TECHNOLOGY AND DEVELOPMENT pdf

1: The Impact of Technology on the Developing Child | HuffPost Life

Essay on Technology and Development! Technology refers to the use of tools, machines, materials, techniques and sources of power to make work easier and more productive. While science is concerned with understanding how and why things happen, technology deals with making things happen.

Contributors control their own work and posted freely to our site. If you need to flag this entry as abusive, send us an email. Reminiscing about the good old days when we were growing up is a memory trip well worth taking when trying to understand the issues facing the children of today. A mere 20 years ago, children used to play outside all day, riding bikes, playing sports and building forts. Children of the past moved In the past, family time was often spent doing chores, and children had expectations to meet on a daily basis. The dining room table was a central place where families came together to eat and talk about their day, and after dinner became the center for baking, crafts and homework. Juggling school, work, home, and community lives, parents now rely heavily on communication, information, and transportation technology to make their lives faster and more efficient. Entertainment technology TV, Internet, video games, iPads, cell phones has advanced so rapidly, that families have scarcely noticed the significant impact and changes to their family structure and lifestyles. A Kaiser Foundation study showed that elementary aged children use on average 7. Gone is dining room table conversation, replaced by the "big screen" and take out. Children now rely on technology for the majority of their play, grossly limiting challenges to their creativity and imaginations, as well as limiting necessary challenges to their bodies to achieve optimal sensory and motor development. Sedentary bodies bombarded with chaotic sensory stimulation are resulting in delays in attaining child developmental milestones, with subsequent negative impact on basic foundation skills for achieving literacy. So what is the impact of technology on the developing child? The impact of rapidly advancing technology on the developing child has seen an increase of physical, psychological and behavior disorders that the health and education systems are just beginning to detect, much less understand. Child obesity and diabetes are now national epidemics in both Canada and the U. Diagnoses of ADHD, autism, coordination disorder, developmental delays, unintelligible speech, learning difficulties, sensory processing disorder, anxiety, depression, and sleep disorders are associated with technology overuse, and are increasing at an alarming rate. An urgent closer look at the critical factors for meeting developmental milestones, and the subsequent impact of technology on those factors, would assist parents, teachers and health professionals to better understand the complexities of this issue, and help create effective strategies to reduce technology use. Four critical factors necessary to achieve healthy child development are movement, touch, human connection, and exposure to nature. These types of sensory inputs ensure normal development of posture, bilateral coordination, optimal arousal states and self-regulation necessary for achieving foundation skills for eventual school entry. Young children require hours per day of active rough and tumble play to achieve adequate sensory stimulation to their vestibular, proprioceptive and tactile systems. Tactile stimulation received through touching, hugging and play is critical for the development of praxis, or planned movement patterns. Touch also activates the parasympathetic system lowering cortisol, adrenalin and anxiety. Nature and "green space" has not only a calming influence on children, but also is attention restorative and promotes learning. Further analysis of the impact of technology on the developing child indicates that while the vestibular, proprioceptive, tactile and attachment systems are under stimulated, the visual and auditory sensory systems are in "overload. Young children who are exposed to violence through TV and video games are in a high state of adrenalin and stress, as the body does not know that what they are watching is not real. Children who overuse technology report persistent body sensations of overall "shaking", increased breathing and heart rate, and a general state of "unease. While the long term effects of this chronic state of stress in the developing child are unknown, we do know that chronic stress in adults results in a weakened immune system and a variety of serious diseases and disorders. While technology is a train that will continually move forward, knowledge regarding its detrimental effects, and action taken toward balancing the use of technology with critical factors for development, will work toward sustaining our children. Rather than hugging, playing, rough housing, and conversing with

children, parents are increasingly resorting to providing their children with more TV, video games, and the latest iPads and cell phone devices, creating a deep and irreversible chasm between parent and child.

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2: Five ways technology can help the economy | World Economic Forum

Technology & Development The Forest Service operates two Technology and Development (T&D) centers aimed at applying technology and equipment to improve business practices and at keeping employees safe while working in a forest environment.

WhatsApp Today we see that most of the organizations are still failed to adapt to most modern and optimal learning management solutions and practices, which in turn puts them on a struggling road for gaining growth and enhanced productivity. Being the researcher and provider of corporate training and specialized learning solutions to enterprises, yourtrainingedge. Due to the increasing competition and growing popularity of online training and education tools such as MOOCs, video training, online demonstration and simulation, discussion boards, leader boards, distance learning tools like webinars etc, leading organizations in view of technology change in these areas, are abandoning conventional modes of learning and replacing these with more effective solutions [2]. The technology changes are compelling the learning and development teams to adapt to the learning solutions that involve recent technology innovations. Technology is really setting a new standard for engaging learners, improving their performance and developing an enhanced learning experience both for learners and development teams. In this article, let me discuss some of the ways technology is impacting learning and development departments of organizations and influencing the strategies developed by the managers. MOOCs Learning and development teams today are increasingly shifting to adopt MOOCs to leverage their learning and development measures in order to enhance the workforce. Learning and development teams are influenced by the convenience and opportunity modern technology is providing to learners for participating in open learning forms and communities. MOOCs Massive Open Online Community gained popularity in as a great learning mode, playing a vital part in strengthening online learning community and giving access to a broad range of quality courses to the learners [3]. This has led the learning and development teams to consider MOOCs far more valuable and reliable than computer based training and other distance learning courses. Video learning Why learning and development teams are adhering to achieve their learning goals via video learning, is another great way to see how technology is impacting learning and development industry. Video learning, as one of the modern and rising modes for learning and development, gives a new dimension to what PowerPoint is unable to deliver. Learners can easily be engaged through video content and training and development teams are now mostly relied on effectively created training videos to deliver the sessions all over the world. Learning teams consider video as a vital component of their training strategy and influenced by ease, interest and spark the video brings to their training and development session [4]. In addition, accessibility is another feature that has compelled teams to adopt video training. Trainers and instructors can create videos; both informative and demonstrating, that learners can access from any part of the world, once the video is published on dedicated platforms. Video has become one of the greatest means of pulling in visitors to particular website or a business. Thus, learning and development teams, which are also focused on marketing side of their learning and development strategy, especially find video an interesting mode to use. Going Mobile We all are aware of how mobile has just transformed the way organizations work, communicate, interact and collaborate to external environment and within departments. In spite of this reality, many learning teams are not responding to embrace mobile learning solutions. As per one of the latest surveys, just 10 percent of organizations and their learning and development teams are using mobile based learning strategies. Only 8 percent use mobile learning apps, 5 percent use mobile performance web based sites and just 8 percent use mobile performance apps [5]. In addition, teams are also finding it difficult to determine the options that are accessible, effective and budget friendly. Determining technology partner has become an important decision for learning and development teams since this decision greatly impact training cost and learning outcomes as well. Technology is always changing and learning and development teams need to be ready to cope with the challenge of determining, selecting and using the most optimal technological.

