# Education, Happiness, Mindfulness and Colonization: Reflections from Time with San Carlos Apache Nation

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#### **Preface**

There have been debates in almost every corner of the globe over the definitions of culture, identity, and what is ethics. These social constructs all originate in our mind, a product of individuals' ontology, genes, environment and relationships. Colonization has been a major force to articulate bioethical value systems that were previously implicit in the relationships of people and nature.

Ethical values and principles have developed in the context of epistemological systems and are central to how knowledge is gained and organized, how knowledge is used, and who has access to it.

A holistic definition of health that includes happiness is critical for flourishing. The physical, social and emotional health of the Apache community is poor. This book explores the philosophy of happiness in philosophy and education.

The book explores how mindfulness may be used to assist in education, and in the happiness of teachers and students. The purpose of Mindfulness is to arouse conscious attention in the present moment and so to achieve higher levels of physical and mental wellbeing. Its study and implementation has had therapeutic purposes in clinical settings, but it is something new in educational settings. In this book the methodology of the ".b" is described, which is a mindfulness technique used with a selected group of teachers in the San Carlos Apache community.

A concrete example of a study to assess the level of self-realization and personal growth of teachers in San Carlos Apache Tribe (Arizona) with 20 preschool women teachers, who were in training in a Mindfulness program is described using a "Questionnaire Self-concept and realization", AURE, (Aciego et al., 2005; Dominguez, 2001). The results show that they show favorable levels in self-realization and personal growth. The results are very positive in almost all dimensions of their self-realization and personal growth. To ensure the success and quality of Mindfulness programs, it is opts for a quality and applicable research -high number of participants, involving of the entire educational community, longitudinal results comparison in different countries and cultures, and the creation of specific instruments for each program-.

This book will generally use the term "Native American" to refer to a person who has genetic origins in America prior to European colonization. The term "American Indian" is also used in quotations that use that term, and over time the preference for which term is preferred among Native Americans varies. The term American "Indian" developed from the original intent of Columbus in 1492 which was to discover an alternative trading route to India, but Native Americans are not Indians! We must also say that neither of us are American, native or not, but sometimes useful reflections on something can come from those who are outsiders. So forgive us Apache brothers and sisters for daring to write about the Apache people while not being Apache.

We value all the criticism and comments received on this work, as we work with people of all nations and beliefs for an ethical society with people living happily and sustainably for the future. We express our opinions candidly, and are not limited by being affiliated to any particular tribe, or bound by a pledge of allegiance to the current federal Indian policy included under the long list of laws and regulations to be found in the United States of America.

The book includes a brief analysis of what is happiness according to different perspectives: Western philosophy (virtue and external knowledge); Religion (closeness to God) and Oriental religion and Mindfulness (self-realization). We choose this third idea of what is happiness, and sought to implement a program with teachers to improve these qualities of self-realization. This does not mean that our view of happiness is limited to this.



# 1. Colonization and San Carlos Apache Reservation

### 1.1. Colonization of Indigenous Peoples

A fundamental question in the colonization of indigenous peoples by those in power is whether they were killed because of competition over land, water and resources, or because of perceptions among the colonizers of racial superiority, or because of ideological differences in religion and spiritual practices? The motto "might is right" may apply to some invasions of land, which have dominated the geopolitical landscape with the expansionist agendas of so many historical figures including Alexander the Great, The Roman Empire, Genghis Khan, and the western European colonial ideas that shaped modern political boundaries in Africa, the Americas and Asia.

Although this book has global implications, the book will focus on the Apache people, and in particular those who identify with San Carlos Apache reservation in Arizona, United States of America (USA). There are reflections to other Native Americans, and other peoples, in the context of the wider global community. In particular there is a discussion of attitudes and experiences of vulnerable peoples during the nineteenth and twentieth century. The Apache people are mostly located in Mexico and the USA, although the name Apache is globally known which is a credit to the determination of the people to survive. There are differences in the approaches to colonization of Apache seen in Mexico, where a majority of the dominant population are mestizo, persons with genes from both Spanish and indigenous origin, compared to the approaches seen in the United States where the majority of the dominant population from the eighteenth and early twentieth century were of white European genetic origin.

We see important changes over time in the attitudes to indigenous peoples, some which do not appear to have much logic beyond being justifications for exploitation. We will examine how the development of scientific methods for assessing racial purity, craniometry, and eugenics, affected the philosophy underpinning the relationships between the dominant white population and Native Americans.

The average life expectancy of Native Americans on reservations is 49 years of age, a 30 year gap with the average life expectancy in the United States in 2010. This is very disturbing ethically, and in the same way that many writers in the nineteenth century called the federal Indian policy a failed one – we could make the same observation today, in the twenty first century.

There have been reviews of the Education policies, and Boarding School systems, and their contribution to poor life outcomes and a lack of happiness. There have been reviews of the Indian Health Care service (Dejong, 2008), and

why for various reasons it has failed to deliver adequate health care, both preventative and public health, and services to the communities that were promised high standards of health.

# 1.2. Early European Contacts with Apache People and Competing over Land Use

The term Apache is one adapted by the Spanish, but Apache people themselves use the term "nde", meaning the People. The Apachean or Southern Athapaskan language can be divided into seven tribal groups: Navajo, Western, Chiricahua, Mesalero, Jicarilla, Lipan, and Kiowa-Apache. The Navajo is an independent tribal nation now, and with significantly greater population than the other 560+ federally recognised tribes in the USA.

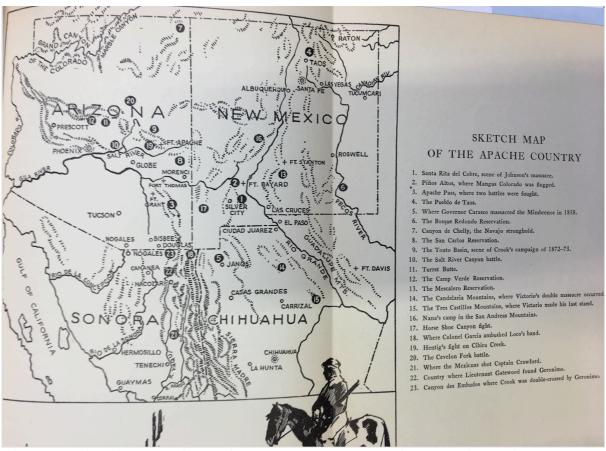


Figure 1: Sketch Map of Apache country (Ca. 1900; from Lockwood 1938)

Like any person whose homeland is invaded, Apache people attempted to defend their homeland. Because of the nature of their life involving seasonal migrations over large lands, the concepts of land, place and home, cover a broader range than those Peoples who follow a sedentary life and a fixed land use agricultural tillage pattern. The first European reports, by Castaneda in his report, The Journey of Coronado in the 16<sup>th</sup> Century. He described them as "people who lived like Arabs and who are called Querechos in that

region...These people follow the cows, hunting them and tanning the skins to take to the settlements in the winter to sell, since they go there to pass the winter, each company going to those which are nearest... That they were intelligent is evident from the fact that although they conversed by means of signs they made themselves understood so well there is no need of an interpreter...They have better figures than the Pueblo Indians, are better warriors, and are more feared." (Lockwood, 1938).

There was an existing system of tribal movements and patterns of migration that allowed toleration of different tribes and people using the same space. We can see this also in other migratory peoples, including nomads in North Africa and the Middle East, today. That is also why they were described by the Spanish as "Arabs" of America in the 16<sup>th</sup> Century (Figure 1).

We can see evidence of the contacts between peoples in some written records. For example at the end of the 15<sup>th</sup> Century the Mexican town of Monterrey was twice destroyed by the Apache tribes, before the third settlement was made to be resilient. In many areas however, the tribes were left to wander over their land. Gradually over two hundred further years the number declined and more settlement occurred. There is considerable documentation, and they maintained a reputation as intelligent warriors. They also had skirmishes with many other tribes, as they had reportedly had prior to the Spanish. Their nomadic life would naturally have led to conflicts with tribes who has chosen to live in lands that these movements crossed.

In 1775 we see Lieutenant Colonel Hugo Oconor planned military operations against the Lipan and other Apaches in a numerous locations (Biblioteca Nacional, Mexico, Numero 161374, 24 March 1775, Dft Ex. 70). In 1776 we can read in a report to Teodoro de Croix, commandment general of the Provincias Internas, Apache depredations in various places (Biblioteca Nacional, Mexico, Numero 761320, 30 June 1777, Dft Ex. 71). There were also attacks by Comanches against the Lipanes. We can read of different approaches of Mexican generals, for example, "Colonel Juan de Ugarte is said to be inclined to pacific measures while Ugalde preferred the sword to do its work first" (Neighbours, 1975, p. 35). The skirmishes continue, and we can read in 1788 in a report to the King of Spain that bands of Lipanes were in the frontiers of Texas, Nueo Leon, among other places. The Spanish missions for the Lipanes on the upper Nueces were abandoned in 1771, presumably because of the reluctance of the locals to having a Spanish presence. Bubi had recommended that the Lipans be "exterminated", but they survived despite the attacks from the Spanish from the south and the Comanche, Wichitan and Caddoan from the north.

In 1820 the Lipanes were said to have suffered a defeat at the hands of Spanish troops on the Guadalupe River and a disastrous defeat at the hands of the Tawacanos on the Colorado Rover (Lamar, 1924, IV, 191-192; Dft. Ex. 77). After the Mexican revolution of 1821 there are less meticulous records than

those the Spanish kept, but the Mescaleros were reported to have taken refuge near Chihuahua from the Comanche.

After that there was a peace treaty between the Lipanes and the Republic of Texas, that allowed the Lipanese to continue nomadic habits peacefully (Neighbours, 1975, p. 39). This general area was Southwestern Texas. In 1847 the former President of the Republic of Texas, David G. Burnet, reported that the Mescaleros, including between 1000 to 1500 warriors were peacefully cultivating the soil on the Pecos. However, two years later, a Comanche raiding party entered the area, and followed by troops the troops killed 30 of the Apache, who fled and then returned to a prior lands into Texas. In 1850 United States Special Indian agent John E. Rollins reported that the Lipanes made corn on the Pecos while some were on the Rio Grande, with a population of 500 persons including 100 warriors. In 1851 another Special agent, John A. Rogers held a Council meeting with the Texas Indians.

Those Lipans living in Mexico faced attacks from Mexico, and the Mexican secretary of war recorded that the population of Lipan warriors had been reduced from 1000 in 1822 to 88 warriors in 1855. There were conflicts between both populations as evidence from the conflicts and decreased population.

Through the 1850s and 1860s there were claims of cattle being taken from cattle ranchers by Apache tribes, and also reports of shortage of foods, and territorial disputes. There were claims in the US Courts that the Apache had not been present in earlier lands, although their presence is reported in the Spanish documentation, which allowed the white settlers to take control of an increasing amount of land. As reservations were established, there continue to be reports of Apache raiders outside of the reservations into the 1880s.

We can see from these examples of the historical accounts that Apache people were attacked from the colonizers of British and Spanish origin. Were these because of racism or simply resource competition? We can see from the earlier historical records of the Spanish that Apache peoples were widespread in the South West United States and Mexico, but they were increasingly being gathered into smaller land areas, ultimately into the reservations.

The conditions on the reservations were poor, and are discussed below. It is therefore of no surprise that there would be attempts to gather medicinal plants, food and other items from the traditional lands.

# 1.3. San Carlos Internment Camp

San Carlos, Arizona, was a destination for about fifteen tribes deliberately mixed together with the hope that if they did not die, they would interbred, and this might dilute the tribal identity. There were also a mix of persons who were working as scouts for the U.S. Army, along with those strongly opposed to colonization of land, and the confinement of a nomadic people. These tensions

(Lockwood, 1838) are still are present in the members of San Carlos Apache nation today.

The motivations of some of the officers and those who interned Apache and other tribes was not always as War, although it was in the Ministry of War, and the "Apache Wars" are famous. We can see some of the changing attitude with a linkage to eugenic ideology in quotations.

John G. Bourke wrote: "The transformation effected was marvellous. Here were six thousand of the worst Indians in America sloughing off the old skin and taking on a new life. Detachments of the scouts were retained in service to maintain order; and also because money would in that way be distributed among the tribes." However, Bourke (1891) was clearly against the establishment of the San Carlos reservation, writing "There is no brighter page in our Indian history than that which records the progress of the subjugated Apaches at Camp Apache and Camp Verde, nor is there a fouler blot that that which conceals the knavery which secured their removal to the junction of San Carlos and Gila." There were a number of events, including group punishment, starvation and violent acts, that sowed seeds of discontent and mistrust, that is still found today, 140 year later.

The Indian Bureau chief, Agent Jon P. Clum, wrote to Washington that a steady stream of transfers of Apache bands from Camp Verde, Camp Apache, the Chiricahua Reservation, and Ojo Caliente, to concentrate them in San Carlos was successful and satisfactory. This was contrary to the opinion of the best judgment of the Army officers in command, and opposed to the desire of the Indians (Lockwood, 1939). There were Grand Jury indictments of some Indian agents, such as Agent Tiffany for the confinement of 14 Apache men without charge for 14 months. Among citizens of Arizona territory there was apparently a wider understanding that fraud was common. The Indian agent is also reported to have sent Apache men to work mining coal in order to receive the rations, that were meant to be free. The profits were kept by some Agents (Lockwood, 1938). There are positive reports of General Crook who returned in 1882 to try to repair the situation and trust that had eroded with the Army crimes at San Carlos.

When groups of Apaches left the reservations, they were called renegades, and their conditions were often poor. Some set up camps in the arid flat land (Figure 2). Others, especially in the hotter seasons of the year, would go to traditional land such as the forests on the 3,000 m high Dzil Nchaa Si' An¹ (English name: Mount Graham, Figure 3), or Oak Flat² (Figure 4). However they were pursuing the ethical principle of autonomy, self-rule, pursuit of traditional lands and medicinal plants and food sources which were generally more healthy than the conditions in the reservations. Life was still tough, but having freedom is an ambition that we take as a basic human right today.

<sup>2</sup> http://www.azminingreform.org/content/stop-oak-flat-land-exchange-senate

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<sup>&</sup>lt;sup>1</sup> http://www.mountgraham.org/category/categories/apache-resistance



Figure 2: Renegade Apache Camp, late 19<sup>th</sup> Century (Source: Munitions Building, Washington D.C.)



Figure 3: Sunrise on Dzil Nchaa Si' An (English name: Mount Graham)

The quality of life in traditional lands was better than in the reservations, and because the white settlers, farmers and mining companies wanted the better land they forced the original inhabitants off the land. This also inhibited the expression of religion and spiritually. Praying to the rising sun (Figure 3), and setting sun, and to lifeforms, is a core belief of the Apache religion. The same is true of Shinto in Japan, and fortunately for the Japanese, their Island location

and distance, and degree of socio-economic development made it impossible for Europeans to colonize.



Figure 4: The authors with some other professors and students at Oak Flat, Arizona

# 1.4. Assimilation or Extermination: Early Voices of Dissent in the White Nation against the Reservation system

Despite the government decisions on the Reservation system we can find a number of voices against the system in the White Community. After massacres, in January and September 1879 for example, there was criticism of the reservation system. The *Alta California*, a San Francisco newspaper, in an editorial called the reservation policy a "murderous system", "[It] is starvation for the savage, it is oppression by the lawless white pioneer, it is death to our gallant officers and men.", "One thing is certain, and that is that our whole Indian policy is a miserable one and a failure."

In late 1879 a Ponta Indian chief, Standing Bear, made a number of public appearances to large audiences in Chicago, Boston, New York, Philadelphia and Washington D.C. He condemned the reservation system and called for the extension of constitutional guarantees to Indians (Hoxie, 1984). In January 1880 the Commissioner of Indian Affairs (Ezra A. Hayt) resigned after accusations of corruption on an Arizona reservation. There were various Indian

chiefs who spoke for ending the system, including John Ross, Black Hawk, Red Cloud, Geronimo and Sitting Bull.

Standing Bear was supported by a political agitator, Tibbles, who designed the message and could generate much support. In November 1879 a Boston Indian Citizenship Committee was formed from prominent business persons. The growing concerns against the reservation system, or spearartion, led to the alternative solution – total Assimilation. There were various public groups and they were similar to some of the public campaign in the 1840s and 1850s against slavery (Hoxie, 1984). The argument of assimilation would end reservations, and the compensation for loss of land would simply being to have full citizenship of the American society, a booming nation.

The New York Times in February 1880 wrote: "The original owner of the soil, the man from whom we have taken the country, in order that we make make of it the refuge of the world, where all men should be free if not equal, is the only man in it who is not recognised as entitled to the rights of a human being." (Hoxie, 1984).

### 1.5. Emergence of American Anthropology

On 3 March 1879, Congress passed the annual civil appropriations bill including an authorization of USD20,000 to establish a Bureau of Ethnology within the Smithsonian Institution. On 4 March 1879 the Anthropological Society of Washington listened to a paper by Frank Cushing, "Relic Hunting". The Bureau changed its name in 1893 to the Bureau of American Ethnography. There was then a lot of systematic research contacted on the American Indians, who were conveniently confined to reservations for the researchers. Unlike new migrants they were also living outside mainstream society, so they were politically safe as targets of research.

The founding Director of the Bureau of Ethnology is well known as an explorer in Arizona, Major John Wesley Powell. The predominant ideology was of social evolution, with books such as Henry Morgan's *Ancient Society* of 1877. The idea was that human history moved from simplicity to complexity, with a progression from savagery to barbarism and enlightenment. There was a positive image of progress. In some sense we can see this paradigm in current ideas of social development.

It is through such a lens that researchers, and social engineers, argued about the future of human society. Hence they could also embrace the concept of assimilation of Native Americans, and indigenous persons globally, through the concept of social progress. They could also argue that to recognise all people as equal, meant no one should be left behind the bandwagon of social evolution, and all should be making progress.

#### 1.6. From Citizens to Non-citizens to Citizens

This viewpoint of assimilation seems to be at odds of the eugenicists who were also emerging at this time, who argued that the brain of the white person was superior to the brain of the black or "American Indian". Eugenics is discussed in further detail later. In the case of colonization a more important question is that of citizenship. The original inhabitants of a land can be described as the citizens of that land. This is not decreed by a written piece of paper, but by the entwinement of the people with the land through their history.

Ironically the colonizers to the United States decided that the original inhabitants were not citizens. In fact in the Nineteenth century and early twentieth century the term "Native" was applied to U.S. citizens, of all races, in comparison to those people who wanted to be immigrants. Thus we can see how the white government preferred to call the Native Americans "American Indians", because it was convenient to call themselves, the new land owners, the natives. The immigrants who came in the twentieth century (and since) had to pass a quality assurance program, that the earlier people did not. There were various eugenic and racial measures applied in immigration policy (Macer, 1990).

As will be discussed later, by 1879 there was a resurgence amongst white Americans that native Americans should be considered citizens under the law. In the early twentieth century we still see racial superiority and social progress ideals arguments being used as a reason not to grant Native Americans full U.S. citizenship claiming that they were a "backward race", and arguing that they would abuse their full U.S. citizenship, or be taken advantage of by the unscrupulous (Hoxie, 1987).

Finally in 1924 all Native Americans were granted full citizenship, after these types of debates, in the 1924 Indian Citizenship Act (43 U.S. Stats. At Large, Ch. 233, p. 253 (1924)) reads as follows:

"BE IT ENACTED by the Senate and house of Representatives of the United States of America in Congress assembled, That all non citizen Indians born within the territorial limits of the United States be, and they are hereby, declared to be citizens of the United States: Provided That the granting of such citizenship shall not in any manner impair or otherwise affect the right of any Indian to tribal or other property."

Approved, June 2, 1924. June 2, 1924. [H. R. 6355.] [Public, No. 175.] SIXTY-EIGHTH CONGRESS. Sess. I. CHS. 233. 1924.

See House Report No. 222, Certificates of Citizenship to Indians, 68th Congress, 1st Session, Feb. 22, 1924.<sup>3</sup>

It is the common law of the United States that all persons born in the United States become citizens of the United States according to 9 July 1868, 14th Amendment to the U.S. Constitution. The first sentence reads: "All

<sup>&</sup>lt;sup>3</sup> Note: This statute has been codified in the United States Code at Title 8, Sec. 1401(b).

persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside." It appears from that the fact that a 1924 clarification was needed to the 14<sup>th</sup> amendment that Native Americans were not persons.

