

राष्ट्राय स्वाहा इदं न मम् ।

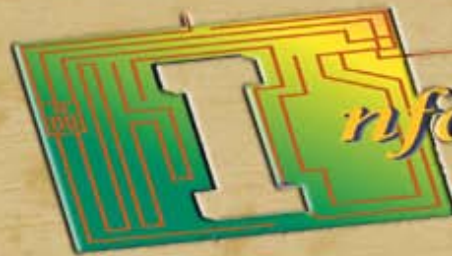


V.V.P. Engineering College

E - Bulletin



Shree Pravinbhai R. Maniar
Chairman



**Information
Technology
Department**

Shree Lalithbhai Mehta
Managing Trustee

Shree Chandrakantbhai Pavagadhi
Trustee

Shree Kaushikbhai Shukla
Trustee

Dr. Sachinbhai Parikh
Principal

H. O. D. : A. R. VASANT

**Committee
Member : K. B. VORA**

3D Printing

Prof. Avani Vasant
H.O.D.
I.T. Dept.
V.V.P. Engg. College,
Rajkot



Additive manufacturing or 3D printing is a process of making three dimensional solid objects from a digital model. 3D printing is achieved using *additive processes*, where an object is created by laying down successive layers of material. 3D printing is considered distinct from traditional machining techniques (*subtractive processes*) which mostly rely on the removal of material by methods such as cutting and drilling.

3D printing is usually performed by a materials printer using digital technology. Since the start of the twenty-first century there has been a large

growth in the sales of these machines, and their price has dropped substantially.

The technology is used in jewellery, footwear, industrial design, architecture, engineering and construction (AEC), automotive, aerospace, dental and medical industries, education, geographic information systems, civil engineering, and many other fields.

History

Early examples of 3D printing occurred in the 1980s, though the printers then were large, expensive and highly limited in what they could produce.

- SLA was developed and patented by Dr. Carl Deckard at the University of Texas at Austin in the mid-1980s, under sponsorship of DARPA. A similar process was patented without being commercialized by R. F. Householder in 1979.
- The term "3D printing" was coined at MIT in 1995 when then graduate students Jim Bredt and Tim Anderson modified an inkjet printer to extrude a binding solution onto a bed of powder, rather than ink onto paper. The ensuing patent led to the creation of modern 3D printing companies Z Corporation (founded by Bredt and Anderson) and ExOne.
- Stereolithography was patented in 1987 by Chuck Hull.
- fused deposition modelling was developed by S. Scott Crump in the late 1980s and was commercialized in 1990.

Terminology

The term *additive manufacturing* describes technologies which can be used anywhere throughout the product life cycle from pre-production (i.e. *rapid prototyping*) to full scale production (also known as *rapid manufacturing*) and even for tooling applications or post production customisation.

In manufacturing, and most especially of machining, subtractive methods have often come first. In fact, the term *subtractive manufacturing* is a retronym developed in recent years to distinguish traditional methods from the newer additive manufacturing techniques. Although fabrication has included methods that are essentially "additive" for centuries (such as joining plates, sheets, forgings, and rolled work via riveting, screwing, forge welding, or newer kinds of welding), it did not include the information technology component of model-based definition; and the province of machining (generating exact shapes with high precision) was generally subtractive, from filing and turning through milling and grinding.

Source: "http://en.wikipedia.org/wiki/3D_printing"

One Success Principle: How to get from Where you are to Where you want to be – Take 100% Responsibility for your Life.

Darshana Patel
Asst. Prof.
I.T. Dept.
V.V.P. Engg. College,
Rajkot

Life is like a combination lock; your job is to find the right numbers, in the right order, so you can have anything you want. You must take personal responsibility. You cannot change the circumstances, the seasons, or the wind, but you can change yourself.

One of the most pervasive myths in the American culture today is that we are entitled to a great life—that somehow, somewhere, someone (certainly not us) is responsible for filling our lives with continual happiness, exciting career options, nurturing family time, and blissful personal relationships simply because we exist. But the real truth—is that there is only one person responsible for the quality of the life you live. That person is you.

If you want to be successful, you have to take 100% responsibility for everything that you experience in your life. This includes the level of your achievements, the results you produce, the quality of your relationships, the state of your health and physical fitness, your income, your debts, your feelings—everything! This is not easy.

In fact, most of us have been conditioned to blame something outside of ourselves for the parts of our life we don't like. We blame our parents, our bosses, our friends, the media, our co-workers, our clients, our spouse, the weather, the economy, our astrological chart, our lack of money—anyone or anything we can pin the blame on. We never want to look at where the real problem is—ourselves.

