An Analysis of Using Digital Content in English Subject at Grade IX-X from Teachers' Perspective

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Abstract: Across the past decades the use of ICT has fundamentally changed the practices and procedures of nearly all forms of endeavour including education. Being driven by the digital revolution, the form of educational context is changing, and will continue to grow and develop in the 21st century where the teachers have paramount importance in educating the learners with the using Digital Content (DC). In this fast developing world, DC is an important instrument which can cater the needs of present English language education. Due to the prevalence of technology in English classrooms, the use of DC has become an appropriate research topic for the researcher. In this paper, an analysis about this at grade IX-X from teachers' perspective was carried out. Both quantitative and qualitative approaches were used to conduct the study, and data was collected from English teachers by one-to-one semi-structured interview schedule. The findings of the study highlighted that English teachers sometimes use DC, mainly in delivering lecture, in giving assigned work and feedback. In addition, the study also discloses that English teachers follow general teaching-learning principles and in most cases they take preparation in using DC. In the end, the researcher puts forward some suggestions for consideration.

Keywords: Digital content; English subject; Grade IX-X; Teachers' perspective; Quantitative and qualitative approach.

Introduction

The style of teaching and learning in the 21st century has noticeably changed with the emergence of dominant technologies, that is, the movement from analogue to digital modes, and from books to monitor screens (Kress3627). In the past few decades, there has been a significant proliferation of digital media. Teaching and learning are active processes which are a modification of behaviour through practice (Malleqe, Begum, Islam & Riadhas cited in Hossen57). With this technological change, a dramatic rift has opened between the process of teaching and learning (Selina 201 cited in Hossen67). Digital content (DC) is crucial for enhancing both teaching and learning (Agariya & Singh514; Wang, Deng & Deng422). It is therefore important to extend the notion of teaching and learning beyond the traditional modes of listening, speaking, reading and writing, by incorporating various digital contents (DC). The condition of using DC in English subject was judged by this study.

Baker denominates "Digital content in the form of digitised photographs, images, videos and audios can be accessed and used in collaborative learning environments; the use of interactive digital content typically involves individual learners engaging

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with a critical educational concept (19)". In this regard, Garcia(4) stated that while talking about digital content I meant anything that could be created and stored digitally and used to support teaching and learning, and also items such as a useful URL, a text document or presentation file and in some cases a package of content or structured set of course materials and tasks are known as DC.

ICT is positioned in every single-phase of teaching and learning; that is why language teachers need to understand and cope with the changing nature of education system through using DC. Access and use of DC by the English teachers at secondary level in teaching and learning English were examined by this study. Hence, the study was undertaken.

