

Research Paper

Digital Education: Its Uses and Perception among the Students of Raiganj University and Adjacent Institutions - *The Social, Technological & Economical Context*

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ABSTRACT

Digital Education is the need of the hour due to the impact of Information Technology in Education, Teaching and Research. Digital Education is composed with other allied mode of education including Online Education, Blended Education, Virtual Education, ICT in Education, Distance Education, and so on. Gradually the uses and impact of Digitalization in Education lead the concept of Digital Education. Digital Education may be the online education or it may be considered as ICT and Computing uses in teaching-learning, educational administration and management. Digital Education and its uses not same in all the countries, states or territories; and people or learners have various thinking, impact and perception regarding the uses of Digital Education. Such use pattern and preference differences are mainly due to the social and economical status of the users or learners. Digital Education is highly depends on Education Technology utilizations in Education and allied activities. This paper is about Digital Education with a special focus on uses, impact and perception among the students Raiganj University and adjacent institutions. Paper highlights the scenario, socio and economic concern about Digital Education and ICT application in Education.

HIGHLIGHTS

- ① Digital Education is a concept, research area and very recently become a field of study; available as academic degrees.
- ① Digital Education comes with ample opportunities but there are large number of issues and concern regarding technologies, finance, education and social.
- ① As per the survey total 4 selected institution's respondent's perceptions have been studied, analyzed and reported.
- ① Total four institutions have been selected purposively for this study and perception of total 635 respondents expressed their thinking on the technologies of Digital Education including technology, finance and social concern.

Keywords: Digital Education, Education Technology, E-Learning, Online Education, Edtech Companies, India

Uses, integration and Information Technology applications in education, teaching-learning, research and educational administration are leading the concepts and emergence of Digital Education drastically (Muthuprasad *et al.* 2021; Paul *et al.* 2012), (Sikandar & Rahman, 2021; Thomas, 2011). Information and Communication Technology

(ICT) including networking technologies, web technologies, software technologies, database technologies, multimedia technologies are impacting

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Digital Education designing and development and moreover newer technologies and systems also been effecting and changing Digital Education and allied educational concern (Aggarwal, 2009), (Bhattacharya & Sharma 2007; Dillenbourg, 2016). Among the latest technologies and systems of IT and Computing following are rising and impacting viz.—

- ♦ Cloud Computing;
- ♦ Big Data Management;
- ♦ Data Analytics;
- ♦ Internet of Things (IoT);
- ♦ Blockchain Technologies;
- ♦ Cyber Physical Systems;
- ♦ Metaverse Technologies;
- ♦ Edge Computing;
- ♦ Fog Computing and so on (Dillenbourg, 2016; Gaba, 2005; Paul, 2022).

The impact and role of such technologies are directly applicable to the educational institutions, and indirectly to the students, teachers and other stakeholders (Baber, 2020), (Gibson *et al.* 2015; Hanna, 1998). Today learners are getting education completely online, or partially using blended mode (Palvia *et al.* 2018; Palvia *et al.* 2018). Some students are also getting education in traditional mode of education but using ICT and Computing (Narciss, 2013; Paul *et al.* 2012), (Nimavat *et al.* 2021; Pal & Vanijja, 2020). More clearly students are acquiring degrees in onsite mode but they are using side by side various technologies in support of their education/ training/ degrees viz. Uses of online classes whenever required, students group collaboration in online live streaming, use of the projectors, use of the appropriate networking technologies and internet services, uses of digital payment methods regarding educational contents, pursuing one onsite program and parallel online or blended training or academic event program, etc. (Hiltz & Turoff, 2005), (Kar *et al.* 2014; Knox 2016). Digital Education is about all; includes ICT in fully online context or it is partial or blended context or simply uses of ICT in onsite/ on-campus education effectively (Jan, 2017; Jindal & Chahal, 2018), (Salmon, 2019; Saxena *et al.* 2018).

OBJECTIVE AND MOTIVATION

The paper titled ‘Digital Education: Its uses and perception among the students of Raiganj University and adjacent Institutions-*The Social, Technological & Economical Context*’ is a empirical work dedicated in finding current status on Digital Education specially on a targeted groups or student circle. The core aim and objective of this work is include as follows—

To learn about the basics of Digital Education including its basic foundation, features and characteristics.

- ♦ To know about the uses, utilizations and perception among the students of the concerned or selected educational institutions viz. Raiganj University, Raiganj Surendranath Mahavidyalaya, Raiganj B.Ed College, Raiganj Government Medical College and Hospitals.
- ♦ To know about the social, economical status of the concerned respondents among the four selected educational institutions.
- ♦ To learn about the technological perception and ongoing utilizations of the applications, systems in regard to uses in education, teaching-learning process.

As a remote area (i.e. concerned study area), the locality is not getting the benefits of the fully online degrees/ education due to non-offering of such degrees and programs by nearby institutions, and further they are also non-pursuing any online program from other or remote educational institutions due to lack of interest, lack of awareness. However the trend of ICT uses in onsite education, by individual means, by the teachers are increasing, therefore this study is especially helpful in studying, finding and highlighting about the status, impact, and perception about the Digital Education in Raiganj University and adjacent educational institutions, effectively.

METHODS ADOPTED

Study Area

Four (04) major educational institutions have been selected purposely to develop the research paper titled ‘*Digital Education: Its uses and perception among the students of Raiganj University and adjacent Institutions-The Social, Technological & Economical Context*’. Both Undergraduate and Postgraduate

level of study of Raiganj University, Raiganj Surendranath Mahavidyalaya, Raiganj B.Ed College and Raiganj Government Medical College and Hospitals have been considered to analyse the perception on ICT uses in Education of the students.

