Chapter 4

Data Analysis and Interpretation

4.0 Introduction

The present chapter delineates statistical as well as descriptive analysis and interpretation of the data collected through various means as mentioned in the previous chapter. The analysis of the data received through questionnaires (for students as well as for teachers) presents detailed descriptive discussions with simple calculation of percentage of degrees of agreements, disagreements, opinions, statements, derivatives, arguments and conclusions with respect to queries on various impacts of modern electronic mass media on the teaching and learning of the language and communication skills in English. The queries included in the questionnaires reflect the research hypotheses and questions as mentioned in the previous chapters. The Pre-Tests and Post-Tests were conducted to measure the difference between the actual performances of the students before and after the treatment.

4.1 Analysis and Interpretation of the Data Received through Students’ Questionnaires, Interviews and Observations

A very simple and straightforward numerical analysis of the data collected has availed statistics indicating interesting results. Though the analysis brings out not very surprising results, they are informative and suggestive of the behavioral and attitudinal changes that these devices bring about in their second and foreign language acquisition and/or learning.
There may be major IT revolutions and evolutions in the world with the invention of new amazing IT gadgets, devices and services, the scenario in Indian households remains not so promising. There may be numerous reasons apart from the diverse economic conditions in our Indian social fabric. A considerable difference is found in the presence of electronic or IT gadgets like TV, Computer, Internet, Mobile Phones, DVD etc. in the rural and urban households. So far as TV is concerned, all the students have at home. A marked difference exists so far as computer, Internet and Mobile Phones are concerned. Less than 50% households in rural parts do not have computer and Internet while more than 50% households in urban areas possess these facilities at home. It makes all the difference in their use or application if an instrument or device is at home. A free and unrestrained use is possible only when one possesses an instrument of one’s own. Any time availability of an instrument or a device certainly makes all the difference in second or foreign language acquisition as in the case of Mobile Phones. It widens the scope of exposure to input that is necessary for SLA and also makes SLA incidental (Long, 1990)

The absence of the modern IT gadgets and devices at home and the resultant ignorance about them is compensated with the availability of all those instruments, devices and services like TV, Computer, Internet etc. at college in both rural and urban areas. It has been found that all the colleges, belonging to both rural and urban areas in Gujarat, have all the IT gadgets and facilities. Well-equipped computer laboratories with multiple Internet connections are there in all colleges. With the financial assistance of the UGC, all the colleges have established computer labs with sufficient number of computers for
the cost-free use. College students in Gujarat now have easy access to the modern
electronic media gadgets and devices to enhance their higher learning.

Students make use of these gadgets and devices for numerous purposes. Listening to
music, watching films, sending short messages, E-Mails and making phone calls are the
widely nurtured purposes among others. Almost equal number of students from urban
and rural areas, 53.33% that has 73.33% boys and 32.22% girls and 55.83% comprising
76.67% boys and 35.56% girls respectively, always make use of TV, Computer,
Internet, Mobile Phones to listen to music or songs. Almost quarter part (25.83% with
22.22% boys and 28.89% girls) of the urban area students and 36.66% (33.33% boys
and 40% girls) of the rural area students sometimes listen to music or songs with these
instruments. A considerable difference is found when 6.66% rural students which
include 8.89% boys and 4.44% girls and 20% urban students that have 23.33% boys and
16.67% girls opted for ‘often’ category for listening to songs or music. It seems that
students do not prefer these gadgets or devices for watching films as only 26.66%
(35.56% boys and 17.78% girls) and 24.16% (23.33% boys and 15.56% girls), in rural
and urban students respectively, declare that they always watch films using these
instruments. On the other hand, majority of them, 54.16% made of 46.67% boys and
62.22% girls of rural and 47.5% urban students, 42.22% boys and 53.33% girls,
‘sometimes’ watch films using these gadgets. It can be assumed that most of them
prefer multiplexes or big screens for movies starring their favorite actors. Less than
quarter of them, 13.33% which includes equal number of girls (13.33%) and boys
(13.33%) in rural areas and 21.66%, the sum total of 22.22% boys and 21.11% girls in
urban areas, ‘often’ watch films with the help of modern media gadgets and devices
So far as SMS and E-Mails are concerned, students in urban areas outnumber their counterparts in rural areas. 56.66% students, 76.67% boys and 36.67% girls in urban areas while 42.5%, 53.33% boys and 31.11% girls in rural areas ‘always’ make use of SMS and e mail services. More rural area students (24.16% that includes 31.11% boys and 17.78% girls) than urban area students (18.33% that has 18.89% boys and 17.78% girls) ‘sometimes’ use SMS and E-mail services. A considerable difference is found when 14.16% (10% boys and 18.89% girls) rural area and 8.33% (4.44% boys and 12.22% girls) urban area students, declare that they ‘never’ make use of these services. Thus, the use of SMS and e mail services is higher with urban area students.

A majority of both urban and rural area students do not go for chatting, blogging or twitting. 70.83% comprising 62.22% boys and 80% girls while 41.66% comprising 35.56% boys and 47.78% girls, in rural and urban areas respectively, do not at all visit sites for chatting, blogging or twitting. Only 6.66% students, 8.89% boys and 4.44% girls, in rural areas while 17.5%, 16.67% boys and 12.22% girls, in urban areas always go for chatting, visiting blogs and twitter sites. The difference becomes cognizable when 6.66% rural area students and 14.16% urban area students say that they sometimes go for chatting, viewing blogs and twitting.

The largely used instrument is mobile phone and ‘making phone calls’ is the highest placed use of it. It is used almost in equal proportion in both rural and urban areas as 64.16% rural students that have 66.67% boys and 62.22% girls, while 65.83% urban students that include 68.89% boys and 63.33% girls, admit the fact that they ‘regularly’ (always) make phone calls with their mobile phones. Almost equal number of them
resort to their mobile phones for making calls with various time frequencies. Thus, the use of mobile phones in urban and rural parts is almost the same.

