

# TRANSFORMING EDUCATION THROUGH TECHNOLOGY AND SKILL DEVELOPMENT

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**Abstract:** Technology and skill development are considered to be a blessing to mankind. Its contribution has been experienced in all the spheres of education. Technology is employed in spreading useful information, training, in improving the quality, in sharpening awareness and inculcating to abide values. This is a new area in the discipline of education. Use of technology has transformed and modified teacher's method of teaching and learner's behaviour for their own betterment and for the betterment of mankind. This has brought a revolution in modern age. Whatever we get that has been fully transformed now. The purpose of education technology and skill development is to illuminate the world in all its existence. It has turned ignorance unsubstantiated and it is a support that beacons a human traveller like a lamp post lighting up a spirit of hope. By using technology a student can dissipate the biggest challenges in this hurtling competitive world of today. So Internet has opened avenues to easily and effectively make students understand the concepts of subjects. The capability of technology driven, well-versed-in-computers children are much higher because of the vast amount of information. Children spend a large chunk of their time everyday on computers, playing games or surfing through websites. They are exposed to prevalent situations and issues being dealt heavily. Their mind gets a stimulation to think beyond the conventions. Our school is equipped with smart-labs that give avenues of opportunities for the students to explore. In conclusion our School teaches the students ephemeral and sacrificial nature of life right from a very early age. Gathering resources, finding solutions, quickness, alertness, activeness, development of imagination, involvement of creativity, inquisitiveness are additional points and skills which students learn in school time. Our school always focuses on the development of basic skill, in depth understanding and area of choice for students.

## Technology a catalyst for enhance learning and sustainable technology based quality education

The world of today in which we are living is very dynamic and an age of science and technology. A large number of tremendous changes have come due to the contribution of science and technology. Technology and skill development are considered to be a blessing to mankind. Its contribution has been experienced in all the spheres of education. Technology is employed in spreading useful information, training, in improving the quality, in sharpening awareness and inculcating to abide values. Technology is an art which is related to skill and dexterity. This is a new area in the discipline of education. When we apply science of learning and communication to teaching, we evolve a technology. Education Technology is concerned with the development application and evaluating system. It is also concerned as a science of techniques, methods and media by which education goals can be achieved. This technology is a systematic application of the knowledge. Use of technology has transformed and modified teacher's method of teaching and learner's behaviour for their own betterment and for the betterment of mankind. Earlier the concept of educational technology was used as pictures, charts, maps, models means direct teaching learning. But with the advent of physical science and electronic revolution an era came like projectors, tape recorders, radio, television etc. Then came an age of mass media. With the advent of programmed instructions and programmed learning — a new dimension of technology came into existence. Technology has individual used the process of education and introduced a system of self instructional material. Here micro teaching works a lot. Education technology basically is a sum total of all such aspects which go on a long way in shaping the personality of the learner. This has brought a revolution in modern age. Whatever we get that has been fully transformed now. The purpose of education technology and skill development is to illuminate the world in all its existence. It has turned ignorance unsubstantiated and it is a support that beacons a human traveller like a lamp post lighting up a spirit of hope. The real issue is to provide technical based education as it develops understanding of a learner. It enhanced in him real roots of intelligence, cognition, and calculations. By using technology a student can dissipate the biggest challenges in this hurtling competitive world of today. This system is so appropriate that it cannot nibble him indiscriminately which is the mere cause of harassment. Now accessibility to resources has become an easy job. This is playing a vital role as it has increased the competitive spirit from basic skill to higher skill of reading writing. Internet has also opened up all the frames of opinions in front of the students. Internet satiates the queries of an inquisitive student. It is also provides platform of personalized learning which means developing personalised projects assignments for students that they may explore and investigate on their own. Internet has clearly established a scenario where cramming and mugging up the facts and figures in majority of class is obsolete. Use of Technology proves very beneficial as all the persons work together. This is the tailoring of Pedagogy curriculum and learning environment by learners in order to meet their different learning needs and aspirations. Each student can programme his or her curriculum according to his needs, interests and abilities to promote both independence and dependability to enhance students' social skills and sense of responsibility towards others. Here students can focus on creative activities, emotional and social development. Here students get chance to improve intellectual, social and moral growth. Here communication technology can be proved a powerful tool for personalised learning as it allows learners' access to information and research. Short videos are prepared by the students