The role of learners and technology has been changed drastically from traditional content to DC, from traditional instruction to virtual learning environment (Majumdar27). Hereafter, major paradigm of education has also changed during the last decades. The major paradigm has shifted due to ICT wherein DC is a major part. The major shifts have been described in figure below:
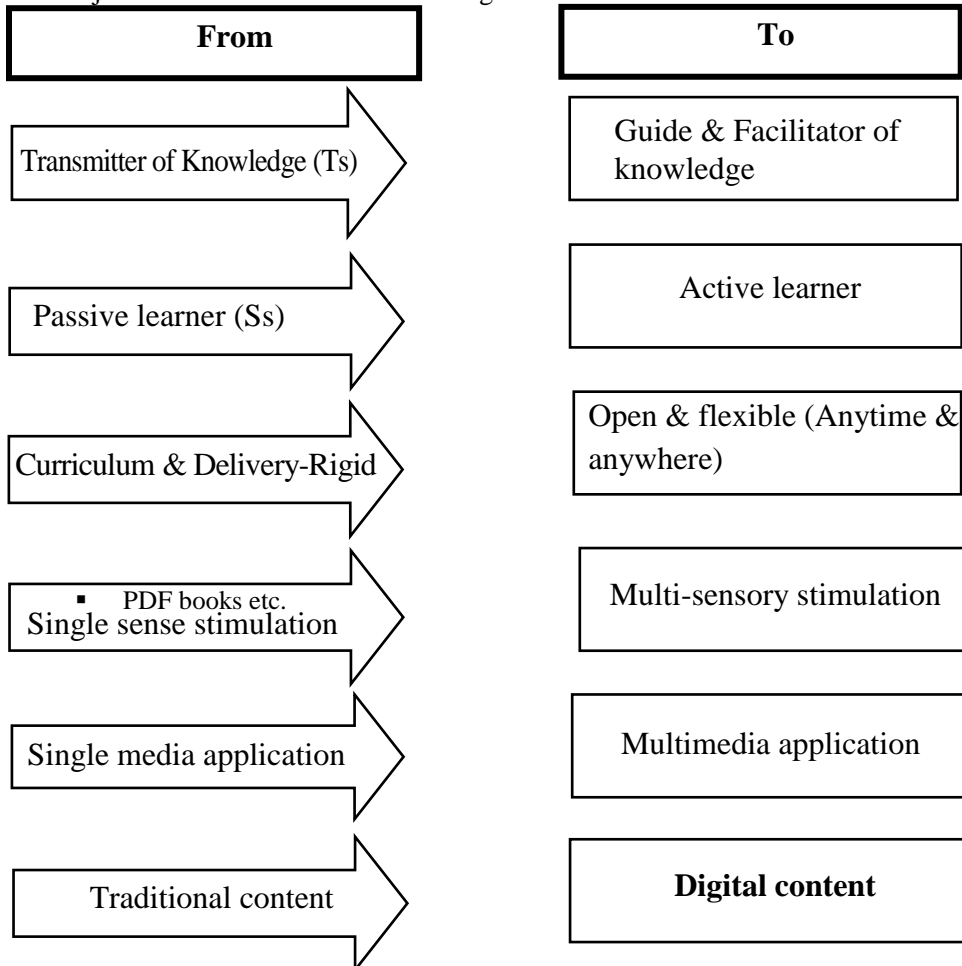
From	To
Transmitter of Knowledge (Ts)	Guide & Facilitator of knowledge
Passive learner (Ss)	Active learner
Curriculum & Delivery-Rigid	Open & flexible (Anytime & anywhere)
▪ PDF books etc. Single sense stimulation	Multi-sensory stimulation
Single media application	Multimedia application
Traditional content	**Digital content**

Fig 1. Major shifts in different areas of education (Source: Author)

To gauge such changes and adaption in English subject the researcher was involved to conduct this study.

Importance and Significance of the Study

One of the major goals of present education policy is - in order to build up knowledge and ICT based society (Digital Bangladesh), much more emphasis is given on ICT and other disciplines (Goal no.-12, National Education Policy87). In all the level of education, usages of ICT as a teaching-learning material have to be increased (Goal no.-21, NEP89). Besides, the 6th fifth year plan (6FYP) envisaged restructuring the education system to make it more attuned with the technologically evolving global landscape. "The role of ICT in boosting the quality of education will be emphasized and steps will be taken for narrowing the ICT skills between urban and rural people" (Zaman & Rokonuzzaman 13). Further, revised ICT policy 2009 and 2010, National education policy 2010, Master plan for ICT in Education (2012-2021), 7FYP etc. are taken to promote of DC based teaching-learning process. Consequently, a2i has introduced DC in teaching-learning process of Bangladesh (Strategic Priorities 20). However, there is little research about the existing condition of using DC especially from teachers' perspective. This study, therefore, is significant to know the emerging fact. Moreover, the findings of this study may help:

- to indicate the extent to which digital content is used in teaching and learning English at grade IX-X by the teachers;
- to identify how DC helps both teachers and students in teaching-learning process of English;
- to facilitate effective and enjoyable use of DC in the classes of IX-X at secondary level of education;
- to inform the teachers about the opportunity and the possible way of mitigating challenges of using DC that might enhance the quality of using DC and students' performance;
- to act as a foundation for further research that will benefit researchers.

As well as this study may help the secondary teachers and teacher educators to understand the importance of developing good DCs to improve the overall satisfaction and performance of the students in English subject.