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# 2. Happiness and Mindfulness

"Make your optimism come true, even the darkest night will end and the sun will rise...Life's great happiness is to be convinced we are loved"

Victor Hugo, Les Misérables (1862)

### 2.1. The idea of happiness according to Western philosophy

Socrates says that only through the development of dialectics and questions we can reach the philosophical truth or happiness (Brun, 1978). In Plato's work, "Phaedo" (Plato, 2003), happiness is the virtue of the soul and only come to it through a life of good deeds. Plato makes a parallel between the human soul and the different levels in nature: the corrupted soul is under sea, but with a dignified life, it gets on the floor and finally it up to the ether or heaven. In his work "The Republic" (Plato, 2003), only the first class, "philosophers" (as they are virtuous, as they have dedicated to contemplation, to education, to the understanding of how the universe and living things work) achieve happiness and can serve as a model to the people and govern.

In "Nicomachean Ethics", Aristotle (1952), explains that only the wisdom, the development of reason, and the human virtues and contemplation of how nature works, leads to happiness. The most important of the virtues is the virtue of the soul or intellectual virtue, it leads to truth and is acquired through instruction. Locke (1996) agrees with this, saying that it is important to teach children to reason and find pleasure in it. In his book "The Emilio" (Locke, 1996) or treaty on education, Locke discloses that we attain the happiness with a healthy body, with a virtuous character, with an appropriate curriculum at the schools, discarding wishes and following the reason. It is the same thing in Plutarco's works, "Essay about the virtuosity, Moralia" (1927), that virtuosity is related with happiness, just who is virtuous and acts in a proper way achieve the happiness.

Sofocles (1998) talks about the force of Destiny. The Destiny is written and directs our lives. For example in "Oedipues Rex" Jocasta, Oedipues's mother says: "Fear? What has a man to do with fear? Chance rules our lives, and the future is all unknown. Best live as we may, from day to day" (Sofocles, 1998, line 977). Nevertheless, in other work Sofocles changes his arguments, he introduces wisdom and personal learning as keys to improve our destiny and be happier. Phædra says: "the greatest griefs are those we cause ourselves" (line 1184). Antigone says: "Grief teaches the steadiest minds to waver" (line 563) and "There is no happiness where there is no wisdom…and proud men in old age learn to be wise" (line 1347).

In the *Iliad* and the *Odyssey*, Homero (1999, 1995) speaks about happiness too, as he relates it with the Gods, the immortals are happier than mortals, which show insecurity and stress. But human happiness can be learned by the warriors away from home for some time and achieve the peace, meeting with the family again, after fighting against evil, the gaining of heroic glory is seen as a form of happiness.

According to "Thus Spoke Zarathustra" (Nietzsche, 1972), the main character, after meditating for a long time in the mountains, discovers the truth, the nature of things. These are as they really are and not as other have taught us to see them. To achieve happiness we must understand the truth, leaving aside the established morality and religion, and be guided by the will within. This is what he called the birth of Superman and the death of God.

For Dante Alighieri, the idea of happiness is related with the "*Phaedo*" of Plato. The "*Divine Comedy*" (Alighieri, 2012), is the journey of Dante through the three worlds. Hell, purgatory and paradise. The idea of happiness is the idea of paradise, the third world reached by Dante. Those who have arrived here have led a decent life, they do not aspire to change the level, and they are satisfied with their lifestyle. As he is ascending into different levels and approaches to the sun, he see a flashing light, his reason cannot believe it, he is embraced by God.

Descartes (1993) speaks about happiness indirectly in "Metaphysical Meditations". He says that it is necessary "think well to act well". To organize the discourse for a good reasoning leads us to the truth, to the idea of God and to the happiness. The three concepts are totally related.

Leibniz (1710) in "*Theodicea*" explains that nothing happens at random, that everything is pre-established by a perfect being called God. That is why our world is the best of all possible worlds, as we living beings. The misery comes when there is decompensation in the energy at the external and internal level of the human being.

Berkely (1972) in "Treatise on the principles of human knowledge" explains that the human mind cannot understand abstract ideas, only perceives own ideas and feelings, so that ideas are inherent to a perceiver. All ideas are in the mind and change with the perspective of the observer, as well as the idea of happiness that does not depend on external circumstances.

Spizoza (2006) thinks that only the development of intellectual knowledge and reason leads us to human freedom and happiness, escaping the determinism established by innate ideas and mechanistic laws. Locke (1975), in the "essay on human knowledge," says that nothing is innate; all knowledge comes from our experience, so we must provide positive experiences to children to make them happy. In "children education" or treatise on education (1797), he speaks of rejecting desires and emotions and following reason and will, teaching to associate ideas and reason as the key to virtue and happiness. In "ethics demonstrated according to a geometric order", he expresses that freedom and

human happiness is to leave man's servitude to God and the force of affections, enhancing the understanding and reason and the practical confrontation of ideas that we have in doubt.

Kant (1781) In "Critique of Pure Reason," says that knowledge does not depend on the object of knowledge, but on the ability of the connoisseur. The world of experience does not lead us to truth, to things-as-they are (or a priori knowledge). Only with pure reason we come to knowledge and criticize the illusions to which we are subjected. The thought is full of impurities about our subjective perception of the world. God and the soul are noumenos, they are things-in-themselves, and we cannot know them through experience.

With this, we must use pure reason to reach the truth, mathematics and philosophy, expressing and criticizing thoughts and doubts beyond dogmatism. Check ideas through principles, propositions and direct evidence and not personal experience. According to pure reason we must do things to deserve happiness, we will be happy if our conduct does things to deserve it.

Schopenhauer (2008) in "the world as will and representation" says that our choice is not free, depends on will, the motive of oneself, thing-in itself, window to the world behind the representation. Will lead us to true knowledge but also to suffering, desire and effort. Will is our inner knowledge, which is hereditary. Will can be expressed through music and abstract painting and art. Therefore happiness depends on that adequate expression of will.

In this sense, according with a general idea of western thought, happiness is the development of virtue and discovery of universal truth through knowledge.

## 2.2. Happiness according to religion

According with the Bible (Reina-Valera, 1960):

"Happy are those who observing justice, those who do justice at all times" (Psalm 119: 1-2); and "Happy are those conscious of their spiritual need, because to them belongs the kingdom of heaven"... "those who hunger and thirst for justice, since they will be filled" ... "Happy are the pure in heart, since they will see God"... "Happy are the peaceable, since they will be called 'sons of God" and "Happy you are when people reproach you and persecute for my sake. Rejoice and leap for joy" (Matthew 5: 3-11).

Some ideas that the Koran (Jeffery, 2001) collects about happiness are: Allah says: "Worship only to God ... do good to their parents, to your family, to the orphans, to the poor, neighbors, relatives and non-relatives, partner, the wayfarer and who they are at your service" (Koran, 4:36). Allah says: "To the believer acting rightly, whether male or female, I'll give him a good life and multiply him the reward of his good deeds" (Koran, 16:97).

Allah says: "Whoever turns away from my remembrance will lead a life of tribulation" (Koran, 20: 124). Mohamed says: "My God, I do not fear that they are poor, I fear worldly wealth is granted them, as it was granted to them who

were before you. Then they compete with each other, as they competed, and that will destroy you as it destroyed them" (Koran, 2: 265)

The sacred book of the Hindu religion, *Bhagavad Gita* (Swarupananda, 1989) also makes refers to happiness with the following ideas:

"Far away by the qualities of nature, ordinary men are related to these activities. Weak of truth they have only a partial knowledge." (III, 27, 28, 29). "The man who abandons all desires, come and go, free from bondage, says more: "It's mine" or "I"; that access to peace" (II, 39). "It is for attachment to act the ignorant act. The wise should act uniformly, but without binding, only oriented to the integrity of the universe" (III, 25).

"One whose happiness, joy, light, resident in it himself and not external things, access to appearement in the Brahmin" (V, 24). "The heart free from external bonds, which is their true happiness, he finds inside. Its unified soul in binding to Brahman enjoys an immortal happiness" (V, 24). "All beings have a dual nature as matrix. I'm at the origin but also in the dissolution of the entire universe" (Swarupananda, Bhagavad Gita, 1989: VII, 6).

The Yin and Yang (Wing-Tsit, 1969) are two concepts of Taoism, exposing the duality of everything in the universe. It describes the two opposite and complementary fundamental forces found in all things. According to this idea, every being has a complement of that depends for its existence and which in turn exists within himself. All in a continuous transformation and the idea of well-being and happiness is to learn to maintain balance and equanimity facing duality and change.

Therefore happiness is search of justice, peace, purity of heart and follows the path of light as something external or God according to the Bible; and to follow the path of Allah, do good, to act properly and charitably and moving away from worldly good according to the Koran. Nevertheless happiness according the eastern thought means to abandon worldly desires, no attachments to things and human beings, seek the truth, the light is within oneself; besides be aware in the present moment, acceptance of reality as it is, in good times and bad times, and to understand that everything is constantly change, for what we should learn to be equanimous.

# 2.3. Mindfulness and happiness

Before describing that it is mindfulness, it is necessary to explain that it is "Vipassana", which would be the tradition of which mindfulness comes. So, Vipassana means to see things as they really are, and it is a kind of meditation reintroduced in the Theravada-tradition by Ledi Sayadaw and Mogok Sayadaw and popularized by Mahasi Sayadaw (Goenka, 1987). It is one of India's most ancient techniques of meditation, discovered by Gotama Buddha more than 2500 years ago, and taught by him as a universal remedy for universal ills. According with Goenka (1987) this is a non-sectarian technique, which aims for

the total eradication of mental impurities and the resultant highest happiness of full liberation.

Vipassana or the "art of living" is a way of self-transformation through self-observation. It focuses on the deep interconnection between mind and body, which can be experienced directly by disciplined attention to the physical sensations that form the life of the body, and that continuously interconnect and condition the life of the mind (Goenka, 1987). It is this observation-based, self-exploratory journey to the common root of mind and body that dissolves mental impurity, resulting in a balanced mind full of love and compassion. The scientific laws that operate one's thoughts, feelings, judgments and sensations become clear (Goenka, 1987). Through direct experience, the nature of how one grows or regresses, how one produces suffering or frees oneself from suffering is understood and life becomes characterized by increased awareness, non-delusion, self-control and peace (Goenka, 1987).

Mindfulness belongs to Vipassana tradition and it is a technique that involves the practice of simple everyday exercises that invite us to be awake and fully alert (Thich Nhat Hanh, 2007). Meditation helps people to be happier and thus also helps all those around them (Ricard, 2012), developing those qualities of the human spirit such as love, compassion, patience, tolerance, forgiveness, contentment, a sense of responsibility and harmony. These qualities imply an implicit concern for the welfare of others and can be developed to a high degree through meditation (Clark et al., 2006).

The key to physical and mental well-being is having emotional balance, and by practicing mindfulness we change our mind, find balance, create the conditions necessary to see the reality that surrounds us clearly, and also solve problems that previously we were unable to solve (Simon, 2011). When it is used effectively shows us the foundation needed to live our lives in a more productive, conscious and peaceful way (Gunaratana, 2012). Learning to focus attention on the immediate experience, moment by moment, with the curiosity of an open mind and accepting everything that happens to us (Bishop et al., 2004).

The continued practice of Mindfulness improves brain functioning at different levels and also invites us to a brilliant exploration of what it means to live in this world and experience the moment with all our senses. It is scientifically proven that when we experienced a state of full consciousness, this strengthens our physical, psychological and social being (Siegel, 2010). To perform activities of daily life consciously, invites us to be fully awake and alert at every moment; and events such as eating, washing dishes, talking telephone or peel an orange for example, offer us an opportunity to know ourselves more deeply and enjoy more peace and inner balance (Thich Nhat Hanh, 2007).

During the last thirty years, this practice has been secularized and simplified to fit a Western context (Weare, 2012), whose purpose is to try to alleviate the suffering caused by dysfunctional forms of behavior. In the

seventies, Mindfulness caused interest in intervening in health problems and Jon Kabat-Zinn introduced a structured eight-week program with which psychologically positive results were obtained, reducing anxiety and getting some physical improvements, such as patients relief experiencing severe and chronic pain (Kabat-Zinn, 2005). Since then, interventions have proliferated around the world and scientific evidence suggests that the practice of mindfulness has a wide range of potential applications (Weare, 2012).

Mindfulness is extracted from a line of contemplative traditions, but the new skills are learned in a very practical way, through the experience applied in everyday life (Goldstein and Kornfield, 1987) and of attention in every activity we do (Segal, Williams and Teasdale, 2002). The opposite of this attention is the senselessness, state in which we live most of the time, since we are usually worried with ruminations on the past and planning for the future (Weare, 2012). This senselessness makes us to see our experience through a filter of judgments and labels that promote our behavior, with the mind disconnected of the body, so we are not aware of signs of stress or clues about the negative emotions that the body provides us (Weare, 2012).

The regular practice of Mindfulness makes us more pleased and happy, addition to awaken us other positive emotions related to a long and healthy life, increased physical and mental strength and a more satisfying relationships (William and Penman, 2010). It has been found that a high percentage of adolescent students violent, perform actions with social and health risk, highlighting drug use (Cerezo and Mendez, 2012). In this sense, Mindfulness reduces dependence on alcohol and drugs, hypertension, chronic pain, cancer, fighting colds and other diseases by strengthening the immune system (William and Penman, 2010). With daily practice of some very simple Mindfulness techniques, we can focus our energies on achieve a good physical and mental health, emerging further integrative functions that generate more neural connections, as regulatory body functions, coherence, emotional balance, flexibility of responses to the different situations of life, loss of fear, understanding, empathy and high levels of morality and intuition (Siegel, 2012).

### 2.4. Mindfulness in the schools programs

The most common Mindfulness courses have been practiced to reduce stress (Mindfulness-Based Stress Reduction "MBSR") or depression (Mindfulness-Based Cognitive Therapy "MBCT"). However, today it being carried out other beyond clinical areas, such as ".b" project, conducted in the UK schools. Its participants are guided by the teacher through simple exercises that increase their awareness in the present moment, discussing the experiences that arise in the group and seeking its relationship with everyday life. This practice gives special attention to the feelings that arise of the body, such as breathing, contact between the body and the chair, the sensation of your feet on the floor and other sensations related to actions such as standing, walking,

laughing, among many others. These exercises are prepared to continue outside the classroom and to be performed in the normal routines of daily living (Mindfulness in Schools Project, 2011).

This study seeks to highlight the ".b" program to the education community and show whether the application of Mindfulness techniques brings benefits to participants. Also find out if there are limitations to its implementation in schools, with the aim of proposing improvements in its implementation (Mindfulness in Schools Project, 2011). Teachers have also shown decreased exhaustion, increase of compassion, improvements in the classroom organization, on team tasks and on interactions with students and colleagues. In this sense, Burnett (2010) commitment to teacher training as a key element in teaching mindfulness, and the continuity of their own practice.

A wide review of studies about the implementation of Mindfulness programs obtains very positive results in personal and academic student development; improved intellectual abilities, sustained attention, visuo-spatial and working memory, concentration and in some areas of meta-cognition. Mindfulness has the potential benefit of improving attention and social skills, reducing test anxiety and the maintenance of calm (Ruiz et al, 2014). Rempel (2012) obtained some of these results after continued practice with students, proposing integrate activities based in Mindfulness with children and youth in schools. Hennelly (2011) conducted an extensive study with high school students participating in the mental training Mindfulness program, and the results showed positive effects on adolescent's awareness, self-regulation, motivation, confidence, competence and efficiency.

After a long mindfulness program Flook et al. (2015) showed that children initially lower in social competence and executive functioning demonstrating larger gains in social competence relative to the control group. Besides, these interventions in children and youth are a feasible and effective method of building resilience in universal populations and in the treatment of disorders in clinical populations (Greenberg and Harris, 2012), since it has been shown that mindfulness practice help to reduce and prevent depression in adolescents (Raes, et al., 2014), significant reduction of bad behavior among children with ADHD and a significant reduction of stress among parents participants (Van der Oord et al., 2012).

Regarding to the teachers, Flook et al. (2013) found stress and burnout reduction, and teaching efficacy among participants in a Mindfulness-Based Stress Reduction course adapted specifically for them. Frank, Reibel, Broderick, Cantrell and Metz (2015), also reported significant gains in self-regulation, self-compassion, mindfulness related skills (observation, no judgment, and no reacting), and significant improvements in multiple dimensions of sleep quality as well. The mindfulness program Cultivating Awareness and Resilience in Education (CARE for Teachers) of Jennings, Frank, Snowberg, Coccia and Greenberg (2013), resulted also in significant improvements in teacher well-

being, efficacy, burnout/time-related stress, and mindfulness compared with controls, and especially with teachers working in high-risk settings (Jennings, Snowberg, Coccia, and Greenberg, 2011); as well as greater focused attention and working memory capacity, occupational self-compassion, lower levels of occupational stress and burnout, and symptoms of anxiety and depression at post-program and follow-up (Roeser et al., 2013).

According to the .b program, several studies have been published in reputable scientific journals. Participants were teenage students in most cases, teachers and parents, chosen on the basis of voluntariness. It has been demonstrated that the continued practice of Mindfulness can provide beneficial results, including positive effects on emotional and social skills, greater ability to control our own lives, greater acceptance of experience as it is, better manage difficult feelings, keeping calm, besides increasing the strength, compassion and empathy (Baer, 2003; Salmon et al., 2004).

Kuyken et al. (2013) evaluate the acceptability and effectiveness of the ".b" program on mental health and well-being of 522 adolescents in twelve secondary schools in the UK. They conducted a randomized, with stressed young between 12 and 16 years old, and other mental health problems. Participants had fewer depressive symptoms, lower stress and higher welfare in monitoring and after the course, compared with the control group. After three months follow-up, it showed that those who practiced more often Mindfulness techniques had even greater well-being and less stress than those who practiced only sporadically.

More and more studies in the field of Mindfulness in schools are coming to the conclusion that these techniques are viable and promising. Interventions in schools are generally acceptable and there weren't reports of adverse effects (Burke 2009; Harnett and Dawe, 2012). Hennelly (2011) conducted a comprehensive study of Burnett, Cullen and O'Neill (2011) ".b" program with 68 high school students, using a questionnaire and interviews with teachers and parents to triangulate the data. The instruments were used longitudinally immediately after the course and six months later, to assess the immediate and sustained changes in mindfulness, ego-strength and wellbeing. Statistical analyzes established significant differences between participants and control groups in each of the study variables; also found that all these positive changes were even more significant in the long term.

The author focuses its thematic analysis on the theories of self-regulation, self-determination and self-efficacy (Braun & Clarke, 2006; Deci and Ryan, 2000; Bandura, 1977; cited in Hennelly, 2011), to describe the effects of mindfulness training in motivation, confidence, competence and effectiveness of adolescents. It follows that the ".b" program is associated with immediate improvement and months after the course in the general operation and welfare of participants, in addition to identifying cognitive and behavioral changes, so it

is proposed as a viable and effective program in enhancing strengths and personal development of high school students.

Huppert and Johnson (2010) launched a study with 155 students in which attention was measured, resilience and psychological wellbeing. The results showed that there is a positive and significant association between the amount of practice Mindfulness and improvement in attention and psychological wellbeing, which is positively related, at the same time, with personality variables, such as kindness and emotional stability. Of the limitations of the study, the authors concluded that further work is needed to improve the training program, so they decided to create a definitive randomized controlled trial with subjective and objective measures with longer-term follow-up. To do so, they took into account the comments of students and teachers involved, additional consultations with colleagues and consideration of the needs of each particular teenager (Burnett, 2010).

Franco et al. (2011) have shown through the questionnaire of "self-concept and self-actualization" (AURE) the Mindfulness practice in schools is valid and appropriate to promote personal growth and self-realization among adolescents. The authors suggest the use of these techniques as a complement to other programs aimed at personal and emotional development of students. In this sense, Leon et al. (2009) try to find significant relationships between mindfulness -with the "Scale of Mindfulness" designed by them- and emotional intelligence -with the test "TMMS-24 / Trait Meta Mood Scale" - in a sample of 344 students of 1st and 2nd year of high school. They verify the significant and positive relationship between attention and emotion, so they propose the development of mindfulness through the implementation of Mindfulness techniques in the schools.

Ruiz et al. (2014) launched the project "Growing with attention and mindfulness" in the continuous evaluation finding the participants -students of a school in Madrid- are increasing their capacity for empathy, improving relations, reducing anxiety, symptoms of attention deficit and hyperactivity and increasing academic performance.