.Arrangements of programme ,discussions can be made .Power Point Presentation can be made jointly .So Internet has opened avenues to easily and effectively make students understand the concepts of subjects . There are many things which are becoming beneficial in transforming education through technology and skill development. Transmission of information is serving as role model and contribution to the provision of feedback. Today everyone is becoming perfect in using education tools .Now massive open online courses and various number of available resources is changing the way we teach .Today teacher knows the usage of using assignment tools, social media , video and audio ,collaborative working ,presentation ,gales and learners 'response system. Now a days instead of taking notes, students are taking notes. They are occupied by surfing the internet, scrolling through facebook and messaging friends on smart phones ,tablets ,laptops. Students also prefer to use maximum technology devices.

Traditional methods are becoming outdated gradually and gradually due to usage of technology. Moreover possibility of committing errors has been decreased. Everything a leader is getting in a very effective way. Our institution has generated our own website and this is the perfect example to show that a person is a true leader .Our institution is using online opportunities .Best ways are used to take and provide help to others and in this way we can contact very easily . One can establish communicative terms by using digital training methods.

Students participation in making PPTs' of different topics, preparing themselves by seeing video clips, doing recording of different skits and dramas, using digital cameras, handicaps, getting and enhancing knowledge from internet are the best practices done in our institution.

### **E learning**

With the advent of technology, the system of imparting education has been supported strongly. One of the key challenges teachers have always suffered is fetching interest of students in a particular concept. It has always been difficult to make students imagine and realise the value of a topic, which is not easy by medium of spoken words alone. Computers, smart classes have added an edge to pedagogy. Students get to experience and understand a topic by audio and visual aids that bring to mind the concrete reality of a topic. It makes learning a wholesome experience. The same technology has also strengthens the relation between parents and teachers. The connection has never been better and more two-way. Regular feedback can be sent to parents and dissipating of assignments and homework has been eased out as well. The convenience of mobile applications is such great that parents are kept informed with the routine activities and defined homework is sent regularly. Another feature in e-learning is the sudden spurt of extra information available at the disposal of students. Class presentations have been a regular characteristic of a lecture, wherein students present the topic via impressively illustrated slides. Teaching could never be as team-game as it is now. Likewise, the homework and assignments can be mailed to student email account and great amount of supplementary information can be pasted along. The data and information at a heavy amount is on a flow.

Students are becoming smart enough that can easily educate themselves through electronic media and can get higher education without ant obstacles. Various diploma and degrees, plenty of stuff are available on online system. Students in our institution are becoming vocationally trained. E- leaning has opened many avenues for the students. Here in the evening classes vocational training of computer education is given to the students at free of cost in the evening classes. They are getting complete information of online courses also.

### **\*Innovation & Technology \***

In most of the schools, apart from activity clubs, another element added is the entrepreneur clubs and idea-clubs. Students are encouraged to think out of the box and bring forefront suggestions to improve functioning of daily activities. This has suddenly become a trend ever since many young children have proven their capability by inventing and discovering new things. The capability of technology driven, well-versed-in-computers children are much higher because of the vast amount of information within the access of these students. Children spend a large chunk of their time everyday on computers, playing games or surfing through websites. They are exposed to prevalent situations and issues being dealt heavily. Their mind gets a stimulation to think beyond the conventions. So, if these kids are given opportunities to present forth their ideas and opinions, many new insights can be formed and solutions can be discovered. In the current market space, art has rediscovered its potential. Artists have won their space back perhaps due to the influx of reality talent shows. Nevertheless, the need of being creative and experimental has heightened up substantially. No wonder, the parents too are ready to invest in the Co-curricular activities. Mothers have begun working part-time to support the family income. This is paving way for the child to pile up skills, much beyond the numeracy and literacy of academics. A skilled child of today is more likely to bring out solutions and answers than an adult.