Types of Data Collected

The major portion of the study is developed based on primary data collected from the students of selected educational institutions during the period from March, 2023 to April, 2023 through a structured questionnaire circulated using Google Form. Convenience Sample technique has been used to collect data to know the views of the students on the digital education. However, secondary data have been collected from the recent published articles in various journals and books to fulfil the objectives of the study.

Statistical Tools Used

The primary data so collected from the field survey through google from initially tabulated on the excel sheet and considered for analysis. Number of respondents and their perception on the digital education has been shown in frequency distribution table. Chart and diagram have also been used to show the results of the survey.

BACKGROUND OF THE STUDY

This study is conducted at Raiganj (Pin-733 134, West Bengal, India), territory wise located in Northern Part of West Bengal, and it is about 400 KM away from Kolkata, and studied/ selected institutions are Raiganj University (*A State Government University offers Bachelors, Masters, Doctoral programs in Morning, Day and Evening batches to the needy students of the locality and other aspiring learners*), Raiganj Surendranath Mahavidyalaya (*It is an affiliated college under the University of Gourbanga, Malda, WB*), Raiganj B.Ed. College (*A Education College for the students already having at-least first Bachelor Degree and under Dr. Babasahed Education University, Kolkata, WB*), Raiganj Government Medical College and Hospital (*This is affiliated under the West Bengal University of Health Sciences, Kolkata and for the time being offers UG Programs; mainly Medical Degree-MBBS*). As far as number of respondent is concerned in this study 337 (three hundred and thirty seven) are male, 297 (two hundred and ninety seven)

are belongs to the female candidates and 01 (one) from transgender segment. Number of respondent institute wise belongs to Raiganj University PG-including Male, Female & Transgender is 171 (one hundred and seventy one) and UG-including Male and Female is 347 (three hundred and forty seven). Among other three institutions Raiganj B.Ed. College holds 77 total responses while Raiganj Surendranath Mahavidyala and Raiganj Government Medical College and Hospital share 25 and 15 number of responses respectively. Details of numbering responses including their Gender distribution is depicted in Table 1.

Table 1: Sharing of institution wise responses in this study and distribution of their gender

Sl No.	Name of the Institute	Gender			
		Response	Male	Female	Transgender
1	Raiganj University PG	171	99	71	1
2	Raiganj University UG	347	195	152	0
3	Raiganj B.Ed College	77	25	52	0
4	Raiganj Surendranath Mahavidyalaya	25	8	17	0
5	Raiganj Government Medical College and Hospital	15	10	5	0
Total		635	337	297	1

Table 2: Sharing of living areas of the respondents

Sl. No.	Name of the Institute	Response	Living Area	
			Rural	Urban
1	Raiganj University PG	171	107	64
2	Raiganj University UG	347	217	130
3	Raiganj B.Ed College	77	51	26
4	Raiganj Surendranath Mahavidyalaya	25	17	8
5	Raiganj Government Medical College and Hospital	15	9	6
Total		635	401	234

Table 2 depicts about the living area of the respondent and it has results that as a whole 63.15% of people in the respondents belongs to the rural areas whereas 36.85% are belongs to the urban area, here majority of the respondents (68.00%) of Raiganj Surendranath Mahavidyala lives in urban areas among other

institutions whereas Raiganj Government Medical College and Hospital belongs with 60.00% of urban area people and 40.00% is rural area people.

Fig. 1 here more depicts about the sharing of each institution wise respondents living area including Raiganj University as two headings PG & UG.

Fig. 2 here shows the institutions wise age group, and it reveals that maximum respondents categorised between 21 to 23 Years, whereas Age group 27 and more belongs to only 34 respondents out of total 635 respondents.

Here Table 3 is more clearly depicts each institutions and their respective number of respondents in tabular formats.

RESULTS AND DISCUSSION

The study entitled 'Digital Education: Its uses and perception among the students of Raiganj University and adjacent Institutions-*The Social, Technological & Economical Context*' specially focused on finding the status and perception of the ICT usages for the purpose of teaching-learning and educational activities among the selected institutions located at Raiganj and adjacent institutions.

Perception and Impact: Digital Education Perspective

Digital Education is the need of the hour and people are getting various types of advantages using Digital Education. As far as this study is concerned, the data interpretation shows various kind of results and among which one important is variable is on perception and concept on the nomenclature 'Digital Education', and it has shown that maximum respondents share their views that it is the combination of the online education, ICT in Education and Blended Education as depicted in Table 4.

Social & Technical Perception

As far as responses and views are concerned regarding the understanding of the term 'Digital Education' it has reveals that among the 'Online Education', 'ICT in Education' and 'Blended Education', a maximum number of respondents expressed about Online Education (178), Blended Education (103) and 26 respondent express that it could be 'ICT in Education'. However maximum respondents expressed all the above i.e. mixture

