Abstract: Universal consciousness, also known as empathic consciousness, or the 21st century enlightenment is the awareness that one is connected to, and shares an essential commonality with, all life and energies. This awareness is the foundation for a new educational paradigm for the 21st century. Universal consciousness unleashes untapped human potentialities. It opens opportunities for solutions to persistent global problems, and brings individual and communal fulfillment. From diverse backgrounds and perspectives, panel members describe their perspectives on what is universal consciousness, and how it works for them in their work. Topics include: “Learning Experiences That Raise Universal Consciousness;” (Roy Tamashiro); “Life as an Everyday Work of Art” (Annette Hormann); "Education ‘R’ Us: Collaborative Thinking and Collective Action to Reinvent Education" (Manuel Muro); and "Education in the Second Wave of Outer Space Development" (Edythe Weeks).

1. Introduction

Today, like no other time in history, we feel and experience our interconnectedness and interdependence with everyone and everything on the planet. Economic globalization and instant global communications show us this connectedness every day. We sense our shared roots. In spite of the vast diversity among us, we can identify with and have compassion for others’ vulnerability and suffering as well as their joys. We are moved to understanding and supporting
one another in solidarity despite individual and cultural differences in thinking, beliefs, and convictions. Universal consciousness unites human and planetary systems (including education) into a synergistic, life-affirming force for a positive future.

In their papers, panel members describe their understanding of universal consciousness, also known as empathic consciousness and the 21st century enlightenment. They summarize what is universal consciousness and how it works for them from their individual professional perspectives. They explain how this awareness is shaping their lives and directing their work. The authors themselves come from diverse backgrounds and disciplines.

2. Roy Tamashiro -- Learning Experiences That Raise Universal Consciousness

To raise awareness for universal consciousness may be the most important aim for education in the 21st century. This is because universal consciousness unleashes untapped human potentialities for extraordinary cognition, creative capacity, deepened compassion, empathy, and spiritual awareness. It releases energies that lead to solutions to persistent global problems, and brings individual and communal fulfillment. Let me start with three stories of students who reflect on their learning experiences:

Several years ago, I led a class on Humanitarianism and Internationalism to Geneva, Switzerland. We visited several international organizations there, including the World Trade Organization (WTO). Terry was a 27-year old International Studies major in search of a professional direction. In reflecting on course, he wrote how impressed and proud he felt that the young public relations officer leading the seminar at WTO was a recent Webster University graduate in his major, International Relations. “This gave me new confidence and a real hope,” he wrote, “that I too could land a job with an international agency overseas.” He reported that this insight led him to be more motivated and committed to his studies in his field. Terry found the thread of connectivity between himself and a world of professionals in international organizations.

The second example involves Sandra, a senior finishing an elementary education major. She participated on an international study tour class which visited primary, elementary and secondary schools in China. Sandra eloquently described the epiphany she had about the Chinese teachers, American teachers and herself:

“… I learned that the teachers in China are concerned about the very same things that American teachers are: discipline in the classroom, motivating the kids to be interested in the topic; and whether I reached everyone in today’s lesson. In spite of the outward differences in language and culture, we are pretty much the same inside.”

Patty was a storyboard editor in a video-production class that researched and developed a three-minute introductory piece for a university-sponsored video conference between representatives of the Harry S. Truman Presidential Library and Museum, and the Hiroshima Peace Memorial Museum about “the future of nuclear weapons.” During the video conference, the Director of the Hiroshima Museum told the American students he was moved by the student video, and requested permission to use it for their nuclear disarmament advocacy work. After the video conference event, Patty reflected, with tears in her eyes, “It is so amazing. It is
unbelievable. They want to show our video all over Japan!” Patty was not expecting to feel seen and connected to people halfway around the world through the video she worked on.