A cognizable difference is noted between them so far as the use of social websites like Facebook, Orkut etc. are concerned. Only 6.67% of the rural area students with equal number of boys and girls have the regular habit of navigating through such social networking sites. While 60% of them, 54.44% boys and 65.56% girls, ‘never’ visit certain websites. On the other hand, the picture is quite different in urban areas. 35% of urban students, 40% boys and 30% boys, enjoy the said social sites regularly while only 15.83% of them 13.33% boys and 18.89% girls, do not have the habit of logging on to such sites. Almost a quarter portion (21.66% including 22.22% boys and 21.11% girls) of urban area students ‘sometimes’ embark on these popular social websites. The number sinks in rural areas where 13.33% of the students that have 12.22% boys and 14.44% girls, ‘sometimes’ browse these websites.

Similar difference in their habits of viewing educational and entertainment channels like Discovery, National Geography, English News Channels, movies in English and subject related programs are concerned. The urban area students show more interest in educational cum entertainment programs than their counterparts in rural areas. 14.16%, 20% boys and 8.89% girls, in rural areas while 35.83%, 43.33% boys and 28.89% girls, in urban areas ‘always’ view Discovery and National Geography channels. More students in rural areas (43.33%, 56.67% boys and 30% girls) than urban areas (38.33%, 45.56% boys and 31.11% girls) ‘sometimes’ switch on to these channels. A cognizable difference is registered between them when 23.33% with 18.89% boys and 27.78% girls
while 2.5% students with 2.22% boys and 3.33% girls, in rural and urban areas respectively, declare that they ‘never’ watch programs on these channels. Similarly, news in English does not attract more in rural areas. A very small portion (2.5%) of rural area students, 3.33% boys and 2.22% girls, show regular interest in news telecast in English whereas 16.66% students that include 20% boys and 13.33% girls, are ‘regular’ viewers of news in English in urban areas. 54.44% boys and 50% girls making the total of 50.83% in urban areas while 30% which includes 31.11% boys and 28.89% girls in rural areas prefer to view news in English ‘sometimes’. A marked difference is found when 33.33% rural area students, 37.78% boys and 28.89% girls, while 4.16% urban area students that has 3.33% boys and 5.56% girls, admit that they ‘never’ view or listen to news in English language. So far as movies in English language are concerned the situation remains almost the same. 1.66% made of 2.22% boys and 1.11% girls while 19% made of 20% boys and 17.78% girls, in rural and urban areas respectively, ‘always’ prefer to watch movies in English. A big portion of 40% that has 38.89% boys and 41.11% girls, in rural areas while 39.16% that has 42.22% boys and 36.67% girls in urban areas ‘sometimes’ go for movies in English language. And 25.83% portion of rural area students comprising 24.44% boys and 27.78% girls while 4.16% urban area students that include 3.33% boys and 5.56% girls do not at all prefer to watch films in English.

A considerable difference is evident in their habits or practice of viewing or listening to subject related CDs or DVDs. No student from rural area colleges always make use of subject related CDs and DVDs whereas 4.16% students that include 5.56% boys and 3.33% girls, in urban parts ‘always’ make use of these devices and gadgets. A
cognizable difference is found when 14.16% that has 17.78% boys and 11.11% girls while 26.66% which includes 28.89% boys and 24.44% girls, rural and urban students respectively, declare that they ‘sometimes’ go for CDs and DVDs. Again more students (57.5% with 53.33% boys and 62.22% girls) in rural parts than students (14.16% with 15.56% boys and 13.33% girls) in urban parts do not at all / ‘never’ make use of subject related CDs and DVDs.

In their studies also, we find difference in the use of modern media gadgets and devices. Very less number of rural area students (7.5% consisting 6.67% boys and 8.89% girls) makes use of the Internet for their studies. A good portion of urban area students (35.83% comprising 37.78% boys and 34.44% girls) always surf the net as a part of their studies. 16.66% covering 18.89% boys and 14.44% girls whereas 20% consisting 21.11% boys and 18.89% girls, in rural and urban areas respectively, ‘sometimes’ go on the Internet to further their studies. Almost half portion (47.5%, the sum total of 36.67% boys and 58.89% girls) of the rural area students never make use of the Internet for study purposes whereas 13.33% (12.22% boys and 14.44% girls) of the urban parts students do not make use of it for studies. For project work and assignment tasks, the figures differ. 23.33% boys and 13.33% girls making a total of 18.33% in rural parts while 30% boys and 28.89% girls bringing the total at 29.16% in urban parts ‘always’ complete their project and assignment tasks with the help of the Internet. 23.33% having 25.55% boys and 21.11% girls while 22.5% including 23.33% boys and 22.22% girls, in rural and urban parts respectively, ‘sometimes’ make use of the Internet to help themselves with their project and assignment tasks. A vast difference is noted when 36.66% rural area students that include 33.33% boys and 40% girls whereas 6.66%
urban area students that consist 5.56% boys and 7.78% girls declare that they do not make use of the Internet for their project and assignment works. Thus, once again, comparatively speaking, more use of the Internet is found with the urban area students than with their counterparts in rural areas.