Another key feature of an innovative mind is his will to challenge the conventions and think beyond the ordinary. Shows such as TedTalks and motivational gurus encourage students to not be satisfied with the average or the mediocre. The trends in fashion and media also push the young minds to discover their unique individuality and think the impossible. The smart CEOs of companies unleash their products glamorously and talk high of the unique features. This sparks dreams in the eyes of young eyes who too begin indulging in creative pursuits. The classroom teaching, aided by technology, helps to bring a greater clarification in the underlying mechanisms behind processes that govern the functioning of the world and the access to ideas satiate the brain from the other hand. Both together, gives birth to innovation, ingenuity and novelty.

Videos are shown to the students as knowledge acquired by video is permanent. It is helpful to the students in providing them the knowledge of social and cultural the political conditions of different countries. It is helpful in developing thinking and reasoning power. It is equally helpful in educating and entertaining both backward and gifted children. With the help of video teacher can remove the doubts of the Students side by side. Video films are easily available on different subjects. While using Computers information is stored. One can handle the information in specified ways in extremely short period of time. Projectors are used where large images are obtained. The teacher maintains complete class control and interest in a

lesson by turning a switch on or off. Teacher easily faces the class by maintaining eye contact. Videos are shown and the students as knowledge acquired by video is permanent. It is helpful to the students in providing them the knowledge of social and cultural the political conditions of different countries. It is helpful in developing thinking and reasoning power. It is equally helpful in educating and entertaining both backward and gifted children. With the help of video teacher can remove the doubts of the Students side by side. Video films are easily available on different subjects. While using Computers information is stored and can handle the information in specified ways in extremely short period of time. Projectors- large images are obtainable. The teacher maintains complete class control and interest in a lesson by turning a switch on or off. Teacher can always face the class by maintaining eye contact With the people. It is used in well lighted a room which enables the teacher to develop a circuit of understanding by watching the expression of others. Tape recorders and the mixed re-recording of the final tape done in recording rooms. Sports films, films about achievements popular science films, travel films bringing the world and the class - rooms health education films, films about working of big institution hospitals nature films dealing with flora and fauna films aimed to produce and encourage social awareness and expected behaviour of individuals towards betterment of society are shown —historical events. Now students are becoming more perfect in gathering resources and finding solutions. Their quickness and alertness ,activeness development of imagination, involvement in creativity, inquisitiveness are becoming the best features of their personality. Video can be played continuously in a large group. School is providing all type of facility related to advance technological devices, on line messages information sent in school recording rooms, projector room Computer rooms are properly used. Provision of smart classes, smart boards are there where students are showing keen interest. Learning with full enthusiasm. Usage of technology has changed the whole scenario of the institution. Every student is becoming perfect day by day using technological devices. This has proved a boon for the institution. In assembly small documentaries related to moral values are shown to the students. Different students of different calibers are taking benefits from this. Their inquisitiveness is increasing day by day. Provision is given to the students to use google for educational point of view and for enhancing the knowledge of other educational terms.

#### **\*Technology in Leadership\***

A leader is the forerunner who is ready to take risks and lead a situation. When the going gets tough, it is the leader who brings to front a motivating hope that reignites courage in the team to carry on working. Education has become a great deal performance oriented. The system has realised the urgent need to have students with sharp communication skills, confidence and articulation so that they can impress and cast their influence on others. In the competitive market scenario, it matters a lot which enterprise wins and convinces the buyers by smart-talk and greater expressions. Such vibrant, vivacious leaders, brimming with ideas are the need of time. In order to chisel students to be eloquent, confident, well-spoken adults, technology is also put to use. Projects involving researches online, case-studies involving interaction with international communities all needs computers and approachability to electronic gadgets. The schools are equipped with smart-labs that give avenues of opportunities for the students to explore.

A leader can train his employees as well as students by adopting different ways to develop leadership qualities and by adopting effective ways. He can be in touch with others by using online interaction, whatsapp etc. A leader can bond with his employees by using social media .In this way social relations can be maintained .Here digital tools are used which provide great support to workers ,employees and students . Moreover work becomes more speedy. Our institution is taking full advantage of technology for the development of leadership skills. It has become very essential to make oneself friendly with high tech. tools. Day to Day messages, assignments, snap home work, whatsapp are used for conveying information and other messages.