Lawlor et al. (2012) conducted a study on mindfulness among 286 children aged 11, 12 and 13, with the conscious scale of children "MAAS-C", modified version of the test to assess attention in adults. The results indicated that Mindfulness is related to emotional disturbance, emotional well-being and happiness. Razza, Bergen-Cico and Raymond (2013) evaluated the efficacy of an intervention based on Mindfulness and yoga techniques, with twenty children from 3-5 years old. The results indicated significant effects on self-regulation, especially among children who were at increased risk of dysfunction of it. Greenberg and Harris (2012) made a review of research on Mindfulness practice with children and young people, both clinical and school settings treatment and prevention of health. They conclude that the Mindfulness intervention is a feasible and effective method to increase resilience and self-

esteem and to improve the treatment of health disorders in clinical populations. In regard Rosa-Alcázar et al. (2014) also found that high self-esteem is one of the most important predictors and heavier in psychological health.

The Mindfulness techniques in the school also have a positive influence on learning problems, since it requires complex cognitive processes such as attention, concentration and executive function, or higher-order thought processes that govern the working memory, planning, reasoning problem resolution and multi-tasking (Semple et al., 2010). These authors evaluated the impact of Mindfulness program between students of 9-13 years old were having academic difficulties, and the results showed significant improvements in measures of attention and reduction of anxiety problems and behavior, compared to students who had not participated. Mindfulness practice in the schools has shown a very high impact on the intellectual, improving sustained attention, visual-spatial memory, working memory and concentration of students (Jha et al., 2007; Chambers et al., 2008; Zeidan et al., 2010).

Saltzman and Goldin (2008) launched a program based on Mindfulness learning techniques for eight weeks, among children aged 9-11 and their parents, whose evaluation was based on objective measures of self and parent reports. The results indicated improvements for children and parents, attention, emotional reactivity and in some areas of meta-cognition. Beauchemin et al. (2008) launched another program based on mindfulness techniques over five weeks, among 34 adolescents with learning difficulties. They concluded that the practice of mindfulness reduces anxiety and increases faith in themselves, promoting social skills and positive educational outcomes.

The study of Gustems and Calderon (2014) relates the character strengths -with the test "Values in Action Inventory of Strengths"- and psychological well-being -with the test "Brief Symptom Inventory"- and its impact on the academic performance of 98 student teachers, concluding that the strengths of nature (goodness, justice, teamwork, love and honesty) are positively related to psychological well-being of the students, and indirectly to the academic performance of them. Gallego et al. (2010) conducted a study to verify the impact of Mindfulness techniques on levels of academic achievement, self-concept and anxiety in a group of students of 1st year of high school. In the experimental group a significant increase in academic achievement, an improvement in all dimensions of self-concept and a significant decrease in anxiety states it was observed.

Singh et al. (2013) measured the effects of early childhood education students that took a course about Mindfulness among their teachers over 8 weeks. The results showed a decrease challenging behaviors of students and increased their compliance to requests from the teachers, while a decrease in the negative social interactions and increased in suit isolated. Flook et al. (2013) conducted a pilot randomized controlled trial in a course about stress reduction "Mindfulness-Based stress reduction / MBSR" adapted to teachers. The results

suggest that the course may be a promising intervention, showing significant reductions in psychological symptoms of exhaustion, increased self-pity, improved classroom organization and performance of team tasks. By contrast, participants in the control group showed increased stress.

It was demonstrated that mindfulness training for teachers is effective in changing the teacher-student interactions, bound to improvement of their health in the workplace, which encourages the participation and learning of students (Roeser et al., 2012). Moreover, through a comparison between two groups of teachers who participated in a program of this nature, it was found that the Mindfulness techniques were more effective in supporting teachers working with students in high-risk environments (Jennings et al., 2011).

Teachers are one of the professional groups most affected by psychological problems (Franco et al, 2010). The improvement in attention by Mindfulness practice is correlated with changes in the direction of psychological symptoms, exhaustion and sustained attention in teachers (Flook et al, 2013). However, teachers do not receive enough training on how to teach these techniques and many of them are not even aware of the importance of their own practice, as this is most effective when is taught by teachers who have developed it (Mindfulness in Schools Project, 2011). Teachers who practice mindfulness, are better able to create positive change, both inside and outside the classroom, they are able to focus more clearly the key ideas, to set priorities, develop improved materials for the classroom, to focus without distractions, to create peaceful and orderly climate and to induce a better behavior in their students (Mindfulness in Schools Project, 2011).

Franco et al. (2010) evaluated the levels of psychological distress in a group of 68 secondary teachers, in the experimental and the control group by the scale "Symptom Checklist-90-R / SCL-90-R" before and after the implementation of training program in Mindfulness. Statistical analysis showed a significant reduction in the three general measures of psychological distress (Global Severity Index, Distress Symptoms Positive and Positive Symptom Total Index) and in all its dimensions (somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism) in the experimental group compared with the control group. The monitoring showed that in the experimental group, the results remained after four months the end of the intervention.

The literature shows that a Mindfulness program in the schools taught by conscientious teachers, that is, those who maintain continuity in their own practice, leads to a significant reduction in behavioral problems and depression scores, especially in those with clinically significant problems before intervention (Joyce et al., 2010).

However, research on these programs show little applicability, since the number of participants is not sufficient and does not involve the entire school community and even less to Families (Burnett, 2010). The comparison of the

results of the application of the same program in different locations or countries with different culture is also missing, together with the promotion of longitudinal studies that show what happens after a year of implementation, and if participants continue to practice or not outside the centers (Mindfulness in Schools Project, 2011). In turn, the instruments that measure the results of the implementation of these techniques, in most cases are adapted, but are not specific for a particular program. With all this, it should promote plans to implement this practice in the schools, taking into account the importance of clearly articulating the objectives, in terms of who it may concern, to keep in mind the level of motivation of the participants, considering the ethical part program and teacher training as a key in it teaching (Burnett, 2010).

#### 2.5. Emotional skills and teachers

School has traditionally been used to fill the mind and less to help create emotional balance, and has taught more discipline than love and insight (López-Hernáez, 2015). Previous studies about bad coexistence in schools find an urgent need to integrally train students, families and teachers (Lopez-Hernáez and Ramirez, 2013; 2014), on the basis of the creation of new programs that improve communication, social and emotional skills (Lopez-Hernáez and Ovejero, 2014; Pegalajar-Palomino and Lopez-Hernáez, 2015). Teacher training is essential, beyond technical aspects, because teachers cannot teach or transmit emotional skills if they have not previously acquired it (Lopez-Hernáez, 2015).

The need for integrally training all the educational community members in emotional skills and especially to teachers is a priority key in education (López-Hernáez et al., 2014). Bisquerra (2009) and López-Goñi et al. (2012) describe the inclusion of emotional competencies in initial teacher training as a fundamental, although, in practice, they are secondary in the set of teaching skills.

The development of emotional skills in a teacher means an improvement in their interpersonal relationships and their education efficacy (Bisquerra, 2007). Emotional competencies are defined as necessary to be a good teacher (Vaello, 2009), because the most personal and emotional facet, based on the awareness and ability to manage and control one's emotions and feelings, is directly related to interpersonal relationships with others and it represents a basic element in the motivation to face the teaching-learning process (Soriano et al., 2008).

Gallego et al. (2004) note that the appropriate emotional management and the harmonization between the cognitive and emotional should be fully considered in the curriculum. Jennings et al. (2009) and Sutton et al. (2003) show the close relationship between social and emotional competencies of teachers and the effectiveness and quality for developing processes of teaching-learning in the classroom and to promote prosocial behavior of students in class. The university context is a privileged space for the promotion and development

of emotional skills, contributing positively to the personal and social welfare of students (Livia et al., 2015) and an ideal study environment for identifying and evaluating them (López-Goñi et al., 2012).

A study of Zuazua (2001) shows that most young Basque Professional Training students claim to have a full life and have more luck in their life projects; however, only those with higher levels of self-efficacy generate higher expectations of themselves, they trust their capabilities, they perceive the academic environment as less threatening and are adapted successfully to the demands, experiencing higher levels of general welfare (Cabanach et al., 2010). Pertegal et al. (2009) show that most of the students are not prepared for successful employment integration in terms of emotional competencies are concerned.

According to Marchesi et al. (2007), 77% of teachers are satisfied with their life and career, although a 75% feel that the profession has worsened in recent years, generating a growing discontent. This malaise affects the concept that the teacher has of himself, causing him insecurity and lack of self-esteem (Hue, 2008). In this sense, Pena et al. (2012) have found a significant relationship between emotional competence in primary-school teachers and the different dimensions of burnout and engagement, thus, greater emotional competence by teachers involves a lower level of exhaustion, in addition to higher levels of personal fulfillment. Peñalba et al. (2013) found that one in two student teachers have a deficit in emotional competencies, including personal and interpersonal skills; although their skills in this area are higher compared the University population in general (Bueno et al., 2005).

Personal and emotional maturity allows teachers to be more self- aware, to perceive better and have a deeper understanding of what they do and its effects (Ramírez et al., 2012). The teacher who is emotionally more competent is better prepared to engage in a positive and appropriate manner with the educational community, which increases the efficiency of education (Bisquerra, 2007), the learning process, mental and physical health, the quality of social relationships and the academic and work performance of the educational community (Brackett and Caruso, 2007; Extremera et al., 2004). Teachers with high emotional skills experience higher levels of general welfare (Cabanach, et al., 2010) and they act as agents of social change in their educational experiences (Leguizamon, 2014).

An effective personality is linked to a more mature vocational decision making based on the best knowledge of the person and the labor market (Bethencourt et al., 2011). A study by Mejia et al. (2011) shows how some future teachers have not covered their emotional needs and self-esteem. In this sense, Peñalba et al. (2013) also found how one in two student teachers shows a deficit on emotional competencies, including personal and interpersonal skills; although the skills in this area are higher compared to the general student population (Bueno et al., 2005). According to Pertegal et al. (2009), most

students are not prepared for successful workplace integration, because they do not have sufficient skills to the relationship with others, nor to adapt to continuous change, nor to control their emotions.

The teaching profession has a low social and economic status in many countries, and it is difficult for them to achieve a similar status to that of other professionals with careers traditionally more dilated, as doctors or lawyers (Garcia-Garduño, 2010). Almost half of the student teachers do not study because of a strong vocational interest, they have expectations to abandon the degree and make another (Garcia-Garduño et al., 2006), with an unfavorable attitude towards it. According to Mendías et al., (2004), the main reason why the future teachers of pre-school education choose this degree is because they like young children.

Moreover, according to Garcia-Garduño (2010) it is the intrinsic interest, satisfaction for a job well done and personal achievement, which leads most teachers to choose this profession. The teaching vocation and family influence, especially having teacher's relatives, are the main reasons why the degree of education is chosen (Garcia-Garduño, 2010; Pegalajar et al., 2015). Family involvement is essential in the process of self-regulation and academic vocational choice of their children, as it affects significantly and positively on the perception of their competence as students (Gonzalez et al., 2002).

The study of Pegalajar et al., (2015) aims to assess the level of self-realization and personal growth of student pre-school teachers at the Catholic University of Murcia (n = 183). The questionnaire results of -AURE- (Aciego et al., 2005; Dominguez, 2011) show that future pre-school teachers show very favorable levels of self-realization and personal development, mainly in behaviors of sociability, respect and collaboration. Participants are themselves quite motivated and show efficiency in planning tasks, and most of them express high levels of effort and persistence, seeking alternatives, they are tolerant and autonomous, and they enjoy on the realization of their projects. These results are much more positive in the case of the female students.

#### 2.6. Gender difference and emotions

"Gender differences are not natural, but historical-cultural constructs that express power relationships based on differences that distinguish the sexes" (Monzón, 2004, p.8). Children are born neutral psychosexually and can be assigned to one or other gender during the first years of their lives, with only a change in the practice of learning (Money, 1988). Gender is not a natural quality of people but rather a complex set of cultural beliefs mutually related which stipulate the social meaning of the masculine and the feminine, concept that varies across cultures and across time (Gaviria et al., 2013). Throughout history, women have played a secondary role in society being relegated to the family, or small circles of friends, so they have learned to express their emotions in intimate places, being more prepared phylogenetically to express

their emotions while men socialize to express a greater extent physical force (Subirats, 1997).

The relationships of the girls are more comprehensive and they have a different sense of life project and self-realization to men (Zuazua, 2001). Professionally, women opt for employment models that represent greater harmony in the interaction between work, family and community (Mojerón, 2010). In this sense, the study of Pegalajar et al. (2015) shows that future female teachers have more positive levels of self-realization and personal growth that male teachers, and tend to get significantly higher scores than men on emotional intelligence measures (Bueno et al., 2005; Extremera et al. 2007; Joseph et al., 2010; Valdez et al., 2010).

Recent studies on cyberbullying relate a greater attitude toward violence and reduced capacity on emotional skills on men. There is a higher prevalence of men as large cyberbullies (Sabater et al., 2015, Garaigordobil et al., 2013). This fact is transferred to traditional bullying, where the prevalence is higher among boys, which harass more physically than girls (López-Hernáez, 2013; Ortega, 2008). In general, boys are more interested in controlling external events, being more aggressive physically and with greater domain to their peers (Anastasi, 1982).

# 2.7. The ".b" program in the schools

It would be interesting to apply Buddhist teaching and its four immeasurable thoughts in schools, especially in the infant stage (González-Caldei, 2013). However, the ".b" project is nonsectarian, this is just a practice based on Mindfulness in the schools, whose main objective is to teach to maintain conscious attention at every moment, through nine sessions, one per week. The first international conference on ".b" in the schools was held in London in March 2013, where teachers and experts met, and Professor Willem Kuyken, director of the research Mindfulness unit at the University of Exeter, presented some of the latest results. This project was written in 2007 by three professors from the UK with teaching experience in secondary schools and in the teaching of Mindfulness; Richard Burnett, Chris Cullen and Chris O'Neil. Currently, it is carried out in the schools by Richard Burnett and Chris Cullen, expressing that: "We were both finding great benefits in ourselves, and we thought put into practice these techniques in classes where we taught (...) the response of the students was amazing and it inspired us to create a program where they could find fun and would be accessible and effective in their lives (...). Now the idea is carried out in twelve countries "(Cullen, 2013; cited in Crossley-Holland, 2013).

The teaching of ".b" is provided in Oxford (U.K.) once a year, since 2009, attended by several teachers and researchers from around the world. The project is a collaboration between Oxford, Cambridge and Exeter University, which are finding valuable benefits of its implementation. The program is flexibly

designed to involve everyone, whatever their ideology, religion or culture (Weare, 2012) and to make it applicable in any context (Mindfulness in Schools Project, 2011). It is taught among teachers and researchers first, in order to implement it between student's volunteer groups later, or other specially selected, with stress, depression or anxiety problems. Currently, over two hundred teachers have been trained to teach it and more than two thousand teenager's students have participated in it (Kuyken et al., 2013).

At the end of the course, a questionnaire, about perception one has of the same, is completed in order to further improve it. These instruments and research studies conducted by Cambridge, Oxford and Exeter University, have shown that Mindfulness interventions in the schools are generally enjoyed and appreciated by the participating students, reporting positive experiences and significant changes in their lives subsequently (Mindfulness in Schools Project, 2011).

In the article, published in "The Guardian" (Crossley-Holland, 2013) the impact it is having the implementation of the project ".b" in schools in the UK is described, showing an analysis of interviews conducted with students who participated. Students say that in times of stress and tension before an exam, they are more aware of their inner state and they attend "7/11" technical or "Beditation" practice among other techniques learned. These are some of the impacts that the course has had on students, teachers and some parents: "After practicing Mindfulness accept more things and do not criticize people so much, I now understand that people are different and accept you cannot change that (...) My thinking is more rational (...) I keep my mind focused and find before the answer to my problems (...) I started to think more positively (...) I learned to make better decisions for my present and my future (...) I am calmer, more relaxed and less stressed " (Mindfulness in Schools Project, 2011; cited in Crossley-Holland, 2013).

When teenage students are more present in every activity, they are more able to deal situations from a fresh perspective and make better use of the learning content (Weare, 2012). Moreover, students are better able to cope with everyday stresses on tests, social relations, sleep and family problems because Mindfulness struggle against the difficult mental states, such as depression, ruminations, anxiety and low moods (Weare, 2012).

The ".b" has a solid foundation of scientific evidence, with tests that have been conducted after the courses, such as randomized controlled trials and brain imaging tests (Weare, 2012). To ensure the success and quality of these programs, it is opts for a quality and applicable research -high number of participants, involving of the entire educational community, longitudinal results comparison in different countries and cultures, and the creation of specific instruments for each program-. It would be interesting to choose participants outside this age range with special issues. For participants with problems, this

can be a lifesaver, because it is a valuable tool that helps them cope with the current difficulties (Weare, 2012).

Before describing an application of this program in Apache schools let us further review some issues in the history of education in Apache schools.

# 3. Education, Determinism and Thought Systems

#### 3.1. Education for All to Become "Civilised"

Education through community learning was a norm for all human beings through evolution. This included education in hunting, fishing, raising children, music, prayer, and health, for example. Particular cultural patterns and traditions reinforced this, and culture is closely tied to education.

Education (Latin: *educatio* "rearing" or "bringing up") has always been central to human life. Systematic instruction, usually of the young, provides people with the knowledge, skills and wisdom necessary for them to become active members of society (Pollard and Zintgraff, 2017). Education include lifelong processes of development and maturation, but the term is more commonly restricted to those influences brought to bear on children, adolescents and young adults preparing for the workforce. In ancient times the Greeks were one of the first civilizations to provide schooling and organized instruction (education). Jewish education also developed early, following along the line of Old Testament injunctions regarding the training of children, and the Arab world too was very scholarly. The 12<sup>th</sup> Century saw the rapid development of learning in Europe during the Renaissance, heavily indebted to both Arabic and Hebrew scholarship.

With the rise of Christianity, schools in Europe were instructing this religious doctrine as well as subjects such as the liberal arts, grammar, logic, arithmetic and music. It is now generally recognized that the state has a duty to provide education for all its citizens, for example, the United Nations Development Programme's Human Development Index<sup>4</sup> uses adult literacy and education enrolment as two of its four measures used to rank countries into its global development network. Consequently, most of the technologically developed world has good literacy and compulsory schooling for children.

There were education systems in a number of indigenous communities prior to European colonization, and we can see the famous remains of academies in Incan, Aztec and Mayan culture. Advanced astronomical knowledge was critical for the marking of solar and lunar solistices that were critical to agriculture and survival.

Today, as in the past, national governments set curriculum that are often tightly linked to the construction of a society where individuals think in a particular manner. The Ministry of Education, or in the United States case, the Department of Education, is often conservative in their values. Organised

<sup>&</sup>lt;sup>4</sup> https://en.wikipedia.org/wiki/Human Development Index

education is a type of social engineering, and nowadays we still hear elders complaining that the young generation are just not being taught properly in school.

The boarding school experience for Indian children began in 1860 when the Bureau of Indian Affairs established the first Indian Boarding School on the Yakima Indian Reservation in the state of Washington. These schools were part of a plan devised by eastern reformers Herbert Welsh and Henry Pancoast, who also helped establish organizations such as the Board of Indian Commissioners, the Boston Indian Citizenship Association and the Women's National Indian Association. The goal of these reformers was to use education as a tool to "assimilate" Indian tribes into the mainstream of the "American way of life," a Protestant ideology of the mid-19th century. Indian people would be taught the importance of private property, material wealth and monogamous nuclear families. The reformers assumed that it was necessary to "civilize" Indian people, make them accept white men's beliefs and value systems. By the 1880s there were over sixty Boarding Schools, and many children were forcibly taken away from their parents and their home communities, in efforts to make them confirm to a white model of a person.

Although education was being offered to all Native American persons, through a Boarding School system, the education was to provide persons as servants of the upper class. Trades schools to produce, maids and waiters, were for the more feeble-minded races. In most cases children of Native American families were forcefully taken from them families to Boarding Schools. Many children died at the schools, and many lost their identity through these assimilation attempts, which including forbidding children to use their mother tongue. The graveyard was one possible outcome, and not so many graduated.

Eugenic ideology would state that a person of a certain genotype can only work in a certain occupation and profession, i.e. genes determine your future occupation. By the end of the twentieth century there had been recognition of the greater importance of non-genetic factors in determining intelligence, criminality and social desirability. It has been found that the trend in the USA for family size to be decreasing can be correlated with an increased level of educational attainment. The less siblings there are, the higher chance of continuing education. On reservations however there were large family sizes, many teenage pregnancies and high levels of violence.