In response to a question, inquiring about their obvious preference for a language or a language type and its frequency, they stand quite divided as most of them make use of more than one language or mixed varieties of them all with varying frequencies. So far as mixed types of language i.e. Gujarati, Hindi and English are concerned, all of them, both rural and urban area students, have more or less similar habits (see the Graph 1 & 2). 30.55% urban and 47.22% rural college students (34.44% boys and 26.67% girls in urban, 52.22% boys and 42.22% girls in rural) ‘always’ make use of Gujarati or Hindi written in English script with English words frequently used. More number of urban area college students (32.78% with 30% boys and 35.56% girls) than their counterparts in rural areas (15% students that has 15.56% boys and 14.44% girls) ‘sometimes’ make use of Gujarati or Hindi written in English script with English words or phrases or sentences. Almost equal number of students in urban areas (30.55% with 31.87% boys and 28.89% girls) ‘often’ make use of Gujarati or Hindi written in English script with frequent English words / sentences / phrases. Again, 4.44% in urban (1.11% boys and 3.33% girls) and 6.67% in rural (2.22% boys and 12.22% girls) ‘hardly’ make use of the said type of language. 4.44% in urban (1.11% boys and 3.33% girls) and absolutely no student in rural area colleges who ‘never’ make use of the language type.
Total 110 urban area students and 131 rural area students make use of Gujarati or Hindi written in English with frequent English words / sentences / phrases. The difference stands at 11.67% showing greater number of students from rural area colleges making use of this particular language type.

The other language type – Gujarati or Hindi written in English with no English word or sentence – is vividly used in different frequencies by students in rural and urban area colleges. 13.33% urban area college students that includes 14.44% boys and 12.22% girls while 8.33% rural area college students that has 8.89% boys and 7.78 girls make use of it. 23.33% urban area students (24.44% boys and 22.22% girls) whereas 20.56% rural area students (23.33% boys and 17.78% girls) ‘sometimes’ make use of the language type. 12.22% students (13.33% boys and 11.11% girls) in urban areas while 20.56% students (21.11% boys and 20% girls) in rural area colleges ‘often’ make use of the language type. 16.66% with 13.33% boys and 20% girls in urban and 20% with 17.78% boys and 22.22% girls in rural area colleges ‘never’ make use of the language type.

Total 25.56% urban area students that includes 27.78% boys and 23.33% girls while 28.89% rural area students that has 30% boys and 27.78% girls make use of this particular type with various frequencies. The rural area college students lead their counterparts in urban area colleges by 3.33%.

‘Gujarati or Hindi written in the respective script with no English word’ is also employed with varying frequencies by students according to the need or occasion. 11.67% students that includes 13.33% boys and 10% girls in urban area colleges while
16.11% students that has 7.78% boys and 14.44% girls in rural area colleges ‘always’ make use of the language type. 7.22% urban area students (7.78% boys and 6.67% girls) while 6.67% rural area students (7.78% boys and 5.56% girls) ‘often’ make use of it. 10.55% urban area students (8.89% boys and 4.44% girls) ‘sometimes’ make use of this language type. 36.67% students having equal number of girls and boys (36.67%) in urban area colleges while 37.78% students containing 28.89% boys and 46.67% girls in rural area colleges ‘never’ make use of this language type.

Total 18.88% students (21.11% boys and 16.67% girls) in urban area colleges while 22.78% students (25.56% boys and 20% girls) in rural area colleges make use of this particular language type with varying frequencies. The rural area college students lead their counterparts in urban area colleges by 3.9%.

‘English only’ is preferred in varying frequencies. 56.67% in urban area colleges (54.44% boys and 58.89% girls) whereas 30.55% in rural area colleges (32.22% boys and 28.89% girls) ‘always’ prefer English only. 13.33% urban area students that includes 14.44% boys and 12.22% girls while 11.11% rural area students that consists 14.44% boys and 7.78% girls ‘often’ make use of English only.20.56% urban area students (22.22% boys and 18.89% girls) whereas 38.33% rural area students (40% boys and 36.67% girls) ‘sometimes’ make use of English only. 0.56% students (with no boy included) in urban area colleges while 3.33% students with 2.22% boys and 4.44% girls in rural area colleges ‘never’ make use of English only.

Total 70% urban area students that has 68.89% boys and 71.11% girls whereas 41.67% rural area students (46.67% boys and 36.67% girls) make use of English only. Thus,
urban area college students are ahead of their counterparts in rural area colleges by a considerable margin of 28.33% in making use of ‘English only’.

The remarkable difference is noted in their habit of using ‘English only’. The majority of urban area students use ‘English only’ more frequently (always) than their counterparts in rural areas who (majority of them) prefer it ‘sometimes’ only. Interestingly, the rural area students outnumber their counterparts in urban areas in the use of a language type i.e. Gujarati-Hindi written in English script with English words in it. Most of the rural area students always prefer the mixed type whereas their counterparts in urban areas sometimes go for it.

**Graph: 1**

Rural Area Students Preference for Language or Language Type and Frequency

![Graph showing preference for language or language type among rural area students. The graph indicates that rural area students prefer English more often than their counterparts in urban areas. The mixed type of Gujarati-Hindi is also preferred more by rural area students.](image-url)
In response to a query directed to bring forth the possible reasons behind their preference for English while sending SMSs and e-mails, a considerable portion of each group, (32% with 35.55% boys and 28.89% girls) of the rural area students and 40% (42.22% boys and 37.78% girls) of the urban area students, go for English as it is a widely used and commonly accepted language for the purposes. Among other reasons wherein there is negligible difference between them are: English is the operational language of the modern electronic gadgets and so its use becomes an obvious choice, secondly, most of the SMSs and E-Mails, generally of business category, are in English. The frequent use by business houses has associated the language with the functions. An interesting blend of linguistic and technical reasons comes up when a considerable number of them, 25.6 % urban area students (26.67% boys and 24.44% girls) while 18.4% rural area students (22.22% boys and 14.44% girls), assign the short and
informative nature of SMSs and E-Mails that can be best expressed in the operational language of the instrument or device as the reason for their preference for English.