Research Aim

The cardinal aim of this study was to analyse the teachers' perspective about using the digital content in English subject at grade IX-X. In keeping with cardinal aim, the following specific research objectives were determined to trace out-

  i.   to identify the actual condition of using digital content in English subject at grade IX-X
  ii.   to find out which principles teachers follow for using digital content in English subject at grade IX-X
  iii.   to explore how teachers get themselves prepared for using digital content in English subject at grade IX-X

Conceptual Framework of the Study

A conceptual framework is an explanatory device (Rahman47) "which explains either graphically or in narrative form, the main things to be studied- the key factors,

constructs or variables and the presumed relationship among them" (Miles & Huberman, 1994, p. 18 cited in Rahman287). Based on the review of the literature, research objectives and research variables, a conceptual framework was developed to guide the conceptualisation of this study which derived from mapping the issues that impacted upon and influenced the conceptualisation of this research. It is mentioned below:
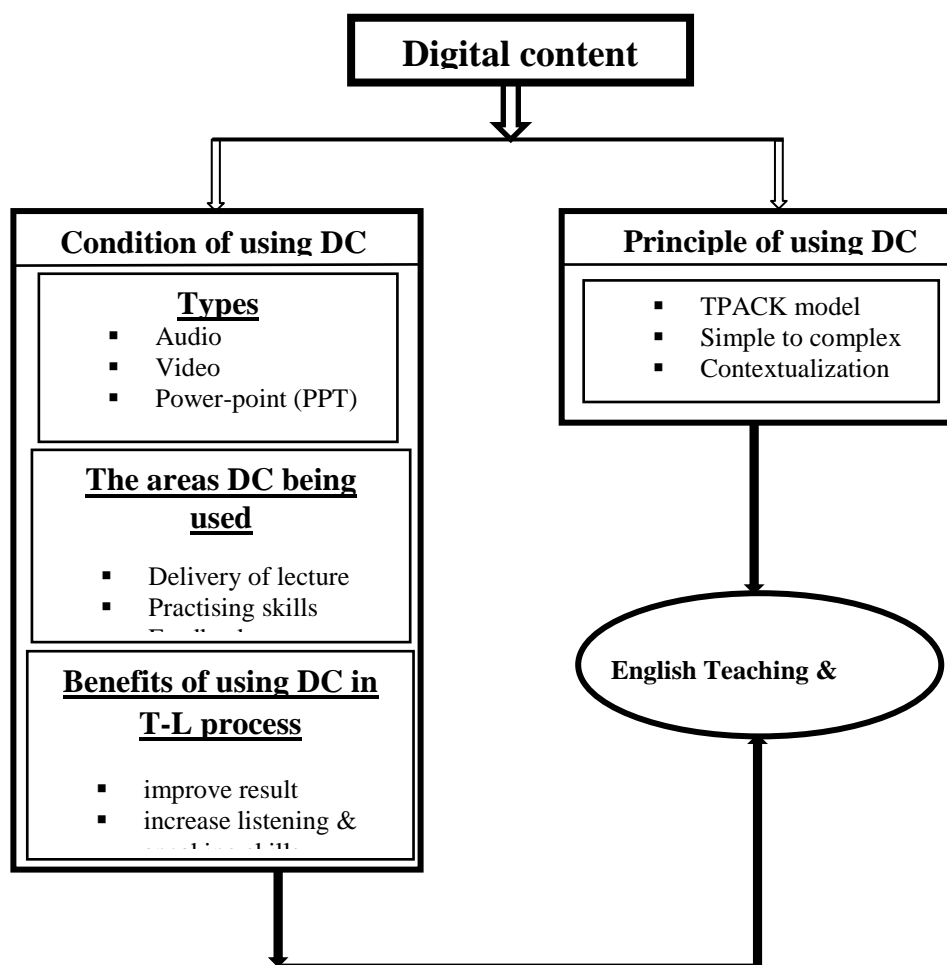
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                     │   Digital content    │
                     └──────────────────────┘
                                │
              ┌─────────────────┴─────────────────┐
              │                                   │
  ┌───────────────────────┐         ┌───────────────────────┐
  │  Condition of using DC │         │  Principle of using DC │
  │  ┌──────────────────┐  │         │  ┌──────────────────┐  │
  │  │      Types       │  │         │  │ ▪ TPACK model    │  │
  │  │ ▪ Audio          │  │         │  │ ▪ Simple to      │  │
  │  │ ▪ Video          │  │         │  │   complex        │  │
  │  │ ▪ Power-point    │  │         │  │ ▪ Contextualization│ │
  │  │   (PPT)          │  │         │  └──────────────────┘  │
  │  └──────────────────┘  │         └───────────────────────┘
  │  ┌──────────────────┐  │
  │  │ The areas DC being│ │              ┌─────────────┐
  │  │      used        │  │              │   English   │
  │  │ ▪ Delivery of    │  │              │ Teaching &  │
  │  │   lecture        │  │              └─────────────┘
  │  │ ▪ Practising skills│ │
  │  └──────────────────┘  │
  │  ┌──────────────────┐  │
  │  │ Benefits of using │ │
  │  │  DC in T-L process│ │
  │  │ ▪ improve result │  │
  │  │ ▪ increase       │  │
  │  │   listening &    │  │
  │  └──────────────────┘  │
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Fig 2. Conceptual framework of the study (Source: Author)