**Universal consciousness** is the awareness that one is connected to, and shares an essential commonality with, all life and energies. This awareness of commonality extends across differences in blood and family ties, ethnicity, cultures, religions, languages, ideologies, nationalities, geography, and even species differences. We feel connected to others in the distant past -- our ancestors, as well as those whom we know in the present. Universal consciousness is associated with the empathic response: one identifies with the emotions of others, feels compassion toward them, and is motivated to aid them in distress or commune in their joy. Simply stated, universal consciousness echoes the spiritualists’ mantra, “We are all connected; we are not alone; and we are all one.” (Chopra, 2004; Midnight Sea Society, 2011)

Universal consciousness may also be described as the psychologist Carl Jung’s *collective unconscious* having risen to a level of recognition, awareness, or understanding.

“... in addition to our immediate consciousness, which is of a thoroughly personal nature ..., there exists a second psychic system of a collective, universal, and impersonal nature which is identical in all individuals.” (Jung, 1996, p. 43)

Universal consciousness can also be defined as the omniscient knowledge often described in near-death experience research. This omniscience is largely lost to ordinary consciousness once individuals are born into the material world into physical bodies. The omniscient knowledge refers to the awareness of:

"... the experiences of all who had lived. The experiences existed as separate items yet belonged to the whole. The whole was the collective knowledge of all. I understood there was no individual, just one, yet each experience was individual making up the whole. ... In this case "one" is … Many being one and one being many, both existing simultaneously in the same time and space. I further understood that the collective experiences are omniscient knowledge. Everything that has been spoken, heard, and experienced." (Atwater, 2001)

When we witness the globalization of the planet in this 21st century, we realize that this consciousness and empathic sensitivity can now extend across the planet and the biosphere. We grasp the connectedness and commonality of the entire human race, the biosphere itself, and all of life on Earth (and beyond Earth). Social media and mobile communications technologies support the sense that everyone is connected to everyone else. (Rifkin, 2010)

Whether the world’s human and planetary crises can be solved in time may well depend on whether the human family develops this universal consciousness. Today’s difficult local and global problems – from natural disasters, to persistent droughts and chronic famines, to environmental degradation, to human rights abuses and exploitation, to economic crashes and political upheavals – can seem too complex to understand, impossible, and hopeless to solve.
However, universal consciousness spawns creativity, openness to new possibilities, the desire to collaborate and work with others, motivation and belief in the solvability of the problems. We can go beyond the limits of our current knowledge and abilities. People and organizations that have this awareness are passionately committed to seeking solutions. They are motivated and confident, without being arrogant or self-certain. They have visionary awareness. They discover greater cognitive abilities in themselves. They have greater affective, aesthetic, intuitive, creative and even ethical sensitivities. They see consciousness itself expanding for themselves and for others.

The terms “empathic consciousness” and “universal consciousness” are seldom used in the discourse of educational goals. Yet, visionary educators do include analogous terms, or the elements contained in universal consciousness when they discuss educational missions, goals, and learning outcomes. These terms include: “21st century education competencies or skills,” (Partnership for 21st Century Skills, 2011) and “global awareness or citizenship.”

Universities such as Drake, Southern Oregon University, Chapman University, University of British Columbia (Canada), University of Nottingham Ningbo (China), and our own Webster University use the term “global citizenship” in their mission statements:

“Webster University, a worldwide institution, ensures high quality learning experiences that transform students for global citizenship and individual excellence.” (Webster University, 2011)

"Empathy for all humanity" is the mission statement for Bunkyo University (Japan). Emory University's mission is "to create, preserve, teach, and apply knowledge in the service of humanity." (Emory University, 2011)

By including the correlates of universal consciousness in their mission, goals and learning outcomes, schools and universities are declaring that they can and do provide the learning experiences that lead to universal consciousness.

Transformational learning theory provides the framework for understanding how students (learners) gain deep insights associated with consciousness raising. "Transformative learning is the expansion of consciousness through the transformation of basic worldview and specific capacities of the self." (Elias, 1997 p. 3)

What learning activities can expand consciousness and transform learners? The list includes examples like learning a new language through immersion; traveling to a new country where you don’t know the language or the culture; or doing service learning or community action projects. Most documented learning activities involve a problem or task that is challenging, intense, complex, or a novel to the learner. They may involve team projects (like a joint presentation, research report, or video production) requiring cooperation, collaboration and an open end objective. A stimulating class discussion or debate in which students question their own beliefs or attitudes can be transformative.