A query that examines their language acquisition and the resultant psycholinguistic changes brings forth remarkable differences in key areas like vocabulary and sentence pattern learning and independent use of the language as shown in the Graph.
Learn many words in English

Learn many sentence constructions in English

Feel free as I do not have to worry about correctness or accuracy

Feel free as I can use whatever word or sentence

Necessity of English in its informal form has changed my attitude

English words and sentences get added without my being aware of it

Gives good chances to create beautiful expressions, couplets etc.

Gives good chances to think and to feel the difference between varieties of the language.

Get habituated with words, phrases, sentences and they become part of my schemata

Language Acquisition and the Resultant Psycholinguistic Changes

<table>
<thead>
<tr>
<th>Rural Girls</th>
<th>Rural Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.78</td>
<td>12.22</td>
</tr>
<tr>
<td>13.33</td>
<td>14.44</td>
</tr>
<tr>
<td>14.29</td>
<td>21.43</td>
</tr>
<tr>
<td>13.33</td>
<td>22</td>
</tr>
<tr>
<td>35.71</td>
<td>50</td>
</tr>
<tr>
<td>35.71</td>
<td>50</td>
</tr>
<tr>
<td>28.89</td>
<td>36.67</td>
</tr>
<tr>
<td>28.89</td>
<td>36.67</td>
</tr>
</tbody>
</table>
Graph: 4

Language Acquisition and the Resultant Psycholinguistic Changes

Get habituated with words, phrases, sentences and they become part of my schemata

Gives good chances to think and to feel the difference between varieties of the language.

Gives good chances to create beautiful expressions, couplets etc.

English words and sentences get added without my being aware of it

Necessity of English in its informal form has changed my attitude

Feel free as I can use whatever word or sentence

Feel free as I do not have to worry about correctness or accuracy

Learn many sentence constructions in English

Learn many words in English

32.8% of the rural area students that includes 36.67% boys and 28.89% girls find more chances to get acquainted with English words, phrases and sentence constructions even without formally learning them (in classroom). A cognizable difference is found in their attitude to English as a necessity in today’s day-to-day life. More urban students find
English as a required means of authentic / real life communications. It has become a part of their everyday existence. The proportion of the urban area students is greater when it comes to using whatever word, phrase or sentence (even Gujarati or Hindi) freely in the English text of their SMSs and e-mails in order to put forward the meaning. The independent, free from morphological and syntactical norms, use of the language is greater with urban students. However, all of them admit that the frequent dealing and confrontation with English words and sentence-patterns get them used to them and that boosts their independent use of the language in authentic communications. More urban students (16% with 17.78% boys 14.44% girls) find opportunities to be creative with the language as they get enough time to create beautiful expressions, couplets and witty answers than the rural area students (13.6% which includes 14.44% boys and 13.33% girls). Again more number of urban area students (16.8%) realizes the difference between varieties of English i.e. formal and informal etc. and the appropriateness and acceptability of words, phrases and expressions in a given situation.

Most of the rural and urban area students are indifferent or uninterested in business SMSs. 45% that has 65.55% boys and 24.44% girls of rural area students while 59.16% consisting of 81.11% boys and 37.78% girls of urban area students say that they get interested in business SMSs or they care to read them. On the other hand, 55%, 34.44% boys and 75.56% girls, while 40.84%, 18.89% boys and 63.33% girls, in rural and urban areas respectively admit that they do not get interested in such messages and so do not read.
Among those who get interested and read business SMSs have various reasons for doing so. 51.85% students, 42.37% boys and 77.27% girls, in rural areas while 66%, 69.01% boys and 64.71% girls, in urban areas cite the reason that business messages provide good information about business. 16.66% consisting of 16.64% boys and 18.18% girls while 20% covering 19.18% boys and 23.53% girls, in rural and urban areas respectively, like business SMSs as they are sometimes entertaining. They contain jokes, parodies or other entertaining items. Most of them, 31.48% (30.51% boys and 36.36% girls) in rural while 53.33% (45.21% boys and 70.59% girls) in urban areas, find business messages a good source to learn business terminology.

Among those who do not get interested and do not read business SMSs, cite numerous reasons for their dislike. There are students, 5.63% and 11.25% in rural and urban areas respectively, with 6.45% boys and 5.88% girls in former while 17.65% boys and 8.93% girls in later group, find them bogus and humbug. A little portion, 8.45% rural students, made of 9.68% boys and 8.82% girls while 7.5% urban students consisting of 11.76% boys and 7.14% girls say that they feel awe reading business language. The use of business jargons and expressions are difficult for them to get through. A whopping portion in each group, 67.60% (41.93% boys and 79.42% girls) in rural and 45% (23.52% boys and 51.79% girls) in urban parts, simply admit that they are not interested in business or such SMSs.

In a response to a question as to what do they do when they come across any word, phrase or sentence, the meaning of which is beyond their knowledge, a number of revealing reasons are cited. Majority of them, 47.5% that includes 53.33% boys and
42.22% girls while 60.83% which contains 67.78% boys and 54.44% girls, in rural and urban areas respectively, say that they refer to dictionary to find out meanings. 23.33% students that have 21.11% boys and 25.56% girls in rural parts while 19.16% with 17.78% boys and 21.11% girls in urban parts admit that they take help of their friends to make out meanings. A few of them, 13.33% (10% boys and 16.66% girls) rural and 17.5% urban students (14.44% boys and 21.11% girls), take help of their teachers or any other person. A small part in rural areas (9.16% including 10% boys and 8.89% girls) and 17.5% (20% boys and 15.56% girls) in urban areas admit that they make out meanings from the context in which the words or the phrases are used.

