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Digital Education And Student's Prefrences

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ABSTRACT

There are notable changes in the habits and preferences of humans all over the world. The developing technology and digitalization has shown its impact even on the education system. Though the modern method of digital education had entered India before the year 2011, but it mushroomed at a good pace only in the forth coming years. From then till now, a massive change has been seen. Starting with installation of smart-boards and projectors in class rooms, to bringing class education in each house with the help of mobiles, I-pads, tablets etc. and video lectures and different applications, we have seen the education habits change in the past few years. But the question is whether Indian students are really comfortable with digital trends or is it just a fashion trend to adopt digital methods in education along with the traditional education system of using books and physical classroom learning. Another matter of concern is if those in the favor of such modernization belong to metro cities in particular or is it a general acceptance.

This paper will be a survey and analysis of the same. The population targeted is of both NCR and outside NCR. Analyzing the preference for Digital education and at which qualification level is it supposed to be the best according to the students will be a major part of this paper.

Keywords: *Classroom Learning, Video Tutorials, Distant Education, Lethargic Vs. Active Approach, Gadgets, E-learning.*

INTRODUCTION

Education has been one of the foundation pillars in the modernization of human society. Centuries ago knowledge was passed on only in verbal form from generation to generation. Later the same verbal knowledge was provided in written form and recorded for generations to come; first on stones, rocks and other material and then on paper. In today's scenario education and transfer of knowledge has taken a step further as digitalization has influenced the same.

CONCEPT of DIGITAL EDUCATION: Digital education is the use of electronic technology for departing knowledge.

Many audio- visual methods of teaching are being adopted with the help of projectors, smart-boards, video tutorials and other online courses. These practices are being adopted both by the institutes in classrooms and by students at home for self help. Critics may support this method by calling it an active approach as extra knowledge and longer retention is provided through digital education, however the method may be opposed by giving the explanation that

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this is a lethargic approach for all those students who do not care to pay any attention in the class and have a habit of studying at the last moment. Also, the teachers might get as escape from teaching by adopting this lethargic method.

Like any other issue, digital education also has its own pros and cons, but the question is whether Indian students in NCR and Non-NCR areas are really comfortable with digital trends or is it just a fashion trend to adopt digital methods in education along with the traditional education system of using books and physical classroom learning.

NCR- National Capital Region covers the areas such as UT Delhi, Ghaziabad, Faridabad, Gurgaon, Noida and Meerut.

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OBJECTIVE

Every individual boasts about being modernized and adopting the latest trends. Digitalization in every sector is the most rapid change taking place in today's modernizing scenario of India. Thus, this boasting nature of humans provide with the first objective of this paper, which is

- To see if digital education is only a fashion trend or students really prefer it over traditional education system.

Also, everything should be experimented at the right time and in the right situation, and same goes for the use of digital education. It is important to know where digital education can be used best and with full utilization, and so the second objective of this research paper becomes

- To see at what level of education students prefer Digital education the most.

By answering the above two points, it will become easy for many institutions and other concerned authoritiesto make decisions about at what level of education and to what extent do they need to spend on incorporating digital education in their old traditional classroomlearning system.

SOURCES AND METHOD OF DATA COLLECTION

Primary data has been used for this research, which was collected by circulating a questionnaire made on Google form. Social media apps like 'WhatsApp,' 'Facebook' and 'Messanger' were used to spread the link of the online questionnaire. It was a random sampling with a sample size of 200.

The responses were collected from NCR, as well as Non-NCR regions; the main Non-NCR regions being the states- Himachal Pradesh, Uttrakhand, Punjab and Haryana.

TOOLS USED

- Percentage
- Pie Charts
- Bar Graphs

LIMITATIONS OF THE STUDY

– Due to time constrain, only 200 responses could be collected and more complex statistical tools couldn't be used for a much detailed study.

– The link was sent to and forwarded by people who mainly belonged to the above mentioned regions and thus the study involves hardly any responses from other parts of India, making the results of the study more prone to habits of North Indian Students.

– The pie-charts are not showing fractional percentages as shown in tables.

ANALYSIS

A total of 200 responses were received from the students belonging to the age-group 14 years to 25 years (majority of them being of 18, 19 and 20 years). 93 responses of males and 107 responses of females, from which 86 were residents of NCR and the other 114 were the residents of Non-NCR regions were recorded. Majority of these respondents were persuading their graduation while the survey was done (March- April 2018).