#### **Case study**

Gaurav and Bharat of XI and XII Commerce are really very brilliant students and committed to their work. How technology and school best practices helped them? Actually in school student from classes XII are shown movies, documentary and inspirational talks like Tedtalks etc. and to check their understanding and comprehension questions/ answers rounds are conducted by teachers.

According to Bharat and Gourav these movies and documentary helped them a lot. When they appeared for the second level QBIZ Competition in Jalandhar. In this competition on 22<sup>nd</sup> August 2018 students of XI and XII participated and this was very healthy competition. Here Gourav bagged 1<sup>st</sup> position and Shrey bagged 2<sup>nd</sup> position. They cleared the third level.

According to them various documentaries shown in school from Junior Level classes and after that asking of question really strengthened their level. So this has proved that they have got good forum where their confidence, up gradation of knowledge have been boosted up. These practices have been proving many beneficial for other students also.

#### **\*Preparation of students for the Unexplained world\***

The previous century had seen an education system that became more about learning and cramming facts and figures. It took away the essence and meaning of education because students became parrots who could repeat the contents of the books but were not ready to think originally. Great minds such as Einstein challenged the system, expressing the need of a change that could show students the way and encourage them to explore on their own. Leaders in the past few decades have spoken at length on the need to understand that much has been discovered and invented but a lot is still left. Humans today have greater requirement of finding sustainable processes of work, the need to safeguard the planet, take care of the environment is greater than ever. So, the old system of simply learning the ways of the ancestors won't work. We need smarter innovations, efficient systems and consistently better-becoming technology to lessen our ecological imprint and strengthen our contribution in saving environment. Also, today mankind is engulfed by various disease, the cure of which is unknown. Cancers, for example,

are claiming lives of more and more people. We need such explorers who have a sound understanding of mechanisms so that they can observe the mysterious world with greater logic. Our expanse of knowledge and the expanse of our living world has also widened considerably because our field of world has been stretched to outer space and the extraterrestrial. So, the potential of novelty and surprise is greater today and the need to understand and discover even more. Students deserve tutorials of topics that cast a richer understanding in their mind and not just a horde of data and figures.

Here Inter classes PowerPoint presentation competitions are held in school where students participated in teams. For preparation of PPT, they take the help of internet, go through various websites and find the valid content for the competition. For the stylization and designing of slides they take the help of YouTube. Innovative ideas are inserted from there. After mixing and merging those final output is made. Various layout fonts innovative colours are prepared by the students to make the presentation more powerful. Students from VII to XII are using such facilities. They have become very perfect in using advance technology. They make themselves prepare for inter as well as intra school competitions. Every year school is participating in Science Congress at State and National Level and has got many prizes. This has become possible only due to the advancement of technology.

The famous epics of Ramayana and Mahabharata in our institution and role plays by the students leave everlasting effect on the mind of the audience. Preparation and rehearsal are made in advance to bring the perfection. Many different types of props whether dandia, dance steps are copied by watching the video clips. Presentations are made colourful by taking the help from internet.

### **Interventions to Overcome Barriers**

With such great aims and ambitions, it is apparent that the obstacles are going to surround. One of the key obstacles is the fact that education is often considered a purchasable commodity by parents. Money can buy a facility, a place but true education comes with self-efforts and parent-teacher cooperation. When at homes, children are not given the right atmosphere that waters the fertile soil of their thoughts, the impact of conditioning given in schools also weakens. It is imperative therefore that parents are also involved in the events and seminars to keep them informed and updated with the advancement in the industry. It becomes a greater need of time because the children of twenty First century are being raised raised by mind-sets that were educated in twentieth century. There has been a paradigm shift in the thinking of people. For example, once being a doctor or an engineer was considered the most important and noble while professionals and jobs such as of a nurse, a guard were looked down upon. The modern society realises the worth Of every profession because it is only together than everyone forms a team. The stress today is to develop edge and expertise in whatever role one adopts and to feel confident and take pride in the duty one is settled in. So, if a school encourages a child to realise his potential, express his capability and discover his true heart's desire, the parents, in greed of a monetary reward with some good job-placement of their ward in future, often confuse his mind. So, one of the key barriers in education today is making parents realise the need to let the children discover his true potential, and not to judge him by his academic credentials alone.

