SOFTWARE AS AN AID FOR TEACHING AND MANAGEMENT IN MODERN SCENARIO – AN ACCEPTANCE STUDY IN CHENNAI METRO

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Abstract: *This report is the resultant of complex investigation of different information and data identified with the subject Software as an Aid for Teaching and Management in Modern Scenario in Chennai Districts. In India, educational system is changing bit by bit because of the rise and huge advancement in technology. Data technology assumes an indispensable part and a great deal more programming has been created for training as well as for organization and administration system of educational establishments. The examination device utilized as a part of our study is mostly Questionnaire. The example size is 100. Clear research is embraced in directing this study. The measurable instrument utilized is rate examination, chi square investigation, Karl Pearson's Co-proficient of Correlation and Weighted Average Method.*

Key Words: *Major types of educational software, software for specific educational purposes, educational software industry and market analysis report, types of education sector, levels of education in India, software as an teaching aid and software as an management aid.*

INTRODUCTION

A study on Software as a guide for instructing and administration in cutting edge situation manages the examination on the utilization of PCs and programming in the educational organizations. This study is made to take a review and to discover how do programming encourages the educating and administration process. Keeping in mind the end goal to make a work proficient, an individual must be prepared well. Preparing contrasts in view of educational programs and work profile of every person. In addition, an individual can't perform an undertaking similarly without fail. There is a danger of human blunder. Along these lines, programming is utilized as an apparatus to make work proficient. In this cutting edge situation, educational establishments use programming for grounds

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computerization, keeping up library records, finance records, leading classes for understudies and likewise to conduct online exams for simple, constant and far reaching assessment of results.

OBJECTIVES OF THE STUDY

- To study how software serve as an aid for teaching and management in modern scenario in Chennai districts.
- To identify the standard of education provided by educational institutions.
- To analyze the presence of computer lab in educational institutions.
- To assess the awareness of software usage in educational institutions.
- To identify the types of software installed in educational institution.
- To examine the quality of service provided by the software installed.
- To give suggestions to improve the market demand of the company's software.

Major Types of Educational Software

- Children's learning and home learning
- Courseware
- Classroom aids
- Edutainment
- Reference software
- Educational software on custom platforms
- Computer games with learning value
- Software in corporate training and tertiary education

Software for Specific Educational Purposes

- Mind Mapping Software such as Mind Genius, which provides a focal point for discussion, helps make classes more interactive, and assists students with studying, essays and projects.
- Language learning software (KVerbos or English in a Flash, for example)
- Note taking
- Typing tutors (Anupama Typing Tutor, KTouch, Mario Teaches Typing or Mavis Beacon, for example)
- Driving test software

- Software for enabling simulated dissection of human and animal bodies (used in medical and veterinary college courses)
- Interactive geometry software
- Medical and healthcare educational software
- Spelling tutor software

EDUCATIONAL SOFTWARE INDUSTRY AND MARKET ANALYSIS REPORTS

Electronic Education Report Newsletter

By: Simba Information

For nearly 20 years, top executives and decision-makers have relied on Electronic Education Report to consistently deliver critical news and informed perspective on the K-12 electronic instructional materials market.

Children's Educational Software Market

By: Packaged Facts

This report on the market for children's educational software analyzes the educational software market for children in the 4-to-14-year-age group. It examines software for integrated learning systems (ILS), non-ILS pre-packaged software for the school market, pre-packaged.

Children's Educational CD-ROM Market

By: Packaged Facts

An explosion in consumer retail sales pushed the market for children's educational CD-ROM software close to $800 million in 1995, representing more than a 60% gain in both dollars and units.

U.S. Market for Distance Learning: Systems and Services

By: Packaged Facts

This is a fledgling industry with major growth potential. This study reports on the forces shaping the industry, developments in transmission and storage technology, the regulatory environment, and the types of transmission.

The School Publishing Market

By: Kalorama Information

Opportunities abound in the U.S. school publishing field. This Kalorama Information report examines recent strategic acquisitions; the impact of access to public-investor funds; technological advances; and more.