Table 1. Educational Level of Respondents

Class	No. of Responses	Percentage (out of 200 respondents)
10th or below	2	1
11^{th}	1	0.5

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12th	28	14
Graduation	126	63
Post Graduation	35	17.5
Distant Courses	0	0
Others	8	4
TOTAL	**200**	**100**

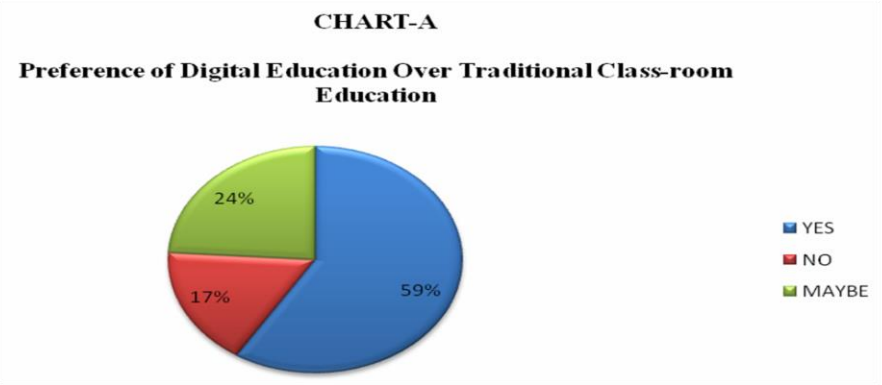
OBJECTIVE ONE- These students were asked if they prefer Digital Education over Traditional Class-room Education, to know about the answer of first objective of the research. The results extracted are shown in *Table-2*.The same is also graphically represented in *CHART-A*.

Table 2. Preference of Digital Education Over Traditional Classroom Teaching

Preference	No. of Responses	Percentage (out of 200)
Yes	118	59
No	34	17
Maybe	48	24
TOTAL	**200**	**100**

CHART-A

Preference of Digital Education Over Traditional Class-room Education



– More than 50 percent students clearly stated that they preferred Digital education over traditional methods, which tells us that digital education is now becoming a part of students' academic habits and in not just a fashion trend.

– 17% of the sample had a clear vote for the traditional methods, but the further research stated that they accepted digital education as on the scale of 1 to 5, majority respondents with a response of 'no' had given a rating of 3 to digital education. Their explanation gave clarity that according to them traditional methods had greater perks which digital education cannot replace, however digitalization is bringing a boon in education.

– 24% students were not sure which method they preferred more as both had its pros and cons.

Yet another question of concern was to know who preferred digital education more, students of NCR or non- NCR areas. The results are shown in *Table- 3*, *Table- 4* and graphically represented in *Chart- B*&*Chart- C* respectively

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Table 3. Preference for Digital Education Over Traditional Class-Room Education (IN NCR)

Preference	No. of Responses	Percentage (out of 86)
Yes	48	55.81
No	11	12.79
Maybe	27	31.40
TOTAL	**86**	**100**

CHART- B
Preference of Digital Education over Traditional Class-room Education (in NCR)

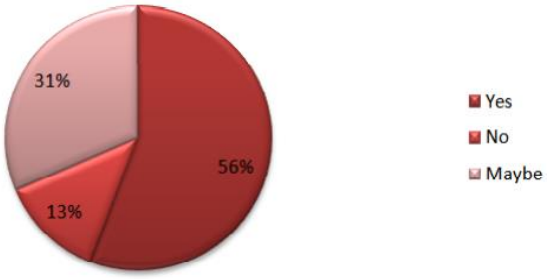
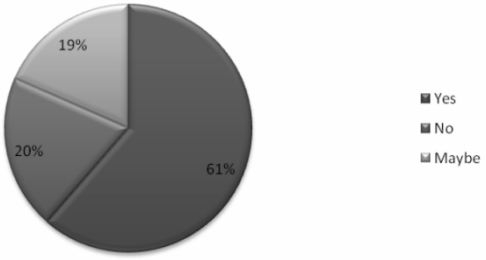


Table 4. Preference For Digital Education Over Traditional Class-Room Education (IN NON-NCR)

Preference	No. of Responses	Percentage (out of 114)
Yes	70	61.4
No	23	20.18
Maybe	21	18.42
TOTAL	**114**	**100**

CHART- C
Preference of Digital Education over traditional Class-room Education (in Non-NCR)



— The two data sets of *Table- 3&Table-4* state that a majority of students, both from NCR and Non-NCR areas prefer digital education, which is 55.81% and 61.40% respectively. The

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indifferent attitude is seen more in NCR region (31.40%) in comparison to that in Non-NCR region (20.18%). This shows that students in the NCR lack more clarity about whether they would prefer digital education over traditional classroom learning or not.