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3: Research & Technology | US Department of Transportation

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Essay on Technology and Development Article shared by: Essay on Technology and Development! Technology refers to the use of tools, machines, materials, techniques and sources of power to make work easier and more productive. While science is concerned with understanding how and why things happen, technology deals with making things happen. Development is closely related with technology. The stage of development the human being has arrived could have been possible without the advancement in technology. The radical change and advancement in the economy, as we observe today, is the result of the modern technology. Technology has brought about efficiency and quality in the manufacturing sector. Technological advancement has reduced the risk involved in manufacturing enterprises. There has been tremendous improvement in the field of health the world over not only the average age of people has increased but the mortality rate has also declined considerably. This could be possible only because of technological advancement in health sector. There is perhaps no field of human life which has not been affected by technology. Agriculture, industry, profession, health, education, art, political processes, recreation, religious activities and daily life activities all are under the influence of technology. But, it is important to keep in mind that technological advancement has affected human life both positively as Well as negatively. The nature and extent of development the human society has experienced by now is heading towards crises in future. The sustainability of development is in question today. This has happened only due to irrational use of technology. It has been discussed here as to how development â€" economic as well as social â€" takes place with the advancement of technology but not without leaving a scar to threaten the human society. The development of technology, which itself is symptomatic of development, has brought about not only economic development but also radical changes in the social and cultural spheres of society. This articles also points out the negative effects of technological advancements on social, cultural and economic aspects of human life. Technological advancement and development have come to a stage where human society finds itself at a crossroads. The positive as well as negative roles of technology have put humans into to a situation of flux and confusion.

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4: How technology is impacting Learning & Development teams | Your Training Edge Â®

Technology and Development CGD's work in technology and development focuses on the macroeconomic implications of technology change as well as technological applications for specific development challenges.

Explore the latest strategic trends, research and analysis At a time of slowed growth and continued volatility, many countries are looking for policies that will stimulate growth and create new jobs. Information communications technology ICT is not only one of the fastest growing industries â€" directly creating millions of jobs â€" but it is also an important enabler of innovation and development. The number of mobile subscriptions 6. In this new environment, the competitiveness of economies depends on their ability to leverage new technologies. Here are the five common economic effects of ICT. Direct job creation The ICT sector is, and is expected to remain, one of the largest employers. In Australia, building and running the new super-fast National Broadband Network will support 25, jobs annually. Naturally, the growth in different segments is uneven. In the US, for each job in the high-tech industry, five additional jobs , on average, are created in other sectors. In China, this number can reach 2. The doubling of mobile data use caused by the increase in 3G connections boosts GDP per capita growth rate by 0. The Internet accounts for 3. Most of this effect is driven by e-commerce â€" people advertising and selling goods online. Emergence of new services and industries Numerous public services have become available online and through mobile phones. The transition to cloud computing is one of the key trends for modernization. ICT has enabled the emergence of a completely new sector: The contractors are often based in emerging economies. Microwork platforms allow entrepreneurs to significantly cut costs and get access to qualified workers. In , oDesk alone had over 3 million registered contractors who performed 1. This trend had spillover effects on other industries, such as online payment systems. ICT has also contributed to the rise of entrepreneurship, making it much easier for self-starters to access best practices, legal and regulatory information, marketing and investment resources. The Internet provides them with new ways of reaching out to customers and competing for market share. Over the past few years, social media has established itself as a powerful marketing tool. ICT tools employed within companies help to streamline business processes and improve efficiency. The unprecedented explosion of connected devices throughout the world has created new ways for businesses to serve their customers.

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5: Technology Development | Department Of Science & Technology

Through its Research, Development, and Deployment work, OE is pursuing technologies to improve grid reliability, efficiency, flexibility, functionality, and security; and making investments and sponsoring demonstrations aimed at bringing new and innovative technologies to maturity and helping them transition to market.