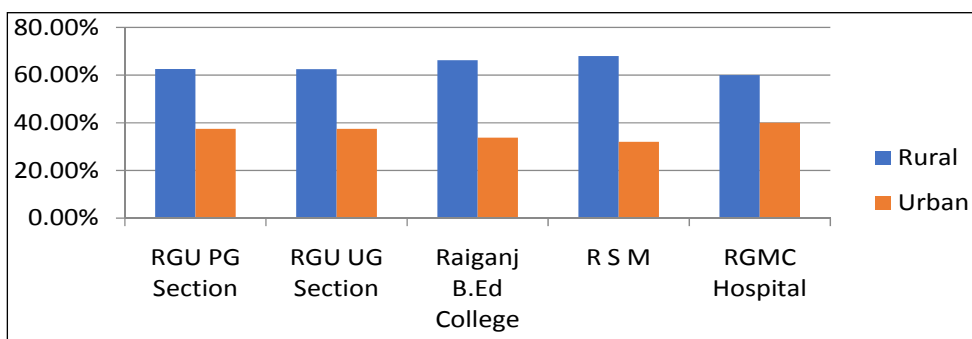


Fig. 1: Institutions wise living areas of the respondents

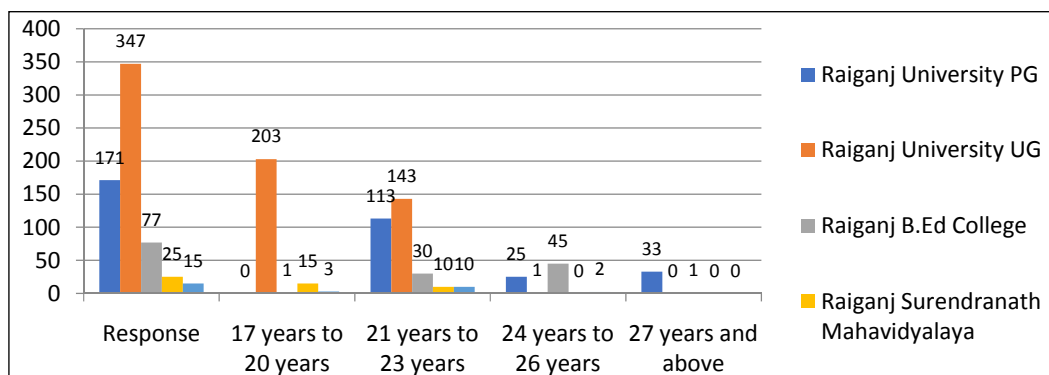


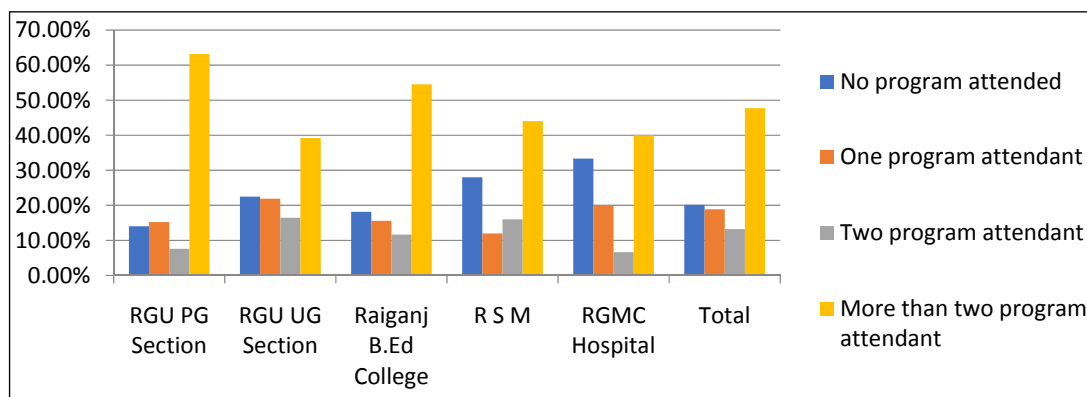
Fig. 2: Institutions wise sharing of age of the respondents

Table 3: Sharing of age group of each respondent

Sl No.	Name of the Institute	Response	Age Group			
			17 years to 20 years	21 years to 23 years	24 years to 26 years	27 years and above
1	Raiganj University PG	171	0	113	25	33
2	Raiganj University UG	347	203	143	1	0
3	Raiganj B.Ed College	77	1	30	45	1
4	Raiganj Surendranath Mahavidyalaya	25	15	10	0	0
5	Raiganj Government Medical College and Hospital	15	3	10	2	0
Total		635	222	306	73	34

Table 4: Response of the respondents of the selected institutions on keyword 'Digital Education'

Sl No.	Name of the Institute	Response	What do you mean by digital education?			
			Online Education	ICT in Education	Blended Education	All of the above
1	Raiganj University PG	171	39	8	22	102
2	Raiganj University UG	347	119	9	62	157
3	Raiganj B.Ed College	77	9	9	11	48
4	Raiganj Surendranath Mahavidyalaya	25	3	0	8	14
5	Raiganj Government Medical College and Hospital	15	8	0	0	7
Total		635	178	26	103	328

**Fig. 3:** Institution (of respondents) wise data on involvement on online events in last one year

of all these and it touches total 328 number of responses.

Here Fig. 3 is shows the data on the usages and involvement on online academic activities by the learners of four institutions and it has reveals that maximum respondents from Raiganj University PG have shared that they have attended more than two (63.16% respondents) online academic events in last one year. Data shows that Raiganj Government Medical College and Hospital respondents (33.00%)

have not attended any online educational program in last one year.

Regarding another technical and digital query to the respondents on uses of preferred meeting app/ applications (for attending classes and session) out of 635 respondents 598 shared that they are using Google Meet followed by Zoom meeting app, while no response recorded for WebEx and 12 respondents share that they are using other than

the mentioned meeting apps. Here table 5 depicts statistics (number & institution wise).

Among the preference of the Google Meet, Raiganj B.Ed. College stands first with 96.10% feedback on this applications uses whereas Raiganj University UG and Raiganj University PG shares app usage as 95.39 % and 95.32% respectively.

Here Fig. 4 shows graphical use pattern whereas Table 6 depicts institution and respondent wise feedback and uses pattern of the meeting apps (in percentages).

As far as other feedback is concerned respondents shared their views on knowledge on different

emerging technologies of Information Technologies as shows in Fig. 5. Institute specific data also shared in Table 7 which is depicts about the actual numbers, and it is reveals that maximum number of respondents are having knowledge of Database (233 respondents), followed by Information Technology (213 respondents) and Data Science (52 respondents). Here Big Data Analytics (43 respondents) got less number of feedback regarding knowledge or concept of this domain.