The Adult and Continuing Education Business Report

By: Primary Research Group

This report from Primary Research looks at the rapidly growing U.S. market for adult education products and course offerings, and includes frequency of use data for U.S. adults for a broad range of adult education

The Children's Educational Software Market

By: Packaged Facts

Packaged Facts report provides detailed analysis of this $2-billion market, examining three market segments: packaged software for the home market; packaged software for the school market; and software for integrated learning systems (ILS).

U.S. Distance Learning Markets

By: Frost & Sullivan

New technology has turned the spotlight on distance learning systems and services. This Frost & Sullivan report covers both systems and services, giving unique insight into the entire industry and its key trends.

The Survey of Internet Administrators and Webmasters in Higher Education

By: Primary Research Group

This 3-volume study is based on an extensive survey of internet administrators and webmasters at institutions of higher education in the United States and Canada.

The Academic Library Budget and Expenditure Report

By: Primary Research Group

This report gives insight into the materials and technology purchasing plans of America's two-year, four-year and university academic libraries.

The Survey of Adult and Continuing Education Programs in Higher Education

By: Primary Research Group

This special 2-volume report gives a broad range of data about the plans, operations, cost structure, course offerings, personnel policies, distance-learning technologies, and so on.

U.S. Distance Learning Systems & Services Markets

By: Frost & Sullivan

The advent of improved information exchange technologies is resulting in transformed distance learning (DL) market dynamics. This report covers DL systems and services markets for each satellite and terrestrial segment and sub-segment.

The Survey of Academic and Special Libraries

By: Primary Research Group

This report gives extensive and detailed benchmarking data for information science professionals. Tables are carefully designed to allow users to compare their library's spending priorities and policies with those of comparable libraries.

Educational Publishing in China: A Market Analysis

By: Access Asia

This report on the educational publishing industry in China is essential reading for those seeking to understand developments in the market and those publishers looking to secure foreign rights arrangements in China.

Purchasing In UK Mainstream Nursery, Primary And Secondary Schools

By: MSI Marketing Research for Industry, Ltd.

This report analyzes the changes in expenditure by mainstream nursery, primary and secondary schools in the UK over the next 5 years until 2005.

The U.S. School Security Market

By: Packaged Facts

In the wake of the school shootings at Columbine High School, U.S. schools are more concerned about security issues than ever before. This report from Packaged Facts analyses the new attention of schools.

U.S. Corporate Distance Learning and Online Training Markets

By: Primary Research Group

This report includes data from three separate samples taken in 2000, with a small sample of law firms and colleges taken in 1999. It measures the U.S. business and industry market.

Leverage In-School Penetration to Build Powerful Web Presence

By: Jupiter Research Corporation

WeeklyReader.com is the online counterpart to Weekly Reader, a news publication geared toward pre-kindergarten to sixth grade students. The newspaper has six million subscribers, 99 percent of which are through schools.

Corporate Internet Distance-Learning (E-Learning)

By: Global Industry Analysts

The report analyzes the US market for Corporate Internet Distance Learning. Annual market data and projections are presented in billions of US dollars and growth rates for the years 1999 through 2005 in percentages.

North America Computer-Based Training and E-Learning Markets

By: Frost & Sullivan

Rapidly Growing Industry Spurs Competitors to Establish Products, Increases Market Share Computer -based training (CBT) and e-learning markets have exploded over the past few years.

Distance Learning and Adult & Continuing Education Compendium

By: Primary Research Group

This compendium encompasses eight reports which present an overview of the distance learning and adult and continuing education arenas that spans the past several years. The reports on distance learning serve as useful benchmarking tools.

REVIEW OF LITERATURE

Computers & Learning

From the most punctual times when PCs were monetarily accessible, they could be found being used in educational establishments. PCs ought to be utilized to backing learning. There has dependably been tremendous group support for this as delineated as of late in an overview of voters in the USA, which demonstrated most prominent backing for use on ICT in schools when contrasted and a rundown

of option consumptions in training - Bork, 1980; Carnegie Commission on Higher Education, 1977; Papert, 1980.