– Only few students are against digitalization of education, i.e., 12.79% in NCR and 20.18% in Non-NCR areas. Thus we can conclude that students prefer Digital Education over the traditional methods of classroom learning, both in NCR and Non-NCR.

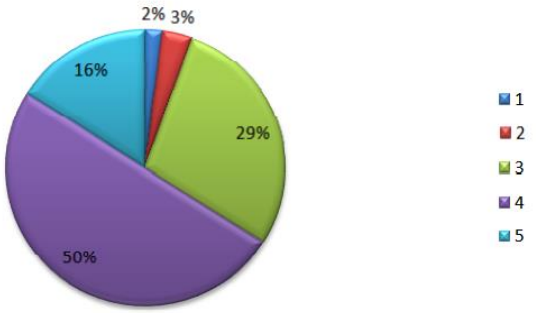
The general response of students stated that digital education is becoming a vital part of the academics culture, so they were also asked to rate Digital education on the Likert scale of 1 to 5, '1' being the least and '5' being the most. This would tell us to what extent they preferred it to be a part of traditional methods and the results extracted are shown in *TABLE-5* & represented graphically in *CHART-D*.

Table 5. Rating of Digital Education on the Scale of 1 – 5

Rating	No. of Responses	Percentage (out of 200)
1	4	2
2	7	3.5
3	57	28.5
4	100	50
5	32	16
TOTAL	**200**	**100**

CHART- D

Rating of Digital Education on the Scale of 1-5



– 50% respondents gave a rating of 4 out of 5. Some of the logical reasons stated by students for giving a rating of 4 were:

- No method is perfect. The digital education also contains some flaws but the benefits are far greater.
- Digital education is more portable as compared to books and stationary.
- Because India's infrastructure and aptitude of students is not ready for this.
- Endless possibilities, yet drawbacks.
- Digital education is better for the students but somewhere it depends upon them how one uses it.
- As far as education is concerned we need digitalization but the traditional method is also necessary as it involves complex thinking pattern which necessary for developing the logical reasoning of the students.
- One mark deducted for security concerns.
- There are different lacks and hacks of digital education in our country specifically.

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So it's not properly implemented that's where it lacks.

- Some things cannot be really understood without the help of a mentor/teacher.
- Teachers' guidance is required as presence of fake websites and irrelevant education material is a problem. But overall digital education should be promoted.

In general, it can be said that majority who rate it 4, believe Digital education can be an aid only and cannot replace the Traditional methods completely as even digitalization has its own demerits, however merits overpower them. Indian's lack in technological advancement and the misuse of the available resources by the Indian minds, who take the privileges, provided to them for granted are the main counted demerits. Also, another major reason which does not let 50% of the respondents to rate Digital education 5 out of 5 is that the digital methods cannot give an explanation to each student in their own language. To get the straight response of any doubt, a student at the end has to consult someone, as searching through digital resources can lead the user to irrelevant material.

— 5.5% respondents gave a rating of only one or two out of five and some of the logical reasons stated by them were:

- In digital education, concentration level decreases and personalization of education is not possible.
- Digital education is not as understandable as there is lesser interaction between teacher and students.
- Because digital education is not implemented properly in India.
- One comes across many irrelevant websites with partial or unverified facts while adopting E-learning methods.
- Audio-visual techniques or video tutorials in specific, limits the imagination of a student and thus prevents one from understanding in their own way.

SOME OTHER DIMENTIONS OF ANALYSIS, WITH RESPECT TO THE FIRST OBJECTIVE

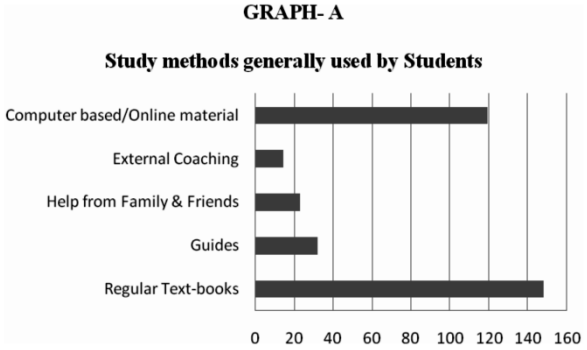
Apart from knowing the extent to which the students accept digitalization in education, the research was also done about the general habits of students in concern with education, like- the methods generally used by students to study, type of digital education & the gadgets preferred by them for the same and also the frequency of studying/taking aid from video tutorials.