There are actually many routes to transformative learning and universal consciousness. Being here right now reading and thinking about this topic can put some of us on that plane.
Even a quiet or solitary experience like sitting on the beach, watching the windsurfers and seagulls can put us in touch with the planetary beauty and the energies we share. Universal consciousness is an awareness that can be accessed through the range of experiences that is as varied as our own individual differences that make each of us unique.

References:


3. Annette Hormann -- Life as an Everyday Work of Art

Looking at everyday life as a work of art is perhaps my way to explain universal consciousness. We are all regularly engaged in the process of making art. Creating something -- the most beautiful or interesting possible -- is engaging in the artistic process: Choosing the right clothes for the day; dressing the dinner table with candles, flowers and special tableware for a birthday; taking a different route to go to work.

By seeing life as a permanent possibility of creating art, we become aware of how rich life could be if we are committed to creating life in every moment.

Creating life as a work of art may seem too difficult or an unnecessary luxury. But it might be very gratifying and inspiring for less abundant people as well. For example, we all know moments or periods of life, when we feel poor, exhausted, disenchanted, depressed and afraid -- poverty is not always so much material as it is a matter of consciousness.

Even though my profession is doing artwork, the daily practice of art is more valuable because of its transformative nature. It is possible for an artist to be very creative and create amazing work and still be disconnected, unloving and egocentric.

The world around us is showing how disconnectedness, egocentrism, fear and hate are destroying our planet and the people living on it. The sense of disconnectedness is birthed out of a fearful approach to life, which sounds approximately like this: “Me against the rest of the world... I must affirm myself... I must be better than others, maybe even destroying others to be safe. Less others, less danger.”

Very unfortunately the grain of disconnection is planted in us from infancy when circumstances make the baby feel afraid. This happens when the small person is left alone, disconnected from love. Then she starts to affirm herself through screaming. Later she might affirm herself against her siblings and then against other kids in kindergarten and so on. This small person constantly has to prove something and to be better than another or as good as the expectations of parents and other adults.

At a later stage a person having suffered like this might come to a point when she thinks: “Stop! My life has to change! I have to change!” She starts looking at things differently and trying a different approach. As children, and later as adults, we try to make sense of occurrences we did not understand.

Fear and disconnection are not the truth but an understandable misconception. The world of fear inhibits us to a smaller or larger degree, eating up our possibilities of living a life in joy. It makes us self-centered and defensive or aggressive. It excludes us from love. It makes us sick and bitter and isolated.

But life does not have to be like that and we can start right now in this very moment to change something. Just look around - What do you see? What is catching your eye? What catches your eye is probably not what catches the eye of your neighbor. Tomorrow at the same
time in the same place something else will catch your eye -- maybe you will want to explore this further. Maybe you are inspired by a color combination of some flowers in the garden that you would like to see as cushions on your sofa at home. Or you might see a person's shoes that you find amazing, funny, or outrageous.

It is a great thing to do when feeling tired or a little depressed. Putting the attention outside and watching a movie, walking like the person in front of you, putting yourself in the shoes of another while sharing a subway trip, looking out for colors, shades, lights, words - anything.

Last summer I went to the south of Spain to infuse myself into the sun because the weather in Belgium was just depressingly grey and cold. This year I would have to spend these holidays alone and this was OK. In a corner of my heart I felt vulnerable and insecure like a child in a new environment who had been told "just go outside and play with the other kids, make yourself some friends!" As a child I felt frightened in these circumstances, not knowing how to ask whether the unknown children would like to play with me.

Spain was supposed to be a holiday and I didn’t feel like indulging in my child traumas. So I decided to practice the everyday work of art with my photo-camera and the smallest moleskin notebook I could find. Putting my attention outwards mostly all the time while in Seville, I saw beauty all over the place. I felt moved to a point that almost overwhelmed me; tears coming up when beauty became unfathomable. I took hundreds of pictures, some of them on my blog Si la Vie était une Oeuvre d’Art ~ Quelques photos, quelques idées, peut-être autre chose encore (Hormann, 2011). It was my heart having opened to experience this beauty: The love that had been put into a building, the color of a facade, the fountains in a garden or the image of a palm tree growing straight.