Children in Abuja, Nigeria work on computers provided by One Laptop per Child - the initiative was criticised for not understanding the educational context. The insights from these attempts have helped provide the basis for an emerging body of thought on best practice. Putting the user at the centre of the design process Making sure that technology is designed with the user in mind is high on the agenda of Kenny Ewan, chief executive of WeFarm , a social enterprise working in Africa and Latin America. The tech platform enables small-scale farmers to access information and share expertise with their peers around the world through either sending an SMS or accessing the online forum. One of the real assets of WeFarm, he argues, is allowing farmers to define their own needs and answer their own problems among their peers. Nama Raj Budhathok, executive director at Kathmandu Living Labs , is also a strong advocate of using technology to empower communities. OpenStreetMap, an initiative of the Nepalese non-profit tech company, crowdsources data to create maps in Nepal. In the aftermath of the earthquake these have proved invaluable for relief organisations trying to reach remote, previously unmapped, places. So far 5, people have added geographical data to the maps either online or through mobile phones. The beauty of using technology in this way, says Budhathok, is its ability to unlock community knowledge and to encourage people to question their local built environment. The picture shows the distribution of reports in the area. Kathmandu Living Labs For Kochi, the surest way of ensuring a technology is genuinely empowering is to have a collaborative design process. She says that at Unicef developers are sent into the field to test and develop new technologies. A drone to deliver medicines. Unicef Cultural sensitivities also play a role. Marc Shillum at Matternet , a company currently testing the use of drones to deliver diagnostics in remote areas, highlights the need for an awareness of the associations technologies may have in particular places. Technology is only one piece of the puzzle There is no doubt that technology has already had a transformative effect in development. This is evident particularly when it comes to the speed of data collection, says Kochi. Obtaining data on what was happening in the field used to be so slow and retrospective that it was a bit like driving in a car with all the windows blacked out apart from the rear one, says Kochi. Yet the size of the role played by technology should be kept in perspective, says Vota: Looking to the future Earlier this month the UN commission on science, technology and innovation brought leaders in development together to highlight the integral role technology will play in implementing the SDGs. Yet many challenges still lie ahead as development professionals brace themselves for the next 15 years. Looking forward, Ewan highlights the issue of data and the many insights aggregated data will provide NGOs. Others, however, will be wary about the levels of transparency and protection involved in the use of this data. Like using a computer to type up your notes.

6: Role of Technology in Economic Development

The Department of Science & Technology plays a pivotal role in promotion of science & technology in the country.

Email 5 Trends for the Future of Learning and Development Five key trends and best practices that companies should consider include the use of mobile technology, adoption of social learning tools, alignment with corporate objectives, use of adaptive learning principles, and the ability to measure effectiveness. August 28, Article Author: As a result, leading companies are abandoning traditional methods of learning in favor of more effective solutionsâ€”often involving technology innovationâ€”that engage talent and improve performance. This report highlights key trends affecting the future of enterprise learning and recommendations for selecting the right provider. Key Findings One-third of companies are increasing their budget for learning and development. Finding and keeping talent is no longer an HR challenge but a strategic business priority. Yet, most companies are unable to build lasting relationships with their employees in an effort to overcome these challenges. Instead of empowering employees with the tools they need to succeed, many companies feel threatened by their workforce and fearful of change. For many companies, an updated learning and development process is long overdue. It may seem surprising considering the state of the global economy over the last few years , but learning has remained, for the most part, stagnant. The good news is that one-third of companies are increasing their budget for learning and development over the next 12 months. Although having the right resources and expertise is critical, companies may want to consider the role technology can play in transforming their learning functions. Trends and Recommendations Although learning is one of the most mature areas of talent management, it is also one of the most innovative. With recent technology advancements and the rapid adoption of social collaboration, learning and development has come a long way. Yet making a decision to improve a learning management program and invest in a learning management solution is often a daunting challenge. Five key trends and best practices that companies should consider include the use of mobile technology, adoption of social learning tools, alignment with corporate objectives, use of adaptive learning principles, and the ability to measure effectiveness. Mobile has transformed the way companies work, interact, and collaborate. With global penetration rates skyrocketing, organizations that are not considering mobile in all areas of HCM will have a difficult time competing for talent. Despite this reality, companies are still slow to embrace mobile learning solutions. Only 10 percent of companies are using mobile Web-based learning solutions. Some 8 percent are using mobile learning apps, 5 percent mobile performance Web-based sites, and 4 percent are using mobile performance apps Most companies recognize that mobile learning solutions can improve adoption, expand global reach, and engage users better, but do not understand how to execute a mobile strategy. Additionally, some organizations find it challenging to determine what options are available and which providers to consider. Regardless of the barriers they are facing, organizations looking to improve their learning functions will need to make mobile part of the equation and determine what requirements they have in order to select a technology partner. Companies are quickly embracing social media tools, as well as investing in social collaboration tools to better engage employees and foster a learning culture. Although social has become mainstream, companies still lack the knowledge and insight around how to use these tools for learning and development. Of the 59 percent of companies using social for their learning strategies, only 24 percent say they are effective. One reason is that companies are limited in the social tools they are using. Companies must educate themselves on the value of social learning and invest in providers that offer solutions that drive business outcomes. Adaptive learning is a methodology that breaks traditional models and allows employees to learn at their own pace. In the workforce, adaptive learning is conducted similarly. Employees can be monitored individually and in real time to determine what learning approach will best suit their needs. It has advantages for younger generations entering the workforce that have expectations around flexibility and interaction. Adaptive learning can be effective at improving efficiency, as well as employee engagement and retention since it allows employees to build confidence and overall expertise. Companies may want to consider breaking traditional learning methods by introducing aspects of adaptive learning. Aligning with Business Objectives. The learning of the past operated in silos where learning