The results extracted for the same are shown in: *Table-6, Table-7, Table-8* & *Table-9* and graphically represented in *Graph-A, Graph-B, Graph-C* & *Chart-E.*

Table 6. Study Methods Generally Used by Students

Methods Used	No. of Responses	User percentage (out of 200)
Regular Text-books	148	74
Guides	32	16
Help from Family & Friends	23	11.5
External Coaching	14	7
Computer based/Online material	119	59.5

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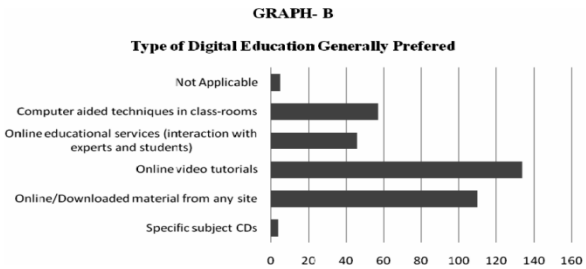


– The regular text books are still used by majority of the students. Along with that, E-Learning (the use of computer based/online material) has become a major part of students' studying habits, however the methods of using guides, external coaching, and help from family and friends are being used by very few students.

– This implies the increasing value of Digital Education.

Table 7. Type of Digital Education Generally Preferred

Types of Digital Education	No. of Responses	User percentage (out of 200)
Specific subject CDs	4	2
Online/Downloaded material from any site	110	55
Online video tutorials	134	67
Online educational services (interaction with experts and students)	46	23
Computer aided techniques in class-rooms	57	28.5
Not Applicable	5	2.5



– Majority of the students are more independent when it comes to use of digital education. The percentage of students using techniques provided by institutions or techniques involving experts like, the computer aided techniques in class rooms, online educational services and specific subject CDs fall below 30%.

– More than 55% of the students use methods of e-learning, i.e., online video tutorials and online study material download.

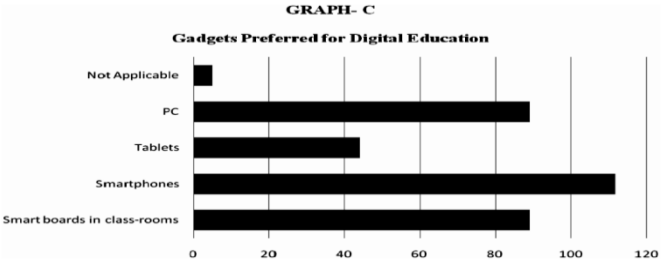
– Only a minor section of students do not use digital education at all. It was also noted that, people not using digital methods were the only ones to give it a rating of 1 out of 5 on the Likert

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scale, making the correlation between the two aspects equal to 1.

Table 8. Gadgets Prefered For Digital Education

Gadgets Preferred	No. of Responses	User Percentage (out of 200)
Smart boards in class-rooms	89	44.5
Smart phones	112	56
Tablets	44	22
PC	89	44.5
Not Applicable	5	2.5

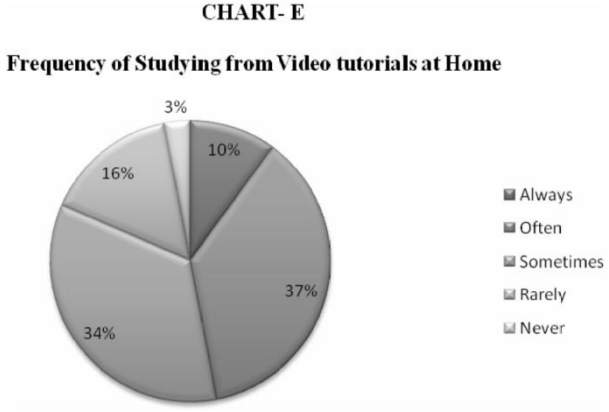


– More than 50% respondents use one or more gadgets for e-learning and other digital methods.

– It can also be noted that majority of the students are facilitated with smart boards in the class-rooms, by their institutes, showing the extent to which various institutes have promoted digital education along with the traditional class-room learning.

Table 9. Frequency of Studying from Video Tutorials at Home

Frequency	No. of Responses	Percentage
Always	20	10
Often	74	37
Sometimes	69	34.5
Rarely	31	15.5
Never	6	3
TOTAL	**200**	**100**



– The use of video tutorials for the purpose of understanding the topics is an upcoming trend.