There is a wonderful story told about a man who is out walking one night and comes upon another man down on his knees looking for something under a streetlamp. The passerby inquires as to what the other man is looking for. He answers that he is looking for his lost key. The passerby offers to help and gets down on his knees and helps him search for the key. After an hour of fruitless searching, he says, “We've looked everywhere for it and we haven't found it. Are you sure that you lost it here?”

The other man replies, “No, I lost it in my house, but there is more light out here under the streetlamp.”

It is time to stop looking outside yourself for the answers to why you haven't created the life and results you want, for it is you who creates the quality of the life you lead and the results you produce.

You—no one else! To achieve major success in life—to achieve those things that are most important to you—you must assume 100% responsibility for your life. Nothing less will do. Thus, **EVERYTHING YOU EXPERIENCE TODAY IS THE RESULT OF CHOICES YOU HAVE MADE IN THE PAST.**

Reference: The success principles by John Canfield.

The case for digital literacy and open source in classrooms

Hitul Marvaniya
Asst. Prof.
I.T. Dept.
V.V.P. Engg. College,
Rajkot

Municipalities across America should be working to bring open source educational tools to schoolchildren so they will have the necessary digital literacy skills to tap into their creativity and imagination, or even to provide them with valuable future life and workforce skills. And the case of the Feoffees of the Grammar School in Ipswich, Massachusetts—the oldest charitable trust in America—illustrates this point well.

Over 350 years ago, in 1660 William Paine bequeathed 27 acres of land at Little Neck in his will to benefit Ipswich schools and future generations of schoolchildren in the town. In 1647 Massachusetts law required towns to set up grammar schools, whose

mission was to prepare young white males for Harvard and the puritan ministry. For hundreds of years, Feoffees, or trustees, acted as beneficiaries for the children and schools of Ipswich. Over the years 167 cottages were built on Little Neck, waterfront property; the Feoffees collected rent money on the cottages.

However, according to parents of students and concerned citizens who are advocating for accountability on the fate of Little Neck in Ipswich, over the last 30 to 50 years or more the Feoffees have not fulfilled their obligations and made little to no contributions to the town's children and schools. Instead, the Feoffees mismanaged the land and kept rents dramatically low, which denied the town and schoolchildren the benefit of revenue (potentially many millions). It is my stance that the focus of the Feoffees (and with other municipalities) should be on developing and making a commitment to renewable open source educational tools for the benefit of future generations of schoolchildren in Ipswich (and elsewhere).

In 17th century New England, paper, books, and other printed materials were expensive and somewhat scarce; literacy through print was uneven. Most books, pamphlets, and broadsheets were imported from England and Europe until printing presses existed in Boston. Yet news and interest in the printed word was widespread. Word of mouth reigned. Many people learned how to read through a hornbook (mainly the alphabet), psalm book, or Bible. Many people had some basic reading skills, but could not write. Others could possibly learn the alphabet enough to write their names, but did not know how to read. Female literacy rates for the 17th century are still difficult to ascertain. Nevertheless, books and printed materials helped to circulate ideas and information, though the scope of it was limited with literacy being uneven and without local printing presses.

In 21st century America, and in many places around the world, paper, books, and other printed materials are no longer expensive, scarce, or restricted; digital technology and digital information is quickly replacing paper, pen, and printed materials.

Digital literacy, however, is still uneven in America and throughout the world. Lack of hardware and software often hampers digital literacy and an importance placed on it. Many schools lack funds to move computers to classrooms. Many schools still confine computer hardware and software to a technology lab or a library. Some high schools do

require the use a laptop or tablet today, but lack an integrated digital curriculum or fully understand what digital literacy is.

While the Common Core of State Standards calls for 50% informational text (nonfiction materials from newspaper articles to textbooks) in elementary and high schools across America, there is no similar call or even a consensus or urgency to embrace open source. Children in kindergarten, 1st grade, and 2nd grade learn about the differences between fiction and nonfiction, historical events, or basic scientific ideas or concepts, but do not learn about open source and the differences between them and the more common, commercial-based digital media.

Research and initiatives from the Joan Cooney Ganz Center and The Future of Children show that very young children are facing an unprecedented time of digital communication, technology, and literacy today that elicits our attention. An awareness to what is at stake as society transitions to a digital age for very young children is overdue. Young children today often seamlessly integrate the use of film, radio, television, video games, music, and the telephone with digital technology that previous generations could only fantasize about. Landline phones are becoming a distant thing of the past. And yet six-year-olds need guidance and support with this unprecedented digital age and to learn digital literacy skills.