However it is important to note that, 256 respondents expressed that they are not aware about any kind of technologies asked or mentioned. And each details are given in Table 7.

Table 5: Uses of Meeting platform among the respondents (for the classes & session)

Which platform do you usually use for online learning?						
Sl No.	Name of the Institute	Response	Google Meet	Zoom Meet	Webex Meet	Others
1	Raiganj University PG	171	163	6	0	2
2	Raiganj University UG	347	331	13	0	3
3	Raiganj B.Ed College	77	74	2	0	1
4	Raiganj Surendranath Mahavidyalaya	25	20	2	0	3
5	Raiganj Government Medical College and Hospital	15	10	2	0	3
Total		635	598	25	0	12

Table 6: Uses of Meeting platform among the respondents (percentage wise)

Which platform do you usually use for online learning? (percentage wise)					
Sl No.	Name of the Institute	Google Meet	Zoom Meet	Webex Meet	Others
1	Raiganj University PG	95.32%	3.51%	0.00%	1.17%
2	Raiganj University UG	95.39%	3.75%	0.00%	0.86%
3	Raiganj B.Ed College	96.10%	2.60%	0.00%	1.30%
4	Raiganj Surendranath Mahavidyalaya	80.00%	8.00%	0.00%	12.00%
5	Raiganj Government Medical College and Hospital	66.67%	13.33%	0.00%	20.00%
Total		94.17%	3.94%	0.00%	1.89%

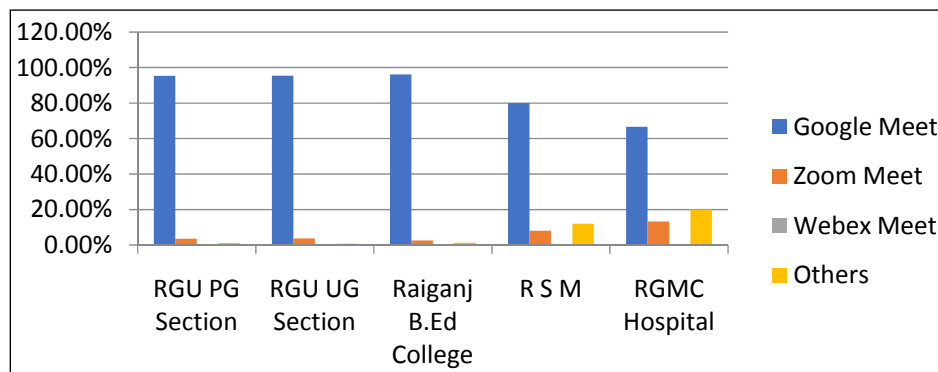
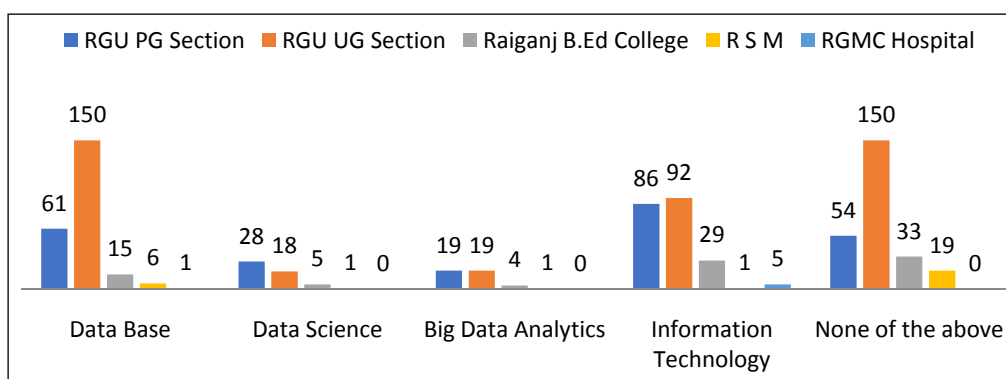


Fig. 4: Uses of Meeting platform among the respondents

Table 7: Awareness about the emerging Information Technologies in numbers

Do you have any concept about the following technologies?							
Sl. No.	Name of the Institute	Response	Data Base	Data Science	Big Data Analytics	Information Technology	None of the above
1	Raiganj University PG	248	61	28	19	86	54
2	Raiganj University UG	429	150	18	19	92	150
3	Raiganj B.Ed College	86	15	5	4	29	33
4	Raiganj Surendranath Mahavidyalaya	28	6	1	1	1	19
5	Raiganj Government Medical College and Hospital	6	1	0	0	5	0
Total		797	233	52	43	213	256


Fig. 5: Knowledge and awareness about latest emerging technologies from IT and Computing

Television play an important for in knowledge spreading and gathering and this study also shows that total 20.31% respondents uses TV as an educational medium whereas 6.14% respondents claims that they are using TV for gathering news. Though it is worthy to note that 72.44% respondents have informed that in their institute, they don't have any opportunities of Television. Here Table 8 depicts in details.

Digital Education is fully technology depended whereas online education is fully internet based and other modes and opportunities such as E-Learning, Blended Learning, Online Meeting, E-Reading, gathering knowledge and sources also depends on Internet. Here Fig. 6 shows internet connectivity and its uses among the respondents and obviously the same can also being used in educational purposes.

Whereas Table 9 shows institute wise respondents uses of internet technologies ranging from 3G, 4G, 5G. 0.31% of the candidates are not using any kind of internet services, and in this context Raiganj University PG share 0.58%. Study shows that

students of Raiganj Government Medical College and Hospital share highest amount of 4G internet (66.67%) and 5G internet (33.33%).

Regarding perception of the interaction while online classes and the preferences are shown in Fig. 7 and it depicts that in all the institutions students preferred chatting window for the interaction and next they do an online video interaction after the session or the class.