More challenging were the moments spent alone in cafés and restaurants. But I had my notebooks. I could do the same thing with my notebooks as I did with the camera: taking pictures, this time in writing, of what I saw, or pictures of what I felt: "Diary - Momentary." Some momentaries are exposed on the blog as well.

Another small secret I want to reveal is the “love switch”. This is the idea that love can be turned on instantly. About 25 years ago, I was studying fashion design and had an exercise to make for the next day. The exercise consisted of a gradient color collage of torn out pieces of paper from magazines. It should be a collage of the color of my choice from light to dark. “What an awfully childish thing to do! Boring and stupid!” I felt furiously bored, almost not able to do the thing at all. Then I heard a voice: “Love it!” I was thinking “How can I love it when I hate it. One cannot command love like that.” Strangely, the whole experience was bad enough to actually try loving this exercise. And even stranger, the moment, I felt: “OK, I try;” I felt something opening in my heart and everything changed. I could now actually see the small pieces of paper and the different shades of blue color and feel some passion about this large variety of blues. My concentration got focused and I felt myself enter into some sort of sacred space. The exercise was done in no time and I knew that this had been some sort of epiphany. The next day my teacher congratulated me for my work and I was not at all astonished. It was the work of love.
This is an experiment that can be done all the time and with the most down to earth jobs: dishwashing or bed making, floor swiping or lawn mowing. I don’t know about standing in a traffic jam - more creativity might be asked here. This is the challenge and joy of turning everyday experiences into a creative act.

When practicing looking outwards and being an everyday artist, we might be aware of the inner critic. This inner critic can be very strong. He wants to find fault wherever he can -- sometimes we are the object of his criticism, sometimes it is the world around us. He also knows very well how to make things better. He is a very frustrated fellow. Talking about critics, art critics for example often seem to be frustrated artists. They don’t dare to create. They have been cutting themselves off creating, for whatever reason, mostly fear, and instead are very good in criticizing, sometimes with disastrous effect on the sensitive artist they are judging.

The inner critic is like a frustrated artist or other kind of creative creator. This frustrated artist desires to create beautiful interiors or would love to be in fashion. He could be a better architect, a doctor, a writer, a politician or a better parent. Actually he would love to create life completely new. Truth is, there is a creator in us who could create life completely new.

Letting the inner critic be by saying “Thank you for inspiring me with some new ideas - and actually I would love to have some new ideas next time when sitting at my desk not knowing what to write.” This is training him to become a valuable collaborator. (Of course, my inner critic still tries to talk me out of creating and often succeeds.)

With the earth’s population soon reaching seven billion people, the diversity of experiences existing inside and outside of us opens infinite potential for creating the future. We know that no one of those seven billion will ever be the same as another. Even within ourselves we are never the same but changing constantly. The diversity of thoughts and experiences for each individual every day multiplied by seven billion is mind blowing. We see that there is an infinite potential in this world. With this vision, we can now step into our creator shoes.

Every day, we can choose to affirm life or not, to feel open or closed, to accept or reject our own unique experiences. If we choose to affirm life, we can make the choice to do the things with love, to create beauty around us, to look upon the world with compassion, to value creativity and to make steps into the direction of a life we could love. This everyday work of art is the way I have found to access universal consciousness. It is one of many paths. This practice can be much more complex than what I have just exposed. Over time the everyday practice of art can transform lives, create happier, more joyful people, compassion and a feeling of connectedness. We can feel more empowered and really step into our true shoes which seem to be much too big right now: the shoes of an artist/creator of life.

References:


4. Manuel Muro -- Education ‘R’ Us: Collaborative Thinking and Collective Action to Reinvent Education

As a passionate electrical engineer and technologist, for the last four years, I have taught elementary school students how to build electrical circuits. I teach them that an engineer is someone who applies their knowledge to solve real-world problems: The knowledge traditionally resides in the realms of math and science, but it is by no means limited to those realms.