Instructional method and Constructivism

There is regularly the confused conviction among educators that constructivism implies that all learning must be totally by disclosure and that the instructor and educational programs materials have no spot. Two constructivist positions on educating/learning ideal models is portrayed as Without the data given (WIG) constructivism Beyond the data given (BIG) constructivism. It is upheld that a mix of both methodologies is utilized. - Perkins, 1992.

Equalization of methodologies in the setting of utilizing PCs as a part of schools

The equalization of methodologies in the setting of utilizing PCs as a part of schools is talked about as takes after. An effective PC learning environment is portrayed by a decent harmony between disclosure learning and individual investigation on one hand, and systematic direction and direction on alternate, continually considering the individual contrasts in capacities, needs, and inspiration between understudies - DeCorte, 1990.

PC Proficiency

Understudies take in the terms of PC proficiency with family bolster and from educational technology. The field of educational technology is ceaselessly changing to mirror the undeniably worldwide working environment and improvement of new advances and standards, which gives another meaning of PC proficiency. Indeed, even where teachers and educational modules software engineers seems to have comparable points, the way they are characterized and gathered can regularly prompt altogether different translation of PC proficiency - Hoffman, Mark E., 2005

The essential importance of the term education signifies "capacity to peruse and compose the images that speak to the hints of dialect". PC Literacy signifies" essential aptitudes and capacity to utilize a PC and its product to perform a down to earth undertaking" - R.P. Asha and R. Ramachandran

Training Sector

The training part comprises of schools, schools, colleges and different private establishments. The instruction segment can be extensively arranged into three classes:

K-12: This incorporates the training offered from nursery to the twelfth grade by different open, private and religious schools.

Advanced education: This incorporates different state-run and private schools and colleges. This likewise incorporates Med Schools, Law Schools and Business Schools.

Professional training: This incorporates industry/work arranged instruction, taking into account the apprenticeship strategy for learning.

Sorts of Training

1. Formal Education: Formal training can be characterized as a progressively organized and sequentially reviewed instruction system. It includes essential instruction, advanced education and full time proficient preparing. This instruction system is alluded to as standard or conventional training.

   Four Stages in formal or standard training

   ● Nursery Education

   ● Essential Education

   ● Auxiliary training

   ● Advanced education

2. Adult training:

3. Alternative training:

4. Special training:

   Levels of Education in India

   ● Play School

   ● Primary School

   ● Secondary/Higher Secondary

   Programming AS A TEACHING AID

   ● Application programming

   ● Machinery programming

   ● Retail programming

   ● OEM programming (Original Equipment Manufacturer)

   ● Shareware

   ● Cripple product

- Demo programming
- Ad product
- Spy product
- Freeware
- Public area programming

Educating Aids

As we, all realize that today's age is the period of science and technology. The educating learning programs have additionally been influenced by it. The procedure of instructing - learning relies on the diverse kind of hardware accessible in the classroom.

Sorts of Teaching Aids

Visual guides

The guides that utilization feeling of vision are called Visual guides. For instance :- genuine items, models, pictures, outlines, maps, streak cards, wool board, notice board, blackboard, overhead projector, slides and so forth. Out of these slate and chalk are the commonest ones.

Sound guides

The guides that include the feeling of hearing are called Audio helps. For instance radio, recording device, gramophone and so on.

Varying media helps

The guides that include the feeling of vision and additionally hearing are called Audio-Visual guides. For instance TV, film projector, filmstrips and so on.

Need of Teaching Aids

- Every individual tends to overlook appropriate utilization of showing helps which holds more ideas forever.
- Teaching helps build up the correct picture when the understudies see, hear taste and smell appropriately.
- Teaching helps give complete case to calculated considering.
- The instructing helps make the earth of enthusiasm for the understudies.
- Teaching helps expands the vocabulary of the understudies.

- Teaching helps the instructor to get at some point and make learning changeless.

Significance of Teaching Aids

- Teaching helps persuade the understudies with the goal that they can learn better.
- Through instructing helps, the educator elucidates the topic all the more effortlessly.
- Teaching helps builds the vocabulary of the understudies all the more successfully.
- Saves time and cash.
- Teaching helps make the classroom live and dynamic.
- Avoids bluntness.
- Teaching helps give direct experience to the understudies.