As far as the preferences among the options viz. online (live streaming) mode, blended mode, and face-to-face (onsite) mode and self study through the internet maximum respondents expressed about their perception on Blended mode (i.e. mixer of online and face-to-face mode) 59.21% respondents. Here Table 10 shows the details of the responses of the students of selected institutions as per this study.

Social Networking is one of the important knowledge gathering tool for the time being, it is also useful in entertainment, communication and friendship. As many respondents expressed that they are

Table 8: Uses of the television as a knowledge device

How does your institution use television as a teaching learning material?				
Name of the Institute	Institution has no television	News shown on television	Educational movies shown on television	Sports shown on television
RGU PG Section	83.63%	0.58%	15.79%	0.00%
RGU UG Section	72.33%	5.19%	21.33%	1.15%
Raiganj B.Ed College	48.05%	22.08%	27.27%	2.60%
R S M	76.00%	4.00%	20.00%	0.00%
RGMC Hospital	66.67%	13.33%	13.33%	6.67%
Total	72.44%	6.14%	20.31%	1.10%

Table 9: Sharing of uses of different Internet technologies (generation) for study and learning purposes

Which generation of mobile internet technology do you use?					
Sl. No.	Name of the Institute	3G	4G	5G	No Internet facility
1	Raiganj University PG	0.00%	87.72%	11.70%	0.58%
2	Raiganj University UG	2.02%	90.78%	6.92%	0.29%
3	Raiganj B.Ed College	2.60%	92.21%	5.19%	0.00%
4	Raiganj Surendranath Mahavidyalaya	0.00%	84.00%	16.00%	0.00%
5	Raiganj Government Medical College and Hospital	0.00%	66.67%	33.33%	0.00%
Total		1.42%	89.29%	8.98%	0.31%

Table 10: Preferences of different modes of classes and teaching-learning process

Which mode of class do you preferred the most?				
Name of the Institute	Online Internet based Class	Blended mode Class (Mixture of Online & Face to Face)	Face to face mode Class	Self-study through Internet
RGU PG Section	7.60%	49.12%	39.18%	4.09%
RGU UG Section	7.49%	65.13%	20.46%	6.92%
Raiganj B.Ed College	3.90%	53.25%	38.96%	3.90%
R S M	8.00%	76.00%	12.00%	4.00%
RGMC Hospital	6.67%	40.00%	46.67%	6.67%
Total	7.09%	59.21%	28.03%	5.67%

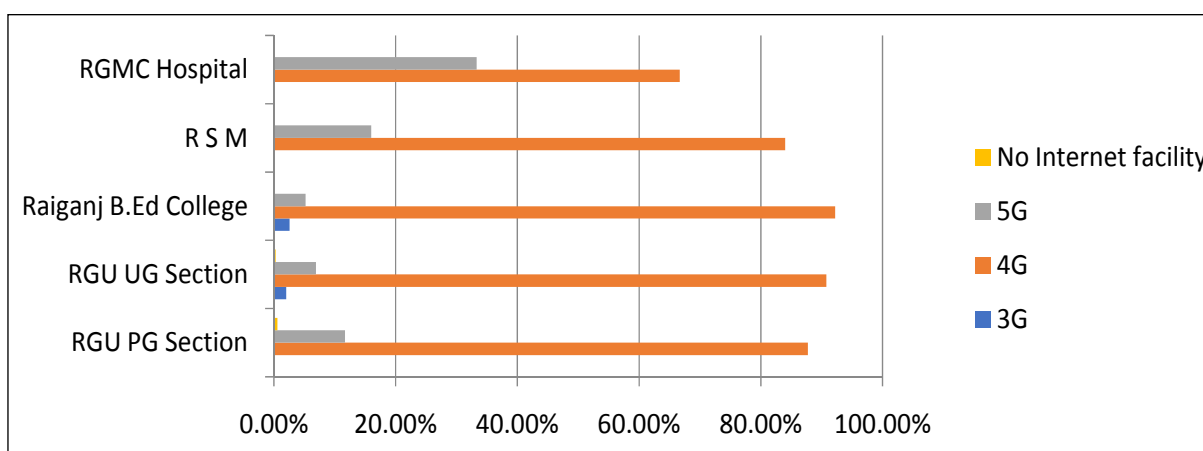


Fig. 6: Graphical sharing of uses of different Internet technologies (generation) for study and learning purposes

using social networking for different purposes an expression gathered on its daily uses and it has reveals that 25.35% respondents uses more than 3 hours timing for social networking while highest is 37.01%. Here Table 11 shows details about the utilizations of Social Networking sites.

Economical and Financial Aspects and Perception

As far as Economical and Financial perception among the students of the selected institutions are concerned various information and data reveals this

section. First data regarding financial perception mentioned in Fig. 8 about the family income of the respondents. It is fact that modern days educational systems and modes are depends on money and budget, and this figure shows that maximum number of respondents (61.42%) inform that their family income is less than ₹ 10000/- (Ten thousands). And this percentage touches 66.86% when it is tagged with Raiganj Surendranath Mahavidyalaya, West Bengal, India.