Research Methodology

In its investigation, the current study follows both quantitative and qualitative approach. Aspects of the method followed in this study are;

    a. Population and Sample of the Study

The population for this study were- all the govt. and non-govt. secondary schools of Bangladesh; and all the secondary schools' teachers of Bangladesh, especially who teach English at grade IX-X.

The study sample was taken from four secondary schools, two from Dhaka city and two from Chandpur district. The study involves a sample of eight respondents whom the researcher selects according to research demand. This sample is composed of four male and four female English teachers.

b.   Sampling Technique and Data Analysis Tools

The convenient random sampling method was used to select schools and purposive random sampling was used to select teachers. The necessary data and information are sourced responsibly and analyzed in both qualitative and quantitative manner. The quantitative data were analyzed by MS-Excel software.

c.   Tool of the Research

The researcher developed a semi-structured interview schedule for the collection of data. Then one-to-one interview session was conducted for each selected teacher.

d.   Ethical Considerations

Ethical issues are codes of professional conduct for researchers (Creswell 200). The study was carried out in an ethically proper manner from the beginning to end. It was ensured that all appropriate steps were taken to protect the interests, status, values, beliefs and harms (e.g., physical, social, psychological, professional) of all participants in this study. It was also ensured that rigorous accuracy and impartiality in data collection, analysis, and reporting were followed.

e.   Delimitations of the Study

The study limits are confined to its representativeness, coverage, time, level and diversity. Lack of representativeness of the participants was the first limitation. Only eight respondents were involved in this study. It does not give the complete picture of Bangladesh. The analysis and findings do not completely cover the gender, age, or experience as these variables were not set as selection criteria. Again the major limitation of this study is the short span of time for conducting it. A long time research might give a more effective and viable picture. Another limitation is the dealing with only grade IX-X. Further research would be needed to address other grades. Lastly, the diversity of schools was not fully represented in this study. The study mainly focused on mainstream school of secondary level of education.

f.   Analysis of Data

In the following segments data is presented and interpreted according to research objectives. The segments include both quantitative and qualitative data where it is necessary. All the segments are comprised of data collected through tool.

Teacher's Thoughts on DC

When teachers are inquired about their knowledge of DC, a similar response provided by the maximum (4 out of 8) teachers is "Digital Content is a multimedia based teaching-learning content which is used for better support." On the other hand, a pair of teachers (2 out of 8) said "DC means those types of content which is actually worked by binary digit." Besides, one of them comments,

> *"Digital Content is virtual text, picture, image, animation, and audio-video based content which is driven through electric media like computer, laptop or mobile phone or something like that".(TI_7;* Here, TI indicates Teachers Interview*)*

In contrast, one teacher has no idea about DC. He only knows that content means subject related topics but he does not know about the DC. The total picture of teachers' cognizance about the DC is shown by the following graph-
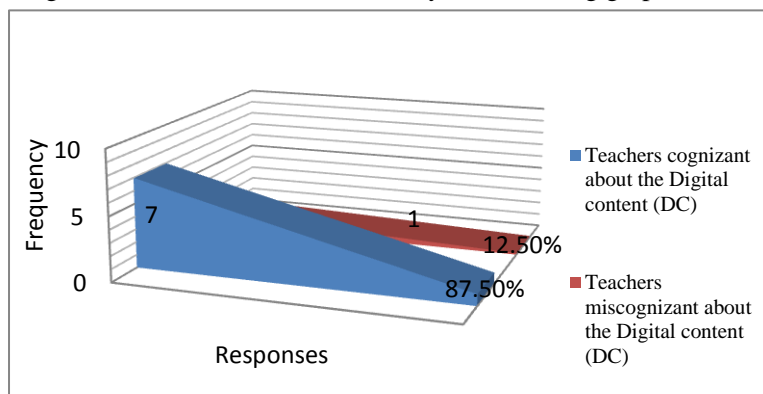

Fig3. Teachers cognizant about DC (Source: Author, on the basis of data analysis)

The figure presents that 7 out of 8 (87.50%) teachers are cognizant about the DC whether 1 out of 8 (12.50%) teachers are not cognizant about the DC. That means most of the teachers are familiar with the DC.

a.   Teachers' Responses about the Use of DC in Classroom Teaching-Learning Process of English

Teachers admit that they sometimes use DC in classroom teaching-learning process of English. Their responses are given below-

Table 1

Teacher's Responses about the Use of DC in Classroom Teaching-Learning Process of English

Responses	Frequency of Responses	Percentage (%)
Yes	6	75%
No	2	25%
Total	8	100%

(Source: ibid.)