Essential Educating Helps for the Classroom

- Chalkboard or whiteboard
- Pointer

Classroom Maps

- Overhead projector
- Computers

PROGRAMMING AS A MANAGEMENT AID

In this advanced situation, educational establishments use programming for administration reason moreover. It includes grounds computerization, keeping up library records, finance records, and for directing online exams for simple, nonstop and thorough assessment of results. Programming is additionally utilized for participation checking, standardized tags for library administration. Also, online web/intranet coordination helps the staff, understudies and folks to see the timetables. This likewise gives security instrument to keep the unapproved clients from getting to the site. Every understudy, guardian and organization can have his or her user name and secret word. Message board permits folks, staff and understudies to send messages to one another. Programming arrangement suppliers for educational establishments likewise gives extra administrations and items like web planning; Language lab for English and different dialects;

Computers, equipment, printers, organizing; online exam module for leading preparing and exam digitally; LCD/LED TVs with programming to encourage instructing in classroom.

Aside from educating, programming likewise serves as an administration help. In the organization side, it helps in making and keeping up of clients, information reinforcement, report era, client level and consent settings. Staff module incorporates staff points of interest passage, altering, assignment, subject distribution, photograph collection, staff renunciation, assessment, utilities, reports, lesson organizer, staff class planner, complaint register, etc.

RESEARCH METHODOLOGY

i) **RESEARCH TYPE** - Descriptive research Studies often involve the description of the extent of association between two or more variables.

ii) **RESEARCH AREA** - The study was conducted for the employees residing in and around Chennai city.

iii) **SAMPLING TECHNIQUE**:

   SAMPLING DESIGN—Convenience Sampling, We confined our study using Convenience Sampling. Due to the population is very large; we took some samples only and collected data.

   SAMPLE SIZE—NUMBER OF RESPONDENTS: 100

iv) **RESEARCH INSTRUMENT—***Questionnaire.*

v) **CONTACT METHOD—**The contact method used in our study is *personal* method.

vi) **DATA SOURCES -** Data collection methods used for the study are primary and secondary.

vii) **STATISTICAL TOOLS:**

   Percentage Analysis

   Chi-square test

   Karl Pearson's Co-efficient of Correlation

   Weighted Average Method

ANALYSIS AND INTERPRETATION

1. Standard of education the institution offer

| Sl. No.	Type of education	No. of respondents	Percentage of respondents
1.	CBSE	10	10
2.	MATRICULATION	38	38
3.	STATE BOARD	24	24
4.	COLLEGE	28	28
Total		100	100

Source: Primary data (survey) Inference: Most of the institution offer matriculation education.
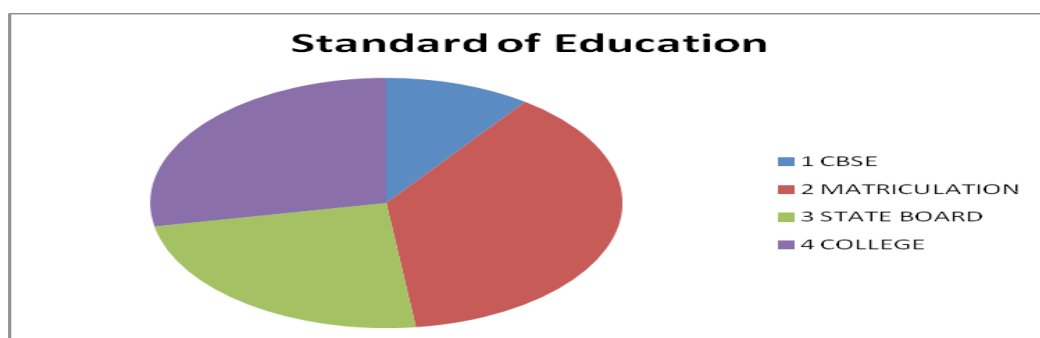
2. No. of institutions having computer education in their curriculum

| Sl. No.	Is computer education included in curriculum	No. of respondents	% of respondents
1.	Yes	97	97
2.	No	3	3
Total		100	100