Here table 12 more clearly depicts various data related to the family income of all the selected

Table 11: Preferences of Social Networking sites both for education and entertainment

How much time do you employ on social networking sites daily?				
Name of the Institute	Less than one hour	1 to 2 hours	2 to 3 hours	More than 3 hours use
RGU PG Section	25.73%	32.75%	14.04%	27.49%
RGU UG Section	22.19%	37.75%	17.29%	22.77%
Raiganj B.Ed College	14.29%	42.86%	15.58%	27.27%
R S M	12.00%	28.00%	12.00%	48.00%
RGMCH	20.00%	53.33%	13.33%	13.33%
Total	21.73%	37.01%	15.91%	25.35%

Table 12: Family income of the respondents (all are in INR)

Name of the Institute	Less than 10,000	10,000 to 30,000	30,000 to 50,000	50,000 or more
RGU PG Section	52.05%	27.49%	6.43%	14.04%
RGU UG Section	66.86%	24.78%	4.90%	3.46%
Raiganj B.Ed College	63.64%	18.18%	9.09%	9.09%
R S M	64.00%	28.00%	4.00%	4.00%
RGMCH Hospital	26.67%	33.33%	13.33%	26.67%
Total	61.42%	25.04%	5.98%	7.56%

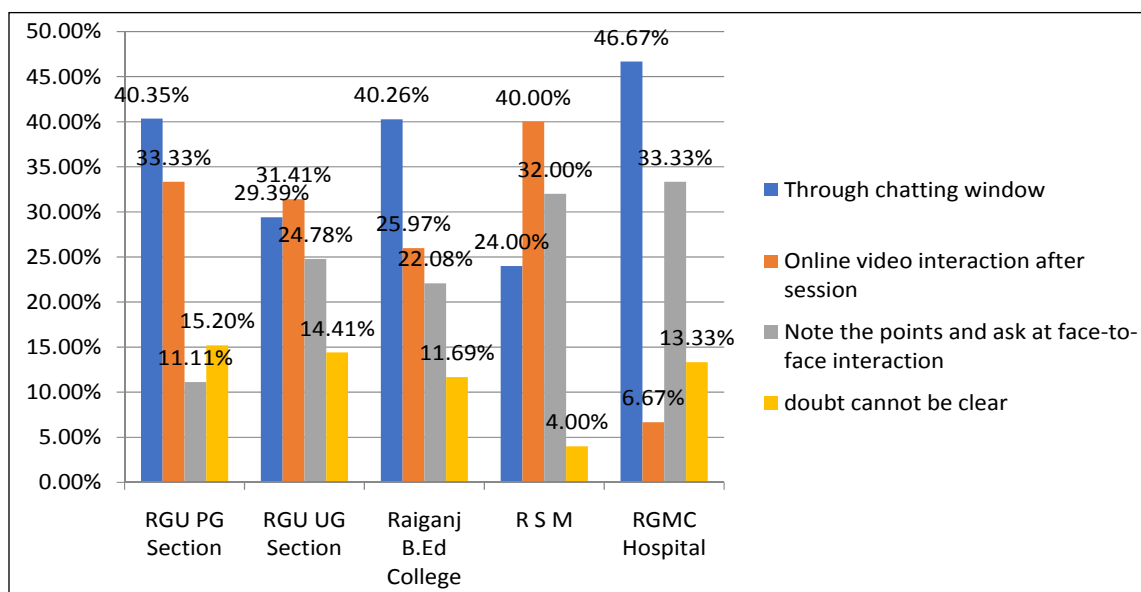


Fig. 7: The perception of the interaction in online classes for teaching-learning process

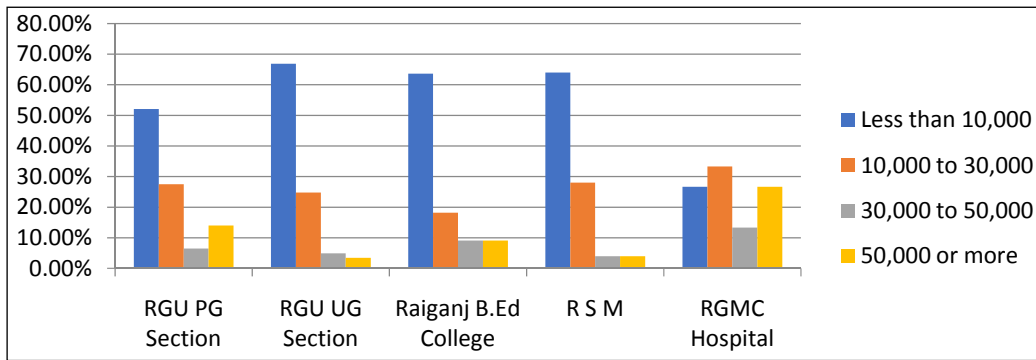


Fig. 8: Economical status of the respondent's family members

Table 13: Preferences of payment regarding Digital Education/ online events

Which Mode of payment do you use to pay for Conference, Seminar, Symposium or workshop fees?					
Sl No.	Name of the Institute	Debit Card / Credit Card	Net Banking	UPI based Payment	I only participate if it is free
1	Raiganj University PG	9.94%	14.04%	29.24%	46.78%
2	Raiganj University UG	6.92%	19.02%	26.51%	47.55%
3	Raiganj B.Ed College	5.19%	15.58%	15.58%	63.64%
4	Raiganj Surendranath Mahavidyalaya	4.00%	16.00%	20.00%	60.00%
5	Raiganj Government Medical College and Hospital	6.67%	6.67%	66.67%	20.00%
Total		7.40%	16.85%	26.61%	49.13%

institution's respondents. As far as highest income in concerned the scale as per query made more than ₹ 50000 and it has reveals that 7.56% of the respondents inform that they are having this amount as their family income.

Digital Education is associated with various kind of online and e-modes and modalities and among which seminar, conferences and other academic events considered as important. And for joining and attending such events online payment is most convenient for the time being and this study shows that among the options asked (Debit-Credit Card/ Net Baking/ UPI Payment) for payment 26.61% shared their preferences as UPI based payment method and details (institution wise) given in Table 13. Since budget is a factor in Digital Education this variable shows that a good number of respondents (20.00%) expressed that they don't join any online program/ events if it is not free and this results also shows the perception about the online programs/ events of the respondents of Raiganj B.Ed. College is 63.64% regarding preference of free-ship.