**Graph: 5**

![Graph](image_url)
In fact, all of them, at the very first place, try to make out the meaning/s of the word/s or phrase/s or expression/s with various frequencies of success. A considerable portion (40%) of the urban area students, 42.22% boys and 37.78% girls, while relatively small portion (27.5%) of the rural area students, 32.22% boys and 23.33% girls, ‘always’ succeed in making out meanings. 37.5% that has 36.66% boys and 38.89% girls while 30.83% that includes 28.89% boys and 33.33% girls, in urban and rural areas respectively, say that they ‘often’ succeed in doing so. More rural area students (33.33%with 30% boys and 36.67% girls) than urban area students (24.16%having 26.27% boys and 22.22% girls) succeed only ‘sometimes’. Again more number of rural area students (2.5% made of 3.33% boys and 2.22% girls) than urban students (1.66% with 2.22% boys and 1.11% girls) confess that they ‘rarely’ succeed in doing so.
A couple of reasons are cited by them for successfully making out meaning/s. Almost equal portion of each group, 45% (46.67% boys and 43.33% girls) from rural area group and 42.5% (42.22% boys and 43.33% girls) from urban area group, prescribe for the reason that SMSs and e mails are related to their events and activities of daily life, so it becomes very easy to understand the contexts and thus can easily make out the meaning. A larger portion of them in each groups, 50% (52.22% boys and 47.78% girls) and 57.5% (60% boys and 55.56% girls), in rural and urban areas respectively, opt for the reason that the language of SMSs and e mails is generally of their daily conversations and so easy to make out the meaning/s of any individual word, phrase or sentence.

**Graph: 7**

<table>
<thead>
<tr>
<th>Reasons for Successfully Extracting Meanings Out of SMSs and E-Mails</th>
<th>Urban Boys</th>
<th>Urban Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMS and E-Mails are related to the events and activities of their daily life</td>
<td>42.22</td>
<td>43.33</td>
</tr>
<tr>
<td>The language of SMS and E-Mails is generally of their everyday conversation</td>
<td>60</td>
<td>55.56</td>
</tr>
</tbody>
</table>
After guessing the meaning/s thus to get the full message clearly, most of them have the tendency to confirm the meaning/s afterwards. A whopping 76% that includes 76.66% boys and 75.56% girls in rural while 83.20% that consists 78.89% boys and 87.78% girls in urban areas firmly declare that they confirm meaning/s afterwards. A large number of them make use of more than one means to do so. Most of each group, 63.15% (57.78% boys and 68.89% girls) and 60.57% (54.44% boys and 66.67% girls), in rural and urban areas respectively, consult dictionaries. More number of urban area students (25% made of 23.33% boys and 26.67% girls) than their counterparts in rural areas (14.73% having 21.11% boys and 8.89% girls) make use of online dictionaries. Again, the number of students (23.07% consisting 21.11% boys and 25.56% girls) in urban areas exceeds their counterparts in rural areas (18.94% that has 20% boys and 17.78% girls) who take the help of friends. A very less number in each group, 12.63%
(10% boys and 15.56% girls) while 19.23% (17.79% boys and 21.11% girls), in rural and urban areas respectively, approach their teachers to confirm the meaning/s.

There are students, though less in number, who do not at all confirm the guessed meaning/s. 24% that has 23.33% boys and 24.44% girls in rural and 16.8% which includes 18.89% boys and 15.56% girls in urban areas do not take any recourse to confirm the meaning/s. They have a couple of reasons for not going for confirmation. Relatively small groups, 33.33%, 42.22% boys and 24.44% girls, while 38.09%, 46.67% boys and 30% girls, in rural and urban areas respectively, do not get meaning/s confirmed as they always feel very confident about it (meaning/s) from the context itself. While large portions, 66.67%, 68.89% boys and 64.44% girls, in urban and 61.90%, 63.33% boys and 61.11% girls, in rural areas, do not feel the need to do so because the meaning/s get confirmed itself when the word/s or phrase/s or expression/s recurs in the same or the other context.

Dialogue boxes serving instructions, declarations, suggestions, reminders, warnings that appear while working with various programmes, applications, softwares, devices etc. on computer, Internet, mobile phones, also add vividly into the knowledge of English. A majority part in each group, 57.6% rural students that includes 60% boys and 55.56% girls whereas 65.6% urban students which consists 67.78% boys and 63.33% girls read and try to understand all by themselves. Others, 42.4% rural and 34.4% urban students, 41.11% boys and 43.33% girls while 32.22% boys and 36.67% girls respectively, try to read and understand but also take help of friends or teachers to check the correctness of their understanding of various words / phrases / sentences and the overall meaning.
Watching / viewing / listening to news reports, commentaries on games, programmes on channels like Discovery and National Geography, other programmes in English on TV / radio / Internet enhance their acquaintance, understanding and grasping of various socio-cultural contexts, pronunciations, semantics and syntax of the language. Significant differences have been found between the two groups in some of the various aspects of the language learning while in others, negligible differences have been noted. A considerable portion in each group, 24.8%, 28.89% boys and 21.11% girls in rural while 35.2%, 34.44% boys and 36.67% girls in urban areas admit that they provide good opportunities to listen to a number of varieties of English language. Again, a sizable portion in each group, 20.4% having 23.33% boys and 17.78% girls whereas 41.6% consisting 45.56% boys and 37.78% girls, in rural and urban areas respectively, find in them good source to learn words in English. Almost similar number of them, 25.6%, 30% boys and 21.11% girls in rural area while 24.8%, 24.44% boys and 25.56% girls in urban parts feel that watching / listening to various programmes in English everyday helps internalize the language. A cognizable difference is found between two groups when double number of rural area students (15.2% with 18.89% boys and 12.22% girls) compared to urban parts students (7.2% having 6.67% boys and 7.78% girls) say that apart from the class, it is the only avenue where English gets dashed into their ears. The urban area college students, particularly studying in English medium colleges, more frequently come across English than their counterparts in rural area colleges or those who study in Gujarati medium colleges. So far as ‘Indian accent’ and ‘foreign accent’ are concerned larger portion of rural area students (12% that includes 14.44% boys and 10% girls) than urban area students (8% that has 5.56% boys and
4.44% girls) find Indian accent comparatively easy to follow. More than double number (14.4% comprising 13.33% boys and 15.56% girls) of rural area students compared to 5.6% portion of urban area students (4.44% boys and 6.67% girls) find foreign accents hard to follow. A considerable difference is noted when 29.6% urban area students, 31.11% boys and 28.89% girls, while 15.2% rural area students, 14.44% boys and 16.67% girls, admit that with viewing / listening to programmes in English, their speaking skill gets improved with improved pronunciation, intonation and rhythm. The visuals make language learning more like natural acquisition of the first language. 14.4% rural and 12% urban area students, 15.56% boys and 13.33% girls while 13.33% boys and 11.11% girls in rural and urban areas respectively, testify that visuals make it comparatively easy to understand the context. The audio and visuals make the presentation of their subject / topic very attractive. With 16% of rural area students (17.78% boys and 14.44% girls) as against 8.8% urban area students (7.78% boys and 10% girls), language learning gets easier and also interesting with the audio-visuals included in the presentation of their subject / topic.
The modern media not only help them understand but also search out new social and cultural contexts. To 21.6% rural area students, 22.22% boys and 21.22% girls, while 13.6% urban area students, 12.22% boys and 15.56% girls, modern media serve as a key to open up the locks of social and cultural contexts which, in turn, explains the language use. According to rural area students, sparse use of English for everyday activities in
rural areas leaves no more avenues for students where they can have opportunities to come in touch with the language. Urban parts comparatively avail more opportunities making greater room for better perception of social and cultural contexts.