### **Skill education- a step towards carrying forward Gandhian legacy and alignment of skill education with school curriculum.**

Life is a process of survival where every human being dissipates the wellness of his actions into the smooth functioning of the society .School is an arena where the students of different calibers realize their innate abilities. This is the real platform where the teachers prepare the students for real life. Schools make the education an elating experience where the students show their actual skills by enjoying full freedom. The destiny of the nation is shaped in school education. These young children are inheritors of tomorrow. School education is playing a vital role by developing different skills of the children and prepares them to face the future with enthusiasm and confidence. Development of Skills is very important to get success as these help to excel the students --in this age of information and knowledge.

Development of the positive attitude in school education affects all aspects of life. Learning to listen your internal dialogue helps the child to recognize his thoughts. While getting school education students learn how to handle stressful situations. Positive attitude brings optimism in students' lives. This positive attitude helps the child to achieve his goal. These attitudes are not inherited but these are acquired and learned. In school a student learns about culture, traditions, language etc. which makes him capable enough to learn what is acceptable and not acceptable.

Communication whether verbal or non-verbal, oral or written aims at conveying information from one medium to another .Reading, writing and listening are the three skills for students. These skills have become the part of curriculum in school education. Students learn how to write reports, articles etc. Different speeches based on different occasions are given by the students. This is very beneficial for overall development of the students. School education is providing opportunities to the students at different levels to speak publicly and interact. This increases the confidence, ability of communication and articulations of thoughts and ideas, ability to lead etc. Practical benefits the students get like career benefits receive recognition learn to speak concisely, clearly and confidently. Schools have made this a regular feature of their curriculum. Here students learn the expressive skills which are used to express their feelings, thoughts and expressions. To develop expressive skill students learn how to communicate effectively and get the full attention of the listeners.

To learn values and principles in school- education is a great skill. Students learn in school that a man of principles deserves respect, appears formidable and his primness looks akin to victory. The value of honesty, discipline and love for elders are not to be talked incessantly like a drone but rather the useful applications and miraculous potential of such acts are to be enlightened about to the students. Here in schools many events are organized such as Grandparents' Day, Mothers' day, Folk Cultural shows etc. which ink the proud tattoo of self -recognition, unique identity, powerful belonging and patriotism on the young minds. Harmony , concern for others , integrity ,honesty ,hard work ,respect for other individuals all are value based which students learn in school activities like cultural shows, one act plays, street play , dramas and musical shows.

To manage time is a beautiful skill which child learns in school. Education in school becomes extremely important because it has to prepare the students for youth when time is a precious resource and when the students tend to become ambitious. A student needs to be taught that time is never short or long. Every achiever is endowed with the same 24-hour time.

Time management means prioritizing the works efficiently so that the one with urgent necessity is placed first. Students are often seen complaining of home-works and projects but this is a real preparation of life because this is the situation when the students learn the art of managing the work-load and exercise their ability of prioritizing. Time and tide waits for none but if one learns to manage himself confidently, one can surf adroitly and successfully like a surfer.

The most developing skill is resourcefulness. Here the task is to make the students efficient enough that they should be ready to gather the resources. Immediate finding the solution in one way or the other or finding alternatives is the best technique. A child learns this skill step by step. This skill makes the child's mind sharper and his thinking becomes stronger. The alertness and activeness of child's mind helps him to find the resources. His development of imagination increases and with the increase of imagination he involves himself to some creativity by collecting different resources and in this way the child becomes more inquisitive.

To make the students emotionally strong is a technical skill which can be inserted in students when they come to school. School can invite guest-speakers and inspiring achievers who can share their experiences and instances to inspire the students. Every student has a unique capacity to learn and grasp the things. School can involve the students in different activities and encouragement can be given in such a way that whatever the work they will choose and do that will be the best work.