One of the important knowledge delivery model

in Digital Education is Conferences and similar academic event in online mode, and study shows that maximum (72.44%) respondents did not pursued any event in last one year while 11.81% expressed about one, 6.77% about two event's attendance. And interestingly 8.98% of the respondents share that they attended more than three online events in last one year. Here Table 14 shows institution wise data on this digital event's participation.

As far as freeship perception is concerned regarding online events attendance, this study shows that among the 635 respondents of this study 362 preferred it should be free, while 162 respondents expressed that some registration charges may be given, 53 expressed that some registration and contingency fees may be paid, and 52 respondents share that it could be charged if the online contents are good and effective. Details are depicted in Fig. 9. Online training and academic events related perception in respect of advertisement (with or without), requirement and expression in little charges, and expression of charges have been recorded by this study with following sub-parameter

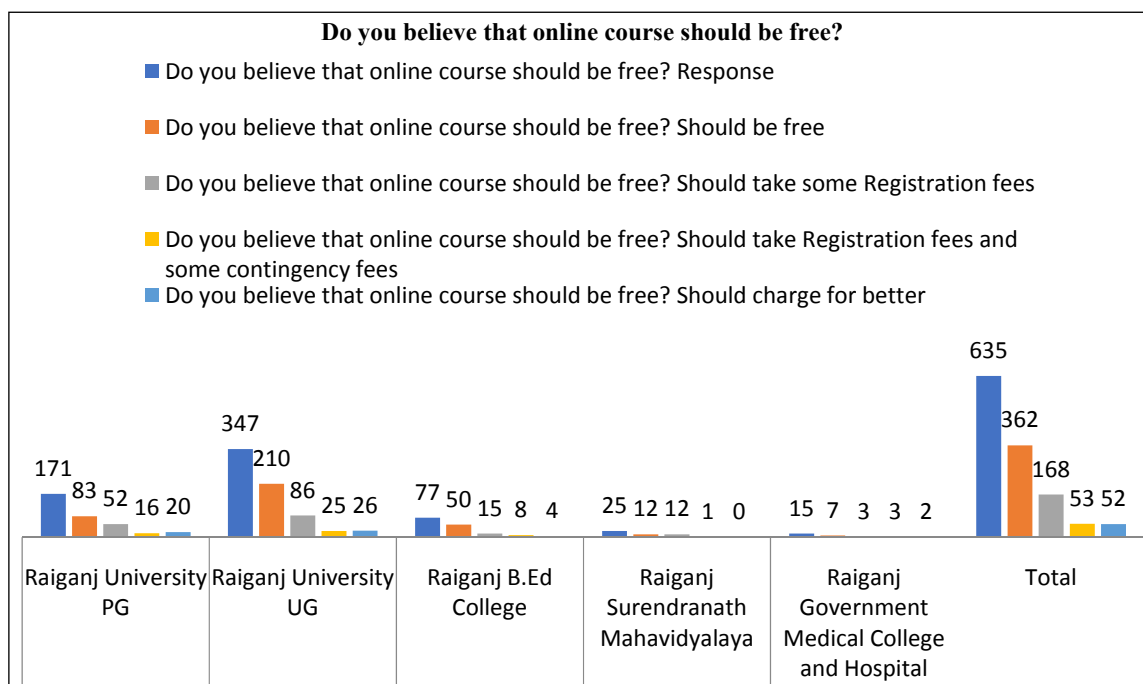


Fig. 9: Perception on Online courses/ training programs/ events on Paid vs. Free of cost

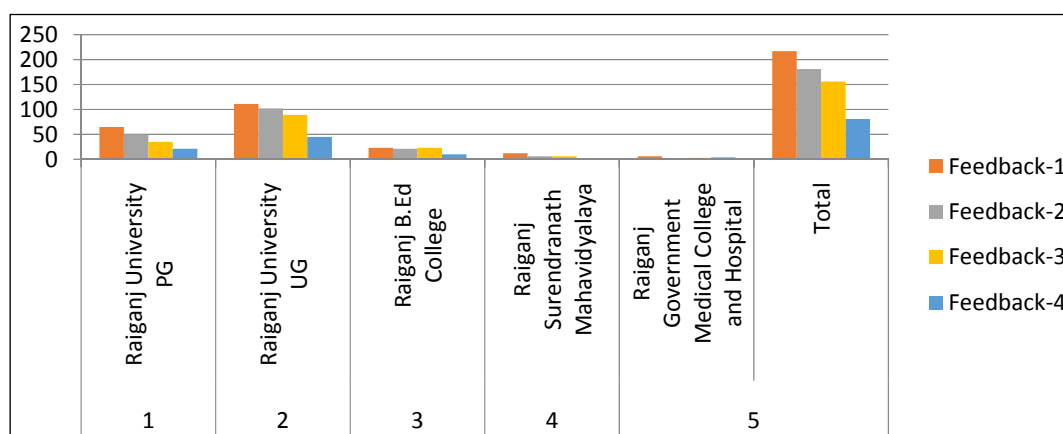


Fig. 10: Perception on payment regarding E Contents quality

viz. Feedback-1: E-Learning Platforms should be free to use without any advertisements, Feedback-2: E-Learning Platforms should be free to use with advertisements, Feedback-3: E-Learning Platforms may take little charges, Feedback-4: For good content e-Learning platforms should be chargeable. Details of perception depicted in Fig. 10.