A movie, scientifically as well as artistically, is the most famous form of entertainment today. With the advent of foreign TV channels, movies in English language have also been added in the list of entertainments. Even while switching between channels on TV, one happens to come across movies in English language. Here also, more number of rural students (34.4% including 33.33% boys and 35.56% girls) than their counterparts in urban areas (18.4% consisting 18.89% boys and 17.78% girls) find foreign accents difficult to understand. A considerable number of them, 16.8% (24.44% boys and 13.33% girls) in rural while 23.2% (26.67% boys and 20% girls) in urban areas admit that they can make out meaning/s through the visuals / scenes of films even when they find accent difficult to follow. Urban students are ahead (with 32.8%, 36.66% boys and 28.89% girls) of rural students (with 28.8%, 32.22% boys and 25.56% girls) in viewing movies for second or more time. They admit that viewing for the second or more times makes it easy to understand dialogues / language. The use of dialects / regional accents has also been found by 11.2% urban and 14.4% rural students, 12.22% boys and 10% girls while 13.33% boys and 15.55% girls respectively, difficult to understand. Even with all linguistic hurdles, a film can yet be enjoyed as a work of art for a number of reasons and it can appeal one’s aesthetic sense. An interesting and revealing finding comes up when almost double number (36.6%) of rural students, 42.22% boys and 31.11% girls, in contrast to 19.2% urban students, 20% boys and 18.89% girls, say that the story, the cinematography, the sceneries, the musical effects,
the action, the choreography etc. together appeal their aesthetic sense that, in turn, help them decode the language not only phonetically but also syntactically and semantically.

**Graph: 10**

Viewing movies in one’s mother-tongue or in first language with English sub-titles is yet another way of learning the language. More number of rural students (36.8% having 45.56% boys and 27.78% girls) than urban students (33.6% comprising 42.22% boys and 25.56% girls) find it very interesting to learn language like that. Almost equal number of them, 17.6% in rural areas and 18.4% in urban areas, 20% boys and 15.56% girls while 24.44% boys and 12.22% girls respectively, admit that viewing a film in mother tongue / first language with English sub-titles gives them both words and sentences (vocabulary and syntax). Again, almost equal portion in each group, 34.4% in
rural areas and 32.8% in urban, 37.78% boys and 31.11% girls while 36.67% boys and 28.89% girls respectively, finds it comparatively easy to learn the language through mother-tongue or first language. So far as learning words or their different meanings in various contexts is concerned, more than double number (36%) of urban students (43.33% boys and 28.89% girls) than their counterparts (15.2% having 21.11% boys and 10% girls) in rural areas finds it a good opportunity to learn words / different meanings in various contexts.

**Graph: 11**

The bombardment of advertisements on electronic media has certainly proved to be an effective factor in language learning (Picken, 1999). 36.8% urban and 33.6% rural students, 41.11% boys and 32.22% girls while 37.78% boys and 30% girls respectively,
testify the fact that advertisements in English enhance their vocabulary and also general knowledge as they are generally based on contemporary issues or products. They, 24.8% (24.44% boys and 25.56% girls) and 14.4% (16.67% boys and 12.22% girls), in urban and rural areas respectively, say that because advertisements are always witty, they arouse their interest and also eagerness to find out meaning/s of word/s used in various contexts. For their enhanced eagerness and interest for learning language, 16% rural and 25.6% urban students, 17.78% boys and 14.44% girls while 26.67% boys and 22.22% girls respectively, attribute to skillful use of visuals and language — usually uncommon and sometimes rare. Native or local cultural connotations come into play when 12.8% (13.33% boys and 12.22% girls) rural and 24% (25.56% boys and 22.22% girls) urban students feel language grasping easy as well as entertaining as they find advertisements culture specific making use of words, expressions etc. in the native or local contexts.
In a response to a query with respect to learning grammar and vocabulary in classroom, a visible contrast is found in the views of the urban and rural area college students. 36% rural area students (21.11% girls and 28.88% boys) while 20% urban area students (13.33% girls and 14.44% boys) say that learning grammar in classroom (in traditional manner) makes foundations for further learning of the language. 34.4% in rural areas (23.33% girls and 24.44% boys) while 42.4% (26.67% girls and 32.22% boys) have experienced that grammar and vocabulary get reinforced with the use of modern electronic gadgets. 38.4% students (25.56% girls and 27.78% boys) in rural area colleges while 47.2% students (31.11% girls and 34.44% boys) in urban area colleges say that learning grammar in classroom is complementary in acquiring language further. 8% students (4.44% girls and 6.67% boys) in rural area while 13.6% students (10% girls and 8.89% boys) in urban areas say that it (learning grammar and vocabulary in
classroom) is not that much helpful as it is not essential to acquire language for its everyday use. A very little portion in both groups, 3.2% in rural areas with equal number of girls and boys (2.22%) while 4.8% in urban areas with 4.44% girls and 2.22% boys, feel that it is not useful as constant and frequent touch with the language through electronic gadgets enhances the understanding of the grammar and vocabulary.