Source: Primary data Inference: Majority of the institution having computer education in their Curriculum.
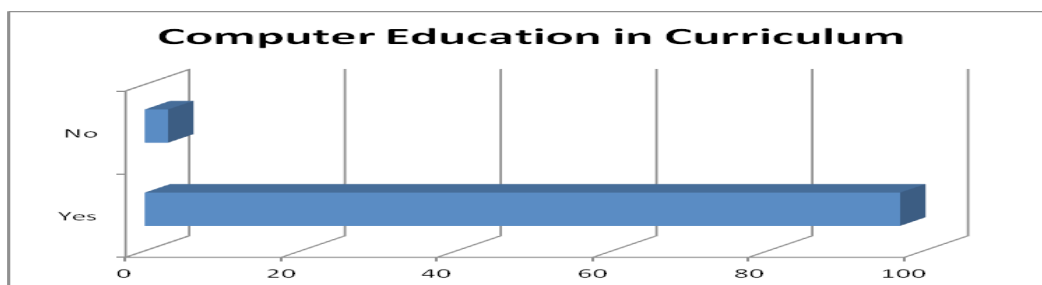
3. No. of computers in lab

Sl. No.	No. of computers	No. of respondents	Percentage of respondents
1.	0 to 50	66	66
2.	51 to 100	8	8
3.	Above 100	23	23
4.	No lab	3	3
Total		100	100

Source: Primary data (survey) Inference: Most of the institution having less than 50 computers.
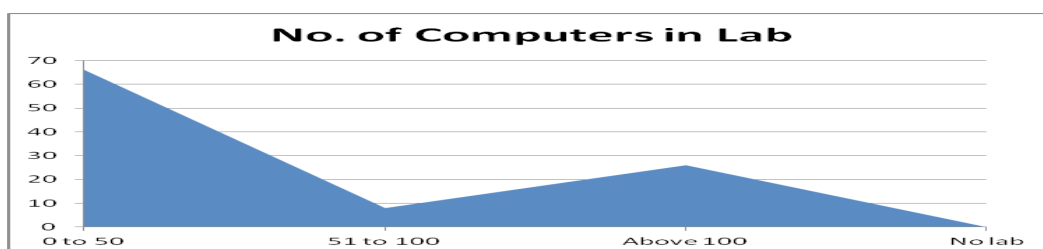
4. Do you have any of the following software?

Sl. No.	Software	No. of respondents	% of respondents
1.	Campus automation	38	38
2.	Language lab	4	4
3.	Online exam	1	1
4.	Library	1	1
5.	Payroll	4	4
6.	Continuous and comprehensive evaluation	0	0
7.	None of the above mentioned software	17	17
8.	Campus & Payroll	20	20
9.	Continuous & Payroll	1	1
10.	Campus & Language lab	1	1
11.	Campus, language lab & Payroll	2	2
12.	Campus, Library & Payroll	6	6

| 13. | Continuous, language lab & Payroll | 1 | 1 |
14.	Campus, Language lab, Library & Payroll	2	2
15.	Campus, Continuous, Library & Payroll	1	1
16.	Campus, Language lab, Online exam & Library	1	1
Total		100	100

Source: Primary data (survey) Inference: Majority of the institution using Campus & Payroll Software.
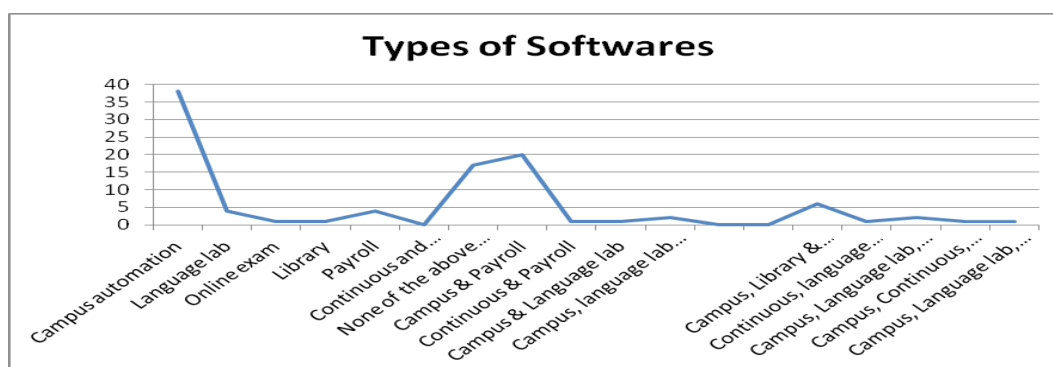
Types of Softwares