Parental interaction improves verbal ability, which is very significant in educational outcomes and in achieving a happy life. However, Boarding Schools where children were separated from parents took away this critical aspect of non-formal educational stimulation, and destroyed the safe happy environment of a family environment. Negative social influences, such as increased numbers of divorces and solo-parent families, are associated with social and developmental problems, and there are significant challenges still today.

#### 3.2. Determinism

Determinism says that because we have a particular gene or combination of genes, or a particular environment, including both home and school environment, we are likely to grow up to behave in the corresponding way. It is the long standing nature/nurture debate. Most accept that we need a balance of views and both are important. There are certainly some complex genetic influences upon behavioural variability, the question has narrowed to tracing out the details, and of the mechanisms of these influences. It is also true that a mixture of physical and spiritual factors help determine whether we will be happy or not.

A number of studies have shown that both nature and nurture are important for intelligence. In a French study, the average I.Q. of adoptees was higher when reared by parents with a high rather than a low socio-economic status. Their I.Q. was also higher if their genetic parents were of higher socio-economic status (Capron & Duyme 1989). This data is consistent with data from twin studies and other adoption studies (McGue 1989). If we want to improve the intelligence and general upbringing of children we should also spend resources to find out what environmental factors are the best for children and then try to improve them. This type of study requires less finance than an approach based on the discovery of all the genetic elements, and might have a greater positive impact.

The American Eugenics Society changed its name to the Society for the Study of Social Biology in 1972. The social environment was thought by some, such as Muller, Huxley and Osborn to be one of the main directors of natural selection, and that eugenic goals could not be readily achieved in capitalist societies (Bajema 1976, Freeden 1979). Capitalist society is dysgenic (Huxley 1936). Osborn (1940) advocated a type of social welfare state to aid eugenics. The issues of eugenics and the ways it may be implemented in public policy are not just based on genetic ideas, but consider the economic and social system.

The major use of eugenic selection occurred together with the move to a more scientific worldview. This is because of both the development of scientific techniques, from sterilisation operations, genetic screening to gene therapy in the immediate future; and from the associated cultural values. As our genetic knowledge greatly increases we must note this tendency. We must be careful about the possible growth in genetic reductionism that could come from the detailed analysis of the human genome. This will be a challenge to existing human society, and will need to be introduced slowly, in a way that is sensitive to any adverse social consequences.

A number of health conditions have multiple causes and simple models of determinism can lead to stigmatization. Diabetes and obesity are endemic on Native American reservations. The cause of this includes diet, genes, lack of exercise, and culture. Diet and exercise programs are needed to reduce

morbidity and mortality, and social support systems to motivate persons to maintain these lifestyle changes.

The finding that there is an association between an allele of the gene for dopamine D2 receptor and alcoholism, illustrates the type of dilemma. There has been four decades of research which has shown that part of the vulnerability to becoming alcoholic after exposure to alcohol is inherited (Gordis et al. 1990; Blum et al. 1990). Understanding how genes and environment interact to lead to alcoholism is a broader challenge. There are several genes involved, and many cultural factors. It is a major problem on the reservations, but it is determined by genes and culture, and the examples of families in the past.

We can ask whether universal ethics is desirable. Different societies have different goals, as do different people. This diversity is to be valued, and our ethics should be one that will recognize, value and maintain diversity. We should never expect all people to balance the same values in the same way all the time, and such diversity is also valued in Native American societies. We cannot determine the social behaviour of a person simply by naming the tribe that they belong to.

### 3.3. The Same Challenges Exist Today as Sixty Years Ago in San Carlos

Although we acknowledge that five years is a short time to experience the educational systems in Arizona Indian reservations today, after discussions with parents, students, teachers, superintendents and others, there are many challenges still existing today. An extensive review of the San Carlos Apache tribal educational system of the 1950s and 1960s (Parmee, 1968), reveals the same problems that exist today. The hopes and aspirations of the tribal members, educationalists and others expressed then are similar to those of today.

There have been a number of educational initiatives over the past decades. In 1981 the U.S. Department of Education announced \$55 million USD for development of tribal culture and curriculum, "history and heritage, making available teacher aides and home-school coordinators from Indian communities". There has apparently been progress, however in discussions with many tribal educators there is still a long way to go. The development of the American Indigenous Research Association in 2013 is some indication that there is progress in the movement to elevate Native Americans from being merely the subjects of research to being researchers themselves (Swisher, 2004). There have also been questions on the ownership of knowledge in the research (Archuleta, 1990). At least we can see success in a growing number of Native Americans with doctorates and Departments of Native American studies at some universities.

No doubt there have been individual successes, and also some progress in the Apache language programmes so that the language stays alive in the community, but the high mobility and dropout rates continue to plague the youth today. We need to find different solutions and learn from the lessons that are obvious. The subject itself requires a study in itself.

Given the theme of this thesis, what is interesting is that there is a shift in ideology of the Indian Boarding Schools, which had intended Native American students to only work in service industries because of either a perceived low intelligence — or the desire to maintain the Native American tribes as suppressed communities of people who would not challenge the ruling elite. The 1960s was considered a revolution in development of human rights, and the termination policy of the 1950s to assimilate tribes into white mainstream culture. The 1960s saw the rise of self-determination in Native American tribes (Cook, 1994). There is evidence for both ways of thinking.

Parnee (1968) wrote: "This book is written in vigorous opposition to the policy or program that seeks to vivisect the population of a community into its live, successive generations without concern for the family, neighbourhood, or the surviving native unit of traditional social organization (i.e. the Apache gotah), as vital, drable, interdependent and potentially productive social and economic units in which all existing age groups interact for mutual benefit and security." (p. viii). He continues, "this book has not been written to provide the reader with a current and definitive description of the San Carlos Apaches and their reservation, but rather as a demonstration of what can happen to a community – any community – when it is manipulated by outside sources and its people are neither trained nor given an increasing share of the responsibility for their own affairs, when they are deprived of their traditional heritage while pressured to accept change, and when their social, political, and economic institutions are disrupted without provision for immediate or adequate replacement."

The title of this book includes colonization. The recommendations of the book however are positive, and suggest options to overcome the poor state of affairs. Based on our experiences, Lara working for two decades in Spain as a teacher and teacher educator, and Darryl working in Asia for three decades, including as UNESCO Regional Adviser for Asia and the Pacific for a decade, our suggestions are that in order for the Native American tribal communities to reform their education, the models of decolonisation applied in other places to develop efficient education systems have much relevance. An educational system should learn from all sources, but needs to have independence.

As illustrated in Figure 5, there were significant attempts to demand uniformity in the Indian Boarding Schools. The presence of uniforms and strict discipline was common to many schools at the same time. The photographs are from the early 1990s. The most serious impact however is the bans on speaking languages other than English, so that the children would be discouraged/punished if they spoke Apache. This led to a loss of identity and conformity. This cultural and identity confusion, through multiple generations, has significant psychological and developmental problems. The eugenics

rhetoric was dominant, and remember that these children would only become U.S. citizens in 1923!



Figure 5: Boarding School Children from San Carlos Apache Reservation upon Entry to the School and Six Months Later (Source: Hayden Library, Arizona State University, Tempe, Arizona)

Many scholars have examined the curriculum, teaching methods and goals of education for Native American students (Ryan & Brandt, 1932; Dumbleton & Rice, 1973). There continue to be academic discussions of how to improve

tribal education because the results continue to be disappointing.<sup>5</sup> Like any educational system one can expect it takes time to improve, but a whole century of challenges suggests that there are fundamental issues of identity, language and the goals of education.

Anderson (1981) argued that the expectations of the students, the teachers and the parents were all different, and each group did not know what the other's expectations were. Some of the concerns such as a system that does not encourage creativity are more universal. Huxley (1932) wrote that particular goals for each tribe should be used for deciding the type of education of the people, 13 years before he would become the first Director-General of UNESCO. He encouraged art, pottery, basket weaving, as well as other culturally orientated educational goals that would reinforce the community values.

During 2016 we had the privilege to work with the Department of Education of the San Carlos Tribal Community to run a professional development course and educational training program for two weeks with the teachers of the Head Start programme. We appreciate all the comments and ideas shared in that programme, which have informed the conclusions discussed so far, and which will be further described in the fifth chapter. There is hope for the educational community, but once the students enter primary school after the Head Start program there are few Apache teachers in the School system. This needs to be remedied. In most countries the educational systems moved long ago from relying on people from outside the community to teach their children in critical formative years.

There are some tribal members enrolled in Colleges and Universities, but only a few take advantage of the free tuition that is usually offered, and few complete. In Salt River Pima Maricopa Indian Community in Scottsdale, despite the presence of Scottsdale Community College on the community land, and being only 6 miles from Arizona State University, few persons from high school complete an undergraduate degree from either two year or four year colleges. This is not because of any deficiency in intelligence, but because of the social, family and environmental situation that continues not to incentivise educational development.

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<sup>&</sup>lt;sup>5</sup> For example, see a special issue of *Peabody Journal of Education* 61(1), 1983. Of course there are many contemporary articles, but as illustrated these discussions have continued for a century – without a solution for education for many students who still cannot seem to excel.

# 4. Eugenics, Sterilization and Native Americans

#### 4.1. Eugenics

The word eugenics was coined by Sir Francis Galton (1871), and is derived from the Greek word "eugenes" which means "well born" or "hereditarily endowed with noble qualities". This idea of "good genes" may be separate from the very common view that the mating of people of "good views" is desirable, to give us more offspring of that view, but we will see that eugenic proponents have often retained this idea (Macer, 1990). This interplay between the concept of possessing good genes or possessing good views, is very relevant to the various policies used in the interactions of European colonization into lands occupied by indigenous people. We see for example, cases where extermination campaigns were made against some Native Americans, and Tasmanian Aborigines, which were followed up with assimilation campaigns to take the children of indigenous persons into either new families (forced adoption into white families), or into long term Boarding Schools.

Eugenics differs from other human activities in that it is an activity in which we are trying to change ourselves, not the environment or other creatures, and therefore is particularly challenging. It is unethical for people of one community to attempt to change the reproduction and genes of another population, however, there have been attempts for population engineering of Native Americans.

For millennia some groups of people have had ideas of selective breeding to increase the representation of people with "good genes". Plato had considered the desirability of achieving these ends by subtle, or direct, incentives to control marriage, and/or mating, of supposedly 'fit' human beings. This is what we could call positive eugenics, as opposed to negative eugenics which refers to the policies intended to reduce the occurrence of particular traits, such as in the sterilization programs of Native Americans through the Indian Health Service in the 1970s (White, 1989).

Babies born with major deformities were often killed at birth, and sometimes an image in their likeness was made as a type of idol. The most ancient sculptures of double-headed twins are from 6500 BC (Warfary 1971), and many others around the world have been found. The birth of these children was seen in the ancient world as a sign from god, specific predictions were made from each deformity. Consanguineous marriages were banned in most nations of antiquity, and Apache bands had many close relatives. Marriages between brother and sister was banned over recorded history, but often marriages were made within small bands living in one local area (Opler, 1941).

In general, the safeguards against degeneration of the human race were isolated, never religiously motivated and seldom were enforced by legal enactment (Jakobovits 1975). The practice of killing off deformed infants was very common until the last few centuries around the world. Sometimes the child was killed by drowning or strangulation, or just exposure in the town market place. Malformed babies were routinely killed as they were considered a burden on society.

The Spartans used exposure to the environment to kill imperfect babies (Plutarch II). Every father had to present his child to a council of elders. If it was not healthy it had to be exposed, as it would not become a good citizen or soldier. On, the other hand, if a man had three sons he was relieved from military obligations, and if he had four sons, exempt of taxation. Plato in the Republic (Plato IV) advocated the abolishing of private homes and families for a single class of Guardians. The Guardians could then breed and rear children of the highest type using the methods used for breeding animals. Sexual intercourse was to be strictly controlled. There should be "as many unions of the best of both sexes, and as few of the inferior, as possible, and only the offspring of the better unions should be kept as guardians." In *Timaeus* (Plato I) he advocates only the children of the good should be educated. In the *Republic* he recommended that defective babies should be hidden away in a dark and secret place, though it is vague whether he means infanticide, or relegation to the lowest class. Plato was interested in the quality of babies from a point of the State, as have most recent proponents of eugenics. Plato advocated the deceit of citizens in the manipulation of the quality of stock of the human "herd", as he knew people who were prevented from breeding would not be so happy. He would do this by rigging the drawing of lots.

Aristotle also postulates a hierarchy of human worth, men with fully developed virtue(s) being most fully human. Aristotle supported the exposure of handicapped infants (Aristotle IV), though some ancient writers opposed this (Amundsen 1987). The early Roman empire showed increasing respect for human life with the rise of Christianity, though the fetus was not considered so highly as it is today. Abortion became illegal, and infanticide became a capital offence in 374 AD, and after much earlier public opposition. Infanticide of handicapped newborns was practised in more modern times in Europe, especially by the Vikings, and in Japan until the Twentieth century, and still indirectly in many countries today in cases of severe handicap. Despite these times with prohibition of infanticide, the hierarchy of races was used to justify the slave trade bringing many Africans to serve as labourers in the Americas, and to the programs to kill indigenous persons. Thus we can see that the value of life depends on what class of life a person is placed into.

#### 4.2. Hierarchy of Worth, Human Progress and Eugenic Dreams

The 1870s were an interesting time for this discussion of San Carlos

Apache reservation because they come in a decade of significance in the emergence of new paradigms of Western thought. The idea of some groups of human beings being inferior to others was often based on intelligence, or a method prescribed to define this. The rational was called superior to the animal, thus Aristotle claimed women and slaves were inferior by nature because of diminished reason and being closer to an animal state. The 18th century biologists claimed to prove that Negroes' skulls and physiognomy most clearly resembled those of apes thus justifying slavery (Greene 1959). Superiority is often judged by how close people approach to the 'ideal' of intelligence and rationality (Rothschild 1988). In the previous chapter the concept of social progress and the American Ethnography Society was introduced.

During colonization the clash of world views should be apparent, which can make a group of persons who oppose those in power, a "criminal of convenience". The concept of inherited criminality was promoted by the Italian, Cesare Lombroso in 1876. This was a major motive for eugenics programs. Although the methods of Lombroso were refuted by the English prison doctor Charles Goring, he supported the view that mental deficiency was inherited. Galton (1869, 1883) had written to say genius was inherited, and this was accepted by many scientists, including Darwin (1871). Galton (1883) defined eugenics as the science of improving the "stock". Eugenics was defined by Galton as the study of agencies under social control that may improve or impair the racial qualities of future generations either physically or mentally. He intended eugenics to extend to any technique that might serve to increase the representation of those with "good genes", in this way accelerating evolution.

A major motivation underneath many eugenicists was also the idea of human progress, that we must be progressing genetically as well as in our knowledge. This was boosted by the theory of evolution, the survival of the fittest was equated with the survival of the "best". The best were the best people to cope with modern life. Galton was a cousin of Charles Darwin. Social Darwinists' tended to equate a person's genetic fitness with his social position. Social Darwinist ideology provided a good climate for eugenic thought, and many qualities such as intelligence, temperament and behaviour were believed to be inherited (Ludmerer 1978).

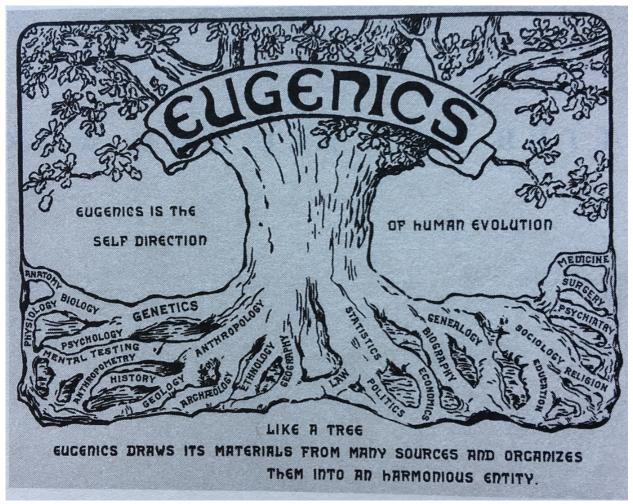


Figure 6: The Image of Eugenics as being Portrayed as Natural. A Eugenics Leaflet Prepared by Harry Laughlin, Director, Eugenics Records Office, ca 1931.

Dowbiggin (2000) documents the involvement of both American and Canadian psychiatrists in the eugenics movement of the early twentieth century. Psychiatrists at the end of the nineteenth century felt professionally vulnerable, because they were under intense pressure from state and provincial governments and from other physicians to reform their specialty. Eugenic ideas, which dominated public health policy making, seemed the best vehicle for catching up with the progress of science. Prominent psychiatrist-eugenicists included G. Alder Blumer, Charles Kirk Clarke, Thomas Salmon, Clare Hincks, and William Partlow. Psychiatrists played roles in the tough debates about immigration policy.

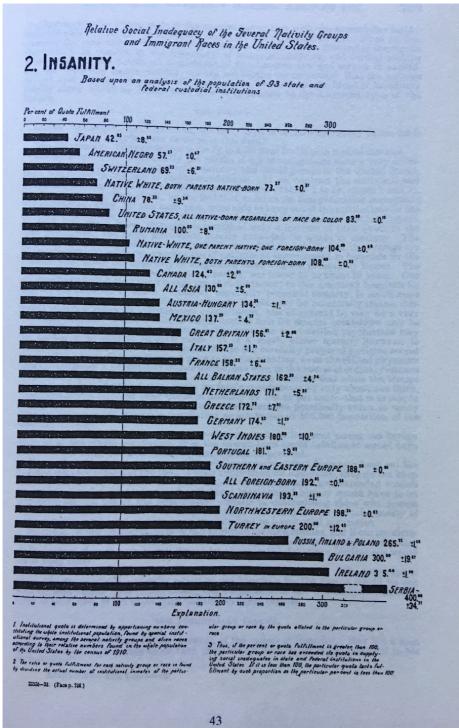


Figure 7: (Source: Laughlin, Harry H. "Analysis of the Metal and Dross in America's Modern Melting Pot", Statement of Harry H. Laughlin, Hearings before the Committee on Immigration and Naturalization. House of Representatives, 67<sup>th</sup> Congress, Third Session, 21 November 1922; Washington D.C. Government Printing Office).

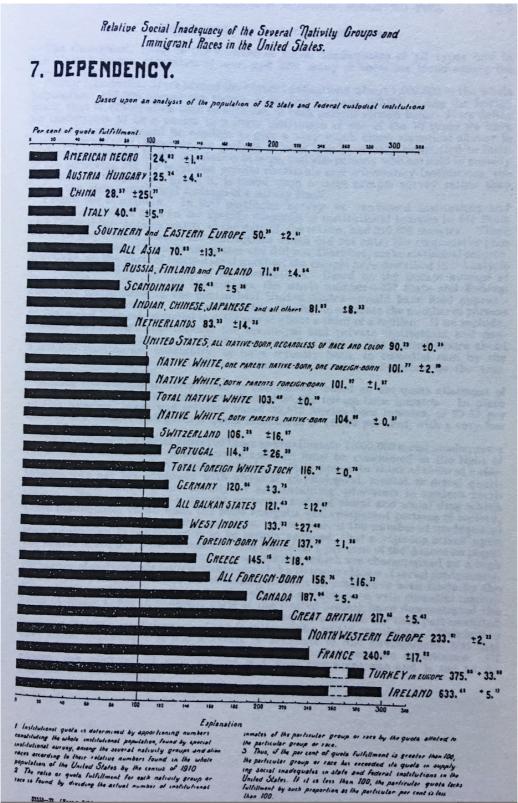


Figure 8: (Source: Laughlin, Harry H. "Analysis of the Metal and Dross in America's Modern Melting Pot", Statement of Harry H. Laughlin, Hearings before the Committee on Immigration and Naturalization. House of Representatives, 67<sup>th</sup> Congress, Third Session, 21 November 1922; Washington D.C. Government Printing Office).

The eugenicist's concept of the best human was their idea of the "perfect man", which tended to be an intelligent white male of northern European stock, who had been said to have a larger brain. Some eighteenth century philosophers had believed in the possibility of human perfectibility (Kelves 1985). There was also a fear that the "stock" was deteriorating.