Open source presents a dilemma to these organizations, educators, and parents on when and how to introduce them into young people's lives. At the moment, children aged two to six are being introduced to digital technology, mainly from their parents. But there is a big void in education with open source and showing kids how to create them, use them imaginatively, and gain future life and workforce skills.

Events such as SCALE (Southern California Linux Expo) Kids Conference attempt to bridge this gap, but they need help in doing so. The next generation of open source citizens needs mentors. Some sites do feature digital citizenship and literacy courses for children, but few, if any, include open source.

Common Sense Media has free digital citizenship and classroom literacy courses for children from kindergarten to high school, but nothing on their site, including the digital literacy courses, on open source. Similarly, Digizen has information about digital citizenship and bullying, but nothing on open source. Even the guide, Net Cetera: Chatting with Kids About Being Online, from the federal government, makes no mention of open source and the opportunities for expanding a child's creativity, imagination, and future life and workforce skills.

Open source has the potential to make a surprising, educational impact if we tap the next generation. Parents and educators need to share open source innovations and affect change in their local communities and elsewhere. A forum discussion group where parents, educators, and open source advocates could band together and discuss these issues facing children today would be a place to start. In fairness, SchoolForge is attempting to do this, though much of the discussion revolves around technical computing issues or particular software or hardware issues, but a broader, wider national (and global) audience with coalitions of parents and educators to the local level is needed to bring open source in classrooms across America and affect social change.

From: <http://www.opensource.com>

What We Mean By Creativity

Komil Vora
Asst. Prof.
I.T. Dept.
V.V.P. Engg. College,
Rajkot

What is true creativity and how is it different from that which is so considered in popular culture?

What is generally called creativity is manmade -- painting, music, literature, romantic and factual, all the architecture and the marvels of technology. And the painters, writers, poets, probably consider themselves creative. We all seem to agree with that popular idea of a creative person. Many manmade things are most beautiful, the great cathedrals, temples and mosques; some of them are extraordinarily beautiful and we know nothing of the people who built them.

However, now, with us, anonymity is almost gone. With anonymity there is a different kind of creativity, not based on success, money -- twenty-eight million books sold in ten years! Anonymity has great importance; in it there is a different quality; the personal motive, personal attitude and personal opinion do not exist; there is a feeling of freedom from which there is action.

Yet most manmade creativity, as we call it, takes place from the known. The great musicians, Beethoven, Bach and others, acted from the known. Writers and philosophers have read and accumulated; although they developed their own style they were always moving, acting or writing, from that which they had accumulated -- the known. And this we generally call creativity.

Is that really creative? Or is there a different kind of creativity which is born out of the freedom from the known? Because when we paint, write, or create a marvellous structure out of stone, it is based on the accumulated knowledge carried from the past to the present. Now, is there a creativity totally different from the activity that we generally call creativity?

Is there a living, is there a movement, which is not from the known? That is, is there a creation from a mind that is not burdened with all the turmoils of life, with all the social and economic pressures? Is there a creation out of a mind that has freed itself from the known?

Generally we start with the known and from that we create, but is there a creative impulse or movement taking place that can use the known, but not the other way round? In that state of mind, creation, as we know it, may not be necessary.

Is creativity something totally different, something which we can all have - not only the specialist, the professional, the talented and gifted? I think we can all have this extraordinary mind that is really free from burdens which man has imposed upon himself.

Out of that sane, rational, healthy mind, something totally different comes which may not necessarily be expressed as painting, literature or architecture. Why should it? If you go into this fairly deeply, you will find that there is a state of mind which actually has no experience whatsoever. Experience implies a mind that is still groping, asking, seeking and therefore struggling in darkness and wanting to go beyond itself.

There is a complete and total answer to the question if we apply our minds and our hearts to it; there is a creativity which is not manmade. If the mind is extraordinarily clear without a shadow of conflict, then it is really in a state of creation; it needs no expression, no fulfillment, no publicity and such nonsense.

