

SLIDE 24-----
Challenging jobs that reward them for work well done;
the stuff of life for **RISK TAKERS**

SLIDE 25-----

Sufficient energy to accomplish all of this and afford a green burial or a cremation, one hopes linked with combined heat and power. How's that for being REFLECTIVE

SLIDE 26-----

Education based on local environmental history well laced with social responsibility OPEN MINDED

SLIDE 27-----

'Principled' according to the IBO, means the students will 'act with integrity and honesty, with a strong sense of fairness, justice and respect for the dignity of the individual, groups and communities' WOW! What a challenge.

With more than 655,000 IB students at 2,399 schools in 129 countries and rising, taking up that challenge you are a vibrant network of hope for a better more understanding world. How about an interactive map of all those hot spots of hope listing their achievements?

SLIDE 28 Men of the Trees-----

The good news is that every which-way I look around the world I find people fed up, sick and tired that the values and everyday things that their parents and grandparents took for granted are disappearing before their very eyes.

The even greater news is that they are not sitting back and expecting that the government will solve it but are working with their local communities to stitch their patch back into more biodiverse and hence more sustainable working order.

The Million trees project in Brunei is one great example with many schools taking part and there are thousands of others around the world giving hope and a focus for celebration.

I call it the green renaissance, a worldwide movement of people striving back towards the ethics of social **responsibility**.

But how could you make all this happen within the framework of the PYP, MYP and diploma programmes?

For over 3 decades I have used the acronym WHALES when talking to my students both young and not so young about the environment.

Hot of the press after 17 years the publisher of my book “101 Ways to Save the World” has added a Greek edition to its international list.

So here goes. |

Comment [s1]: David, I really like this and think it could be the catch phrase we use for our break out sessions.

SLIDE 29 W STANDS FOR WATER-----

Some of you live in countries where clean water is taken for granted – but do you get your students to consider it – really consider it – outside of IB Geography. Did you know that according to UN figures, 3 billion people – half the world’s population do not have easy access to clean water and more than 1 billion people have no access at all to clean water.

Every drop of water we use has to be cleaned of poisons and fertilisers and that uses energy.

For years I have been working with the Police in Scotland to bring trout and Salmon into the classroom. This has gone hand in hand with the development of vocation qualifications in riparian management. We have already got many schools breeding native Trout in the classroom for release into

rehabilitated streams. Every one a memorable moment to be recorded in active minds and school diaries.

SLIDE 30 H STANDS FOR HABITAT-----

The vast majority of us live in habitats that were less than 200 years ago covered by solar powered ecosystems.

Back in those days there was no such thing as waste everything was reduced, reused and recycled thanks to the division of labour (biodiversity) of those living system.

While the continual fall of organic debris to the ocean floors are the main source of oxygen in our atmosphere.

Coral reefs and old growth forests are among the most biodiverse systems in the world and any major disturbance of their food chains leads to problems.

I have had the privilege of being the President of Coral Cay for many years during which they have put over 20,000 gap year students carrying out vital research on the sustainable management of reefs and rain forest.

An ongoing project was the purchase for Danjungan Island in the Philippines by members of many schools who raised the money to buy the Island and reef, making possible the research needed to put the coral reefs and tropical forest back into good “natural” working order.

Similar work in

SLIDE 31 Naru,-----

NARU

SLIDE 32 Western Australia,-----

IN WESTERN AUSTRALIA

SLIDE 33 Queensland-----

IN QUEENSLAND

SLIDE 34 Britain -----

IN BRITAIN

They all included pupils of many ages playing their part in stitching part of the world back into more biodiverse and hence more sustainable working order working order

There are many well run groups like this across the world offering fascinating and worthwhile linked projects at all levels.

Your school learns that they are part of the problem and it is a rich reward celebrating that you are part of the answer.

In the next 24 hours, deforestation alone will release as much CO2 into the atmosphere as 8 million people flying from London to China.