5. Users of software installed in institutions

Sl. No.	Users of software	No. of respondents	Percentage
1.	Teachers only	3	3
2.	Students only	3	3
3.	Management only	13	13
4.	Students & Teachers	10	10
5.	Teachers & Management	3	3
6.	All of them	68	68
Total		**100**	**100**

Source: Primary data (survey) Inference: Majority of the users using all the software.
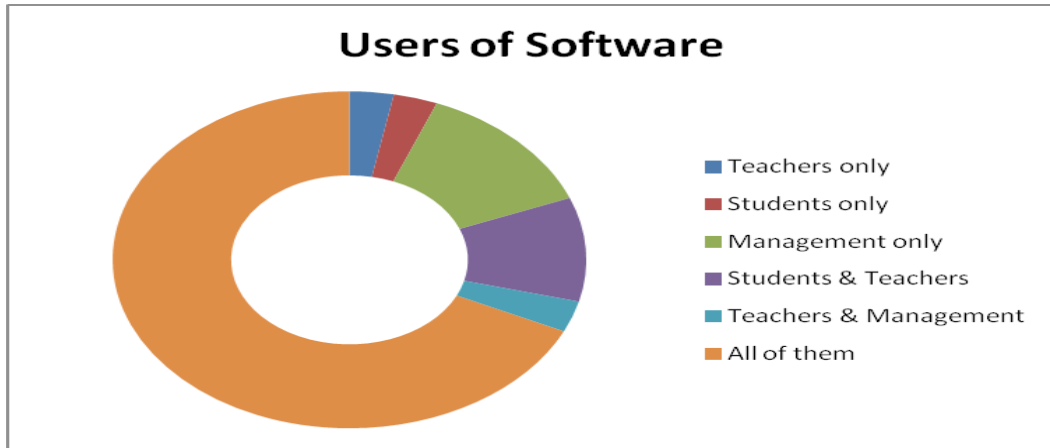
6. Rating of present software on the basis of performance

Sl. No.	Rating	No. of respondents	Percentage
1.	Poor	9	9
2.	Average	11	11
3.	Satisfactory	19	19
4.	Good	51	51
5.	Outstanding	10	10
Total		**100**	**100**

Source: Primary data (survey) Inference: Majority of the respondents said that the performance of the software is good.

7. Factors considered while purchasing software

Sl. No.	Factors	No. of respondents	Percentage
1.	Price	20	20
2.	Features	22	22
3.	Both	58	58
Total		100	100

Source: Primary data (survey) Inference: The main factors influencing both price and features.

Factors of Purchasing Software
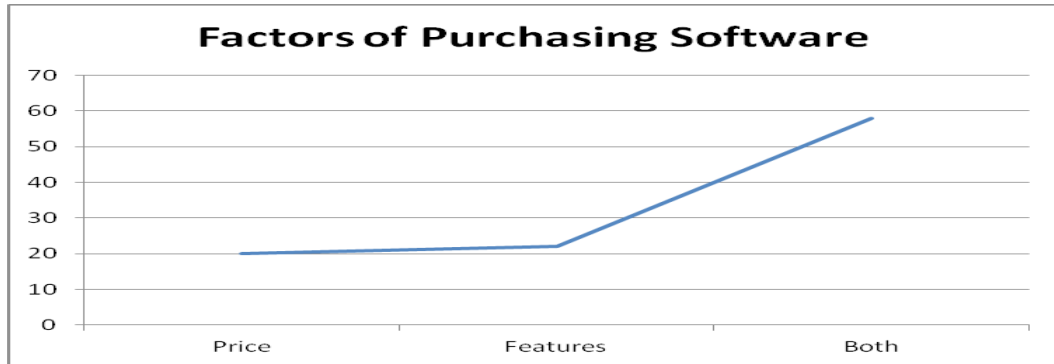
CHI-SQUARE TEST

Null Hypothesis (Ho): There is no difference between the standard of education and rating of software

Alternative hypothesis (H₁): There is a difference between the standard of education and rating of software.