The table shows that most of the teachers **6 out of 8 (75%)** use DC in English classroom, and rest of them **2 out of 8 (25%)** do not use DC in English classroom.

Teacher's Responses about the Proportion of Using DC in Classroom Teaching-Learning Process of English

Data collected from semi-structured interviews reveals that teachers used DC in classroom teaching-learning process of English. The parameters of using DC in the English classes are tabulated below:

Table 2

Teacher's responses about the proportion of using DC in the English class

Responses	Frequency of Responses	Percentage (%)
Very often	1	12.5%
Often	2	25%
Rarely	3	37.5%
Never	2	25%
Total	8	100%

(Source: ibid.)

Data from the table reveals that 3 out of 8 teachers rarely use DC, 2 out of 8 teachers often use DC. On the contrary, 2 out of 8 teachers never use DC. Rest of the teachers (1 out of 8) very often use DC in the teaching and learning process of English. This is the true picture of using DC in classroom teaching-learning process of English.

Teachers' Response about the Types of Used DC in Classroom Teaching-learning Process of English

When teachers are asked what types of DC they usually use for teaching-learning process of English, their responses about this are given in the following table.

Table3

Teachers' response about the types of used DC in classroom teaching-learning process of English(Multiple answers were accepted from the respondents)

Types of used Digital content	Frequency of Responses	Percentage (%)
PPT	8	36.37%
Video	6	27%
Topic related image	1	4.54%
Audio	5	22.09%
Picture	2	10%
Total 100%		

(Source: ibid.)

From the table it is clear that in most of the cases (36.37%) teachers use PowerPoint presentation (PPT) and then video (27%) as types of DC. At a time, in 22.09% cases teachers use audio in the DC based English class. The table also shows that merely in 10% cases teachers use picture and in 4.54% cases teachers use topic related images as the types of DC in teaching-learning process of English.

Teachers' Responses about the Percentage of Using DC in the Different Areas of English Teaching-Learning Process

DC is used in the different areas of teaching-learning process of English. The teachers' responses regarding this are collected from the semi-structured interview

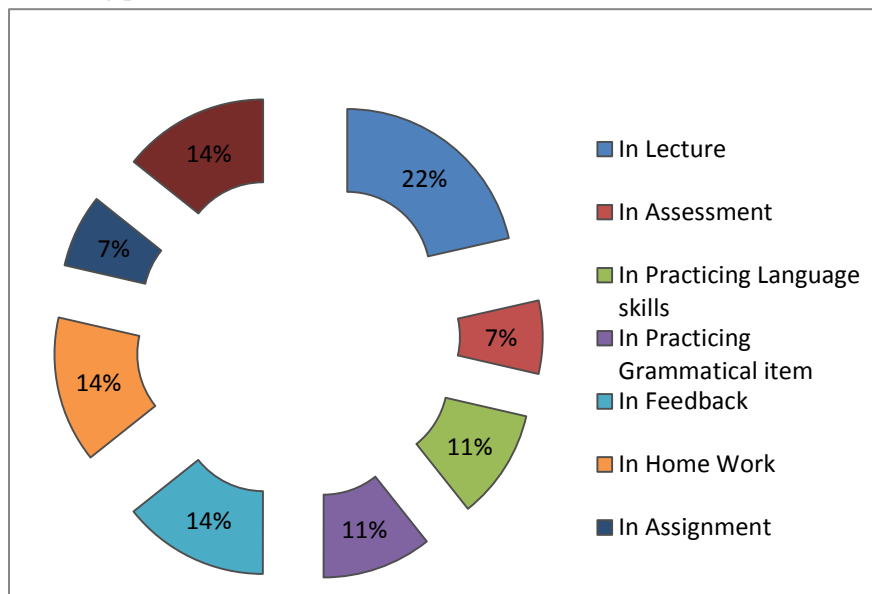schedule. Their responses and percentage of responses are graphically presented in the following pie chart.