Source: "<http://www.speakingtree.in/spiritual-articles/mysticism/what-we-mean-by-creativity>"

Global Warming



The term 'Global Warming' refers to the rise in the temperature of planet earth which will bring an end to the mountains old human civilization. The Green house gases including CFC-11 and CFC- 12 make the earth hotter and hotter by absorbing maximum quantity of thermal radiation of the sun. These gasses permit the rays of the sun to penetrate but don't let the thermal radiations escape from the earth's atmosphere once they enter it. This causing what is termed as the Greenhouse effect which is responsible for the increase in the temperature all over the world. The rise in temperature disturbs the rain cycle, the ecological balance, the cycle of seasons etc. It adversely affects vegetation and agriculture. Thus, we have to face frequent floods and droughts through the world. With the increase in temperature and the melting of glaciers, even snowfall has reduced its occurrence and intensity. The winter temperatures are showing a gradual increase. With the warming of the planet there is also rise in humidity because the rise in temperature has increase the rate of evaporation. The local governments should work against the emission of the Greenhouse gages by improving the vehicles, creating awareness among the people, selling environment-friendly appliances; encourage recycling of paper, metal and glass etc. Such efforts are needed by the people at the grass-root level. Only then we can combat this problem in an effective way.

According to the Human Development Report (H.D.R) 2007, developed countries should cut their carbon emission at least by 80 %, by the year 2050, with 20 -30 % cuts by 2030, if the earth has to be saved from the adverse effects of Global Warming. The report also calls for 20 % in carbon emission by fast growing economies like Indian and China. The UN report says that there is a small window of opportunity in this century for limiting the global temperature increase to 2 degrees centigrade. If this is not done, humanity will face a series of climactic changes that will wreak havoc on the planet. These will include flooding of coastal areas, crop failures, epidemics, severe water scarcity and increase in natural disasters. According to the report, climate change will affect the world's poor most. Global warming will initiate droughts and flooding which will destroy the sources of live hood for poor people in Africa, Asia and South America. The challenge before us is to reduce Global warming. Global warming will melt the polarize caps. It is estimated that if all the ice on the earth melts, about 200 feet of water would be added to the surface of all oceans. Satellite pictures have shown that the solar ice has been shrinking by 10 percent per decade since 1980. Due to global warming, India-Khumba glaciers of Md. Everest has retreated by 5 km since 1953 while sea ice cover of Arctic Ocean has declined by 6 % from 1978 to 1953. It is estimated that an increase of only 3 degree centigrade atmospheric temperature may raise sea level by 0.2-1.5 meters over the next 50-100 years, this may submerge low lying coastal cities like Shanghai, Bangkok, Dhaka, Sydney etc. In Indian this effects may also threaten the inundation of Lakshadweep islands, Mumbai and deltas of Ganges (West Bengal), Carvers (T.N), Godavari (AP) and Mahanadi, Orissa.

The time has gone from our hands for debating on the issue of Global warming. Today the need of the day demand implementation of measures to decrease Global warming.

Komal Shukla
Lecturer,
I.T. Dept.
V.V.P. Engg. College,
Rajkot

Some of the measures that may help to check global warming are (a) Control of population growth by decreasing the birth rate (b) Afforestation (Planting more trees on new areas) (c) Deforestation reversal by reforestation (d) Reduction in the use of chlorofluro carbons (e) Shift from coal to natural gas on electricity as energy resource (f) To trap and use methane as a fuel. (g) More use of non-conventional source of energy like wind power and solar energy. Automobiles should be made more fuel efficient and less taking on the environment.

From :
<http://opensource.com>
en.wikipedia.org/wiki/Global_warming

The role of technical forums in the progress of open source

Riddhi Patel
Lecturer,
I.T. Dept.
V.V.P. Engg. College,
Rajkot

As a society, we are at a point where information sharing is more critical than ever. Technical forums support the mission of open source in multiple ways. First, they allow programmers to work outside of their expertise. Second, forums allow people to share their experiences with software. Last, they allow scientific researchers who are not always (not usually) well-trained programmers to carry out their research with an entire community to help them make design decisions and help them through technical difficulties.

Working outside of your expertise

Very frequently situations arise in which people work in a sub-optimal language or framework because they simply are not aware that there is a better choice! Being a member of a technical community by way of a forum allows them to inquire to the tune of "I am trying to do XYZ. I was planning to do this in C++, but it seems quite awkward. How would you proceed?" Answers to this type of question allow the person to eventually work in the "correct" language or framework. They can also feel comfortable doing so even if they don't know the language very well (or at all!) because they know that if (when!) they run into a problem, there are literally hundreds of thousands of people that they can call out to for help.

Sharing experiences with open source software

A typical conversation may go something like the following:

Question: I've been trying to use OpenGL to render a sphere, and I am running into XYZ problem

Answer: OpenGL is a very low-level language that you should probably not be using for this application. Instead, you should check out the [VTK project](#), which is a layer on top of OpenGL that allows you do things like you are trying to do very simply.