A good number of students in both groups endorse the use of audio-visual aids for learning the prescribed syllabus in the class-room. More than half portion (52% with 50% boys and 54.44% girls) of the urban group and 39.2% of the rural group (43.33% boys and 35.56% girls) say that viewing of related visuals or full audio-visual versions of poetry or drama makes it easy to understand the central idea of the work of art. Though audio-visual aids are found to be helpful for the overall perception, they are found not much useful for learning meanings of words / phrases. Comparatively low portions in both groups, 15.2% (18.89% boys and 12.22% girls) and 20.8% (20% boys and 22.22% girls), in rural and urban areas respectively, admit that they are helpful in explaining meanings of words / phrases. Certain portion in each group talks about various contexts which enhance their understanding of the text or discourse. More number of urban students (26.4% that includes 25.56% boys and 27.78% girls) than their counterparts (16.8% that has 18.89% boys and 15.56% girls) in rural areas acknowledge that the use of audio-visual aids in the class-room clarify the social / cultural / political / geographical / historical contexts of the text / discourse which, in turn, explains the appropriateness of the words and sentences used. Some of them, 26.4% (25.56% boys and 27.78% girls) and 15.2% (18.89% boys and 12.22% girls) in
urban and rural areas respectively, attribute to audio-visual aids for better understanding of meaning/s as the underlying tone of the genre gets reflected.

These modern media gadgets and devices are used for subjects other than languages also in colleges. Interesting results / facts have come up in response to a query directed to search out the impacts of learning other subjects through the modern media on their language acquisition. Almost equal number of students in both groups, 16.66%, comprising 13.33% girls and 20% boys in rural and 15%, 14.44% girls and 5.55% boys comprising in urban parts, confirm the fact that the use of modern media boosts their general vocabulary along with the subject terminology. Again, no major difference is found between them with 11.11% and 11.66% rural and urban students respectively attributing to the use of modern media for availing wide varieties of sentence patterns and grammatical structures. Girls in rural areas are less in number (10%) than their counterparts in urban areas (11.11%) whereas the portion of boys (12.22%) is the same in both areas.

Some students talk about incidental learning of the language (vocabulary and sentence structures) while searching for their respective subjects on the Internet. Students in urban areas are greater in number (13.33%) than the students (11.66%) in rural parts. With 14.44% boys, in urban areas, stand ahead of girls (12.22%) experiencing incidental language learning. Similarly, boys, in rural parts, with 12.22% prove themselves greater in number than girls with 11.11%. The ratio between boys and girls in rural and urban parts is suggestive of girls, in rural parts, doing better than girls in urban areas compared to boys in their groups.
A considerable portion in each group has found the use of modern media very interesting as it increases their subject knowledge. 25.55% in rural and 37.22% in urban parts experience increase in the knowledge of their subjects. A negligible difference in number between boys in urban areas (37.75%) and boys in rural areas (36.67%) holds the proof of similar impacts whereas a huge difference between girls in urban parts (36.67%) and girls in rural areas (14.44%) indicates less usefulness of the mass media for educational purposes on the part of rural area girls. The same difference is found between boys and girls in rural parts indicating boys far ahead of girls in learning their subjects through electronic media.

It has also been endorsed that they learn many words or terms which they generally do not come across in class. The urban area students with 20.56% outnumber their counterparts (10.55%) in rural areas in learning ‘never heard or learnt before’ words or terms of their subjects. The urban area boys (22.22%) are ahead of girls (18.88%) whereas boys, in rural parts, with 12.22% leave girls behind by 3.34% which is the same margin in urban areas also.

Accumulating thus the knowledge of their subjects, a good number of them experience a boost in their knowledge of English along with increasingly improving the perceptions and conceptions of their subjects. 11.11% and 17.78% students, rural and urban respectively, feel the boost. Girls in rural areas form the lowest portion with 7.77% while rural area boys lead the girls by 6.67%. The scenario is in reverse position in urban areas where girls with 18.88% lead the boys by 2.22% (boys forming 16.66%). The boys in rural parts lag behind their counterparts in urban areas by 2.22% whereas
the gap between rural and urban girls is far and wide. The rural girls seem to be very slow in language learning through the means of modern mass media.

As the perceptions and conceptions of their subjects get wider and knowledge of English boosted, 11.66% and 28.33%, rural and urban students respectively, say that they get the capacity to think in English on and about their subject / areas of interest. The boys in urban areas with 34.44% cover the biggest part of the circle followed by urban girls occupying 22.22% portion. The rural area boys stand too far below at 14.44% and girls even lower at 8.88%. The margin between the rural and urban boys is greater than the margin between the girls. That, in no way, is the proof of rural girls doing better but it certainly holds the evidence of boys and girls in rural area going too slow in comparison to boys and girls in urban areas.