professionals had little interaction or input from other areas of the business. The learning of the future must be closely aligned to overall corporate strategies in order for companies to achieve results. Any program or technology investment should involve input from business leaders to ensure that learning is driving retention, engagement, and performance. For those companies that did align learning and business priorities 48 percent , more than 70 percent were able to improve company revenue. To determine if the learning strategy in place is driving business outcomes, companies must find a way to consistently measure its effectiveness. Currently, most companies are considering team encouragement, employee engagement, and employee satisfaction over more concrete business metrics such as retention, turnover, and revenue per full-time employee. Traditional models of learning do little to bridge the gap between employer and employee or to improve engagement and performance. By aligning learning strategies with corporate objectives and leveraging innovative technology, organizations will be able to significantly improve their learning functions. Select the right provider. In the past, organizations had limited technology choices for learning and development, but today there are new solutions emerging every month. Organizations should consider providers with innovative capabilities such as mobile and social and also understand the importance of measuring the effectiveness of learning activities. Collaborate with the business. Learning professionals must work closely with business leaders to design the learning program and also to gather input on the right technology providers. With executive support, organizations can help shift their approach to learning and create new vehicles for enabling individual success. Put the individual first. Companies must shift the way they view employees and consider focusing on the individual and his or her unique learning needs. For some companies, this strategy may include aspects of adaptive learning; for other companies, it could mean a different communication strategy.

7: Research and development - Wikipedia

While technology is a train that will continually move forward, knowledge regarding its detrimental effects, and action taken toward balancing the use of technology with critical factors for development, will work toward sustaining our children.

The chief new sources of power were theâ€¦ General considerations Essentially, techniques are methods of creating new tools and products of tools, and the capacity for constructing such artifacts is a determining characteristic of humanlike species. Other species make artifacts: But these attributes are the result of patterns of instinctive behaviour and cannot be varied to suit rapidly changing circumstances. Humanity, in contrast with other species, does not possess highly developed instinctive reactions but does have the capacity to think systematically and creatively about techniques. Humans can thus innovate and consciously modify the environment in a way no other species has achieved. An ape may on occasion use a stick to beat bananas from a tree, but a man can fashion the stick into a cutting tool and remove a whole bunch of bananas. Somewhere in the transition between the two, the hominid, the first manlike species, emerges. By virtue of his nature as a toolmaker, man is therefore a technologist from the beginning, and the history of technology encompasses the whole evolution of humankind. In using rational faculties to devise techniques and modify the environment, humankind has attacked problems other than those of survival and the production of wealth with which the term technology is usually associated today. The technique of language, for example, involves the manipulation of sounds and symbols in a meaningful way, and similarly the techniques of artistic and ritual creativity represent other aspects of the technological incentive. This article does not deal with these cultural and religious techniques, but it is valuable to establish their relationship at the outset because the history of technology reveals a profound interaction between the incentives and opportunities of technological innovation on the one hand and the sociocultural conditions of the human group within which they occur on the other. Social involvement in technological advances An awareness of this interaction is important in surveying the development of technology through successive civilizations. To simplify the relationship as much as possible, there are three points at which there must be some social involvement in technological innovation: In default of any of these factors it is unlikely that a technological innovation will be widely adopted or be successful. The sense of social need must be strongly felt, or people will not be prepared to devote resources to a technological innovation. The thing needed may be a more efficient cutting tool, a more powerful lifting device, a laboursaving machine , or a means of utilizing new fuels or a new source of energy. Or, because military needs have always provided a stimulus to technological innovation, it may take the form of a requirement for better weapons. In modern societies, needs have been generated by advertising. Whatever the source of social need, it is essential that enough people be conscious of it to provide a market for an artifact or commodity that can meet the need. Social resources are similarly an indispensable prerequisite to a successful innovation. Many inventions have foundered because the social resources vital for their realizationâ€”the capital, materials, and skilled personnelâ€”were not available. The notebooks of Leonardo da Vinci are full of ideas for helicopters, submarines, and airplanes, but few of these reached even the model stage because resources of one sort or another were lacking. The resource of capital involves the existence of surplus productivity and an organization capable of directing the available wealth into channels in which the inventor can use it. The resource of materials involves the availability of appropriate metallurgical, ceramic, plastic , or textile substances that can perform whatever functions a new invention requires of them. The resource of skilled personnel implies the presence of technicians capable of constructing new artifacts and devising novel processes. A society, in short, has to be well primed with suitable resources in order to sustain technological innovation. A sympathetic social ethos implies an environment receptive to new ideas, one in which the dominant social groups are prepared to consider innovation seriously. Such receptivity may be limited to specific fields of innovationâ€”for example, improvements in weapons or in navigational techniquesâ€”or it may take the form of a more generalized attitude of inquiry, as was the case among the industrial middle classes in Britain during the 18th century, who were willing to cultivate new ideas and