Fig 4. The percentage of using DC in the different areas of English teaching-learning process (Source: ibid.)

In the figure above, it is highlighted that in maximum time (22% cases) teachers use DC in delivering their lecture. Secondly, they use DC in giving feedback towards students, giving homework and assigning group/pair work in equal percentage (14%). Apart from, in 11% cases teachers equally use different types of DC for two areas i.e .in practising grammatical items and in practising language skills (LSRW).In addition, teachers also use different kinds of DC for assessment and assignment (7% cases)which are the other important areas of English teaching-learning process.

Teachers' Opinion about the Advantages of Using DC

DC plays vital role in the teaching-learning process of English. Teachers' views regarding the advantages of using DC are tabulated below:

Table 4. *Teachers' opinion about the benefits of using DC(Multiple answers were accepted from the respondents)*

Responses	Frequency of Responses	Percentage (%)
to increase attendance 4	25%	
to improve exam result 4	25%	
to increase listening & speaking skills 4		25%
to increase digital skills	4	25%
Total 100%		

(Source: ibid.)

Data in the table elucidates that in view of the teachers DC plays a vital role in the following sectors equally (25%) - to increase attendance, to improve exam result, to increase listening and speaking skills and to increase digital skills.

Status of Following Principles in Using of DC in English Classroom

Some principles are needed to be followed in using DC in teaching-learning process of English. The complete response of teachers about this is depicted below through the chart -
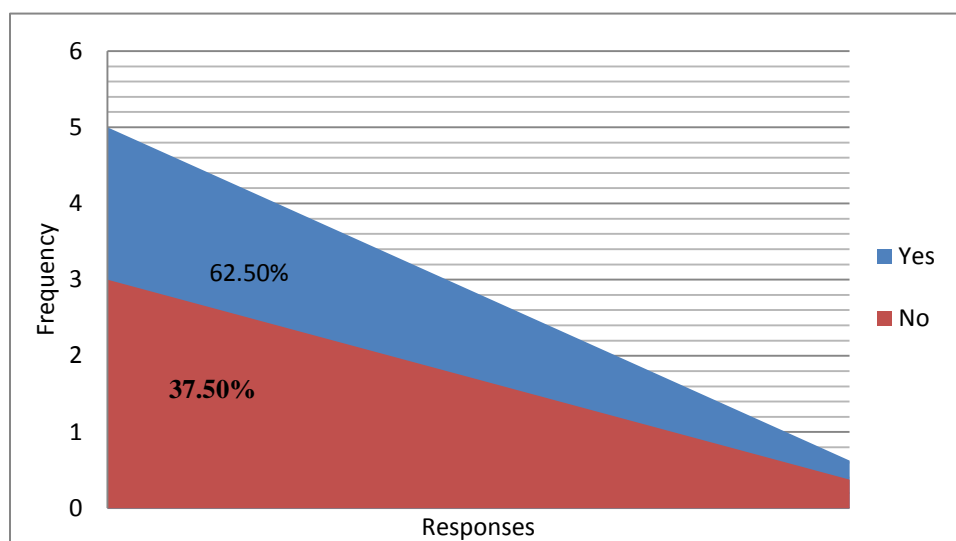

Fig5. Status of following principles in using of DC in English class (Source: ibid.)

The above figure displays that 5 out of 8 (62.5%) teachers follow some basic principles in the time of using DC in English class. The teachers mentioned,

> *"We basically follow participatory approach, and we prepare DC according to students' age, level and contextualize it with our context. Besides, we go from simple to complex gradually in the digital content based class."* (**TI$_1$, TI$_3$, TI$_7$ & TI$_8$**).

On the contrary, one of the rests does not follow any principles in using DC. Inquired of not following any principle the teacher argues against the point and his response is utterly shocking,

> *"I need not follow any principle because situation will fix what principle I should follow during the use of digital content."(***TI$_4$***).