The information and knowledge base in my profession changes at a pace that overwhelms most in the profession. This rapid change, and sense of instability causes many of my colleagues to “specialize” in niche areas at great risk of their professional career path. Those who continue to specialize, and even over specialize, lose their sharpness in identifying problems and their creativity in finding solutions.

When I saw many of my fellow engineers lacking (or losing) critical and creative thinking abilities, or missing a true understanding of the origins of the knowledge they applied daily, I became concerned and quickly took a strong interest in education in general. I started to read and reflect about my own educational process. Once this began, it became an on-going process that has never ended.

Given the rate of technological changes and the collective links that we are now forming the world over with our fellow human beings, how can we expect our educators to prepare our children for such an uncertain and ever-changing future? Since the needed knowledge is not known yet, how can the next generation get properly educated without all of us getting directly involved in the educational process? It was through these realizations that I felt a connection to a universal consciousness. I was an individual person, but yet a part of a larger whole. I was
excited about sharing this epiphany with others, especially with those who also had this similar awareness.

Collaboration has always been the answer, but has not always been embraced or adopted. For example, in my youth, computers were just being introduced to the schools and since there were no computer science teachers, or teachers who even knew how to use them or how to program them, the computers were “tossed” to the math teachers, as that was the closest “related” subject to computers. They were told to teach the students how to use these things. Of course, as expected, it was not a pretty sight nor a great experience for many students. Some students developed computer phobia and ended up not ever wanting to have anything to do with computers later on in life.

The 21st century education will be strongly defined by how we use computers, in its many forms, in the educational process and educational systems in much the same way that pen and paper have been used for carrying out the charge of educating the youth in the past centuries. This is really a natural and necessary evolution of both technology and education with the real challenge being the how. Given the real and perceived complexities of technologies, educators and technologists must work together to find solutions to educating the next generation in this uncertain and ever-changing environment (Khan Academy, 2011; Moodle, 2011).

Examples of new technologies that educators might consider to help prepare students for an uncertain and changing future include: (1) 3-D Printers; (2) Tablet Computers; (3) Video Conferencing; and (4) E-Books and E-Publishing.

(1) The 3-D printers allow students to bring the “virtual” world into the real world by taking designs that they build in the computer, or get designs from others, and produce in the real world using materials like plastics or even chocolate to create 3-D structures.

(2) Tablet computers are simply the next best form of the computer that solves many of the problems with computer accessibility, especially in other languages since “keyboards” can easily be adapted to accommodate the special symbols of non-English languages.

(3) Video conferencing in the classrooms enables the “pen pals” of the past to take on whole new experience, but it also enables the instructors to bring technology experts to the classroom where location or other reason(s) do not make an in-person presence practical.

(4) E-Books and E-Publishing have redefined the notion of a “book” for the 21st century in much the same way when illustrations were added to the printed word. E-Books enable learners to go text only communication by engaging their auditory and motor skills with audio and animation tracks and interactive options that were simply not practical in the past.

One of my instructors told me that he did not take computers seriously in the past because he thought they were a passing fad. It is very unlikely that the four technologies listed above will be just fads. Worse than not taking something seriously because they are perceived as fads, is to become attached to obsolete ways of thinking or living. Such is the current educational goal to
prepare students for obsolete, industrial age “assembly line” type working or living environments. The clinical psychologist Bruce E. Levine (2001) relates the following anecdote:

I once consulted with a teacher of an extremely bright eight-year-old boy labeled with oppositional defiant disorder. I suggested that perhaps the boy didn't have a disease, but was just bored. His teacher, a pleasant woman, agreed with me. However, she added, "They told us … that our job is to get them ready for the work world…that the children have to get used to not being stimulated all the time or they will lose their jobs in the real world." (Levine, 2001, p. 74)

We do children a disservice preparing them for the obsolete, boring, assembly-line type world which is anachronistic to the current Information Age. With three young kids of my own (6, 7 & 9 years old), I see the need to engage our children in authentic, real-world learning experiences, which help prepare them for an uncertain and ever-changing world.