inventors, the breeders of such ideas. Whatever the psychological basis of inventive genius, there can be no doubt that the existence of socially important groups willing to encourage inventors and to use their ideas has been a crucial factor in the history of technology. Social conditions are thus of the utmost importance in the development of new techniques, some of which will be considered below in more detail. It is worthwhile, however, to register another explanatory note. This concerns the rationality of technology. It has already been observed that technology involves the application of reason to techniques, and in the 20th century it came to be regarded as almost axiomatic that technology is a rational activity stemming from the traditions of modern science. Nevertheless, it should be observed that technology, in the sense in which the term is being used here, is much older than science, and also that techniques have tended to ossify over centuries of practice or to become diverted into such para-rational exercises as alchemy. The modern philosophy of progress cannot be read back into the history of technology; for most of its long existence technology has been virtually stagnant, mysterious, and even irrational. It is not fanciful to see some lingering fragments of this powerful technological tradition in the modern world, and there is more than an element of irrationality in the contemporary dilemma of a highly technological society contemplating the likelihood that it will use its sophisticated techniques in order to accomplish its own destruction. On the other hand it is impossible to deny that there is a progressive element in technology, as it is clear from the most elementary survey that the acquisition of techniques is a cumulative matter, in which each generation inherits a stock of techniques on which it can build if it chooses and if social conditions permit. Over a long period of time the history of technology inevitably highlights the moments of innovation that show this cumulative quality as some societies advance, stage by stage, from comparatively primitive to more sophisticated techniques. But although this development has occurred and is still going on, it is not intrinsic to the nature of technology that such a process of accumulation should occur, and it has certainly not been an inevitable development. The fact that many societies have remained stagnant for long periods of time, even at quite developed stages of technological evolution, and that some have actually regressed and lost the accumulated techniques passed on to them, demonstrates the ambiguous nature of technology and the critical importance of its relationship with other social factors. Modes of technological transmission Another aspect of the cumulative character of technology that will require further investigation is the manner of transmission of technological innovations. This is an elusive problem, and it is necessary to accept the phenomenon of simultaneous or parallel invention in cases in which there is insufficient evidence to show the transmission of ideas in one direction or another. The mechanics of their transmission have been enormously improved in recent centuries by the printing press and other means of communication and also by the increased facility with which travelers visit the sources of innovation and carry ideas back to their own homes. Traditionally, however, the major mode of transmission has been the movement of artifacts and craftsmen. Trade in artifacts has ensured their widespread distribution and encouraged imitation. Even more important, the migration of craftsmenâ€”whether the itinerant metalworkers of early civilizations or the German rocket engineers whose expert knowledge was acquired by both the Soviet Union and the United States after World War IIâ€”has promoted the spread of new technologies. The evidence for such processes of technological transmission is a reminder that the material for the study of the history of technology comes from a variety of sources. Much of it relies, like any historical examination, on documentary matter, although this is sparse for the early civilizations because of the general lack of interest in technology on the part of scribes and chroniclers. For these societies, therefore, and for the many millennia of earlier unrecorded history in which slow but substantial technological advances were made, it is necessary to rely heavily upon archaeological evidence. The historian of technology must be prepared to use all these sources, and to call upon the skills of the archaeologist, the engineer, the architect, and other specialists as appropriate. Technology in the ancient world The beginningsâ€”Stone Age technology to c. Animals occasionally use natural tools such as sticks or stones, and the creatures that became human doubtless did the same for hundreds of millennia before the first giant step of fashioning their own tools. Even then it was an interminable time before they put such toolmaking on a regular basis, and still more aeons passed as they arrived at the successive stages of standardizing their simple stone choppers and pounders and of manufacturing themâ€”that is, providing sites and assigning specialists to the work. A degree of specialization

in toolmaking was achieved by the time of the Neanderthals 70, bce ; more-advanced tools, requiring assemblage of head and haft, were produced by Cro-Magnons perhaps as early as 35, bce ; while the application of mechanical principles was achieved by pottery-making Neolithic New Stone Age; bce and Metal Age peoples about bce. Earliest communities For all except approximately the past 10, years, humans lived almost entirely in small nomadic communities dependent for survival on their skills in gathering food, hunting and fishing, and avoiding predators. It is reasonable to suppose that most of these communities developed in tropical latitudes, especially in Africa, where climatic conditions are most favourable to a creature with such poor bodily protection as humans have. It is also reasonable to suppose that tribes moved out thence into the subtropical regions and eventually into the landmass of Eurasia, although their colonization of this region must have been severely limited by the successive periods of glaciation, which rendered large parts of it inhospitable and even uninhabitable, even though humankind has shown remarkable versatility in adapting to such unfavourable conditions. The Neolithic Revolution Toward the end of the last ice age , some 15, to 20, years ago, a few of the communities that were most favoured by geography and climate began to make the transition from the long period of Paleolithic , or Old Stone Age , savagery to a more settled way of life depending on animal husbandry and agriculture. This period of transition, the Neolithic Period , or New Stone Age, led eventually to a marked rise in population, to a growth in the size of communities, and to the beginnings of town life. It is sometimes referred to as the Neolithic Revolution because the speed of technological innovation increased so greatly and human social and political organization underwent a corresponding increase in complexity. To understand the beginnings of technology, it is thus necessary to survey developments from the Old Stone Age through the New Stone Age down to the emergence of the first urban civilizations about bce. Stone The material that gives its name and a technological unity to these periods of prehistory is stone. Though it may be assumed that primitive humans used other materials such as wood, bone, fur, leaves, and grasses before they mastered the use of stone, apart from bone antlers, presumably used as picks in flint mines and elsewhere, and other fragments of bone implements , none of these has survived. The stone tools of early humans, on the other hand, have survived in surprising abundance, and over the many millennia of prehistory important advances in technique were made in the use of stone. Stones became tools only when they were shaped deliberately for specific purposes, and, for this to be done efficiently, suitable hard and fine-grained stones had to be found and means devised for shaping them and particularly for putting a cutting edge on them. Flint became a very popular stone for this purpose, although fine sandstones and certain volcanic rocks were also widely used. There is much Paleolithic evidence of skill in flaking and polishing stones to make scraping and cutting tools. These early tools were held in the hand, but gradually ways of protecting the hand from sharp edges on the stone, at first by wrapping one end in fur or grass or setting it in a wooden handle, were devised. Much later the technique of fixing the stone head to a haft converted these hand tools into more versatile tools and weapons. With the widening mastery of the material world in the Neolithic Period, other substances were brought into service, such as clay for pottery and brick, and increasing competence in handling textile raw materials led to the creation of the first woven fabrics to take the place of animal skins. About the same time, curiosity about the behaviour of metallic oxides in the presence of fire promoted one of the most significant technological innovations of all time and marked the succession from the Stone Age to the Metal Age. Power The use of fire was another basic technique mastered at some unknown time in the Old Stone Age. The discovery that fire could be tamed and controlled and the further discovery that a fire could be generated by persistent friction between two dry wooden surfaces were momentous. Fire was the most important contribution of prehistory to power technology, although little power was obtained directly from fire except as defense against wild animals. For the most part, prehistoric communities remained completely dependent upon manpower, but, in making the transition to a more settled pattern of life in the New Stone Age, they began to derive some power from animals that had been domesticated. It also seems likely that by the end of prehistoric times the sail had emerged as a means of harnessing the wind for small boats, beginning a long sequence of developments in marine transport. Tools and weapons The basic tools of prehistoric peoples were determined by the materials at their disposal. But once they had acquired the techniques of working stone, they were resourceful in devising tools and weapons

