

**TOWARDS TECHNOLOGICAL ERA: POTENTIAL OF CURRICULUM OF
COMPUTER SCIENCES AT SECONDARY LEVEL IN PAKISTAN
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ABSTRACT

Twenty first century is known as the hundred years of advancements, making lives simpler and more agreeable. Presently, one can check his/her bank balance, cover utility tabs and can have refreshes with the assistance of innovation. One can check the ecological changes and can take security measures through innovation. PC is the most superb innovation which has offered staggering types of assistance to the people. Progressed countries have done huge fulfillments in all fields of existence with the utilization of PC. PC instruction is getting fundamental for keen work in the commercial center. Administration of Pakistan has presented PC instruction at school level with the mean to set up the youthful age for working in the mechanical time. The goals of the investigation were (I) to discover the assessment of instructors about the uses of PC in mechanical period (ii) to discover the assessment of the educators about the capability of PC sciences instructed at auxiliary level. A poll was produced for knowing the assessment of the educators about PC training. Every assertion of the poll was minded importance level 0.05 by suing chi square strategy. It was discovered that PC has made our work savvy and its schooling is fundamental for work place. Instructing of PC sciences at school level empower the understudies to gain proficiency with its essential ideas and move towards advanced education with earlier information.

Watchwords: School Education, Technology, Computer Education.

1. INTRODUCTION

Start of twenty first century gets amazing happenings the historical backdrop of humankind. Presently, one can have approach over a gigantic volume of information and storehouse over the world and this trustworthy methodology is because of the advances. The term innovation suggests the use of science to craftsmanship. At the point when we apply the study of learning and correspondence to encouraging we advance an innovation (Singh, 2005). As indicated by Kumar (2006, p.2) innovation is sign to the strategies just as the specialized development. An orderly method of applying the strategies to accomplish a goal is as significant as the utilization of specialized hardware for the equivalent.

PC is one of the magnificent developments throughout the entire existence of humanity. On one hand, PC gives ease and soothe in numerous fields of life to individuals and on other hand, it gives magnificence and new styles to old examples. As of now, pretty much all fields are adorned with PC; PC is in real life from farming field to space innovation and is bringing various advantages for humanity. Indeed, PC innovation is viewed as a standard for improvement. A PC

has ability to ingest many thousands volumes of books, pictures, sounds and recordings in its memory, which one can recover whenever. Almost certainly, PC empowers the people to oversee life designs in various reasonable molds and can watch the occasions happening in any piece of the world. The PC is causing an adjustment in the public eye that is equivalent to the change occasioned by the modern insurgency (Johnson, 2009). Around the world, PC expertise is turning into a required for working with new innovative supplies and in cutting edge nations; PC schooling is mandatory component in the instruction framework.

Pakistan is one of the nations which are making quick development in the utilization of PC. Pakistan has dispatched online framework in numerous administrative establishments for encouraging its residents. Financial Survey of Pakistan (2011, p. 183) states that Pakistan Telecommunication Authority (PTA), has given admittance to Information and Communication Technology (ICT) which came about into an open, mechanically progressed, inescapable and business neighborly broadband market portraying striking development rates throughout the long term. Enlistment of PC in workplaces, and markets requests such individuals who ought to have solid grasp over working with PC.

At present, PC training is a mandatory subject in the expert degree projects and it is kept in human expressions and humanities gathering, in light of the fact that without PC expertise, one would confront numerous difficulties in the genuine work place. Administration of Pakistan understands the significance of PC training for its childhood, and has presented software engineering as a subject at school level. In the school educational program, software engineering is an elective subject from grade 6 to review 8. The primary point of showing software engineering at school level was to make mindfulness about the PC use at low level and to present the understudies with the fundamentals of PC for additional learning. At optional level, administration of Pakistan presents software engineering as a subject in the science stream against science. The point of auxiliary instruction is to get ready understudies forever and work spot and dominant part of the understudies leave schooling after this level. At auxiliary level, instructing of software engineering is for two purposes, first, to prepare the understudies with essential utilization of PC so the understudies who leave schooling must have the option to accomplish some fundamental work, for example, information section and oversee information on PC, besides, to prepare understudies for the utilization of PC in higher learning. There are some normal observations about PC in the educational program. Initially, it is a typical perspective on instructors, guardians and understudies that understudies have more occasions to learn PC at home and school, which empower them to comprehend the PC marvel all the more properly. Besides, guardians imagine that this is the innovative time and PC is all over, so learning of PC is more helpful for the kids. Aside from these recognitions, there is a contention pertinent to determination of PC instruction that PC training is more numerical and which is working behind the advances and thus software engineering is important for the understudies for going into modern callings.

Legislature of Pakistan is giving numerous offices through innovation including, admittance to public and worldwide data, moment cash move and bill installments and so forth. An enormous number of private and administrative establishments are offering "on the web" framework to its clients. The primary point of showing software engineering at school level is to create such understudies who know about PC and may appreciate these offices adroitly.