In conclusion, I must confess that I have just a little glimpse into this awareness we call universal consciousness. This little glimpse has awakened me to see myself and my fellow engineering technologists in a new light: I see the importance of looking deeply into the origins of the knowledge we use in our work. By doing this we come to identify the problems we face more clearly, and we find new insights and new creativity for solving these problems. The works of John Taylor Gatto (2000), and more recently, that of Sir Ken Robinson (2010) have inspired me to rediscover my own educational origins. With this, I have a profound understand that educating our children is a job that is not just for educators. That task is too big, too complex, and too important for just parents or educators. Universal consciousness teaches us that we are all in this together and that we are all part of the education equation that is critical for ensuring the survival of humanity and the planet itself. It is a responsibility we all share as global citizens living on and in our one and only home planet.

References:


In these times of crashing economies, job loss, high unemployment and school system failures, we search for ways to create a more positive future for ourselves and our families. This paper proposes that outer space could prove to be a way for many to find answers to this search. The first wave of outer space development changed the world. This wave included establishing a satellite telecommunications infrastructure in the geostationary orbit. It also resulted in the globalization of new high tech products and services. For example, widespread global use of cell phones, the Internet, social networks, and wireless financial transactions all appear to have happened overnight. Telecommunications technologies coming from the space programs have revolutionized how we communicate. However, wider social inequality gaps also appeared during this time.

The second wave of outer space development began with the legalization of private spaceship travel, the plan to retire the NASA space shuttle fleet, and the preparation of companies to take on space transport from Low Earth Orbit to Earth, space transportation systems and space exploration missions to Near Earth objects (i.e. asteroids), Mars, the moons of Mars and our Moon. The Obama Administration’s recent decisions to cancel NASA’s Constellation Program and to set new space policy initiatives, gave a “green light” for emerging industries, such as space travel, space tourism, spaceport development, commercial space mining and space habitats. These new industries are likely to drive the global economy for decades. They are likely to have even greater impact than did first wave industries like aerospace and telecommunications.

Even with the NASA Space Shuttle program now closed, companies are speeding up private spaceship development. The NASA Authorization Act of 2010 allocates 58.4 billion dollars for space related business ventures. These ventures include plans to build advanced space transportation systems, privatize spacecraft development, commercial space habitats, space stations and space settlements, commercial space mining, spacecraft trajectory optimization for landing on near Earth asteroids, commercial spaceport construction, interstellar-interplanetary-international telecommunications and space exploration missions to near Earth asteroids, the Moon, Mars and Mars’ two moons – Phobos and Deimos. Space mining projects are boosted by discoveries of platinum group metals such as iridium and osmium, and various other valuable untapped natural resources.

The US initiatives have been mirrored in the international community. For example, The Global Exploration Strategy involves 14 space agencies (Australia, Canada, China, Europe-ESA, France, Germany, India, Italy, Japan, Russia, South Korea, United Kingdom, United States of America, and Ukraine) joint venturing to accomplish missions, lunar architecture and other space goals. The Global Alliance for Outer Space Development will enable citizens worldwide to reeducate themselves to prepare for new career paths. The Alliance will provide educational programs, knowledge building services and products, workforce development and retraining resources for people of all ages and walks of life. The second wave of outer space development will involve industries that make possible new life support systems, telecommunications, transportation, and back up habitats.
The new industries open opportunities for education (disciplines, areas of study), professional growth, and ultimately new jobs and new careers. In the first wave, outer space development was limited to studies and professions in the sciences, technologies, business and policy making. The second wave industries will involve those fields as well, but will require skill sets from the social sciences, humanities, languages, and the arts, and perhaps more importantly, individuals trained in interdisciplinary and integrative research across multiple disciplines and languages. Space tourism, space hotels and space settlements, for example, require skill sets in the social sciences (psychology, anthropology and sociology). Earth-based social services -- restaurants, cafes, health clinics, hair dressers, communications systems -- would require re-invention, redesign and re-engineering to service civilian travelers in outer space. New human sustainability models will require testing and validation of their appropriateness in outer space. As knowledge coalitions plan, design, construct and test human habitats, life support systems, transportation vehicles and communications devices, ingredients for new knowledge products will emerge.