You may be thinking, "Couldn't the person have found this project using a search engine?" Well, probably in this case. But there are many cases in which the open source tool has not yet gained a lot of notability but can still be exactly what someone needs. This pointer from a fellow programmer can help lead people in the right direction and may provide exactly the spur they need to start working on an open source project!

Allow scientific researchers to focus on their research rather than technical issues

My formal training is in electrical engineering. There was not much need for any serious programming skills outside of a little bit of MATLAB. When I decided to pursue a PhD in computer vision, I quickly realized that the language of choice in this field is C++. I found that the better I was with C++, the faster I could turn ideas/concepts into experiments. After many web searches turning up less-than-adequate answers to my questions, I decided to try out the concept of posting/asking questions on forums. I signed up for a handful of them, though [DaniWeb.com](#) from the start looked the most

professional and seemed to have the most activity. I wear two hats at DaniWeb. First, my learner hat. The quality of answers I have received in my time at DaniWeb is outstanding. There are several members who are true experts of the art and science of programming, and they have helped me immeasurably. The fact that access to these experts is provided for free via their will to share and spread information is absolutely a treat to be a part of.

Second, my teacher hat. I have been a part of DaniWeb for only a couple of years, but looking back, my progression was a natural one and one that I hope many others have and will follow. At first my relationship was almost purely one-way. I was asking question after question, receiving answer after answer. This was great for me, but surely a drain on the community as a whole. After I learned enough to become very comfortable with the language, some OOP, and other programming concepts, I felt a tremendous debt to the community. The most sensible way to pay back this debt was to take some of the daily burden of answering the easy questions off of the shoulders of the expert members. This quickly evolved into a real passion of helping people. In particular, I have learned from a mentor in an open source project that I am involved with that you should treat every user, no matter how silly or against the rules their first post is, as if they could be the next senior developer. To experienced forum users, sometimes a post by a new user seems like an outrage! As we all know, many times the user is in fact simply being lazy and looking for an easy way out of a problem. However, if even 1/100 of these is simply a problem of a language barrier or a misconception about what is supposed to go on, then it should be worth our time to greet them with an inviting "Welcome!" and explaining (nicely) some of the things that they have done wrong in hopes that they become a contributing member of the community. The ability to foster the growth of the next generation of programmers is a real treat and one of the main reasons I stay active at DaniWeb. As I work primarily in C++, I'd say about 95% of my DaniWeb activity is in the C++ forum. However, it is very convenient that DaniWeb hosts forums for almost all languages because occasionally I will need to do something in a language that I am not comfortable with. Instead of having to go looking for a new forum, signing up, figuring out how to use their system, wondering if the people will be nice/helpful/etc, I can simply hop over to one of the other DaniWeb forums, and the environment is the same great environment I am used to in the C++ forum. This last 5% is often the most helpful because it is typically a question well outside of my expertise. I'd say the best part about DaniWeb is the sheer volume of the user base that it has amassed. It's definitely a chicken-or-the-egg problem--if you build a nice website, people will come to it. If you have a lot of people, it is motivating (psychologically and financially) to build a good website. Their large user base (over 900,000 registered users) allows for a wide variety of knowledge to be brought to the table. It also allows for questions and discussions to evolve very quickly, as there are *always* (24/7) people browsing the forums, asking and answering questions. That, again, certainly encourages people to join and participate on DaniWeb.

From helping students and researchers, to fostering a sense of community among programmers, to allowing people to work as efficiently as possible, forums are an amazing asset. I encourage everyone to take some time to give back communities such as these to ensure that the cycle continues.

*From
<http://opensource.com>*

Cloud Computing

Parth Vikani
Lecturer,
I.T. Dept.
V.V.P. Engg. College,
Rajkot

What is Cloud Computing?

Cloud computing broadly describes off-premise, on-demand computing where the end-user is provided applications, computing resources, and services (including operating systems and infrastructure) by clouds services provider via the Internet. The hosting industry came out of the need for software and computing services that were managed internally, but were made more economical and accessible through the economies of scale of a hosted implementation.

Most service providers offer cloud computing in the form of VPS Hosting and SaaS Cloud services have long been offered in the form of SaaS, such as Microsoft Hosted Exchange and SharePoint.

Large-Scale Operations

Computing clouds consist of thousands of servers located at data centers running tens of thousands of application instances accessed by millions of users at the same time. Such large-scale operations make pervasive automation an absolute necessity. Further, in order to provide secure access to computing resources for various user roles — cloud operators, service providers, resellers, IT administrators, application users — computing clouds need to have delegated administration and self-service capabilities. Cloud computing significantly changes the way applications are delivered, managed and integrated. Compared to traditional computing, cloud computing operates on a larger scale, attracts a variety of users accessing services and application within a single cloud, and comes with the inherent "lights out" dependency on the cloud service providers.