2. LITERATURE

Innovation is in real life surrounding us in various structures, at one spot it is as radio, TV or mixed media and at the other spot as PC. In the entirety of its structures, it is serving the humankind. All through mankind's set of experiences, innovation advancements and new social structures have joined, each impacting the other to make better approaches forever that spread all through the human species (Manjulika and Reddy, 2006). Innovation is basic to planning understudies to live, learn and work effectively in an advanced age (Siddique, 2004). Aggarwal (1995,) states that

Innovation has two viewpoints, for example innovation as things and innovation as social cycle. Innovation as things is the utilization of logical information to handy works by association which include in 2 Ms for example hardware men, while the innovation of social cycle implies the utilization of logical and other coordinated information to commonsense works by progressively requested frameworks which incorporate men machines. (pp.1, 2)

Singh (2005) record that the Computer is the main commitment of man in the current century. In this time of mechanical headway, PC schooling is viewed as a basic element of instruction (Johnson, 2009). Jain (2005) states that today, processing power are not, at this point a constraint for usage of learning apparatuses. The issue has moved from how to actualize to what exactly devices to execute and why. Salim (2007) directed an examination named "PC Education at Secondary Level" about the PC training in the schools, one of the respondents proposes that "It is smarter to report the subject as an obligatory one with the target of furnishing the understudies with quality instructing and down to earth direction on data innovation". The data expressway because of combination of phones, PCs and TV innovations has opened new vistas and admittance to information (Isani and Virk, 2005). Siddique (2004, p.4) called attention to that PCs are imagined as approaches to enable "innovation by telling" and "learning by tuning in" filling in as a fire hose to splash data from the Internet into student's psyche.

Mahmood (2009) directed an examination in setting of Pakistan about Gender, subject and degree contrasts in college understudies' entrance, use and perspectives toward data and correspondence innovation (ICT). There were 625 respondents in the examination and found that vast lion's share of the respondents approach PCs at home (73%) and college (72%). Understudies from science and innovation (76%) and sociologies (75%) offices have essentially

more PC access at college than understudies from expressions and humanities offices (48%). Abbas (2006) states:

Software engineering covers electronic information handling as well as gets ready understudies for critical thinking through the introduction to the BASIC programming language. Anyway the subject of Computer Science has now been found to provide food best to the necessities of understudies with numerical inclination. Enterprises require equipped PC clients as opposed to software engineers talented in an outdated language.

Public Education Policy (1998-2010, p.90-92) states that PC innovation has the quickest pace of return and reported the accompanying advances with respect to PC schooling in its approach arrangements:

- Computer will be presented in auxiliary schools.
- School educational plans will be adjusted toward ongoing advancements in data innovation, for example, programming improvement and the data super expressway and planning Web Pages, and so on
- Educational foundations will be given Internet offices.
- The subject of PC training/science will be presented at higher auxiliary and degree levels in staged way.
- Computer schooling will be made necessary segment for all preparation programs in the instruction area. The National Curriculum of Computer Education for VI-VIII (2007) states the accompanying three objectives of showing software engineering:
 - Computer and Information Literacy
 - Productivity through innovation
 - Algorithmic thinking and critical thinking

Public Curriculum of Computer Science at the auxiliary (2000) recognized the accompanying targets of instructing

Software engineering at the auxiliary level:

- Understand the fundamental ideas, hypotheses, and laws of software engineering and their applications.
- Develop numerical control aptitudes for planning diverse language programs in Computer Science.
- Understand and like the part of Information Technology in financial and social improvement of society.
- Develop aptitudes for utilizing and advancing Internet procedures.
- Provide sound however strong reason for additional examinations in the order of Computer Science and Information Technology. (p.2)

3. Objectives of the Study

The targets of the examination were:

- To discover the assessment of educators about the applications of computer in innovative time.
- To discover the assessment of the educators about the capability of PC sciences instructed at optional level.

4. **LIMITATION OF THE STUDY**

It was attempted to investigate the assessment of software engineering instructors about the elements of PC sciences in mechanical period and the capability of the educational program of PC sciences educated at optional level in Pakistan however the example for the examination was 85 which is exceptionally little for this kind of study. So it is proposed for others to utilize it with level of concern.

5. **METHOD AND MATERIAL**

5.1 **DESIGN OF THE STUDY AND SAMPLE**

The investigation was clear in nature which was done through review. Through reason inspecting procedure, an aggregate of 85 PC instructors were followed from Division Bahawalpur. The standards for the choice of test instructors was they should have ace degree in PC sciences or having have post alumni certificate (PGD) in PC sciences with science foundation at graduation level.

5.2 **INSTRUMENT USED**

To accomplish the destinations of the examination, a poll was created on five point Likert scale (Strongly Agree, Agree, Uncertain, Disagree, Strongly Disagree). There were ten shut finished things in which the respondents were gotten some information about the significance of utilizations of PC instruction in everyday life and the capability of educational plan of software engineering at school level.

6. **DISCUSSION**

The respondents of the examination affirmed that PC makes work simple, more intelligent and make attractions; with PC we can introduce one thing in various shapes and shades. As in current period, PC is all over and PC training is important to appreciate the other mechanical administrations as it information function as a device to work the other innovative based machines. The respondents concurred that through PC applications one can comprehend the focal thoughts and establishments to explain the important angles. They additionally were of the sentiment that PC has become a fundamental piece of pretty much every field so its essential information is important to work on the lookout. The respondents were of the assessment that

educational plan of auxiliary level is adjusted towards developments in the field of data innovation and gives enough ability and aptitudes to work on the lookout. The respondents concurred that educational program of PC sciences can possibly provide food the necessities of those understudies who need to join PC stream in future. The respondents likewise concurred that educational program of PC sciences acquaint the understudies with significant virtual products in other PC based machines.

8. FINDINGS

PC gives us simplicity to introduce our work in a brilliant manner. PC information is vital for working in the present commercial center. PC functions as an apparatus for getting a charge out of other mechanical administrations. Through PC applications we can comprehend the focal thoughts and establishments to explain the significant perspectives in various fields.

Educational program of PC sciences is adjusted towards the progressions in data innovation. The educational plan instructed at auxiliary level acquaint the understudies with the virtual products utilized in other PC based machines and can possibly cook the necessities of the understudies who need to join PC as a field in future.

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