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Though not regularly, but 71.5% students use this method occasionally.

– If the video tutorials are prepared in a language and manner comfortable to students, then the scope of business in the same under E-education is vast.

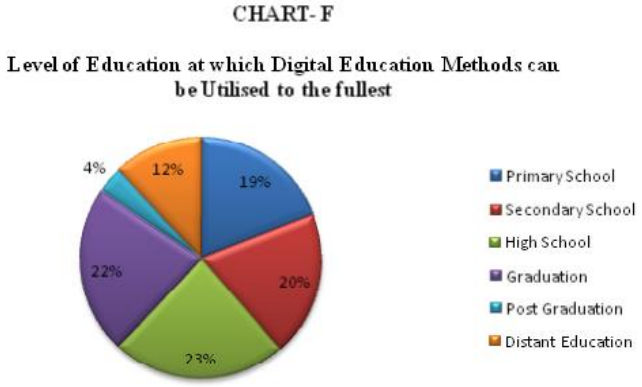
OBJECTIVE TWO-

The results till now has shown that digital education in India should be improved as there do exist some flaws due to which 100% students are not strongly in favor of its use. But along with that, there is a right time for everything, when the benefits could be reaped to fullest. To know the same about digital education from the perspective of students, it was asked from them that at what level of education they think digital education can be best utilized; and the results so found are shown in *Table-10*& graphically presented in *Chart-F*.

Table 10. Level of Education at Which Digital Education Methods can be Utilised to the Fullest

Level of Education	No. of Responses	Percentage
Primary School	38	19
Secondary School	39	19.5
High School	47	23.5
Graduation	45	22.5
Post Graduation	7	3.5
Distant Education	24	12
TOTAL	**200**	**100**

CHART- F



– The response from students was indifferent to a great extent. There was hardly any difference between number of those supporting Digital education to be a better option in Primary and in secondary school; and in High school and at graduation level.

– There was only a handful who found it appropriate to use the digital methods at Post graduation level.

– A noticeable response existed in the support of digital methods to be used best for diatant education.

When asked why the respondents did think it appropriate that the digital methods can be used best at the stated level of education, the reasons quoted brought to the following conclusion:

- Those favoring digital education to be best at Primary & Secondary school level did so as younger minds can be taught better with audio-visual effects.

Here, respondents mainly referred to the digital techniques used in class-rooms, like smart boards.

- The ones favoring High School and Graduation as the best level for the use of digital

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education mainly kept in concern the E-learning methods, like online material download and video tutorials. They preferred so as according to them, students at this age are mature enough to use the digital methods in a right way and not misuse it or get wavered from their path. Also, another strong reason was that syllabus at these levels is vast and one needs to seek extra knowledge, which is made possible with the help of E-learning.

- There was only one reason for use of digital education at Post Graduation level, that the students are mature enough to use the technology wisely.
- 12% respondents supporting digital education methods for distant education referred to e-learning and online interaction with experts. This was because they believe that digital education might become monotonous when used regularly at other levels, whereas for distant courses where there is no class-room learning, it becomes important for such students to get exposure, be it online.

CONCLUSION

The responses clarify the fact that with growing digitalization in India, the digital trends in Education System are also being accepted by the students to a great extent. However, there exists number of flaws in the Indian technology due to which the benefits of such initiative are

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being underestimated. The scope of digital education is vast, only if security is improved and more relevant knowledge is provided by the said digital methods, so that students can use it at any level of education, without hampering themselves by unwise use of such technology.

Also, nothing is good in excess, so despite improvement in technology and proper implementation of digital education, even in rural areas, there stands a duty of the concerned authorities that students use it with a view of active approach rather than being lethargic and depending completely upon digital method. The reason why one cannot depend completely on digital education is that Class-room learning has its own pros which do not have any replacement till date. For once, online interaction with experts might substitute the need for a teacher in class, but in long run, not everything can be asked online as to clarify concepts, one might have to go down to basic level, which only a teacher can do as per the understanding of a student.

To conclude with it can be said: Digital Education can only be incorporated with traditional class-room learning and not act as its replacement, however until technical improvements are made, the scope of Digital education will be underestimated.

REFERENCES

1. Draft of Questionnaire for survey from: https://www.surveymonkey.com/r/FV2MCGX

2. Regions included in NCR from: https://en.wikipedia.org/wiki/National_ Capital_ Region_(India

3. Data collection for research paper (Primary data via Google Forms): https://goo.gl/forms/NDklJrh14yzOZ5mi2