with points and barbs. Thus, the stone-headed spear, the harpoon, and the arrow all came into widespread use. The spear was given increased impetus by the spear-thrower, a notched pole that gave a sling effect. The ingenuity of these primitive hunters is also shown in their slings, throwing-sticks the boomerang of the Australian Aborigines is a remarkable surviving example , blowguns, bird snares, fish and animal traps, and nets. These tools did not evolve uniformly, as each primitive community developed only those instruments that were most suitable for its own specialized purposes, but all were in use by the end of the Stone Age. In addition, the Neolithic Revolution had contributed some important new tools that were not primarily concerned with hunting. It is not possible to be sure when these significant devices were invented, but their presence in the early urban civilizations suggests some continuity with the late Neolithic Period. The drill and the lathe, on the other hand, were derived from the bow and had the effect of spinning the drill piece or the workpiece first in one direction and then in the other. Developments in food production brought further refinements in tools. The processes of food production in Paleolithic times were simple, consisting of gathering, hunting , and fishing. If these methods proved inadequate to sustain a community, it moved to better hunting grounds or perished. With the onset of the Neolithic Revolution, new food-producing skills were devised to serve the needs of agriculture and animal husbandry. Digging sticks and the first crude plows, stone sickles, querns that ground grain by friction between two stones and, most complicated of all, irrigation techniques for keeping the ground watered and fertileâ€”all these became well established in the great subtropical river valleys of Egypt and Mesopotamia in the millennia before bce. Building techniques Prehistoric building techniques also underwent significant developments in the Neolithic Revolution. Nothing is known of the building ability of Paleolithic peoples beyond what can be inferred from a few fragments of stone shelters, but in the New Stone Age some impressive structures were erected, primarily tombs and burial mounds and other religious edifices, but also, toward the end of the period, domestic housing in which sun-dried brick was first used. In northern Europe, where the Neolithic transformation began later than around the eastern Mediterranean and lasted longer, huge stone monuments, of which Stonehenge in England is the outstanding example, still bear eloquent testimony to the technical skill, not to mention the imagination and mathematical competence, of the later Stone Age societies. Manufacturing Manufacturing industry had its origin in the New Stone Age, with the application of techniques for grinding corn, baking clay, spinning and weaving textiles, and also, it seems likely, for dyeing, fermenting, and distilling. Some evidence for all these processes can be derived from archaeological findings, and some of them at least were developing into specialized crafts by the time the first urban civilizations appeared. In the same way, the early metalworkers were beginning to acquire the techniques of extracting and working the softer metals, gold, silver, copper, and tin, that were to make their successors a select class of craftsmen. All these incipient fields of specialization, moreover, implied developing trade between different communities and regions, and again the archaeological evidence of the transfer of manufactured products in the later Stone Age is impressive. Flint arrowheads of particular types, for example, can be found widely dispersed over Europe, and the implication of a common locus of manufacture for each is strong. Such transmission suggests improving facilities for transport and communication.

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8: Essay on Technology and Development

With recent technology advancements and the rapid adoption of social collaboration, learning and development has come a long way. Yet making a decision to improve a learning management program and invest in a learning management solution is often a daunting challenge.