Situation of Taking Preparation before Using DC in English Classroom

The following figure shows the situation of taking preparation before using DC in English classroom.
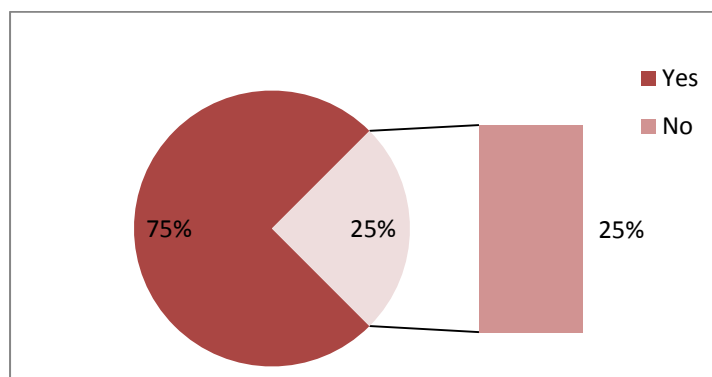
Fig 6. Situation of taking preparation before using DC in English classroom (Source: ibid.)

Percentage in the pie-chart shows that **6 out of 8** (75%) English teachers take preparation before using DC in classroom. When teachers are asked how they take preparation, most teachers promptly reply "we do it; otherwise we can't use it properly."**(TI$_2$, TI$_4$, & TI$_8$).**Another teacher also has said that

"Firstly, I prepare my content by myself then I make it clear & simple. And before presenting in the class I must go through it again and again so that my presentation can be flawless." **(TI$_1$)**

Results and Discussion of the Results: The salient results of this research study comprise of the followings (organized chronologically):

- Maximum teachers (**7 out of 8**) are cognizant with DC.
- Most of the teachers (**6 out of 8** have said in favour of this)used DC for teaching and learning English.
- Although most of the English teachers used DC but the frequency of using DC is very rare.
- PowerPoint presentation (PPT), video and audio are vastly used types of DC in teaching-learning process of English.
- DC is used majorly in the areas of delivering lecture, assigned (group/pair) work and giving feedback.
- According to teachers, DC plays a vital role as a stimulus in English classes; to increase attendance, to improve exam result, to increase listening and speaking skills and to increase digital skills (equally25%).
- Most of the teachers **(5 out of 8)** who use DC follow the general teaching-learning principles in English class.
- Most **(6 out of 8)** teachers take preparation before using DC in English class.

Discussion of the Results: The following discussion proceeds with the consideration of research objectives of the study based on the findings and their interpretations. Salient results are described under some segments with the support of other

literatures and research findings. The total framework of the discussion of this study is presented below with a figure:
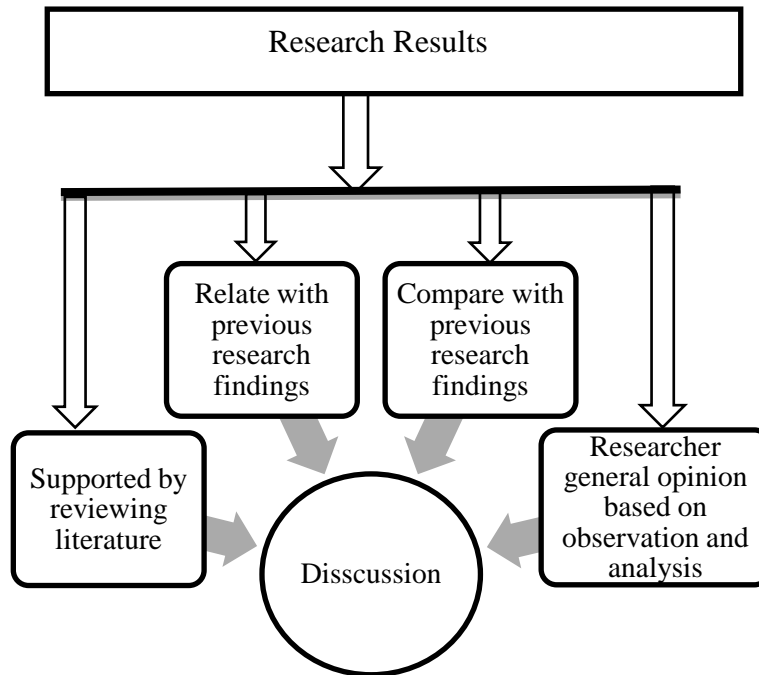
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Fig7. Framework of discussion process (Source: Author)

The study result revealed that most of the English teachers are cognizantwith DC and they used DC in English class although the frequency of using DC is very rare. The teachers who do not use DC and who rarely use DC mention some reasons for their actions:

a)   There is insufficiency in infrastructural availability for using DC in English Classroom;**(TI₃)**

b)   I have no training on digital content. **(TI₅)**

On the side of these findings, Green how, Robelia & Hughes (246) have pointed out that the use of technology (e.g. digital content, digital story telling etc.) is still peripheral to classroom instruction. In accordance with this, Pegrum (4) study explicates that all secondary teachers do not have access to technology.