Cloud Benefits

Cloud computing is efficient and offers opportunities for increased revenue and new channels for independent software vendors (ISVs), telcos and VARs (in the form of SaaS). It offers on-demand services where customers can pay for what they use, and adjust resources to what they need with no long-term commitment.

For hosters, cloud computing provides tremendous growth potential. The cloud services industry is growing rapidly and is forecasted to be 9% of all IT spending by 2012. Plus, the industry buzz is changing from hosting to cloud computing and SaaS, and your customers will begin to expect you to be an expert in these areas.

Types of Clouds

Parallels envisions a world where the majority of computing will move to five different types of clouds over the next five to 10 years. There will be proprietary platform clouds that provide various platform services – provided by Google (Type 1), Microsoft (Type 2) and other large IT players (Type 3) such as IBM, Apple, HP and Amazon.

Then there are services clouds (Type 4) where we envision thousands of clouds services providers offering a variety of services. Examples are web and application hosting clouds, vertical industry clouds (ex: government clouds, healthcare clouds, etc.), ISV clouds (ex: business intelligence, CRM, etc.), telecommunication services (ex: voicemail, VOIP). Finally, there will be clouds run by enterprise IT (Type 5) that will provide services for internal use and by employees and partners.

Platform Clouds

- **Type1:** Google cloud
- **Type2:** Microsoft cloud
- **Type3:** Other clouds (ie: IBM and Apple — Amazon, Facebook, Adobe and more)

Services Clouds

- **Type4:** Channel clouds of service providers — telcos, web hosters, ISVs, SaaS players
- **Type5:** In-house clouds of large companies (Fortune 1000)

Security and privacy

Identity management

Every enterprise will have its own identity management system to control access to information

and computing resources. Cloud providers either integrate the customer's identity management system into their own infrastructure, using SSO technology, or provide an identity management solution of their own.

Physical and personnel security

Providers ensure that physical machines are adequately secure and that access to these machines as well as all relevant customer data is not only restricted but that access is documented.

Availability

Cloud providers assure customers that they will have regular and predictable access to their data and applications.

Application security

Cloud providers ensure that applications available as a service via the cloud are secure by implementing testing and acceptance procedures for outsourced or packaged application code. It also requires application security measures be in place in the production environment.

Privacy

Finally, providers ensure that all critical data (credit card numbers, for example) are masked and that only authorized users have access to data in its entirety. Moreover, digital identities and credentials must be protected as should any data that the provider collects or produces about customer activity in the cloud.

Legal issues

In addition, providers and customers must consider legal issues, such as Contracts and E-Discovery, and the related laws, which may vary by country

On Tough Stuff

Asha
Student (7th Sem.),
I.T. Dept.
V.V.P. Engg. College,
Rajkot

**GRASPING INTO THE THIN AIR,
WE REACH BUT CANNOT TOUCH
THINGS WE WISH WOULD GO AWAY
THINGS THAT HURT TOO MUCH
WHY DO WE FACE SUCH TOUGH TIMES
WHILE OTHERS GO UNSCATHED
WHERE DO WE FIND A SHELTER
WHEN IT RAINS ON OUR PARADE
LIFE WILL GIVE US ROSES
BUT EVERY PETAL FALLS
LEAVING JOY AND SADNESS
FROM THE MEMORIES WE RECALL
SO IF TIME'S OUR GREATEST TREASURE
AND LOVE IS WE NEED
LET'S GIVE EACH OTHER ALL WE HAVE
NOTHING IS GUARANTEED**

Deep Inside

Asha
Student (7th Sem.),
I.T. Dept.
V.V.P. Engg. College,
Rajkot

**STANDING ON THE BEACH,
SAND BETWEEN MY TOES,
WHAT LIES IN MY FUTURE?
WHO WILL COME AND GO?
THE SUN BEAMS DOWN UPON ME,
AS I RAISE MY HEAD AND LOOK
AT THE VAST OCEAN ABOVE ME,
ITS SIZE WHICH I MISTOOK.
I FEEL SO INSIGNIFICANT,
COMPARED TO THIS GREAT EXPANSE.
WHAT DIFFERENCE CAN I MAKE?
WILL I EVEN BE GIVEN A CHANCE?
I REALIZE THEN WHILE STANDING THERE,
THAT ALL I HAVE TO DO,
IS LISTEN TO MY HEART,
AND IT WILL PULL ME THROUGH,
FOR STRENGTH AND INSPIRATION,
ARE NOT MATERIAL THINGS,
THEY COME FROM DEEP INSIDE YOU,
THEY GIVE YOUR SOUL ITS WINGS,
SO WHENEVER YOU ARE IN DOUBT,
AND YOU BEGIN TO STRAY,
TAKE A LOOK DOWN DEEP INSIDE,
AND YOUR ANSWER WILL COME YOUR WAY.
IF YOU ONLY BELIEVE IN YOURSELF,
YOU CAN MAKE YOUR DREAMS COME TRUE,
FOR NO ONE ELSE CAN DO IT,
THE POWER MUST COME FROM WITHIN YOU.**