Most important, this knowledge can be disseminated universally to people throughout the planet. This opens the door for global equality of opportunity, universal access to resources, quality education and justice for all. Not surprisingly this outcome is consistent with the Outer Space Treaty requirement that outer space be used to benefit all humankind.

This second wave of outer space development will impact educational institutions worldwide (pre-K - 12 and universities). First, it means that space studies and outer space development needs to be included across the curriculum and across all levels. For many years space studies have remained the exclusive purview of engineers, scientists and technology experts. It is important to approach the topic using interdisciplinary and integrative approaches. Disciplines that were excluded in the first wave, especially the social and behavioral sciences, play a significant role in enabling young students -- the future global citizens -- to feel involved and empowered to contribute to the new enterprise. This educational approach will enable more people to develop the new diverse skill sets required for the emerging outer space development industries.

The proposed curriculum focuses on developing intellectual talent for K-12 learners, workforce members needing to be retrained, academics seeking to reinvent themselves, and university students. In this curriculum, students of all ages conduct research, locate and compile data, write and perform critical analytical analysis, and apply results to novel situations. Outer space development curriculum open creativity channels for children and adolescents.

Outer space development curriculum can enable students to develop new dimensions of thought and tap into their creativity to solve problems related to survival and prosperity. These skills are necessary employment skills for the international knowledge networks in the second wave of outer space development. Moreover it develops a generation of people, in all walks of life, to engage in the variety of issues facing global citizens of the 21st century. Such a curriculum is part of the process to develop universal consciousness, empathy, life-saving imagination and innovation, genius and the ability to tap into the 90 per cent of the brain which is seldom used.
Outer space curriculum in the second wave recognizes the diversity of experiences and strengths of individuals while providing equity and equal access to quality education. The complex enterprise of the second wave requires the involvement and inclusion of people from diverse backgrounds, cultures, professions and disciplines. Organizing school curricula for second wave outer space development can close inequity gaps, and knowledge/achievement gaps.

We can imagine a movement involving people being retrained for new job opportunities. This vision enables us to view outer space development as a means for solving the inequality gap problem that many scholars, activists and academics have complained about. Outer space development can serve as an incentive for world peace and equality.

Research Resources:

Spaceships
http://www.youtube.com/watch?v=aMJJe6o4ukY
http://www.youtube.com/watch?v=XBlifr6EOtU
http://www.youtube.com/watch?v=b5N1sNSYBKr
http://www.youtube.com/watch?v=atwBhIHRZ0U

Plan B Narratives
http://www.youtube.com/watch?v=90TWPypMj0I
http://www.youtube.com/watch?v=ZPaadZzPGUk
http://www.youtube.com/watch?v=YPjXxKpM4DM
http://www.youtube.com/watch?v=Bk4XN3KtOCg
http://www.youtube.com/watch?v=ADFeSFkgwUI

Space Mining
http://www.youtube.com/watch?v=wYaP2ZE6LvY
http://www.youtube.com/watch?v=AMOijvbKcd0
http://www.youtube.com/watch?v=fl77vflgIMk
http://www.youtube.com/watch?v=qKoQUrKeNuQ

Space Tourism
http://www.youtube.com/watch?v=NObAsTP9T6U
http://www.youtube.com/watch?v=5C4PlbJYtng

Space Habitats
http://www.youtube.com/watch?v=QqsHK2vxyzo
http://www.youtube.com/watch?v=Ai6_8GK-R0I

New Missions
http://www.youtube.com/watch?v=aQ1Z-xtkdLAN
http://www.youtube.com/watch?v=h6vn6liodH8
http://www.youtube.com/watch?v=-5IviadEChM
http://www.youtube.com/watch?v=QZP3H6Dz6TU
http://www.youtube.com/watch?v=SJYY5Hwasj0
http://www.youtube.com/watch?v=U3sPy0Uv8zY
http://www.youtube.com/watch?v=LHnY8acG0Zw
http://www.youtube.com/watch?v=Ow3eWrUx8bY
http://www.youtube.com/watch?v=ZmnON45Yh6Q


Menon, V.K. (2010) “Education Industry was the Lone Bright Star in the Year Gone By”, The Economic Times. (January 3).