After the publication of Galton's book in 1883, and the growing acceptance of its ideas, he was to inspire and become the Honorary President of the English Eugenics Education Society in 1908. The common concept position of defining people like themselves as "more suitable" and various groups of people as "less suitable", to that of supporting the ethical introduction of advances in human genetics. In the first few decades of this century the effort to do this was based on applying the wisdom of animal breeders. An alleged national interest in the quality of the gene pool of the population was valued more than individual reproductive autonomy. The eugenicists believed that they would save the world, and were very optimistic. They varied, as they have in the past and at present, on whether they support merely a programme of incentives or compulsory measure such as state-controlled breeding and compulsory sterilisation. It was applied to people of all races, but the reservation system allowed a systematic approach for mistreatment of Native Americans.

To present eugenics as a respectable creed many famous religious leaders, from Christ, down to politicians and artists were sometimes falsely presented as supporters (Searle 1976). Eugenic Societies were created in England, United States, Canada, Scandinavia, Italy, Austria, France, Japan, and South America. Galton left his estate to found a National Eugenics Centre, with the statistician Karl Pearson at its head (Kevles 1985). The Galton Laboratory became the British centre of research, and trained many international scholars. Also in the early 1900's the ideas were well accepted in the United States. The U.S. national headquarters were at the Eugenics Record Office at Cold Spring Harbour, where the leader was the geneticist Charles B. Davenport. Davenport had visited Galton and Pearson at this time. This institute was for the experimental study of evolution, and incidentally continues today as a center of Human Genetic Studies. Davenport conducted family pedigree studies over many generations, as he was concerned with Mendelian style inheritance of the genotype, whereas the English were more concerned with the phenotype and often only studied parent and children trends. Whenever family pedigrees showed a high incidence of a given character he concluded the trait must be inheritable, and tried to use single elements of heredity (Davenport 1911). The American Eugenics Society was formed in 1923 combining many smaller committees. The development of eugenics was associated with a political desire to use science to solve social problems (Allen 1989).

A principle concern of the eugenicists was the lower fecundity of family "stocks" from wealthy, and more educated, families. As these people were

from this type of family they had fears of their progeny being swamped by large numbers of progeny from uneducated, and thus genetically unfit, classes. These ideas were around before 1900, but people had been ignorant of the process of heredity. Chromosomes were known to be carriers of the genes only around 1900. This gave a rule for the transmission of traits, so instead of relying on ideas from animal breeders, they now had a biological theory. There was some scientific backing found for Lombroso's and Goring's conclusions on hereditary deficiency, as the idea of the Intelligence Quotient, I.Q., was introduced by the book of Pearson and Jaederholm (1914). This was in the face of many studies showing that traits were determined by complex traits and the effect of the environment, but these were largely ignored.

The eugenics movement was responsible for introducing a social class classification in 1911, with the Registrar General of England, Bernard Mallet, a future president of the Eugenics Society (Austoker 1985). The lower social classes were viewed as the sources of criminals but had greater fecundity. These classes were thought to be caused by genetic, rather than environmental problems, having higher infant mortality because the mothers were incapable. This social class analysis is still used, and has been called an embarrassment to epidemiology.

Public support for eugenics grew. Many churches came to support it, and claimed that the Bible was a eugenic book. Competitions were held to see whose family was the fittest, and displays in fair grounds illustrated the "science" of eugenics. Biology had become popular (Kevles 1985). People also objected to paying many taxes to pay for criminals and for maintaining handicapped people. During World War I intelligence tests based on the Binet-Simon, I.Q. Test, developed by Robert Yorkes, were used to place recruits in their "appropriate" place in the army. After the War these tests were popularly accepted, and Yerkes drew up the standard National Intelligence Test. Courses teaching eugenics were offered in many Universities in the 1920's. There were eugenic policies in about forty countries, but as can be seen they varied widely in the practises used to effect the idea (Adams et al. 1990). Some scientists had dissociated themselves with the mainline eugenics movements in the 1930s despite its high popularity, such as Herman Muller, because they thought eugenics had been perverted into a pseudoscientific facade for advocates of race and class prejudice (Muller 1935). Muller hoped that the principles of evolution would be applied to human betterment, but did not allow his name to be used with any eugenic organisation because of that belief (Carlson 1981).

# 4.3. Creating and Overcoming Dependency

One of the most significant attitudinal changes made in the process of colonization was the shift from being self-sufficient in food provision, to being dependents because the Apache people were confined to reservations. Given the belief in dependency as a motive for eugenic sterilization as illustrated in Figure

8, it is relevant to consider the emergence of dependency as a trait in what were previously Apaches who were admired in the 16<sup>th</sup> century by the Spanish and were clearly self-sufficient. Figure 9 illustrates a scene in San Carlos Apache reservation in the late 1800s of a queue of people for rations. Rations of flour, sugar, coffee, and meat were given out every ten days. Since there were many people it took all day to get the food. Later instead of beef the people were provided cattle to butcher themselves, with ten to fifteen head of cattle per band. If the Apache were allowed to leave the reservation to forage and hunt as they had, they would not need to be relying on the food – given that this food, supplemented with lard would lead to an unhealthy diet and eventual obesity. This is illustrative of the issue for many tribes forced to stay on reservation lands.



Figure 9: Ration Day in the late 1880s (Source: Arizona Pioneers' Historical Society, Tuscon).

# 4.4. Sterilisation Programs

The United Nations World Population plan of action declares that, "All couples and individuals have a basic right to decide freely and responsibly the number and spacing of their children". There are several ideas in this statement, and we can find cases where all aspects of it have, and may still be, prevented. Many are conditional and are prevented in some societies. A question must be, which aspects of reproductive freedom can be limited without violating the basic idea of autonomy.

From 1900 to the 1960s the main eugenic practise involved the

sterilisation of the undesired. Abortion was officially illegal in this time, and birth control did not reach the poor. Some countries had marriage restriction laws, which were more used in Britain. In Britain less eugenicists were convinced of the necessity of sterilisation than in the USA, and in Britain it was considered by the courts as generally being illegal. The most infamous of these methods were the eugenic practises of the Nazis, but their practises were based on an earlier legal tradition. In the 1970s for example, the forced sterilization was administered in the false pretext of laws to eliminate poverty (Torpy, 2000).

In the USA negative eugenics was effected by two major types of legislation: involuntary sterilisation laws and the Immigration Restriction of 1924. Immigration is one avenue for eugenic programs to be carried out. Indigenous people by definition are existing in a land for a long time, so would be thought to be exempt from this concept. However the mass resettlement and forced movement of Native Americans to states such as Oklahoma, can also be revisited through this type of policy.

The first state sterilisation law was enacted in 1907 in Indiana. There had earlier been two unsuccessful attempts at eugenic sterilisation of mentally incompetent patients, in Michigan in 1887 and Pennsylvania in 1895. In 1907, Indiana passed the world's first involuntary sterilization law based on the theory of eugenics. Although the Indiana statute was later declared unconstitutional, other laws restricting immigration and regulating marriage on "eugenic" grounds were still in effect in the U.S. as late as the 1970s (Lombardo, 2011).

A publicised turning point in the progress of eugenics was the 1927 court case of Buck v. Bell, where a judge remarked that "Three generations of imbeciles are enough" (Lombardo 1985), and likened sterilisation to vaccination. Analysis of this case revealed that it was probably rigged to provide a model case for eugenic sterilisation. The courts began to invoke the proposition that "common welfare" overrides any "natural right" of procreation. Applied eugenics was more readily accepted in the USA than in England. Laws were also passed in Canada.

In 1931, thirty states had enacted compulsory eugenic sterilisation laws, and in 1937, 32 states had such laws. Most of these laws were not rigidly enforced, but by 1935, 20,000 people had been forcefully sterilised, nearly half in California. These laws may be applied to a wide range of "hereditary defectives", including "sexual perverts", "drug fiends", "drunkards", "epileptics", and "diseased and degenerate persons". In the 1930s families who were drawing money from social welfare were encouraged to be sterilised. There was a noticeable increase in the number of sterilisations performed during the Depression, as institution officials were afraid more births of handicapped people would strain social services (Reilly 1987). The situation was changed in a 1942 Supreme court case, Skinner versus Oklahoma. The court membership had changed since the earlier decisions, and the Oklahoma

law was judged unconstitutional, and marriage and procreative rights of individuals were stressed (Petchesky 1979, Letterie & Fox 1990). It is interesting that Oklahoma is a state with many Native Americans who were relocated form other parts of the country. In nineteen states these laws are still existing, though under stricter federal control, making it difficult to sterilise mentally disabled persons. The practices against Native American women did continue for decades after this however.

Some of the conditions thought to be heritable were "nomadism", "shiftlessness", and "thalassophilia" (love of the sea) (Haller 1963). The American Eugenics program was tied to the European programs. You can see that nomadic tendencies of Native Americans would place their traditional life choice as one which was an indication for sterilization. In 1935 the American Eugenics Society produced a major work called "Tomorrow's Children" (Huntington 1935). They estimated several million people were in this category of "feebleminded", epileptics or insane. It recommended that while some of these defects might be "purely environmental in origin", these people would produce defective children if allowed to bring up children. It expanded the number to five million adults and six million children who were "subnormal in education", and another twenty million who failed to finish grammar school (Mehler 1987). It recommended that these people should not be allowed to breed, though not all should be sterilised. There were, and continue to be, very low graduation rates for Native Americans. Under education criteria they would therefore be in the groups subject to sterilization.

Davenport had argued for individual selection, but by the 1920s this had been submerged in a principle of racial- or ethnic-group selection (Kevles 1985). Margaret Sanger, the birth control campaigner, argued that the chief issue of birth control is "more children from the fit and less from the unfit" (Sanger 1923).

During the 1960s and 1970s "the Indian Health Service deceptively sterilized a large percentage of Native women who were between the ages of fifteen and forty-four. Those doctors failed to provide women with necessary information regarding sterilization; used coercion to get signatures on the consent forms; gave improper consent forms; and lacked the appropriate waiting period (at least seventy-two hours) between the signing of a consent form and the surgical procedure."

England (1994) discusses the events and studies made of the 1972-1976 sterilization of Native Americans, which included tribal members across Arizona, and the whole United States. The abuse of power by the coercive sterilization programs was called genocide by many commentators, and implies that the responsible persons working in the Indian Health Service still had a belief that the Native American women were inferior in intellect and had to be

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 $<sup>^6</sup>$  http://indiancountrytodaymedianetwork.com/2015/10/03/forced-sterilizations-native-women-and-republican-attempts-shut-down-planned-parenthood

sterilized. This patronizing attitude is still seen today in my observations of Indian Health clinics and the population. Racist attitudes may also have been a cause of these sterilizations in both Canada and the USA (White, 1989).

Although sterilization of Native Americans had still continued after World War II, the general eugenic sterilisation programs went into decline in the 1940s, largely because of the eugenic excesses of the Nazis. The American and other European Eugenicists' had to be on the defensive, and claimed that these Nazi excesses were the casualties of war. This association of eugenics with racism has been very harmful for its public image, but racism featured in eugenic programs of other countries also. However, sterilisation operations were still performed after the war, particularly in Georgia and North Carolina in the USA (Reilly 1987). We also saw some in Sweden as well. In Alberta, Canada, the Sexual Sterilization Act (1928-1973) concentrated on Indians and Ukrainians, and 25% of the women sterilized were First Nations people although they only make up 3% of the provinces population (White, 1989).

The Catholic Church had long opposed eugenics, as in Church doctrine, in the scheme of God's creation human's bodily attributes are secondary to the Spirit. Eugenics was condemned by Pope Pius XI in 1930 (Pope Pius XI 1930). Secular critics shared the dislike of biological reductionism, some did not like the growing authority of science, and its intrusion into individual breeding rights (Kevles 1985).

There had been many scientific arguments against sterilisation being an effective measure, and eugenic principles themselves. In 1904 a British Committee appointed to look into physical degeneration, i.e. increasing crime rate, found that the claim of eugenicists was false: the number of criminals was dropping. By the 1920s, many people held that there was no intellectual deterioration either. There was criticism of I.Q. testing, and the growing association of mental deficiency to environmental conditions. The linkages between poverty as a cause of poor performance in school and health was also noted by a growing number of people. There had been work disproving the eugenic stereotypes of races, such as the American Negros (Klineberg 1935), and by the end of the war public opinion had already switched to believing that there were little innate differences (Kevles 1985). In 1950 UNESCO issued a statement on race, with commentators including the major figures in the eugenics movement, Klineberg, Muller and Huxley (UNESCO 1950). There was a growing emphasis on the importance of the environment in determining the phenotype, with less dependence on heredity (Freeden 1979).

The sterilisation of mentally incompetent persons is still an important issue in bioethics. Severely mentally handicapped people who can not give consent may still be sterilised if they are sexually active; there is a risk of pregnancy; and there is sound evidence that they would be incapable of coping with the emotional and physical stress of pregnancy, or of functioning as a satisfactory parent even with a reasonable level of support; and sterilisation is

on medical and social grounds the most appropriate form of contraception.

Voluntary sterilisation as a form of birth control is encouraged as part of federally financed family planning programs in the USA (Petchesky 1979), but it is not compulsory, and is not publicly associated with eugenic ideas. Compulsory sterilisation is still performed in the USA (Thompson et al. 1978, Letterie & Fox 1990). As a reaction against eugenic sterilisation abuses, there was a period where courts rejected the sterilisation of mentally incompetent patients. However, during the last decade there have been some cases of courts approving sterilisation. The sterilisation usually requires substituted consent, such as by a parent of an incompetent patient. Such sterilisations are conducted in most states. In the USA there are people who want more choice for the parents of mentally handicapped children (Scott 1986). There are still courtordered sterilisations performed, and these are said to be justified not because of the perceived harm to society, but because of the presumed inability of severely handicapped persons to serve as parents, so it is argued that this is for the benefit of the individual concerned. From a consideration of medical ethics practised in most countries today this is the only acceptable criteria. There are individual persons, who are unable to give valid consent, but who would reasonably be thought to benefit from the operation.

It is quite distinct from the sterilisation of a general class of persons, such as Native Americans, that occurred in throughout the Twentieth century. As discussed above, between 1970 to 1975 physicians sterilized about one quarter of all Native American women of child-bearing age through the Indian Health Service (Kluchin, 2011).

### 4.5. Further Control of Reproduction

There have been movements over time for doctors to become more involved in "aiding" reproduction. For most mid-wives and doctors their aim is to bring about the birth of children with the greatest possible care. One of the aims of eugenics today is the "application of societal measures at improving physical and mental attributes of future generations" (Eugenics Society 1988). This is not in itself dissimilar from most peoples' attitude. It is held by many that it is in the interests of the state to reduce the incidence of genetic disease (Macer, 1990).

Because of past abuses described above there are efforts to protect individuals around the world. To counter fears of eugenics the Council of Europe requested "explicit recognition in the European Human Rights Convention of the right to a genetic inheritance which has not been interfered with, except in accordance with certain principles which are recognised as being fully compatible with respect for human rights". (Macer, 1990). Courts have at the same time recognised a "right" for parents to decide whether a handicapped newborn should undergo treatment, or be left to die, in cases such as the Arthur trial in Britain, or the Baby Doe trial in the USA.

The question of ongoing federal financial support for Native Americans is one which should be explored with regard to the economic arguments so often applied to eugenics (Thompson 1979). Some argue that it is a huge cost for society to look after and medically treat handicapped people. About half the hospital beds in USA are said to be occupied by patients whose incapacities have a genetic origin (Smith 1984). The costs of genetic screening are often compared to the costs of medical support (Chapple et al. 1987). These cost analyses are important at times when health budgets are being stretched (Wexler 1980, Evans & Chapple 1988), but we must be careful that they do not become the first criteria that genetic services are assessed by (Clarke 1990). Given the amount of land, water and mineral resources taken from Native American land, there could be no ethical justification made to limit health care finances to Native Americans, who were promised free health care and free education in return for acceptance of the reservation system and giving up land to white settlers. All genetic screening services should be used in a voluntary way. Prenatal tests must be performed on fully informed women with their informed choice. In newborn screening for diseases that can be treated, for example phenylketonuria (PKU), the practise followed is normally presumed consent, so that unless the parents object, the screening will be conducted. It could be argued that if a relatively common serious condition is treatable the prenatal screening should be performed despite objections of the parents because it is in the best interests of the child. Babies who have PKU can live well if the foods they consume have low levels of the amino acid phenylalanine. If they eat normal levels of phenylalanine a toxic by product will cause mental retardation.

There are some diseases that occur at high frequency in Native Americans, for example, Occulocutaneous albinis (tyrosinase + type) occurs at a frequently of 1:150 in certain American Indians, compared to 1:15,000 Blacks and 1:37,000 Caucasians (OTA, 1986). Depending on the community values, individuals may request genetic screening during prenatal diagnosis. The individual's right to free choice in marriage has sometimes been prevented. There are some cultures which encourage children to seek genetically fit spouses, such as Jewish teaching, or broader social policies based on family approval of marriages, such as in India or Japan. Some societies in Middle Eastern countries may promote more consanguineous marriages which have the opposite effect, a higher incidence of genetic disease. What we can avoid is for a society or governmental social policy to condone eugenic selection. To avoid potential stigmatisation, the results should be only disclosed to those directly involved, or kept confidential via an intermeditory.

# 4.6. The Quality of Life

For all of history people have preferred to have their children free of disease. We are not happy to be sick. With modern medicine many people who

became disabled (or differently abled) through genes, birth, disease and/or accident live much longer than they would have in the past. Some suffer from the effects of their disease, others from the lack of capacity of the community to provide sufficient services, such as air conditioning or accessible spaces. The quality of life needs to be considered as a priority of policy, we should work for developments to improve the biological, social and spiritual quality of life.

One of the first questions a mother asks after she has given birth to a child is "Is my baby all right?" Often the parents of the children with severe disorders know that the child they are to have has a high chance of having the disease, either the child will or won't if it is caused by a single gene defect. Some belief in karma, that a disease is the fault of the parents, is found in most countries. The process of prenatal genetic screening allows a genetic check that the embryo is not inflicted with the diseases that the screening is targeting. If the embryo is afflicted the parents may choose abortion and then try to have another fetus, knowing that if they have enough attempts one fetus will not suffer from the disease, and they will end up with a healthy child (with respect to the trait that they are screening for).

Important from a religious perspective is whether we deny the potential for spiritual relationship between God and human in what are the most diseased forms of human life? If a fetus has a serious genetic impairment, with a consequence of serious mental deficiency, some people might say that the fetus does not, and will not in the future, have a "life" as "normal" humans have a life, it's potentiality is different. Still many believe potential spiritual relationships are present in all human foetuses, and vitalism is a common belief among Native Americans. The quality of human beings, the soul, her essence, her unique individuality, with its associated dignity or reverence means that humans have a sanctity.

It is ironic, but important, to remember that a disease that might seem to make someone "less human", in fact may make others around them more human in the love and care that they give. There is a strong idea that ideal ethical behaviour is keeping with our true humanity, we need to be able to love to be "wholly human" (Schuller 1986). Often much of the suffering we see in others is what we would imagine they feel if they had our sense of what is suffering (Hauerwas 1986). The suffering that is being avoided may be more that of the family than the actual individual. Given the extended family and community structures in Native American communities, similar to many African and Asian communities, there is a lower perception of individualism compared to some White American communities.

We do not need to maintain life at all costs, as this may not be in the patient's best interests or in God's will. One of the early statements on the distinction between extraordinary and ordinary treatment came from the Pope Pius XII (1957); "We are normally held to use only ordinary means, according to the circumstances of the situation, but are not obliged to any grave burden

for oneself or another to life... Life, death, and all temporal activities are subordinate to spiritual ends."

The quality of life changes with time and situation. People have different hopes and ambitions, and the capacity for personal growth from a given state is important. The absolute sanctity of life principle has been criticised by many writers (Kuhse 1987), who have shown how we do not practice such a system but rather make decisions regarding the quality life. These decisions can be made with regard to the patient's best interests, which is not always the prolonging of life. However in the Apache view of life only God can take life, so it is close to a sanctity of life ethic. On the other hand, the high levels of violence on the reservation significantly diminish the quality of life of the victims.

# 4.7. Religious Oppression

European colonization was usually associated with missionary zeal to convert local peoples to follow Christian ideals and religious practices. There are many power relationships explicit in this colonization, and we can say that it was important to dissociate people from a close spiritual relationship with the land in order to separate people from the land, that was wanted by the colonizers. People who were focused on spiritual afterlife more than the present are easier to exploit in the present life. Through the nineteenth and twentieth centuries there were punishments against the practice of native religion, including even in funeral rites. There were some records of traditional myths and practices, for example as published by Goddard (1980).