Wind profilers Other synoptic data or weather instruments, including Earth Simulator which is used to model climate and weather conditions. In Africa, flood is one of the major concerns of farmers. The International Water Management Institute launched the mobile services for flood management, specifically in East Sudan. These mobile services are considered as a next-generation ICT for weather and water information. The tool converts complex satellite sensor information to simple text messages which are sent to farmers informing them about the optimum use of flood water for crop production. The text messages would also warn the farmers about the flood events which would help them prepare their fields and advise on how to mitigate flood damage in estimating the risk of future flood events. In times of calamities, information and communication technology is needed for disaster management. Various organisations, government agencies and small and large-scale research projects have been exploring the use of ICT for relief operations, providing early warnings and monitoring extreme weather events. NetHope is another global organization which contributes disaster management and awareness through information technology. CDAC saw the value of communication in responding to the disaster. They emphasized getting accurate and timely information as being crucial to saving lives. One of the organizations and tools that they tapped was the Digital Humanitarian Network. The Digital Humanitarian Network is a group of organizations with various tools that contribute to crisis mapping. These tools were used to manage information that are received about the disaster. The tools they use allow them to monitor mediaâ€”including social media, create live crisis maps, analyze the data they have, etc. The website collates information regarding earthquake preparedness. This was created in response to a predicted earthquake, expected to hit Metro Manila with a 7. Through the use of science and technology and in partnership with the academe and other stakeholders, the DOST through Project NOAH is taking a multi-disciplinary approach in developing systems, tools, and other technologies that could be operationalized by government to help prevent and mitigate disasters. OpenRDI aims to minimize the effect of disaster in developing countries by encouraging them to open their disaster risk data. GIS technologies such as satellite imagery , thematic maps, and geospatial data play a big part in disaster risk management. One example is the HaitiData , where maps of Haiti containing layers of geospatial data earthquake intensity, flooding likelihood, landslide and tsunami hazards, overall damage, etc. Terrestrial earth, land, soil, water , ocean, climate and atmospheric surveillance, data collection, storage and record technologies, remote sensing, telemetric systems, geographic information systems GIS etc. Different computational and processing tools are required to analyze the data collected from environment. Some of these tools are land, soil, water and atmospheric quality assessment tools, Tool for analyzing atmospheric conditions like GHG emissions and pollutants etc. Environment planning and policy formulation require analyzed data, information and decision support systems. Environment management and protection: Information and communication technologies for management and protection of environment include resource and energy conservation and management systems, GHG emission management and reduction systems and controls, pollution control and management systems etc. ICT can reduce its own environmental impacts by increasing system efficiency which ultimately reduce the overall negative impact on environment. Impact and mitigating effects of ICT utilization: ICT use can mitigate the environmental impacts directly by increasing process efficiency and as a result of dematerialization, and indirectly by virtue of the secondary and tertiary effects resulting from ICT use on human activities, which in turn reduce the impact of humans on the environment. ICT is used as a media to increase public awareness, development of environment professionals, and integrating environmental issues into formal education. They have created ICT-based plant clinics employing agricultural extension workers, called "plant-doctors", that would help farmers with their queries. They have provided different ICTs, namely: Mobile phones were used by farmers to contact the plant doctors about their issues. Digital cameras and

microscope are being used to record pests, plants, water levels, soil condition, and also record the problems of the farmers. Plant doctors also use multimedia to educate farmers through video presentations of different agricultural topics. Further, computers and internet, through the use of software - such as MS Office and Pallithaya - has helped in creating a database that allowed plant doctors to keep track of the problems that have occurred and are occurring for farmers, and the solution they could provide. Subsequently, they use google maps and GIS to identify the location of the farmers and use it as a guide in resistance to the climate and climate change vulnerabilities that are known in the area. The project has helped citizens to recognize and map out areas that are most prone to climate change and has assisted in improving their knowledge of available resources in their area, and ways on how to adapt to climatic changes. ICTs would be able to provide education and knowledge in a wider reach, even with a limited amount of resources, unlike conventional systems of education. The Hole in the Wall also known as minimally invasive education is one of the projects which focuses on the development of computer literacy and the improvement of learning. Other projects included the utilization of mobile phone technology to improve educational outcomes. By maximizing the use of technology to create a wide range of learning, UPOU promotes lifelong learning in a more convenient way. It has multiple impacts on student achievements and motivations, including but not limited to: However, it is not without its flaws â€" ICTs can easily become the focus of a program, in which the technology is given and provided before much thought is given to the application of it. ICT can improve the quality of education and bring better outcomes by making information easily accessible to students, helping to gain knowledge and skill easily and making trainings more available for teachers. In one study conducted by the UNICEF in southern and eastern Africa, it is evident that girls population have a lower opportunity in having the chance and right to have a quality and proper education than boys. For example, in India a project titled "Mobile Learning Games for English as Second Language Literacy" aimed to enhance the literacy sub-skills of boys and girls in low-income rural areas and in urban slums via mobile game-based learning of English in non-formal, formal and informal education contexts. If mobile phones could encourage illiterate traders to become partially literate, how useful would it be to incorporate mobile phones in adult literacy classes? Participants also made use of digital and visual literacy skills linking mobile phone menu features with visual symbols and signs related to mango pickingâ€"a common community livelihood practice. The overall Somali community empowerment programme has been documented as boosting job training and placement for 8, young people women and men. Tests before and after showed statistically significant improvement in skills, with the youth livelihoods programme being linked to job placements. Health[edit] ICTs can be a supportive tool to develop and serve with reliable, timely, high-quality and affordable health care and health information systems and to provide health education, training and improve health research. This is approximately million people wherein three out of every four are living in developing countries, half are of working age, half are women and the highest incidence and prevalence of disabilities occurs in poor areas. The Convention on the Rights of Persons with Disabilities CRPD includes policies about accessibility, non-discrimination, equal opportunity, full and effective participation and other issues. Although these do not specifically mention the right to access ICT for people with disabilities, two key elements within the MDGs are to reduce the number of people in poverty and to reach out to the marginalised groups without access to ICT. Researchers are now realizing that activity such as Twitter use " Social media can also be used as a support venue for solving problems and also a means for reporting criminal activity or calamity issues that affects the well being of communities. Social media is also used for inciting volunteerism by letting others know of situations in places that requires civic intervention and organize activities to make it happen. Civic engagement plays a large part in e-government, particularly in the area of Transparency and Accountability. ICTs are used to promote openness in the government as well as a platform for citizens to report on anomalous government activities for the purpose of reducing corruption and in promoting efficiency. Even before the advent or popularity of social media platforms, internet forums were already present. Here, people could share their concerns about pertinent topics to seek solutions. In third-world countries like the Philippines, the text brigade is an easy method for informing and gathering people for whatever purpose. The e-government action plan includes applications and services for ensuring transparency, improving efficiency, strengthening citizen relations, making need-based