Stopping the loggers is the fastest and cheapest solution to tackle climate disbalance. So why are our global leaders still turning a blind eye to this crisis?

SLIDE 35 A STANDS FOR AGRICULTURE-----

How did I get engulfed in these projects? Probably because I grew up in London during the period when some 70% of our farmers went to the wall of extinction.

Ask yourselves where have all the small farmers who used to produce local food and keep their soils in good heart, gone?

Then celebrate the success of those who are still in the business.

Indeed there are many examples where schools could work with them to produce and market their own brand of cheese, yoghurt, fruit drink etc etc etc.

In Britain the number of schools with farms are dwindling despite the fact that Rural Science has been returned to the primary level and is doing well. The reasons revolve around the value of land for development and the need for sports fields and parking and income for development.

So the next best thing is to link your school with the closest amenable farms and take the opportunity of growing, harvesting, preparing and eating your own local food. A tasty way to celebrate those memorable moments

Visits to markets both village, super and hyper will drive home the problems and solutions of best buy dates e numbers and food miles.

The ill researched push for a biofuel Garden of Eden to save the world and the rush for carbon credits – (or are they simply snake in oil carbon indulgencies)- is threatening t starvation on a massive scale while trashing biodiversity across the world.

Biofuels essentially take food from hungry mouths and put it into cars. The grain required to fill the tank of an SUV with ethanol is enough to feed one African for a year. Thirty percent of this year's corn production in the United States will be burned up on America's highways. This has been possible only through subsidies that globally will total \$15bn this year alone.

If we can't grow biofuels without causing starvation and massive loss of biodiversity, the same is true for the raw materials upon which our plastic and chemical based lifestyles already depend.

We need the world's soils to provide food for people not for growing the raw materials of plastics and chemicals. Farming and farm management are the bottom line of every job in the world.

SLIDE 36 L STANDS FOR LIFESTYLES-----

It is our throw away lifestyles that are driving the world to destruction. Greed not greed

It may seem paradoxical, but apart from becoming the worlds biggest emitter of carbon dioxide the Chinese now lead that same world in the practice of recycling including plastic.

Indeed they are now making some plastics a semi- renewable resource and they have the energy to do it.

Little wonder that China is undergoing another agricultural revolution in plastic tunnels making better use of available infrared radiation, water vapour and composted human waste.

Back in a small island just off the south of England a miracle has taken place over the past 15 years

SLIDE 37 EXTRUDAWOOD-----

Every year the world is faced with the problem of trying to get rid of mountains of waste styrofoam. At the present rate if half of this was recycled into extrudawood, it would provide the world with 600,000 homes like these.

It looks like wood, (any sort that takes your fancy), feels like wood, works like wood but cannot be attacked but fungi or insects, even termites.

When you have a house built of extrudawood, the only thing you need to do is care for the environment.

What is more if you get fed up with your house you can recycle it in another colour, shape or form in the extrudawood range.

Most schools I visit are well into the 4 R's reduce, reuse, recycle and replant scheme of things and many are saving and even making money from their activities.

Unfortunately even recycling requires energy so it is not trite to remind this gathering that not only do road miles need a new source of energy but so does almost every aspect of modern life.

SLIDE 38 E STANDS FOR ENERGY-----

Well apart from the 4 R's REUCE. REUSE, RECYCLE, AND REPLANT there are the three F's, FOSSIL FUEL FOOTPRINTS

SLIDE 39 WALKING BUSES-----

It is my privilege to be the adopted grandfather of 124 walking busses in Kent The Garden of England. The children walk to school diluting gridlock and road rage as they skip merrily their way to school saving their parents the cost of fuel. No big sticks of carbon taxes but a carrot to make more and more join in the race towards energy efficiency.

We have already seen the Governments and NGO's of the world stirring the pot of alternatives with some catastrophic results. So all we mortal's can do is become as efficient as we can in the use of energy.