A dominant European mentality, shared by the colonizers in the Americas, Africa and Asia is one that promoted disconnection from the Earth. There were a few with alternative views, such as Franciscan orders. The idea of Manifest Destiny through the Doctrine of Discovery assists in justifying the continual disrespect of the first peoples of a land. Manifest Destiny is the mentality everything God created is a resource to be used up in the pursuit of progress. This dominant view of progress is expansionist and exploitative. Almost all Americans in the 19<sup>th</sup> century believed it was their Divine right to the land and all its natural resources as they expanded westward across the Americas (Newcomb, 2008).

The American Indian Religious Freedom Act (AIRFA) was signed into law on August 11, 1978 in the United States. The Act was created in an attempt to correct the wrongful treatment of Native Americans and their religious beliefs. Ironically even now many tribal members are still under pressure of forced assimilation and conversion to the Christian way of thinking, even by Christian Native Americans. The issue is still divisive, and even separates families today. The stated goal is, "The Act is intended to guarantee to native peoples – American Indians, Native Alaskans and Native Hawaiians – the right to believe, to express, and to practice their native traditional religions. This is

to be achieved by establishing a comprehensive and consistent Federal policy directed toward protecting and preserving the native religious practices in this country." (Native American Rights Fund, 1979).



Figure 10: The San Carlos Agency building is still a central location in the life of San Carlos Apache nation

The United States government recognized the need for American Indians to have protection of their religion, due to the systematic oppression of previous lawmakers. During this time there were also many different religious groups encroaching on reservations trying to convert the people into different ways of worship (Bighorse, 2016). "In AIRFA, Congress and the president stated plainly that the policy of the United States is to preserve and protect Native American traditional practices and religious freedom. This was necessary in 1978 because Native peoples were still suffering the ill effects of sorry policies of the past intended to ban traditional religions, to neutralize or to eliminate traditional religious leaders, and to force traditional religious practitioners to convert to Christianity, to take up English, and to give up their way of life." (Harjo, 2004)

The American Indian Religious Freedom Act came with stipulations. Even though it is based off of the First Amendment of the United States constitution, as the freedom to exercise one's religion, the use of sacred sites is only to the extent that is feasible and is not for proposals contradictory with any United States government operation. Native American Indian tribes all over the United States are fighting for their inherent rights to exercise their cultural beliefs on their own traditional homelands and the United States government is disrespecting tribes by requesting permits for sacred objects and access to

sacred sites, some of these based on mining, such as Oak Flat sacred site for the Apache community, or the oil pipe line in South Dakota.



Figure 11: Oak Flat is a sacred site for Apache people. This holy shrine is a center of the struggle by Apache Stronghold to stop the loss of land to the mining industry. It is a symbol for the recovery of traditional values in education.

# 5. A Mindfulness Program with San Carlos Apache Tribe Department of Education

## 5.1. A Trial of Mindfulness with Headstart School Teachers

A mindfulness program was conducted with Native American Indian teachers from San Carlos Apache Tribe Headstart program. We sent information about the Mindfulness program to the Executive Director of the Department of Education in San Carlos Apache Tribe. In discussions between the Director of the Department of Education, the Coordinator of the Headstart program, and ourselves from American University of Sovereign Nations (AUSN), we were contracted to provide two one week long intensive training sessions in June and July 2016 to all the Headstart teachers. We conducted these trainings with a few guests who included graduate students of AUSN who work professionally with children.

The general **objective** pursued in this research was to launch a Mindfulness program with pre-school teachers at San Carlos Apache Tribe (Arizona), so that they develop their self-realization (happiness) and that of their students in long term. That teacher teaches their students to improve performance at school, class environment, and self-satisfaction of the students and teachers in short and long term. For this, the **specific objectives** were:

- 1) To see the self-realization and personal development levels of teachers of San Carlos Apache tribe.
- 2) See if those who practice yoga or other techniques of meditation have higher levels of self-realization than the rest who do not practice.
- 3) See possible changes in teacher's self-realization before and after the implementation of the program -comparison between both samples-.
- 4) See if the amount of practice in their personal and professional area improves the results.

We did not find studies of these characteristics with Native American populations, for this reason, it is more than necessary to conduct this project. Our first idea was to analyze other variables such as gender, their professional calling and the fact that they have a problematic life. However in the initial dialogues with them we saw that they were all women without any general problem, and all had a sense of professional calling. The participants were women teachers of all pre-school childhood education courses, between 20 and 45 years old. A total of 20 teachers completed the questionnaire. The selection of subjects for the questionnaire on mindfulness was performed using a criterion of voluntariness. Most were living in San Carlos tribal nation, but a few lived in

larger nearby towns, such as Globe, Arizona. All were Native American, though some of the teachers also belonged to other tribes, besides the San Carlos Apache tribe.

In the initial dialogues with them, we discovered that in general, they live with their family and children, are interested in culture and to read, and a significant percentage of them, do sports regularly. They have studied above the average of their population; the majority had university studies or were currently enrolled. All of them criticize that men do not want to be teachers and that Apache society was a macho society.

The methodology of this research was first qualitative, with the administration of the ".b" program in the beginning (See Chapter 3). It consists of nine sessions where activities are performed to help keep the focus on body sensations in different situations -at breathe, eat, sit, and lie down or walk-. It mean "stop, being and breathe".



Figure 11: Professor Lara López Hernáez leading the Headstart teachers in an exercise during the mindfulness program

All activities are performed in a practical way, some of the most important are: sustaining attention in all bodily sensations eating chocolate, do a sweep of sensations in our body when one is lying (Technical "Beditation"),

focus on the sensations of the feet and back when sitting (Technical "FOTBOC"), count seven while breathing and eleven while expiring (technique "7/11"), or observe body sensations when walking as undead within the class, among others. They are simple awareness exercises to give all students an idea of the importance of mindfulness, so that they can return to this practice later throughout their life (Mindfulness in Schools Project, 2011). According to the results of numerous studies, the practice of Mindfulness in the school can lead to immediate benefits, because at the end of the course, students say they feel generally happier, calmer and more full, they can concentrate better and having more tools to deal with stress and anxiety (Hennelly, 2011; Huppert and Jonshon, 2010 and Weare, 2011).

The second part of the methodology is quantitative; it is based on the technique of standardized statistical survey. The data collection was performed through the questionnaire AURE "Questionnaire Self-concept and realization" - AURE- (Aciego et al. 2005, Domínguez, 2001) which includes 55 items grouped into six factors: Self-Concept, Projects, Attitude towards Work, Friendship and Love, Social Concern and Ego Strength. Each item is measured on a Likert scale, whose answers are between 1 and 5 (representing 1 = strongly agree, and 5 = strongly disagree). The application time is short and the questions are simple, which makes its application be an advantage (See Appendix 1)

The questionnaire meets high standards of reliability; because the coefficient obtained through Cronbach's alpha (.97) and Spearman Brown for unequal halves (.93) prove it. Besides analyzing the factorial structure, it provides an understanding of the contents able to reorganize its into three major factors, such as: 1) Coping, operability and fulfillment in the work: includes aspects of planning, availability and self-control against the task and the norm; 2) Self-concept and self-esteem, which compiles all aspects related to the evaluation of himself, and 3) Empathy and social fulfillment, that refers to the satisfaction in relation to others, concern and communication with others.

The consent form and questionnaire were approved by the Institutional Review Board (IRB) of AUSN. After gaining their consent, we administered the questionnaire to the teachers just before starting the mindfulness program, the same day in the first morning. The program was held in two weeks, during nine sessions or classes, during the period of teacher training, which included ethics, educational psychology and setting goals of education. At the end of the course, we asked the teachers to answer some questions about their learning with the program in a letter addressed to Lara.

For the application of the questionnaire to the sample, we indicated to them the objectives of the investigation and requested the necessary authorizations to access the study sample. To get a correct application of it, the teachers were informed about the rules for completion, the questionnaire characteristics and purpose of the test. The questionnaire was administered individually, during the teachers training hours, thanks to the collaboration of the responsible teachers.

We administered the questionnaire again three months after the program was implemented. The post course questionnaire did not include a question about whether they practice yoga or other practices, as another was introduced: if they have put this technique into practice in their personal and professional life - every day or only some times. The idea is that they can practice the techniques learned at home 10 minutes each day, and that they start it with their students as well. Only 10 teachers started the program in their personal and professional setting; therefore, we only administered the questionnaire back to this 50% of teachers, and they had been advised during the training that the follow-up questionnaire was being sent.

The approach was a mixed type, quantitative and qualitative (observation in the classes and test, AURE (Aciego et al. 2005, Domínguez, 2001) which includes 55 items grouped into six factors: Self-Concept, Projects, Attitude towards Work, Friendship and Love, Social Concern and Ego Strength.

For the statistical processing of the data SPSS was used, version 21 for Windows and it performed a descriptive and correlational analysis of the results obtained from the various dimensions of the questionnaire. Student t test was implemented for comparison of means to demonstrate the existence of significant statistically differences between the scale factors and the variable "Practice of other techniques of personal growth" of the participants, besides the Levéne test to know equality of variances. All analyzes were calculated with a confidence level of 90%.

#### 5.2. Levels of self-realization

After launching the Mindfulness program with pre-school teachers at San Carlos Apache Tribe (Arizona), so that they develop their self-realization (happiness), we wanted to:

- 1) See the self-realization levels of teachers of San Carlos Apache tribe.
- 2) See if those who practice yoga or other techniques of meditation have higher levels of self-realization than the rest who do not practice.
- 3) See possible changes in teacher's self-realization before and after the implementation of the program -comparison between both samples.
- 4) See if the amount of practice in their personal and professional area improves the results.

Regarding the *first specific objective*, the levels of self-realization of teachers from San Carlos Apache tribe, the results are shown in Table 1. The mean scores and standard deviations are reflected, for each of the dimensions of the questionnaire, showing generally favorable levels of self-realization and personal development.

Table 1: Analysis of means (M) and standard deviations (SD) by factors from							
teacher before the mindfulness program ( $n = 20$ ).							
	Dimension	M	SD				
	E C4(EC)	1.50	1.04				

<b>Dimension</b>	M	SD
Ego Strength (ES)	1.59	1.04
Attitude Towards Work (ATW)	1.94	1.07
Friendship and Love (FL)	2.00	1.10
Projects (P)	2.06	0.90
Self-Concept (SC)	2.07	1.05
Social Concern (SC)	2.40	1.09

It is in the "Ego Strength" dimension where the best scores are obtained, which means their availability to the effort, perseverance and persistence on the task, tolerance and patience with the difficulties, self-control and searching for alternatives. Together with their high "Attitude towards Work", concerning their availability, motivation and achievement assessment, such as planning, and precision of action and evaluation of work.

In the middle of the range, is the variable "Friendship and Love", these teachers have good behavior towards others in relation to variables sociability, communication, respect, cooperation and identification; as well as others towards them, while they declare they receive affection, positive assessment, to feel respected and get support and assistance. It is the same with the dimension centered on the potential of enjoyment and the adequacy of "projects" carried out, although it is focus more towards agreement, since scores are placed closest to the middle of the range.

The same with their "Self-Concept", at the level of personal satisfaction, overall personal assessment, physical, intellectual ability, mood, social interaction, confrontation with reality and regulatory adaptation. However, the dimension "Social Concern" with active participation in social problems is valued lowest by the participants.

Regarding with the objective 2) to see if those who practice yoga or other techniques of meditation have higher levels of self-realization than the rest who do not practice, the Anova test in which each of the questions in the questionnaire are crossed with the dependent variable of "other practices of meditation and yoga", all values are greater than 0.05, so there is no significance. Therefore, the meditation and yoga practice does not improve the values of personal self-realization of these teachers.

### 5.3. Changes in self-realization

Regarding with the *specific objective 3*, to see the possible changes in teacher's self-realization before and after the implementation of the program (three months later) -comparison between both samples, the result are shown in Table 2

Table 2: Analysis of means (M) and standard deviations (SD) by factors from
teacher after and before the mindfulness program (n=10 / n=20).

Dimension	After, M (SD)	Before, M (SD)
Self-Concept (SC)*	1.76 (0.90)	2.07 (1.05)
Friendship and Love (FL)*	1.82 (0.95)	2.00 (1.10)
<b>Attitude Towards Work</b>	1.84 (0.91)	1.94 (1.07)
(ATW)*		
Ego Strength (ES)	2.02 (0.93)	1.59 (1.04)
Social Concern (SC)*	2.17 (0.91)	2.40 (1.09)
Projects (P)	2.13 (0.93)	2.06 (0.90)

According to Table 2, we can see the differences between before the course and three months after they put the mindfulness program into practice. There are significant improvements in almost all dimensions of the questionnaire (\*) except two. Teachers participating in the program, report improvements with their "Self-Concept" or personal satisfaction, overall personal assessment, physical, intellectual ability, mood, social interaction, confrontation with reality and regulatory adaptation. The same with the dimension "Social Concern", their active participation in social problems is valued highest now than before the mindfulness program, and with "Friendship and Love", since these teachers have a better behavior towards others now than before, and a better communication, respect, cooperation and identification; as well as other towards them, while they declare receives affection, positive assessment, to feel respected and get support and assistance.

Their high "Attitude towards work", concerning their availability, motivation and achievement assessment, such as planning, and precision of action and evaluation of work has also been slightly improved. No improvements have been found in the dimensions "Ego Strength" and "Projects".

The letters received at the end of the training program, show the following: that they have learned, and that the program will be useful to their personal and professional live. That they want to practice at home every day and they want to continue growing as professionals and individually.

According with *objective 4)*, see if the amount of practice in their personal and professional area improves the results, the Anova test in which each of the questions in the questionnaire are crossed with the dependent variable of "time spent practicing mindfulness in their personal and professional life", all values are greater than 0.05, so there is no significance. Therefore, the amount of time spent practicing mindfulness in their personal and professional life does not improve the values of personal self-realization of these teachers. The fact of having practiced (sometimes) during those three months, has already improved the results.

#### 5.4. The Professional Motivations of the Teachers

The teachers are happy with high levels of self-realization and personal development. They are women with high levels of education for their community, with stable families, within this small community, recognized and respected in the United States of America, with a strong idiosyncrasy.

Their profession is their calling, and some studies showed the relation between the emotional skills and professional choice. University students, who reported higher levels of personal growth, have more capacity for a correct career choice (De León et al., 2008). A greater capacity for professional choice is consistent with the purposes of the degree chosen, related to a good academic performance and a more favorable attitude (García-Garduño, 2010). Pegalajar et al. (2015) show that the choice of educational stage is also determined by the emotional capacity of teachers, future teachers with more favorable levels of self-realization and personal growth, choose pre-school education and they also have a higher vocation.

# 5.5. Achievements of the Mindfulness Program

The mindfulness program has further increased these levels of self-realization, in this sense, after a mindfulness program, parents reported feeling happier, less stressed and more able to manage their child's behavior (Harrison et al., 2004). Results indicate that mindfulness was related in expected directions to indicators of well-being across the domains of traits and attributes, emotional disturbance, emotional wellbeing, and eudaimonic well-being (Lawlor et al. 2012), helping to reduce and prevent depression in adolescents (Raes et al., 2014)

Mindfulness showed significant increases in optimism and self-concept (Schonert-Reichl and Lawlor, 2010), self-regulation, self-compassion, and mindfulness related skills (observation, nonjudgment, and nonreacting) and significant improvements in multiple dimensions of sleep quality were found as well (Frank et al., 2015)

This Mindfulness program has further enhanced their self-esteem, since Mindfulness increases the clarity of feelings and emotions on a personal level, therefore, its development in the schools can be central to student learning and their affective and emotional development (Leon et al, 2009). Mindfulness decreases negative effects and increases feelings of calmness, relaxation, and self-acceptance. Improvements in emotion regulation and decreases in tiredness and aches and pains are significant too (Broderick and Metz, 2009).

Teachers studied have improved also their capacity to love and to establish new friendships. In this sense, a mindfulness-based school program for elementary school children were rated by peers as more prosocial, and increased in peer acceptance or sociometric popularity (Schonert-Reichl et al., 2015). According with Roeser et al. (2012) this practice also promotes teachers capacities to create and sustain both supportive relationships with students and

classroom climates conducive to student engagement and learning. Mindfulness training for teachers was effective in changing teacher-student interactions in desirable ways (Singh et al., 2013).

Moreover, the teachers studied also have a greater social concern, after the mindfulness practice are more empathetic regarding the problems of others, since mindfulness has the potential benefit of improving social skills, reducing test anxiety and the maintenance of calm (Ruiz et al, 2014), demonstrating larger gains in social competence (Flook et al., 2015). The program also decreased state and trait anxiety, enhanced social skills, and improved academic performance (Beauchemin et al., 2008), and similarly, improvements on dimensions of teacher-rated classroom social competent behaviors were found (Schonert-Reichl and Lawlor, 2010)

Teachers have also slightly improved their attitude towards work, with a more positive view of it. Participation in these programs resulted in significant improvements in teachers well- being, efficacy and burnout/time-related stress (Jennings et al., 2013), as well as symptoms of anxiety and depression (Roeser, et al, 2013). According with Burnett (2010) teachers who have participated in these programs, have shown improvement on a professional level, and interacting with students and colleagues. In this sense, Burnett commitment to teacher training as a key element in teaching mindfulness, and the continuity of their own practice.

It is the same with student's participants in mindfulness programs, which showed reduced rates of absenteeism, rule infractions, and suspensions compared to the control group (Barnes et al., 2003). Qualitative acceptability measures revealed that the mindfulness class helped to relieve stress and that students favored continuing the class (Bluth et al., 2015), and may be an effective intervention to reduce off-task behavior and increase academically engaged behavior for behaviorally challenging students (Felver et al., 2014), reductions in psychological symptoms and burnout, improvements in observer-rated classroom organization and performance on a computer task of affective attentional bias (Flook et al., 2013)

The success of these programs lies in its long-term practice so ideally we should increase their duration. Only through continued practice it can reach beyond the states of calm, throwing a more penetrating light on the functioning of our suffering (Burnett, 2010). However, we have not been able to relate Mindfulness practice time with improving their self-realization, something that is taken for granted in other studies. Only the fact that half of the teachers have been implemented it in a timely manner, has already given its results.

#### 5.6. Limitations

There are also limitations in the implementation of the program: the short time, the sample size, and some of the teachers have not participated in all sessions of the program. There has been no follow-up, we have only relied on their word. In this sense, we don't know if there is a continuity or integration of Mindfulness into the regular educational curriculum, and whether this would be possible or necessary.

Mindfulness programs are often an after-school activity, although it is possible to do this in a regular class at school, it may be difficult to find the space, so it is suggested to be an after school activity. It would be ideal to conduct transnational cooperative studies, and we invite readers to contact us in case they are interested to collaborate.

#### 6. Conclusions

### 6.1. Mindfulness Programs and Identity

Human ethical thinking about the relationships between Nature, science, medicine and ethics began long before their written record. We are intrinsically made to be mindful, but modern life has often distracted us from this. The results of the study, and the analysis of the historical features and legacy of colonization, suggest that it is critical that all learners and teachers are given time to be clear who they are.

It is proposed to improve education programs of mindfulness, increasing its duration in time, involving more training of teachers, and to involve the entire community. This suggests a thorough review of the paradigm of education, and in the implementation and reinforcement of the spirits of research. Mindfulness can provide new directions (Rempel, 2012) because so far it has not been easy to measure the practice of mindfulness from an empirical perspective (Burnett, 2010).

It is also proposed to have more teacher training in emotional maturity, integrated into the mandatory content of the curriculum, with the main responsibility to support future students in the development of their personal autonomy (Mejia et al., 2011). To design more programs to promote psychological well-being in university students as a means of improving the quality of teaching and the development of programs to improve their affective-motivational resources for a better self-acceptance and personal fulfillment (Salami, 2010).

The current school and professional panorama requires that the involvement of different educational agents go beyond the mere transmission of academic content, they should be aware that their participation must contribute to the overall development of all (Alvarez and Bisquerra, 2011).

#### **6.2.** Education beyond Colonization

Another fundamental question asked in this book is whether in the colonization of the Apache people, other Native Americans, and indigenous peoples generally, the people were killed because of competition over land, water and resources, or because of perceptions among the white colonizers of racial superiority, or because of ideological differences in religion and spiritual practices? In the same sense, is education that attempts to mainstream all people into one view of what it is to be American (or any other identity), not also colonization?