Meditation

Meditation is universal. It transcends all divides like religion, country and culture. It is a gift given to mankind to access the infinite spirit not limited by any identity. It is the only tool that can aid a person to return to innocence.

Modern life style has high exposure to anger, hate, fear and other negative emotions. These human emotions have a high tendency to duplicate and spread. For example, when a person gets cheated, he starts to suspect everything around him. This also has an impact on people around him. These emotions form strong impressions and opinions on an individual and social level. The result of which is an insecure individual and an unstable society.

Meditation helps an individual overcome these emotions to facilitate a calm peaceful mind and a healthy and stress free body. Upon daily practice an individual will blossom into an unshakable personality. With increase in the number of people who are calm, peaceful and healthy will facilitate a social transformation, enabling a society that is trusting, happy and content.

Student (5th Sem.),
I.T. Dept.
V.V.P. Engg. College,
Rajkot



BENEFITS OF MEDITATION

Individual Benefits of Meditation	Social Benefits of Meditation
Bodily Benefits – Lower Blood Pressure, lowers the levels of blood lactate, improves the immune system, increases body vitality, controls insomnia and increases overall health of the body	Violence Free Society – Meditation develops happiness, contentment and calmness. When increasing number of people practice meditation, it has a calming effect on the environment. This is a potent way to achieve a violence free society.
Mental Benefits – Emotional stability, anxiety decreases, anger reduces, happiness increases, and intuition develops clarity and peace of mind, induces ability to focus, and reduces tension and fear.	Value Based Society – The effects of meditation include happiness, respect for the environment and others, appreciation of diversity in nature, a strong sense of social values. These qualities an individual level, helps develop a value based social system.
Spiritual Growth – Consciousness evolves, meditation brings harmony in creation, personal transformation, realization of SELF	Trusting, Happy and Content Society – These are the objectives of any society. Meditation empowers a society to achieve these qualities.

The Subconscious Mind

Student (5th Sem.),
I.T. Dept.
V.V.P. Engg. College,
Rajkot

While most of us are aware that we have something called a subconscious mind within us, there are very few of us who know much more than that about it, let alone how to harness it. This is unfortunate, for your subconscious mind can and should be a great ally in achieving success in your life. All you need do is to establish a working relationship with your subconscious mind. In order to do this, one must become conscious and familiar with this hidden, mysterious aspect of our selves, and the role it plays in our life.

One of the ways we can do this is by affirming to ourselves for several minutes each day, "My subconscious mind is my partner in success." By doing this we are re-educating ourselves as to the fact that we possess a second powerful mind, and that it is our partner in success. Becoming conscious of our subconscious, and moving beyond thinking of it as some abstract concept or figment of our imagination is an important step.

The second step is to be aware of how our conscious and subconscious minds work together, to learn the functions and roles of each. The subconscious has two main functions in our life. The first function is to attract to us conditions and circumstances according to the predominant thought patterns that reside within it. My reoccurring mantra is, "What you focus on you attract." Now with this new subconscious information, you can begin to understand why this is true. Your subconscious mind is not limited in any way and will forever attract to you according to your thoughts. It has no volition of its own and will simply act upon what resides and vibrates within.

Further to this, your subconscious mind will act upon any request or instruction you give it. Any thought that is repeated over and over again will take an imprint within the subconscious, which cannot distinguish between what is real and what is imagined. This is why visualizations, affirmations and repeated images can have such a powerful effect in our life. By doing these exercises we are creating images within ourselves which the subconscious then acts upon.

Our conscious mind is the guardian to the gates of the subconscious. It is the conscious mind's role to make sure that only the highest quality thoughts gain entrance to the subconscious. When we fully understand that whatever thoughts and beliefs gain entrance to the subconscious will eventually manifest in our life, we become very diligent in monitoring and directing our thoughts.