One of the salient results of this study is that English teachers mainly used PPT, video and audio as types of DC in teaching-learning process of English. In maximum cases they use DC for English subject. Similarly, Ehsani & Knodt (58) have mentioned some types of multimedia components such as video, spoken text, graphics, and visual text for language learning which are also important components of DC.

In this study, the researcher has brought out that most of the English teachers in most schools used DC during the delivery of lectures, assigning of work and feedback.

Almost same finding was also found by Project Tomorrow where they markedly delineated that teachers are using digital tools for facilitating group collaboration in 32% cases (par. 19).

Another prominent finding supported by the teachers is that DC plays a vital role to increase attendance, to improve exam result, to increase listening and speaking skills, and to increase digital skills. In connection with the point Beach & O'Brien mentioned that digital technologies like DC have added not only stimulus but also learners' engagement (par. 12).

Present study also reveals that most of the teachers **(5 out of 8)** who use DC follow the general teaching-learning principles in English class. They fundamentally follow participatory approach and prepare DC according to students' age and level, and contextualized it with their context. Besides, they gradually go from simple to complex in the DC based class. In this context, some teachers have opined that in using DC, teachers should follow some principle though it may vary according to teachers, grades and contents. An account of a teacher$_7$-

> *"Digital content should be relevant with textbook content. Teachers should select the content in accordance with students' age, maturity, level of perception etc. The used DC need to be contextualized. It should be simple to complex."* (TI$_7$)

In agreement with teacher$_7$, teacher$_2$ said that-

> *"Teachers should follow e-pedagogy in digital content presentation, in designing students' activity through it and in assessment by using DC." (**TI$_2$**)*

In a similar vein, the SETDA study highlights that DC can be designed and developed with flexibility and customization capabilities at the outset, reflecting the principles of universal design, and can be revised in a more timely manner than the labor-intensive and costly process of updating traditional, static materials like printed textbooks (par.25, 35). In other words, DC can be designed, created, and refined over time in a way that recognizes and responds to the full spectrum of learner variability and these tools and resources can be shared across classrooms and modified, as appropriate, to meet individual student's needs (SETDA par.26).

Kuo, Chen, Hwang & Chen (39) said that teachers should follow principle of quality accreditation for DC adoption in the classroom teaching-learning process aiming to facilitate learners with appropriate learning content.

The study brings to light that most **(6 out of 8)** teachers take preparation before using DC in English class. In most cases they prepared their content by themselves then they making it clear and simple for the students. Besides, prior to presenting in the class they usually go through and check out it aiming at flawless presentation. In a similar fashion, the Empirica study highlights that an overwhelming majority of teachers in Europe (90 percent) use ICT to prepare their lessons and most of the cases they take preparation (par.16).

Recommendations and Conclusion

The study comes to accomplish with a few suggestions on the basis of the findings and teachers' responses to the open ended questions. English teachers are suggested to consider these recommendations-

- ○ Teachers require clear guidelines and advice about the capabilities and skills required to access and use DC for teaching and learning.
- ○ Training and support should be given not only to use equipment but also to exploit digital tools and resources for teaching.
- ○ Overcoming teachers' anxieties about digital teaching by using appropriate technology and ensuring different learner-centred pedagogies.
- ○ Teachers should be allowed to experiment with technology.
- ○ Networking with other teachers and schools should be prioritized.
- ○ To achieve accreditation, the DC must clearly specify the content themes, unit names, study hours, and eligible students.
- ○ Maintaining and upgrading equipment and using DC must be compatible across many systems.

Therefore, successful use and implementation of DC based teaching-learning process requires support of teachers and an environment that gives teachers the flexibility to introduce and use DC.

Technology obviously is an inseparable part of education, the use of DC in language teaching and learning can be effective addition to the arena of English language teaching and learning pedagogy. From the study it is revealed that English teachers have started their journey with DC aiming at better output in the English teaching-learning process. To cope with the dynamic teaching world there is rare alternatives for teachers to adopt such technology, and so they should also be dynamic and take full advantages from it.

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