Given the war ethic that had dominated European ideology over millennia, the violence of colonization is not unexpected. At the same time the pragmatists and business people understood that war was costly, and making a trade system would be to the advantage. In addition at the times of initial colonization, the Europeans were a minority and had to negotiate rather than fight. The reservation system created a dependency upon external food and broke significant parts of the spirit of the indigenous people. This made exploitation easier, and has lasting ramifications in health, education and life choices. Some of these approaches appear to be similar between nations, and vary over time.

There are several drivers of colonization. Economics and exploitation is a common theme, and having a strong local labor force clearly benefited the countries who colonized lands in Asia, such as the five hundred year long colonization of the Indian subcontinent. The Spanish also utilized the labor force in Latin America, and interbred to create a mestizo population.

Health was critical to question, as unlike India, the American populations were disseminated by European diseases, with an estimated 90% decline in populations. As the populations became smaller, military solutions and cultural domination became easier.

Perceived white racial superiority was present throughout the time of colonization, and continues with the dominance of whiteness in education systems today. The eugenics movement emerged in the 1870s, and sterilization measures, dependency and migration measures were applied on the reservations on Native Americans. Those who were dependent on society were also judged to be inferior, but the dependency was created by having the population essentially imprisoned to reservations. The high incarceration rates in modern prisons continue in the 21<sup>st</sup> century to ensure dependency of the community upon government money.

The earliest records of Spanish contact with Apaches in the 16<sup>th</sup> century comment that the Apache were intelligent and physically ideal. This would argue against them being perceived as eugenically "unfit". However, because of the reservation system and loss of land poverty did become an important issue, and many Native Americans fell below the poverty line. This was used in the sterilization programs in the 1970s with shocking agendas and results. Throughout education, eugenics and resource management we also see racial and eugenic overtones.

There have been some common themes throughout the history of eugenics. Some of these explain why eugenics has been, and is, a potentially dangerous activity. We can apply these ideas to modern practice, and may learn from mistakes in past thinking, and from the adverse implications, both direct and indirect, of eugenic policies. The application of genetic technology and screening may well play out with this cultural context, unless bioethical principles and a love of life are not instilled in the young generation. Eugenic

measures often end up with racial or social group overtones, more then breeding from the "best genes". We must have a clear view of human dignity founded in individuals possessing equal value not dependent on their ability or performance of some task.

A holistic definition of health is critical for flourishing. The physical, social and emotional health of the Apache community is poor. Colonization has led to loss of land, loss of control of water, loss of buffalo and traditional food sources, changed eating and living habits, and changed and divided religious identity. Divisions were also created in San Carlos by the presence of families whose ancestors both rejected the U.S. government, and those who fought together with them. Because of economic reasons a number of young Native Americans also join the military today, while another group has significant suspicion of the government, and another group is incarcerated.

## 6.3. Recommendations

- 1) Improved Native language programs so that all school students will be bilingual
- 2) Independent control for educational curriculum and development
- 3) Implement education programs of mindfulness
- 4) Enhance teacher training in emotional maturity
- 5) Bioethics education for empowering citizens to prepare for the policy challenges and implementation of technology which may worsen the stigma, and discrimination, faced by Native Americans
- 6) Return to dependence upon traditional food and medicines as a primary source, supplemented by Western sources when they are better on a case-by-case manner, and integration into holistic education systems
- 7) Lessened dependence on government control and outside sources
- 8) Instil a love of life and pride in all people

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# References

- Aciego, R., Domínguez, R., y Hernández, P. (2005) Consistencia interna y estructura factorial de un cuestionario sobre autorrealización y crecimiento personal. Psicothema, 17 (1), 134-142.
- Alighieri, D. (2012), .The "Divine Comedy". Online: CreateSpace.
- Allen, Garland E. (1989) "Eugenics and American social history, 1880-1950," *Genome* 31: 885-889.
- Álvarez, M. y Bisquerra, R. (2011) Manual de orientación y tutoría. Barcelona: Wolters Kluwer
- Anastasi, A (1982). Psychological testing (5th edition). New York: Macmillan.
- Anderson, Ned. (1981) The teacher-student relationship in Apache Education. Presentation at the Inter-tribal Parent Education Meeting, 30-31 January 1981.
- Archuleta, John. (1990) Discursive Analysis of Tiwa (Peubo) text and the ethicl question of "ownership" of research. *Redink* Fall 1990. p.7
- Aristotle (1952) Nicomachean ethics. London: Heinemann.
- Austoker, Joan (1985) "Eugenics and the Registrar General," *British J. Medicine* 291: 407-408.
- Baer, R.A. (2003) Mindfulness training as a clinical intervention. A conceptual and empirical review. Clinical Psychology: Science and Practice. 10 (2), 125-43.
- Bajema, Carl J. (1976) Ed., *Eugenics, Then and Now,* Benchmark Papers in Genetics, Vol. 5 (Stroudsberg: Dowden, Hutchinson & Ross Ltd 1976).
- Barnes, V. A., Bauza, L. B., & Treiber, F. A. (2003). Impact of stress reduction on negative school behavior in adolescents. Health and Quality of Life Outcomes, 1(10)
- Beauchemin, J., Hutchins, T. L., & Patterson, F. (2008). Mindfulness meditation may lessen anxiety, promote social skills, and improve academic performance among adolescents with learning disabilities. Complementary Health Practice Review, 13, 34–45.
- Berkely, G. (1972) A Treatise Concerning the Principles of Human Knowledge. Menston: Scolar Press.
- Beckwith, J. & King, J. (1974) "The XYY syndrome: a dangerous myth," *New Scientist* (14th Nov.), 474-476.
- Bethencourt, J.T y Cabrera, L. (2011). Personality and career decision making in undergraduates. Revista Electrónica de Investigación y Evaluación Educativa, 17(1), 1-15.
- Bighorse, Lian. (2016) *The Holy Fight Defending Oak Flat.* Masters in Bioethics and Global Public Health thesis, American University of Sovereign Nations.

- Bishop, S.R. Lau, M., Shapiro, S., Carlson, L., Anderson, N.D. & Carmody J. (2004) Mindfulness: A proposed operational definition. Clinical Psychology-Science and practice, 11 (3), 230-41
- Bisquerra, R. (2007). La educación emocional en la formación del profesorado. Revista Interuniversitaria de Formación del Profesorado, 54, 95-114.
- Bisquerra, R. (2009). Psicopedagogía de las emociones. Madrid: Síntesis.
- Blum, Kenneth et al. (1990) "Allelic association of human dopamine D2 Receptor gene in alcoholism," *J. American Medical Association* 263: 2055-2060.
- Bluth, K., Campo, R. A., Pruteanu-Malinici, S., Reams, A., Mullarkey, M., & Broderick, P. C. (2015). A school-based mindfulness pilot study for ethnically diverse at-risk adolescents. Mindfulness. Advance online publication. doi: 10.1007/s12671-014-0376-1
  Brackett, M.A. y Caruso, D.R. (2007). Emotionally Literacy for Educators. Chatham, NC: SEL-media.
- Broderick, P. C., & Metz, S. (2009). Learning to BREATHE: A pilot trial of a mindfulness curriculum for adolescents. Advances in School Mental Health Promotion, 2(1), 35-46
- Bruinius, Harry. (2013) Better for All the World. The Secret History of Forced Sterilization and America's Quest for Racial Purity (New York: Alfred A. Knoff. 2006). Hansen, Randall and Kind, Desmond (2013). Eugenics, Race, and the Population Scare in Twentieth Century North America (Cambridge University Press 2013).
- Brun, J (1978). Socrate (sixth edition). Presses universitaires de France. pp. 39–40. ISBN 2-13-035620-6.
- Bueno, C., Teruel, M.P. y Valero, A. (2005). La inteligencia emocional en alumnos de Magisterio: la percepción y comprensión de los sentimientos y las emociones. Revista Interuniversitaria del Profesorado, 54, 169-194.
- Burke, C.A. (2009) Mindfulness-based approaches with children and adolescents: a preliminary review of current research in an emergent field, Journal of Child and Family Studies. Recuperado de http://www.springerlink.com/content/e1638088141n327m/
- Burnett, R. (2010) Mindfulness in Schools, learning lessons from the adults secular and Buddhist. Retrieved 3 January 2010 from http://mindfulnessinschools.org/research/ma
- Burnett, R., Cullen, C., & O'Neill, C. (2011) .b, Mindfulness in Schools Project, retrieved 10 March 2011 from http://mindfulnessinschools.org/
- Cabanach, R.G., Valle, A., Rodríguez, S., Piñeiro, I. y González, P. (2010). Las creencias motivacionales como factor protector del estrés en estudiantes universitarios. European Journal of Education and Psychology, 3(1), 75-87.
- Carlson, Elof Axel (1981) *Genes, Radiation, and Society. The Life and Work of H. J. Muller* (London: Cornell University Press 1981).

- Cerezo, F. y Méndez, I. (2012) Conductas de riesgo social y de salud en adolescentes. Propuesta de intervención contextualizada para un caso de bullying. Anales de psicología, 28 (3), 705-719.
- Chambers, R., Chuen, Y., Lo, B., & Allen, N.B. (2008) The impact of intensive mindfulness training on attentional control, cognitive style, and affect. Cognitive Therapy and Research, 32, 303-322.
- Chapple, J.C., Dale, R. & Evans B.G. (1987) "The new genetics:will it pay its way?" *Lancet* i. 1189-1192.
- Clark et al. (2006). Ética para el nuevo milenio de S: S Dalai Lama (guía de estudio). Buenos Aires: Amazón. Disponible en http://www.dalailamafoundation.org. [Consultado el día 24 de abril del 2012].
- Cook, Samuel, R. (2004) What is "Self-Determination", Redink 3: 19-21.
- Crossley-Holland, O. (2013) Could Beditation be the answer to exam nerves? "Mindfulness" is the latest big thing in schools. What is it and why is it so popular? The Guardian. Recuperado de http://www.guardian.co.uk/education/2013/mar/04/mindfulness-based-stress-reduction-meditation#ixzz2UhyeV4AP
- Cumston, Charles Greene (1926) An Introduction to the History of Medicine from the Pharoahs to the XVIIIth Century (London), p. 24.
- Darwin, Charles. *The Descent of Man and Selection in Relation to Sex* (London: 1871).
- Descartes, R. (1993) Meditations on First Philosophy. Routledge: London
- Domínguez, R. (2001). Intervención para la realización personal y social: validación de un instrumento de diagnóstico y evaluación del cambio. Tesis doctoral. Universidad de La Laguna.
- Downriggin, Ian Robert. Keeping America Sane. Psychiatry and Eugenics in the United States and Canada, 1880-1940. Ithaca: Cornell University Press 2000.
- Dumbleton, Duane D. & Rice, Marion J. (1973) *Education for American Indians: A Book of Readings*. Anthropology Curriculum Project, University of Georgia. Fen 1973,
- Dunstan, G.R. (1988) "Screening for fetal and genetic abnormality: social and ethical issues," *J. of Medical Genetics* 25: 290-293.
- England, Charles, R. (1994) "A look at the Indian Health Service policy of sterilization, 1972-1976", *Redink* 3 (Spring 1994), 17-21.
- Evans, Debra. Without Moral Limits. Women, Reproduction and the New Medical Technology (Westchester, II.: Crossway 1989).
- Extremera, N. y Fernández-Berrocal, P. (2004). El papel de la inteligencia emocional en el alumnado: evidencias empíricas. Revista Electrónica de Investigación Educativa, 6(2), 1-17.
- Extremera, N., Durán, A. y Rey, L. (2007). Recursos personales, síndrome de estar quemado por el trabajo y sintomatología asociada al estrés en

- docentes de enseñanza primaria y secundaria. Ansiedad y estrés, 16(1), 47-60.
- Felver, J. C., Frank, J. L., & McEachern, A. D. (2014). Effectiveness, acceptability, and feasibility of the Soles of the Feet mindfulness-based intervention with elementary school students. Mindfulness, 5(5), 589-597
- Flook, L., Goldberg, S. B., Pinger, L., & Davidson, R. J. (2015). Promoting prosocial behavior and self-regulatory skills in preschool children through a mindfulness-based kindness curriculum. Developmental Psychology, 51(1), 44-51.
- Flook, L., Goldberg, S. B., Pinger, L., Bonus, K., & Davidson, R. J. (2013). Mindfulness for teachers: A pilot study to assess effects on stress, burnout, and teaching efficacy. Mind, Brian, and Education, 7(3), 182-195.
- Franco, C, Mañas, I., Cangas, A.J, Moreno, E & Gallego, J (2010) Reducing Teachers' Psychological Distress through a Mindfulness Training Program. The Spanish journal of psychology.13 (2), 655-666.
- Franco, C; De la Fuente, M. y Salvador, S. (2011). Impacto de un programa de entrenamiento en conciencia plena (mindfulness) en las medidas del crecimiento y la autorealización personal. Psicothema, 23 (1), pp. 58-65.
- Franco, C; Mañas, I; Cangas, A.J & Gallego J. (2010) Knowledge Management, Information Systems, E-Learning, and Sustainability Research. Communications in Computer and Information Science, 111, 83-97.
- Frank, J. L., Reibel, D., Broderick, P., Cantrell, T., & Metz, S. (2015). The effectiveness of mindfulness-based stress reduction on educator stress and well-being: Results from a pilot study. Mindfulness, 6(2), 208-216.
- Freeden, Michael (1979) "Eugenics and progressive thought: A study in ideological affinity," *History J.* 22: 645-671.
- Gallego, D.J. y Gallego, M.J. (2004). Educar la inteligencia emocional en el aula. Madrid: PPC.
- Gallego, J, Franco, C., Mañas, I., Cangas, A. (2010). The applications of mindfulness with students of secondary school: Results on the academic performance, self-concept and anxiety. En M. D. Lytras, P. Ordonez, A. Ziderman, A. Roulstone, H. Maurer y J. B. Imber (Eds), Knowledge Management, Information Systems, E-Learning, and Sustainability Research (pp. 83-97). Atenas: Springer Berlin Heidelberg.
- Galton, Francis. Hereditary Genius (London: 1869).
- Galton, Francis (1883) *Inquiries into Human Faculty and its' Development,* 2nd ed. (London: Dent, reprinted 1951).
- Garaigordobil, M. y Aliri, J. (2013) Ciberacoso ("Ciberbullying") en el País Vasco: diferencias de sexo en víctimas, agresores y observadores. Behavioral Psychology / Psicología Conductual, 21(3), 461-474
- García Garduño, J. M. y Organista, J. (2006). Motivación y expectativa para ingresar a la carrera de profesor de educación primaria: un estudio de tres generaciones de estudiantes normalistas mexicanos de primer ingreso.

- Revista Electrónica de Investigación Educativa, 8 (2). Recuperado de http://redie.uabc.mx/vol8no2/contenido-garduno.html
- García-Garduño, J.M. (2010). Los determinantes de la elección vocacional de una semiprofesión. Un estudio de estudiantes de primer ingreso a la carrera de profesor de educación primaria. Revista Latinoamericana de Estudios Educativos, 15(1), 95-110.
- Gaviria, E. y López, Sáez, M. (2013). Diferencias sexuales en los celos: el papel de la evolución y de la identidad de género. En M. López-Sáez, E. Gaviria, A. Bustillos y s. Fernández, Cuaderno de investigación en Psicología Social, 2, 19-34.
- Goddard, Pliny Earle. (1919) "Myths and tales from the San Carlos Apache", *American Museum of Natural History* Vol XXIV, Part 1. 90 pp.
- Goenka, S.N (1987) The art of living. Pariyatti: Washington
- Goldstein J & Kornfield J. (1987) Seeking the heart of wisdom. Boston: Shambhala Publications.
- González, J.A., Núñez, J.C., Álvarez, L., González, S., Roces, C., González, P., Muñiz, R. y Bernardo, A. (2002). Inducción parental a la autorregulación, autoconcepto y rendimiento académico. Psicothema, 14(2), 853-860.
- González-Caldei, M. (2013) La idea de pedagogía budista como contradicción esencial y la aplicación de los Cuatro Inconmensurables del Dharma de Buddha a la educación infantil occidental. Revista latinoamericana de educación infantil; 2(3), 57-70.
- Gordis, Enoch et al. (1990) "Finding the gene(s) for alcoholism," *J. American Medical Association* 2094-2095.
- Greenberg, M. T., & Harris, A. R. (2012). Nurturing mindfulness in children and youth: Current state of research. Child Development Perspectives, 6(2), 161-166.
- Gunaratana, B. H. (2012) El libro de Mindfulness. Barcelona: Kairos.
- Gustems, J., & Calderon, C. (2014). Character strengths and psychological wellbeing among students of teacher education. International Journal of Educational Psychology, 3(3), 265-286. Doi: 10.4471/ijep.2014.14
- Haller, Mark H. Eugenics: Hereditarian Attitudes in American Thought (London: New Brunswick 1963).
- Harnett, P.S. & Dawe, S. (2012) Review: The contribution of mindfulness-based therapies for children and families and proposed conceptual integration. Child and Adolescent Mental Health. Reuperado de http://mindfulnesswithoutborders.org/wp-content/uploads/2013/03/Harnett\_Review-of-Mindfulness-Interventions\_2011.pdf
- Harrison, L. J., Manocha, R., & Rubia, K. (2004). Sahaja yoga meditation as a family treatment programme for children with attention deficit-hyperactivity disorder. Clinical Child Psychology and Psychiatry, 9, 479–497

- Hauerwas, Stanley (1986) Suffering Presence (Edinburgh: T. & T. Clark 1988).
- Hennelly, S (2011). Thesis submitted in part-fulfillment of the regulations for the degree of Master of Research in Psychology. Oxford Brookes University
- Holtzman, Neil A. (1988) "Recombinant DNA technology, genetic tests, and public policy," *American J. of Human Genetics* 42: 624-632.
- Homer (1995) Odyssey, 2 vols., revised by George E. Dimock, Loeb Classical Library, Harvard University Press: London
- Homer (1999): Iliad, 2 vols. revised by William F. Wyatt, Loeb Classical Library, Harvard University Press: London
- Hoxie, Frederick E. 1984. A Final Promise: The Campaign to Assimilate the Indians, 1880-1920. Lincoln: University of Nebraska Press.
- Hué, C. (2008). Bienestar docente y pensamiento emocional. Madrid: Wolters Kluwer.
- Huppert, F.A. and Johnson, D.M. (2010). A controlled trial of mindfulness training In schools; the importance of practice for an impact on well-being. The Journal of Positive Psychology, 5(4), 264-274.
- Huxley, Julian. (1932) The Education of Primitive Peoples. Progressive Education IX (2): 122-130.
- Huxley, Julian S. (1936) "Eugenic and society," Eugenics Review 28(1): 11-31.
- Jakobovits, Immanuel. *Jewish Medical Ethics*, 2nd edition (New York: Bloch Publishers 1975).
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. Review of Educational Research, 79, 491–525.
- Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2013). Improving classroom learning environments by cultivating awareness and resilience in education (CARE): Results of a randomized controlled trial. School Psychology Quarterly. Advance online publication. doi: 10.1037/spq0000035
- Jennings, P. A., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2011). Improving classroom learning environments by Cultivating Awareness and Resilience in Education (CARE): Results of two pilot studies. Journal of Classroom Interactions, 46, 27-48.
- Jha, A.P., Krompinger, J., & Baime, M.J. (2007) Mindfulness training modifies subsystems of attention. Cognitive Affective and Behavioural Neuroscience, 7, 109-119
- Joseph, D.L. y Newman, D.A. (2010). Emotional Intelligence: An Integrative Metaanalysis and Cascading Model. Journal of Applied Psychology, 95(1), 54-78.
- Joyce, A., Etty-Leal, J., Zazryn, T., Hamilton, A., y Hassed, C. (2010) Exploring a mindfulness meditation program on the mental health of upper