And for those who still worry about carbon footprints join the 3 f's club' and help reduce the amount of the real killer gasses sulphur dioxide, carbon monoxide, nitrous oxide and particular diesel pouring into the atmosphere.

Both sides can then rejoice in the fact that the quicker we can stop burning these resources the better for the future of our children and grandchildren. For they are the only raw materials for their increasingly plastic and chemical based lifestyles.

SLIDE 40 S stands for sustainability-----

With only one whale of each species left the population cannot be sustained.

Please remember that the main characteristic of all living things is reproduction. The strange thing is that I a highly complex animal cannot reproduce with out he help of a wife or partner. Hence the importance of stable relationships including extended family life.

For many years I worked with Population Concern helping to put family planning into many developing countries. This work included big sixth year conferences every year That was before political correctness made us focus on the words teenage reproductive health care

IB students strive to be Caring and Risk Takers

Do you really teach your students to show empathy, compassion and respect? Do you really get them to approach unfamiliar situations with courage and fore thought?

I really hope that you do because these young adults, the leaders of tomorrow are faced with an illegal drug trade that grows every year, a worldwide increase in antisocial behaviour and perhaps, most sad of all, governments who no longer seem willing or able to cope with these problems.

SLIDE 41 SWALLOWS AND AMAZONS-----

In my most depressed moments I always hold my copy of Newton's Principia in my hands as I watch the DVD of Swallows and Amazons and calm down as I remember how uncluttered science and life was back in the 1930's.

Then back to reality I dream that there is compulsory conscription for all youngsters before they take up a place at university or sponsored apprenticeship.

Conscription based not on the theory of winning wars but of practice of social responsibility.

SLIDE 42 GAP YEAR-----

-

A dream but in pre credit crunch days more and more students were taking gap years before university or before taking up their first job.

Fingers crossed but you can still encourage them to carry out social, environmental and community work.

A real life Creative, Action and Service (CAS) programme.

And now let's get really crazy and ask organisations like the IBO to get universities to recognise these commitments, not just in an informal sense but with, to use an Americanism 'credits'.

Also if we are serious about educating for sustainable development, why not get universities to encourage this during 'industrial placements' – a CAS programme that has real worth.

I know that some schools here offer all three IB programmes – the Primary Years, the Middle Years and the Diploma and some one or two.

But if you believe in educating these students to be 'thinkers' and 'principled' get them all involved.

And how about the older ‘mature’ students, retirees, senior citizens, call them what you will, people with a wealth of knowledge and time on their minds and hands.

The Politically Correct term is age stressed, a category I have been in for 15 years.

SLIDE 43 GREEN GYM-----

Wonder of wonders it was my privilege to open the first Green Gym for such senior citizens in The Falls Road in Belfast almost 25 years ago during the troubles.

One of many that are still helping to prolong active life for a growing number of people key people in the life of the community.

Perhaps the biggest problem here today is that I am talking to the converted and many of you are already accomplishing many of these things or at least I hope you are .

You as educators need to pass the message of social responsibility on to your students and more importantly they need to get out into their communities, armed with as many of the IB traits as possible and continue to educate others.

I would encourage you to come to the break out session with Glenn Canterford, the Secondary Principal from the International School Brunei. A session on how schools can try to incorporate the learning traits and educating for sustainable development into all aspects of the schools – inside and outside of the classroom.

SLIDE 44 TOM LEHRER

Tackling the plethora of modern anti-social behaviour is more difficult.

So the best advice I can give you are in the words of Tom Lehrer's famous song "Don't be scared be prepared"

SLIDE 45-----

WITH THE BACKBONE OF THE IB
INQUIRERS, KNOWLEDGEABLE,
THINKERS, COMMUNICATORS,
PRINCIPLED, OPEN-MINDED, CARING,
RISK-TAKERS, BALANCED, REFLECTIVE
TOGETHER YOU CAN SCALE THOSE
INSURMOUNTABLE OPPORTUNITIES

I DOFF MY CAP TO YOU