The study shows that 12.76% of the respondents expressed that, for good content e-Learning platforms should be chargeable, while institution specific 26.67% respondents (highest sharing) from Raiganj Government Medical College and Hospital believes agrees with this. While this concept is very

less in case of Raiganj Surendranath Mahavidyalaya (i.e. only 4.00% believes/ agreed with this). Here table 15 depicts detailed institution wise perception as far as E-Contents quality and payment concern. In addition to these, this study entitled 'Digital Education: Its uses and perception among the students of Raiganj University and adjacent Institutions-The Social, Technological & Economical Context' explore some of the other aspects related to the technological uses, utilizations in educational segment including in Online education and teaching/ learning process. Here Table 16 is depicts on such queries and their results (with mean

Table 14: Status of payment conferences in last one year

Sl. No.	Name of the Institute	Zero	One	Two	Three or more than Three
1	Raiganj University PG	69.59%	12.87%	5.26%	12.28%
2	Raiganj University UG	73.78%	10.95%	7.78%	7.49%
3	Raiganj B.Ed College	71.43%	12.99%	6.49%	9.09%
4	Raiganj Surendranath Mahavidyalaya	80.00%	12.00%	4.00%	4.00%
5	Raiganj Government Medical College and Hospital	66.67%	13.33%	6.67%	13.33%
Total		72.44%	11.81%	6.77%	8.98%

Table 15: Status and perception of the respondents on payment based on E-Contents quality

E-Learning Platforms should take some charge for enriched content				
Name of the Institute	E-Learning Platforms should be free to use without any advertisements	E-Learning Platforms should be free to use with advertisements	E-Learning Platforms may take little charges	For good content e-Learning platforms should be chargeable
RGU PG Section	38.01%	29.24%	20.47%	12.28%
RGU UG Section	31.99%	29.39%	25.65%	12.97%
Raiganj B.Ed College	29.87%	27.27%	29.87%	12.99%
R S M	48.00%	24.00%	24.00%	4.00%
RGMC Hospital	40.00%	13.33%	20.00%	26.67%
Total	34.17%	28.50%	24.57%	12.76%

Table 16: Depicts perception of some other queries and concern

Sl. No.	Statement/perception	Total	
		Mean	SD
1	I have a concept of Cloud Computing	2.73	1.05
2	I use Cloud drive for data & photo storage	3.09	1.14
3	I attended Online classes before Covid period	2.49	1.20
4	I attended Online classes during Covid period before Covid period	4.13	0.92
5	I attend Online classes till now	3.13	1.11
6	I attended Online based examination before Covid period	2.50	1.21
7	I attended Online based examination during Covid period	3.83	1.13
8	I attended Online based examination after Covid period	3.11	1.22
9	I believe there is still a need for electronic study materials even after the covid period	3.24	1.11
10	I believe Education through Online mode increase the quality of learning	2.84	1.07
11	I think Online learning Tools are helpful to improve students' academic performance	3.18	1.00
12	I am satisfied in Online class	2.99	1.06
13	I believe e-Learning system helps to simplify the learning process	3.48	0.90
14	I am able to access online journals and periodicals at Library	2.73	0.99
15	I got the opportunity to give examination with the use of technology outside of the campus	2.95	1.08
16	I got the opportunity to submit the assignment with the use of technology outside of the campus	3.09	1.07

and standard deviation). This is also ultimately helpful in knowing several other aspects of Digital Education impact, uses and perception as a whole in these selected educational institutions.

This study reveals perception of different parameters related to the technology in education among the respondents and here the outcome of the study mentioned as mean and standard deviation (SD) as mentioned in Table 16. The perception of using Education Technology during the Covid and before and after the Covid also reveals by this study. Regarding the perception of Online classes before Covid period the mean value is 2.49 and SD is 1.20, outcome of the query on Online classes during Covid period and before Covid period (mean-4.13 & SD-0.92). This study also shows about the online class tendency and their perception, Regarding attending any-kind of Online classes till now the result show mean value 3.13 and SD shows 1.11. As far as attending 'Online based examination before Covid period' the mean value shows 2.50 and SD is 1.21. As far as the perception of Online based examination during Covid period is concerned it shows the mean value 3.83 and standard deviation is 1.13. The study also shows about the perception of Online based examination after Covid period, and it shows that the mean value of 3.11 and standard deviation is 1.22.

Students believe that still a need for electronic study materials even after the Covid period and here mean value is 3.24 and standard deviation is 1.11. Regarding the query 'Education through Online mode increase the quality of learning' means value is 2.84 and SD is 1.07. Another important query on 'Online learning Tools are helpful to improve students' academic performance; here mean shows 3.18 and SD is 1.00, Regarding the individual perception on satisfaction in Online class, the mean shows 2.99 whereas SD is 1.06. As far as knowledge of Cloud Computing is concerned the study shows that the mean is 2.73 and Standard Deviation is 1.05.

CONCLUDING REMARKS

Digital Education segment is growing rapidly with all its areas viz. Online Education, ICT in Education, Face-to-Face/Onsite Education, E-Learning, Virtual Learning, Flexible Learning, Corporate Learning, Work-Integrated Learning, and so on (Joshi *et al.* 2020; Joshi & Dewangan, 2021; Liu *et al.* 2010). The

uses, perception, thinking and impact of technical aspects are not same with all the territories as far as Digital Education is concerned. Regarding economical, social issues and aspects also there are different concerns, views and opinion can be noted case to case basis particularly depending upon territory. The place of study 'Raiganj' is a remote area and located more than four hundred KM away from the capital (Kolkata) of the state of West Bengal. People reside here avail less opportunity in communication, accessibility, jobs, education and other modern facilities. Digital Education is belongs with latest technologies and systems in education therefore many problems, and issues are obvious and this study helps to learn about such issues and concern regarding Digital Education. There are future potentialities in continuation of this work with other nearby institutions with more sample and respondents, potentialities are also exists regarding study on teachers and staffs on their perception, views and impact on Digital Education, Education Technology utilizations in Education, and other teaching-learning process.

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