Comparing Standard of Education with Rating of Software

Education Software Rating	CBSE	MATRIC	STATE BOARD	COLLEGE	Total
Poor	0	4	5	0	9
Average	0	2	8	1	11
Satisfactory	0	10	8	1	19
Good	0	24	10	17	51
Outstanding	1	2	0	7	10
Total	**1**	**42**	**31**	**26**	**100**

Calculation of Chi-Square Test

O.F	E.F	(O-E)	(O-E)2	(O-E)2/E
0	0.09	-0.09	0.0081	0.09
4	3.78	0.22	0.0484	0.0128
5	2.79	2.21	4.884	1.75

0	2.34	-2.34	5.475	2.34
0	0.11	-0.11	0.012	0.11
2	4.62	-2.62	6.864	1.485
8	3.41	4.59	21.068	6.178
1	2.86	-1.86	3.459	1.209
0	0.19	-0.19	0.036	0.19
10	7.98	2.02	4.080	0.511
8	5.89	2.11	4.452	0.755
1	4.94	-3.94	15.523	3.14
0	0.51	-0.51	0.2601	0.51
24	21.42	2.58	6.6564	0.31
10	15.81	-5.81	33.756	2.135
17	13.26	3.74	13.987	1.054
1	0.1	0.9	0.81	8.1
2	4.2	-2.2	4.84	1.152
0	3.1	-3.1	9.61	3.1
7	2.6	4.4	19.36	7.44
			TOTAL	41.585

Degree of freedom = 0.05

(C-1) (R-1) = (5-1) (4-1) = 12

$\therefore$ Table value of chi square = 28.2995

As the calculated value (41.585) is greater than the table value (28.2995)

The null hypothesis H0 is accepted and alternate hypothesis H1 is rejected.

$\therefore$There is no difference between the standard of education and rating of software.

KARL PEARSON'S CO-EFFICIENT OF CORRELATION

Aim: Comparing users of software in schools with users of software in colleges

Users of software	Students	Teachers	Management staffs	All of them
In schools (x)	1	1	0	28
In colleges (y)	12	15	15	40

Calculation for Karl Pearson's Co-efficient of Correlation

X	Y	X-X	(X-X)2	Y-Y	(Y-Y)2	(X-X)(Y-Y)
1	12	-6.5	42.25	-8.5	72.25	55.25
1	15	-6.5	42.25	-5.5	30.25	35.75
0	15	-7.5	56.25	-5.5	30.25	41.25
28	40	20.5	420.25	19.5	380.25	399.75
30	82		561		513	532

$X = \sum X/N = 30/4 = 7.5$

$Y = \sum Y/N = 82/4 = 20.5$

$r = \sum(X - X)(Y - Y) / \sqrt{\sum(X - X)^2} \sqrt{\sum(Y - Y)^2}$

r = 0.9916

There is a very high degree of positive correlation between users of software in schools and users of software in college.

WEIGHTED AVERAGE

Weighted average for rating of software

Rating of software	X	Y	XY
Poor	9	5	45
Average	11	4	44
Satisfactory	19	3	57
Good	51	2	102
Outstanding	10	1	10
	$\sum x = 100$		258

$\sum XY/\sum X = 258/100 = 2.58$

The weighted average is 2.58. It lies between 2 and 3.

Therefore the respondents rate their software as Good.

CONCLUSION

India's educational system has altered because of high development of data technology. The study is led to discover the accessibility and need of PC programming in educational organizations. As the populace is becoming higher, educational establishments are additionally developing at a higher rate. Today's educational organizations need quality both in instructing and in addition in their base. Subsequently, they require PC programming for empowering quality educating to the understudies and smooth running of the administration exercises.

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