- primary children: A pilot study. Advances in School Mental Health Promotion, 3, 17–17.
- Jeffery, A. (2001) The Koran. Dover Publications: Mineola, N.Y.
- Kabat-Zinn J. (2005). Mindfulness-based interventions in context: Past, present, and future. Clin Psychol-Sci Pr. 2003;10 (2):144-56.
- Kant (1981) Criticism of pure reason. Hackett Publishin company: Cambridge Kevles, D. J. *In the Name of Eugenics* (New York: Knopf 1985).
- Kluchin, Rebecca M. *Fit to Be Tied: Sterilization and Reproductive Rights in America*, 1950-1980. New Brunswick: Rutgers University Press, 2009. Available on https://muse.jhu.edu/book/6080
- Kuhse, Helga & Singer, Peter (1982) "The moral status of the embryo," in *Test-tube Babies: a Guide to Moral Questions, Present Techniques and Future Possibilities*, Eds. W. Walters & P. Singer (Oxford: Oxford University Press 1982).
- Kuyken, W., Watkins, E., Holden, E., White, K., Taylor, R.S., Byford, S., Evans, A., Radford, S., Teasdale, J.D., and Dalgleish, T. (2013) How does mindfulness-based cognitive therapy work? Behavioural Research and Therapy, 48(11), 1105-1112.
- Lawlor, M. S., Schonert-Reichl, K. A., Gadermann, A. M., & Zumbo, B. D. (2012). A Validation Study of the Mindful Attention Awareness Scale Adapted for Children. Mindfulness, 1-12.
- Leguizamon, G. (2014). La construcción de saberes pedagógicos en la formación del profesorado. REICE. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 12(1), 35-54.
- Leibniz, G.W. (1710) Ensayos de Teodicea sobre la bondad de Dios, la libertad del hombre y el origen del mal (2 vols), Escuela filosofía Universidad de Arcís, Buenos aires.
- León, B, Martín, E. Otero, C., Felipe E y García A. (2009) Atención plena e inteligencia emocional. International Journal of Developmental and Educational Psychology, 1, 271-278.
- Letterie, Gerard S. & Fox, William F. (1990) "Legal aspects of involuntary sterilization," *Fertility and Sterility* 53: 391-398.
- Livia, G. y García, L. (2015). Estudio de las competencias socio-emocionales y su relación con el afrontamiento en futuros profesores de nivel medio. REIFOP. Revista Electrónica Interuniversitaria de Formación del Profesorado, 18(1), 213-228.
- Locke, J. (1797), Educación de los niños. Madrid: Imprenta de Manuel Alvarez. Locke, John (1975) An Essay Concerning Human Understanding, ed. by Peter H. Nidditch, Oxford University Press.
- Lombardo, Paul A. (2011), Ed., A Century of Eugenics in America: From the Indiana Experiment to the Human Genome Era

- López-Goñi, I. y Goñi, J.M. (2012). La competencia emocional en los currículos de formación inicial de los docentes. Un estudio comparativo. Revista de Educación, 357, 205-206.
- López-Hernáez, L (2013) Las manifestaciones del acoso escolar ¿Cómo acosan los alumnos y alumnas? Revista Iberoamericana de Educación; Revista nº 62 (1), 1-13.
- López-Hernáez, L y Ovejero, M.M (2014). Habilidades comunicativas dentro de la familia: medida imprescindible contra el acoso escolar en La Rioja: Revista de estudios de Educación (ESE). En prensa, aprobada su publicación.
- López-Hernáez, L y Ramírez, A (2013). El acoso escolar en La Rioja. Necesidad de formación para reducir su incidencia. Berceo. Monográfico de educación. 165, pp. 183 202.
- López-Hernáez, L y Ramírez, A (2014) Medidas disciplinarias en los centros educativos ¿suficientes contra el acoso escolar? Revista Perfiles Educativos. 145, pp. 32 64.
- López-Hernáez, L. (2015). Técnicas Mindfulness. Su puesta en práctica en centros educativos. Revista española de Orientación y Psicopedagogía, 26 (2).
- Ludmerer, Kenneth M. (1978) "History of Eugenics," pp. 457-462 in *Encyclopedia of Bioethics*, Vol. I Ed. W. T. Reich (New York: Collier. Macmillan 1978).
- Macer, D.R.J. (1990), Shaping Genes. (Christchurch, N.Z.: Eubios Ethics Institute 1990).
- Macer, D.R.J. (1998), Bioethics is the Love of Life. (Christchurch, N.Z.: Eubios Ethics Institute 1998).
- Marchesi, A. y Díaz, T. (2007). Las emociones del profesorado. Cuadernos de la Fundación SM, 5, 9-45.
- Mejía, A., Pastrana, J. J. y Mejía, J. M. (2011). La autoestima, factor fundamental para el desarrollo de la autonomía personal y profesional. Congreso internacional de Teoría de la Educación. Universidad de Barcelona, 20-22 octubre.
- Mendías, A. M., y Camacho, S. (2004). Motivos que impulsan a los alumnos a estudiar magisterio. El caso de la Universidad de Granada. Revista de Educación de la Universidad de Granada, 17, 91-107.
- Mindfulness in Schools Project. (2011) What is .b? http://www.mindfulnessinschools.org
- Mojerón (2010). Género, Autoeficacia y Proyección Profesional: La transición Universidad Mundo Laboral. Bilbao: RGM, S.A.
- Money, J. (1988). Gay, straight, and in-between: The sexology of erotic orientation. New York: Oxford University Press.
- Monzón, A.S. (2004). La diversidad es riqueza: las relaciones de género en sociedades pluriculturales. Fundación Guatemala.

- Neighbours, Kenneth F., 1975, An Ethnohistorical Report, together with supporting exhibits relating to the cause of action in the Lipan Apache tribe, the Mescalero Apache tribe et al. v. United States, Docket No, 22-C, before the Indian Claims Commission. In Apache Indians.
- Nelkin, D.A. & Tancred, L. Dangerous Diagnostics: The Social Power of Biological Information (New York: Basic Books 1989).
- Newcomb, Steven. (2008) Pagans in the Promised Land: Decoding the Doctrine of Christian Discovery. Golden, CO: Fulcrum Publishing.
- Nietzsche, F.W. (1972) Thus Spoke Zarathustra. Baltimore: Penguin Books.
- OTA (1986) U.S. Congress, Office of Technology Assessment, *Technologies* for Detecting Heritable Mutations in Human Beings (Washington D.C.: U.S.G.P.O., Sept. 1986, OTA-H-298).
- Opler, Morris Edward. (1941) An Apache Life-way: The Economic, Social, and Religious Institutions of the Apache. University of Chicago Press.
- Ortega, R. (2008). Malos tratos entre escolares. De la investigación a la intervención. Madrid: Secretaría General Técnica (CIDE).
- Pegalajar-Palomino M.C. y López-Hernáez, L. (2015). Emotional skills in early childhood education teachers. REICE, 13 (3), 45-56.
- Pena, M., Rey, L., y Extremera, N. (2012). Bienestar personal y laboral en el profesorado de Infantil y Primaria: Diferencias en función de su inteligencia emocional y del género. Revista de Psicodidáctica, 17 (2), 341-360.
- Peñalva, A., López, J.J. y Landa, N. (2013). Competencias emocionales del alumnado de Magisterio. Posibles implicaciones profesionales. Revista de Educación, 362, 67-89.
- Pertegal, M.L., Castejón, J.L. y Martínez, M.A. (2009). Competencias socioemocionales en el desarrollo profesional del Maestro. Educación XXI, 14(2), 237-260.
- Petchesky, Rosalind P. (1979) "Reproduction, ethics, and public policy: the federal sterilisation regulations," *Hastings Center Report* 9(5): 29-41.
- Philp, K., ed. Indian Self-Rule
- Plato (I) *Timaeus* pg 19 in "Plato Timaeus and Critias," translated by Desmond Lee (Harmondsworth: Penguin 1971).
- Plato (IV) *The Republic* Book IV, 457B-466B (Abolition of the family for the guardians), translated by Francis M. Cornford, "The Republic of Plato," (London: Oxford University Press 1941).
- Plato (2003). Diálogos. Volumen III: Fedón. Banquete. Fedro. Madrid: Gredos. Plato (2003). Diálogos. Volumen IV: República. Madrid: Gredos.
- Plutarco (1927) Essay about the virtuosity, Moralia. Athens: Frank Cole Babbitt Pollard, I. and Zintgraff, A. *Bioscience Ethics Education Curriculum for Pre-Schoolers to Elementary Age Children*. Christchurch, N.Z.: Eubios Ethics Institute 2017.
- Pope Pius XI (1970) Casti Connubbi Dec. 31st, 1930 (Vatican).

- Presidents' Commission for the study of ethical problems in Medicine, and Biomedical and Behavioural Research (1983) *Screening and Counseling for Genetic Conditions: the ethical, social and legal implications of genetic screening, counseling and education programs* (Washington D.C.: U.S.G.P.O. 1983).
- Raes, F., Griffith, J. W., Van der Gucht, K., & Williams, J. M. G. (2014). School-based prevention and reduction of depression in adolescents: A cluster-randomized controlled trial of a mindfulness group program. Mindfulness, 5(5), 477-486.
- Ramírez, M.S. y De la Herrán, A. (2012). La madurez personal en el desarrollo profesional del docente. REICE. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 10 (3), 25-44.
- Razza, R. A., Bergen-Cico, D., & Raymond, K. (2013). Enhancing preschoolers' self-regulation via mindful yoga. Journal of Child and Family Studies, 1062-1024.
- Reina-Valera (1960): the Bible. Swindon, England: United Bible Societies
- Rempel, K. (2012) Mindfulness for Children and Youth: A Review of the Literature with an Argument for School-Based. Implementation Canadian Journal of Counsellingand Psychotherapy, 46 (3), 201–220.
- Ricard, M (2012). El secreto de la felicidad. II Congreso Internacional de la Felicidad, Madrid; 9 y 10 de abril del 2012.
- Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R., Oberle, E., Thomson, K., Taylor, C., & Harrison, J. (2013). Mindfulness Training and Reductions in Teacher Stress and Burnout: Results From Two Randomized, Waitlist-Control Field Trials. Journal of Educational Psychology. Advance online publication. doi: 10.1037/a0032093
- Roeser, R.W., Skinner, E., Beers, J., & Jennings, P.A. (2012). Mindfulness training and teachers' professional development: An emerging area of research and practice. Child Development Perspectives, 6, 167-173.
- Rosa-Alcázar, A; Parada-Navas, J y Rosa-Alcázar, A (2014) Síntomas psicopatológicos en adolescentes españoles: relación con los estilos parentales percibidos y la autoestima, Anales de psicología, 30 (1), 133-142.
- Ruiz P.J, Rodríguez T., Martínez A. y, Núñez, E. (214) Mindfulness en Pediatría: el proyecto "Creciendo con atención y consciencia plena". Revista de Pediatría en Atención Primaria. 16, 169-79.
- Ryan, W. Carson & Brandt, Rose K. (1932) "Indian Education Today". Progressive Education IX (2): 93-94.
- Sabater-Fernández, C., López-Hernáez, L. (2015). Factores de Riesgo en el Ciberbullying. Frecuencia y Exposición de los Datos Personales en Internet. International Journal of Sociology of Education, 4(1), 1-25. doi: 10.4471/rise.2015.01

- Salami, S. O. (2011). Psychosocial predictors of adjustment among first year college of education students. US-China Education Review, 8(2), 239–248.
- Salmon, P., Sephton, S., Weissbecke, I, Hoover, K., Ulmer, C. & Studts, J. I. (2004) 'Mindfulness meditation in clinical practice'. Cognitive and Behavioural Practice'. 11, 434-46.
- Saltzman, A. & Goldin, P. (2008) Mindfulness based stress reduction for school-age children. In S. C. Hayes & L. A. Greco (Eds.), Acceptance and mindfulness interventions for children adolescents and families (pp. 139–161). Oakland, CA: Context Press/New Harbinger.
- Sanger, Margaret. The Pivot of Civilisation (London 1923).
- Schonert-Reichl, K. A., & Lawlor, M. S. (2010). The effects of a mindfulness-based education program on pre- and early adolescents' well-being and social and emotional competence. Mindfulness, 1(3), 137-151
- Schonert-Reichl, K. A., Oberle, E., Lawlor, M. S., Abbott, D., Thomson, K., Oberlander, T. F., & Diamond, A. (2015). Enhancing cognitive and social—emotional development through a simple-to-administer mindfulness-based school program for elementary school children: A randomized controlled trial. Developmental Psychology, 51(1), 52-66
- Schopenhauer, A (2008) The World as Will and Presentation, trans. Richard E. Aquila in collaboration with David Carus. New York: Longman,
- Searle, G. R. Eugenics and Politics in Britain 1900-1914 (Leyden: Noordhoff 1976).
- Segal, Z.V, Williams J.M.G & Teasdale, J.D. (2002) Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse. Guilford Press: New York.
- Semple, R., Lee, J., Dinelia, R. & Miller, L. (2010) A Randomized Trial of Mindfulness-Based Cognitive Therapy for Children: Promoting Mindful Attention to Enhance Social-Emotional Resiliency in Children. Journal of Child and Family Studies, 19 (2), 218-229.
- Siegel, D (2012). Minfulness y psicoterapia. Barcelona: Paidós.
- Simón, V. (2011) Mindfulness. Barcelona: Sello editorial.
- Singh, N. N., Lancioni, G. E., Winton, A. S., Karazsia, B. T., & Singh, J. (2013). Mindfulness training for teachers changes the behavior of their preschool students. Research in Human Development, 10(3), 211-233.
- Smith, George P. II (1984) "Eugenics and family planning: exploring the Yin and the Yang," *University of Tasmania Law Review* 8: 4-24.
- Sofocles, (1998) Tragedias: Áyax, Las Traquinias, Antígona, Edipo rey, Electra, Filoctetes, Edipo en Colono, Trad. y notas de A. Alamillo Sanz. Intr. de J. S. Lasso de la Vega. Rev.: C. García Gual. Gredos: Madrid
- Soriano, E. y Osorio, M.M. (2008). Competencias socioemocionales del alumnado "autóctono" e inmigrante de Educación Secundaria. Bordón, 60(1), 129-148.

- Spizoza (2006) The Short Treatise on God, Man and his Well-being, London: University of Toronto.
- Subirats, M. (1997). Notas para la búsqueda de una metodología de cambio desde los estereotipos de género, en Goikoetxea, J. Y García, J., Ensayos de pedagogía crítica (pp. 11-28). Madrid: Popular.
- Sutton, E.S. y Wheatley, K.F. (2003) "Teacher'emotions and teaching: a review of the literature and directions for future research". Educational Psychology Review, 15(4), 327-358.
- Swarupananda, S. (1989) Bhagavad Gita. Waukesha, WI: Vedanta
- Swisher, Karen Gayton, (2004) "Pursuing their potential: TCUs turn from being researchers to being researchers." *Tribal College Journal* 16: 8-9.
- Thich Nhat Hanh, L. (2007) El milagro de mindfulness. Barcelona: Oniro.
- Torpy, Sally J. (2000). "Native American Women and Coerced Sterilization: On the Trail of Tears in the 1970s", *American Indian Culture and Research Journal* 24(2), 5.
- UNESCO (1950) "Statement on Race," pp 98-103 in *The Race Concept: Results of an Inquiry* (Greenwood Press 1970).
- Vaello, J. (2009). El profesor emocionalmente competente. Barcelona: Graó.
- Valadez, M.D., Pérez, L. y Beltrán, J. (2010). La inteligencia emocional de los adolescentes talentosos. Faisca, 15(17), 2-17.
- Van der Oord, S., Bogels, S. M., & Peijnenburg, D. (2012). The effectiveness of mindfulness training for children with ADHD and mindful parenting for their parents. Journal of Child and Family Studies, 21(1), 139-147.
- Victor Hugo, (1862); Les Miserables. (1987 edition) Penguin Group: USA.
- Weare, K (2012). Mental health promotion and problem prevention in schools: what does the evidence say? Health Promot Int.; 26:I29-I69.
- White, Patricia. (1978) "Forced Sterilization amongst American Indian women", *J. Indigenous Studies* 1 (2): 91-96.
- Williams, M. y Penman, D. (2010) Mindfulness: encontrando la paz en un frenético mundo. Barcelona: Kairós
- Wing-Tsit, (1969) A Source Book in Chinese Philosophy. Greenwood Publishing Group: Connecticut, United States
- Zeidan, F., Johnson, S.K., Diamond, B.J., David, Z., & Goolkasian, P. (2010) Mindfulness meditation improves cognition: evidence of brief mental training. Conscious Cognition, 19(2), 597-605.
- Zimmerli, Walthur Ch. (1990) "Who has the right to know the genetic constitution of a particular person?" pp. 93-110 in *Human Genetic Information: Science, Law and Ethics*, Ciba Foundation Symposium 149 (Amsterdam: Elsevier North Holland 1990).
- Zuazua, A. (2001) Autorrealización y proyecto de vida en la juventud. Tesis doctoral. Universidad del País Vasco, Bilbao.

## Appendix 1: Questionnaire

## SURVEY ABOUT ME AND PERSONAL GROWTH

1. Gender:	male	female	
2. Teacher is my calling:	yes	no 🗌	
3. I practice some yoga and meditation technic	ques: yes	no	
4. In general, I'm a happy person:	yes	no 🗌	

Thank you to join this survey; we are trying to improve school education. Your privacy will be preserved.

Please insert an X in the box that you consider most appropriate for your ideas considering the following scale: 1-STRONGLY AGREE, 2- SOMEWHAT AGREE,

## 3- INDIFFERENT, 4-, SOMEWHAT DISAGREE, 5- STRONGLY DISAGREE

QUESTION	1	2	3	4	5
1. I feel satisfied and comfortable with myself					
2. I want to be as I am, as I am now.					
3. I am a person with many qualities.					
4. I am generally very capable.					
5. I am lucky, everything goes well for me.					
6. I'm handsome / beautiful.					
7. I'm a physically strong person.					
8. I am a healthy person, in a good health.					
9. I'm smart.					
10. I am cheerful, fun					
11. I have good humor and mood					
12. I am friendly, funny					

13. I am kind to others			
14. I am brave			
15. I am determined			
16. I am obedient.			
17. I am disciplined			
18. I am hardworking			
19. I feel loved and wanted by others.			
20. I feel valued and taken into account by others.			
21. I believe that others generally respect me and treat me well.			
22. I believe that others often do favors for me and help me			
23. I like to meet and share my time with other people.			
24. I usually talk to my family and friends about my problems,			
interests or difficulties.			1
25. I am usually interested in knowing the problems and illusions of my			
family or friends.			1
26. I do not like making fun of people, or to "tease" anyone.			
27. I usually collaborate and help my friends with any problem or task.			
28. I feel very happy when things go well for a relative or friend			
29. When I'm with my best friend I usually worry to know and consider			
what he or she feels like.			1
30. I feel a special affection and love for certain people.			
31. I am concerned and I often think about problems that exist around me			
and in the world in general.			
32. I usually talk to my family and / or friends of the problems that happen			
around me and in the world in general.			
33. I think I can help solve the problems of others.			
34. I usually perform activities to help solve the problems that occur			
	<u> </u>		

around me.			
35. I'm usually entertained and lively with anything I do.			
36. I usually interested in the world, people, things in general, and it entertains me			
37. I usually enjoy watching and thinking about my future.			
38. I usually have fun imagining things I could do.			
39. My ideas and projects are realistic and easy to perform.			
40. I have ideas or projects that I usually put into practice.			
41. I usually entertain and enjoy more acting than thinking about ideas or projects.			
42. I usually have a good availability and interest in performing any work or labor.			
43. Facing a new task or job I often think that I'll be able to do it and I act with confidence.			
44. I prefer tasks that involve new challenges and difficulties.			
45. I strive to carry out what I propose even if I have difficulties.			
46. If I propose something and it remains only a small part to get it, I make a great effort to achieve it.			
47 I tend to be consistent and persistent at work, homework or study that I start.			
48. I tend to be tolerant and patient against the difficulties I encounter.			
49 When something goes wrong, I calm down and look for new solutions.			
50. I control myself: when someone puts difficulties or drawbacks me, I usually react calmly and amicably.			
51. Before starting any work or task I like to make very clear what I will do and how I will do it.			
52 Before starting a job or study, I usually have ordered the materials that I will use and have them on hand.			

53. During work or study, I usually check and clarify what they do not understand and correct what I'm doing wrong.			
54. I am orderly and careful with things			
55. I usually stop to review the work done to see the possible failures and achieve the highest perfection.			

Many thanks

## Letter from the teachers

Dear Lara;		
Write a letter to me,		

- 1- What have I learn? What mindfulness practices would be useful for me? Personal level
- 2- What mindfulness practices would be useful for my kids? Professional level; can I adapt some of this techniques to my kids?
- 3- According with the situation in my life right now, can I practice at home?
- 4- What advise/advises do I want to remember in the future?

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