Leadership is an extraordinarily skill which elutes out of a character of a person. School always develops good leaders. Here students experience the intangible virtues of love, goodness, truth, compassion and learn to use the weapons of insight, creativity and focused attention in order to achieve a goal. One of the foremost duties of the teacher is to kindle his students' minds with a regaining of new outlook, confidence, zeal and knowledge of difference between right and wrong. In the school students are trained to take part in all activities like debate, elocution, group discussion etc. Schools prepare the students to make aware of their strengths and limitations and develop clear understanding about human nature, aspirations, sentiments, emotions and thinking. Here the students learn how to express their ideas clearly and practically. The students also learn how to speak in the front of the audience with fluctuating tone by using interesting vocabulary. Then they can have in their hands the possession of effective communicating skills. They learn the technique to do cumbersome task in a very simple and an easy way while getting school education.

All creative skills are developed in the school as students are provided different platforms according to their mental level. Creativity and imaginative thinking are valued everywhere. Students are taught how to handle tedious task and what ways are to opt to complete the work efficiently. They are given training how to find out creative solutions. Their participation in painting, in making models, science projects, preparing ppt's, in music are the live examples of creativity. Creativity plays a big role. Students learn to maintain courage to pursue ideas which they keep stuck in their minds.

Appearing for interview is skill which gives glimpses of inner traits and qualities of the person. Schools are developing their skill i.e. how to appear for interviews and where students are to show their attitudes skill and knowledge. Schools make the students ready how to handle various situations, how to face challenges and achieve positive outcomes of life. Students are made ready for behavioral, situational and unstructured interviews. Students are made ready while facing unstructured interviews that how to involve in free flowing discussions and how to carry the conversation ahead.

Preference is also given to Vocational skill in school education which refers to occupations that students learn with basic training. For the better skill development of youth, the projects provide them Computer training and make them familiar with the latest technology used in day-to-day life. The main objective is to make the youth self-dependant and more educated. So, basic computer education is one of the essential qualifications for employment of youth in industries, hotels, Government offices and Private sectors. In vocational training children are learnt to focus on practical and career education. Excellence comes when the performer takes pride in doing his best. Every job is a self-portrait of the person who does it, regardless of what the job is whether carpentry, learning photography, mastery of art & craft etc. Students are given training to become a good artist and craft persons. Training is given to them to study visual arts, creative arts, fine arts and designing. In the field of photography, students are given the training for how to use cameras and take photographs etc. Areas of specialization in photography involve photo Journalism, food or fashion, advertising and graphic designing etc. In carpentry students are trained to do some unique work. Many students are trained in basic apprentice programs.

Development of optimistic skill one can experience only in school. A student's mind has a weakness that although it can solve the most intricate of puzzles yet it flows blindly in superficiality and outward appearances. A school that develops confidence in its students about the talents that they possess, however menial they might appear, lends its students an optimism that is contagious and self-inspiring.

In conclusion our School teaches the students ephemeral and sacrificial nature of life right from a very early age. Gathering resources, finding solutions, quickness, alertness, activeness, development of imagination, involvement of creativity, inquisitiveness are additional points and skills which students learn in school time. Our school always focuses on the development of basic skill, in depth understanding and area of choice for students.

#### **Health and Physical wellness - Vital for holistic growth.**

The schools need to bring the children back to the world of calisthenics according to Gandhian philosophy that is an art of fitness where health is associated with strength, endurance, stamina and naturally developed muscles. Holistic development makes the personality of the individuals and describes the better prospects of the life. Many clubs have been formed to bring the awareness in the minds of young people. To bring about general physical fitness among the students and to develop a sense of sportsmanship, a special emphasis is laid on creating a healthy balance between class room and play field. Our school

is humming with regular co curricular activities to facilitate the exploration of each individual's different talents with opportunities to develop their confidence and self-esteem. Its live example is as school has opened Roof Top stadium for indoor games like Table -Tennis, Chess, and Badminton etc. Yoga which is called bliss to health is a continuous practice given to the students everyday .Emotional toxicity which is always stored in body can be immediately removed by doing exercises of Yoga .Mind can be influenced by changing the position of the body : Yoga poses, breathing practices and meditation release the constriction and the mind and body very active. Advanced information regarding health issues, nutrition awareness are taken from Internet. Emphasis is given on the natural form of diets .Awareness is brought about balanced diet and also about other valuable nutrients required for the body .Yoga exercises encourages the person to move in a way that feels good for him.

**So transforming education through technology and skill development has proved a very fruitful boon for our students.**