Focus on Positive Memories, Celebrate the Small Wins, and Keep Yourself Motivated

Student (3rd Sem.),
I.T. Dept.
V.V.P. Engg. College,
Rajkot

Focus on positive memories :

Focusing on positive memories can be a great way of staying motivated and committed toward our long-term goals and values.

In a 2011 issue of Psychological Science, researchers discovered that loyal baseball fans are more likely to remember details of events when their team won, rather than when their team lost.

This suggests that our level of commitment and loyalty is related to our ability to sustain positive memories. When fans of a sports team win a big game, they celebrate it and reminisce about it with family, friends, and co-workers for days. This focus on positive memories allows them to feel a stronger bond with the team of their choice. On the other hand, when their favorite team loses, they tend to dissociate from the memory and not put as much importance on it. Either way, their level of commitment remains intact.

Positive memories serve a very useful purpose, not just in sports, but in all aspects of our lives. When we reflect on positive memories of accomplishing a goal, we are more motivated to grow and improve. When we reflect on positive memories of a person, we feel more connected to them. And when we reflect on positive memories of ourselves, we increase our self-esteem and self-worth.

Sometimes we get so caught up in where we are going that we forget how far we've come in life. But taking a step back and appreciating the good times of our past is hugely important to our happiness and well-being.

Celebrate the small wins Often success is a series of small wins, rather than one big win. When we learn to recognize and celebrate the small wins, we keep ourselves engaged and motivated in the long term – because every day we find something to be **happy and proud about.**

“Victory is won not in miles but in inches. Win a little now, hold your ground, and later, win a little more.”

-Louis L'Amour

Psychologist Teresa Amabile at Harvard Business School collected and analyzed 12,000 diary entries from dozens of workers across various companies and industries. What she found was that individuals who were most focused on small, but meaningful progress (based on reflections in their diary) were also found to be more productive and motivated by their work.

According to her research, Amabile believes that managers and workers are at their best when they focus on what she calls “the progress principle.” Companies that focused on incremental change were more likely to succeed than companies that drew hard lines between “successes” vs. “failure.”

The main lesson is to try to find the small wins every day. When we do something wrong or make a mistake, we can turn it around and learn from it – and that itself is a kind of victory. Acknowledge the small steps toward success, and you will one day look back and see just how much progress you made.

Nishkam Karma – The art of focusing on Actions & Not their Results!

Student (3rd Sem.),
I.T. Dept.
V.V.P. Engg. College,
Rajkot



Nishkam Karma is the art of focusing on our actions & not their results. Involvement for the sake of duty, without any expectations of personal gain. Being bothered with what we do in the present instead of being worried about what its outcome will be in future.

Let's say that someone is preparing for his exams. While preparation, should he or shouldn't he be concerned about results? Should he be concerned about the results on the day of the examination? Should he be concerned about the results after the examination is over? Should he be concerned about the results at least after the results are announced?

The answer to all the above questions is 'No', according to the philosophy of Nishkam Karma!

Attaching oneself towards their duty and detaching themselves from its results is the synthesis of Nishkam Karma.

What is more important for an employee? Being concerned about the work at hand, or being concerned about when he/she would get a salary raise?

Can a Tennis player just concentrate on the serve / rally that they are playing currently without being bothered about the score / outcome of the match even if they are playing at 0-6, 0-6, 0-5 (Love-40) ?

While going to office in the morning, can we be concerned only about driving our vehicle without being concerned about that difficult meeting we need to attend that morning?

In a sense, Nishkam Karma is also about complete absorption in whatever one is doing NOW. And that can be done effectively if one is not bothered/ concerned about the outcome/ results.

The opposite of Nishkam Karma is Sakam Karma. Here, one does his duty always expecting favourable results.

But is it possible to get favorable results always? Isn't life a mixed bag of up's and down's? If one does not get the results they expect, they would be depressed and sad. On the other hand, would they be satisfied and happy at least after they get the results they expect?

If your salary is twenty thousand rupees per month, and you get twenty five thousand rupees per month including bonus, would you be satisfied / happy with it (or) would you want to make thirty thousand rupees per month like your colleague?

Is there a point where one would be satisfied with what they have (with Sakam Karma), how much ever they have?

But with Nishkam Karma, a person is satisfied (detached) with a favorable result and also satisfied (detached) with an unfavorable result. Even a small effort taken in the spirit of Nishkam Karma is satisfying and there is an element of fulfillment.

The Bhagvad Gita goes one step ahead and says that actions are in our hands, but their results (fruits) are not in our hands.

Well, I am not advocating this Nishkam Karma or anything, but I thought it is an interesting point of view (philosophy) that is worth sharing