initiatives, allocating public resources efficiently and enhancing international cooperation. Writing about ICTs for government use in , W. Howard Gammon can be credited as writing the first e-government research paper. Though not mentioning the word "e-government", his article "The Automatic Handling of Office Paper Work" tackled tactics regarding government processes and information systems or electronic machinery. Mirandilla-Santos, it has been suggested from research in the Philippines, that an average citizen does not actively seek information about politics and government, even during an election campaign. Other[edit] Tourism: Tourism is the sector that has possibility of being benefited from ICT. Roger Harris is the first person to show the possible benefits the field can get utilizing ICT. ICT can be an important medium for developing tourism market and improving local livelihoods. A journal entitled, "E-Tourism: The role of ICT in tourism industry", enumerated several ways how e-commerce is expected to benefit economic development in tourism industry. Through allowing local business access to global markets. By providing new opportunities to export a wider range of goods and services. By improving the internal efficiency within the firms. The specific activities of the E-Tourism assume the existence of the tour operators, of the travel agencies and other entities with interests in tourism field in virtual space through a specialized portal. The phenomenon itself, has implications for both travel consumer and for tour operators, travel agents. E-Tourism is composed of three major activities. E-Information- this stage involves providing information in specialized portals, electronic brochures, audio travel guides, photo albums still images and panoramas , real-time images or videos, and even travel diaries through blogs or specialized virtual communities, such as Virtual Tourist, and why not, the guides offered through virtual cities. Online booking services, as informational society services, must comply with the legal requirements which have their source in the regulations that refer to Internet services in general, and the e-commerce and distance contracting. E- Payment- The consumers can use credit cards, electronic checks, digital cash or even micro-cash when payments amounts are only a few cents. Many electronic payment systems on the internet are the electronic equivalent of systems used every day, such as credit cards or checks. The goal is double:

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9: Information and communication technologies for development - Wikipedia

In my opinion technology and games in a large extent affect the development of children. It turns out that playing on the tablet could help developing child's creativity, teach manual skills.

The technology can be regarded as primary source in economic development and the various technological changes contribute significantly in the development of underdeveloped countries. Technological advancement and economic growth are truly related to each other. The level of technology is also an important determinant of economic growth. The rapid rate of growth can be achieved through high level of technology. Schumpeter observed that innovation or technological progress is the only determinant of economic progress. But if the level of technology becomes constant the process of growth stops. Thus, it is the technological progress which keeps the economy moving. Inventions and innovations have been largely responsible for rapid economic growth in developed countries. The growth of net national income in developed countries cannot be claimed to have been due to capital alone. Kindleberger observed that major part of this increased productivity is due to technological changes. In fact, the technology can be regarded as primary source in economic development and the various technological changes contribute significantly in the development of underdeveloped countries. The impact of technological change on production functions can be illustrated with the help of following diagrams. The innovation is neutral with respect to labour and capital. The new production function R shows that the same output can be produced with less labour and less capital after technological advancement. It is generally assumed that the technological advancement is even more important than capital formation. But the capital formation alone can bring out economic development to a limited extent and the progress stops if there is no technological change. A country cannot remain dependent on the import of technology. A nation that spends more on science and technical research will tend to grow faster than another country accumulating more capital but spending less on technological. In the first figure 4 the country A concentrates on accumulation of more capital resources while in second figure 5, country B focuses attention on technological aspects but does not regulate the accumulation of capital. It is clear that the progress of country B is faster than that of country A due to the high rates of technological development. The concept that technological progress is more important than capital formation is illustrated with the help of production function in the diagram 6. On the production function OP if amount of capital per worker raised from Rs. The main objective of technological progress is to make a better utilization of labour and other resources and hence the production function shifts upward which means that more output per labour can be obtained by the same amount of capital per worker. The quantity of capital per worker remains at Rs. This is due to the upward shifting of the production function. In the same fashion, more production can be produced at other levels of capital intensity. Thus, technological progress results in shifting the production function upward which enables more output per labourer with same amount of capital per worker.

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Safer than ever? Trust and gender in relation to meat provisioning in Norway Marianne Elisabeth Lien and In Christ, my Lord The present value of Byron. Oregon dwelling specialty code for one two family dwellings. Quality in the new GP contract A treatise on the law of awards 19th Kerala Science Congress Only With the Heart Boundary labyrinth and the foreign magician AVN guide to the 500 greatest adult films of all time General test practice for 101 U.S. jobs Manual jetta 2008 espaÃ±ol 49 we almost always toted cokes and oatmeal cookies Reel 989. Adams County (part: EDs 1-9, sheet 18) Database-principles, programming, performance The little evangelist Participation in the divine life Nursery rhymes keyboard notes Indian penal code by ratanlal and dhirajlal latest edition Unreliable viruses stall gene therapy research World, the text, and the critic Require the cooperation of the subjects and are / Tokyo (Global Cities) From Pascal to Fortran 77: Groundwork of economics Stem cells and lung cancer Arielle C. Lebrenne, Shahriar Islam and Malcolm R. Alison. The European Union (EU and the Economic Monetary Union (EMU : prospects of the Balkan countries integrati Management of Crohns disease George Stout with His Maps The indian spy mihir bose Large animal clinical procedures for veterinary technicians Sister to the Sioux Pony patrol and the mystery horse Humor and drama of early Texas Maids, modes, and manners, or, Madame Grundys dilemma Electrical construction estimator, 1985-86 4. The Early years Along the Inside Passage Evaluation, administration of the county sales and use tax, Department of Revenue Frueh on the theatre