Interesting divide among them is found in response to a query inter-relating their extra knowledge (points other than those prescribed in the subject syllabus) of their subjects and application of the vocabulary and the knowledge of grammar of English that they have. A whopping difference is registered as 11.66% rural students and 21.67% urban students acknowledge the use of mass media for keeping them well aware of the latest trends / findings / researches of their subjects that, in turn, avail a wide base to use their English vocabulary and knowledge of grammar to flourish. They get wider scope to put into practice their already acquired vocabulary and knowledge of grammar. With 22.22% urban boys keep ahead of girls (21.11%) by a negligible margin of 1.11%. In rural case, the margin (3.33%) gets wider as boys with 13.33% stand ahead of girls (10%). The statistics, once again, make it crystal clear that students in urban areas find
greater volume of syntactical and semantic contexts of vocabulary and grammatical constructions while receiving extra-knowledge of their subjects.

Forging a link between the class-room learning and what they come across on media, 16.66% and 11.11%, urban and rural students respectively, say that what they learn in the class-room gets signified with numerous other theories / opinions / views / researches etc. on the Internet that, in turn, broaden their base of understanding and expression. What they learn in the class gets supported or cited or explained by others in various contexts, the learning gets reinforced enabling the learner to talk and to write on or about the topic independently. Among the rural students, 7.77% girls endorse the view as against 16.67% girls in urban areas. Among the boys, 14.44% rural and 17.78% urban respectively approve the link. The gap between the girls in rural and urban parts is far greater than the margin between the boys’ groups. Thus, it is evident that girls and boys in urban parts are almost at par with one another in finding links between class-room learning and that which is found on the Internet. On the other hand, in rural areas boys seem to be more elastic than girls in searching out links that signify what they learn in the class-room.

Even though they profusely make use of the modern media for various social, educational, entertainment purposes and so get their vocabulary enhanced, semantic and syntactic understandings enriched, enabling them to think critically in English on and about their subjects, a big portion of them lag behind when it comes to expressing themselves verbally even in informal contexts. A large portion (89.44%) of students in rural parts and comparatively small portion (32.78%) in urban areas confess that the use
of media and the resultant acquisition of linguistic aspects do not empower them to express their ideas and thoughts with friends in informal ways. Surprisingly, only 8.89% girls and 12.22% boys in rural areas are able to use the language informally with friends. In sharp contrast, 66.67% and 67.78%, girls and boys respectively, in urban areas are able to do so. The wide gap between the groups can be attributed to numerous educational, sociological, psychological and cultural reasons. The result holds the proof that girls are not far behind boys when it comes to making use of English in informal contexts whereas girls in rural areas need to accelerate to be with the boys.

Those who acquire the ability to communicate with friends informally, find it challenging to talk in formal situations. A very small portion (1.11%) of rural area students as against a whopping 56.11% urban area students feel confident to participate in any formal academic discussion in class or at some seminar or conference. The rural area students are at their lowest ebb when only one boy and one girl in the group of 180 students assert their confidence. In urban parts 56.67% girls while 55.56% boys confirm their confidence. Girls are leading, though with a wafer thin margin.

They give reasons for their not being able to communicate in English in formal and informal contexts. 6.11% and 1.66% students in rural and urban areas respectively have doubts about authenticity of their ideas and thoughts. The reason is more related with their general perception of the content of their talking or discussion than with any linguistic aspect. The second reason cited by 40% rural and 14.44% urban students is closely associated with their lack of fundamental syntactical and morphological knowledge of the language. They flatly confess that they doubt their knowledge of
English. The ‘knowledge of the language’ includes grammar and vocabulary that form the foundation in case of L2 and its absence or insufficient proportion certainly cripples one’s chances of becoming an effective communicator in the language. The third reason is pertaining to the advanced phase of L2 learning. 43.33% and 16.66% students, rural and urban respectively, fear that their skill is not up to the mark. They may have ‘good knowledge of language’ but lack speaking skill. Speaking skill is a separate aspect of language and so needs to be acquired separately (Martin Bygate 1998). ‘Knowledge of language’ does not guarantee any of the four language skills (LSRW) as said by (Dr. G. A. Ghanshyam, 2012).

‘…ELT cannot be confined merely to the technical knowledge of its structure and grammar; comprehension forms an integral part of the process. Unless the student comprehends fully what he/she listens and reads, he/she will not be able to effectively use it in speaking and writing. One has to develop the ability to comprehend, think and decide the particular way he/she needs to employ to articulate…’

Figures of boys and girls present rural area girls in poor light while urban boys and girls are almost at par with one another. 6.66% girls and 5.55% boys in rural parts attribute their inability to the first reason. 42.22% girls and 37.78% boys while 13.33% girls and 15.56% boys, in rural and urban parts respectively, feel hooked because of the second reason. 45.56% girls and 41.11% boys in rural parts whereas 17.78% girls and 15.56% boys in urban parts explain their failure with the third reason.
In an attempt to arrive at reasons behind their interest in modern media from educational or language (linguistic) point of view, we come across interesting and revealing reasons. A big portion in each group, 71.67% and 88.33% in rural and urban areas respectively, put forward the reason that it (media) opens up the whole sky of knowledge. 65.55% girls and 77.78% boys in rural parts while 88.33% girls and 87.78% boys in urban parts find modern media the window to the sky of knowledge. The cognizable difference between them indicates that urban area students utilize media more as a source of knowledge than their counterparts in rural areas.

The second reason is pertaining to learner’s autonomy. A greater number (79.44%) of urban area students than their counterparts (65.56%) in rural areas feel the absolute freedom to move from one matter / point to another at their own pace and liking with modern media (especially computer and the Internet). The ratio of girls and boys shows girls in rural areas with 58.89% and boys with 65.56% as autonomous learners. Urban area girls with 76.67% are ahead of rural area girls in self-learning. The urban area boys with 82.22% form the highest portion among them all who experience self-learning with modern media.

At the third place, they bring in incidental language learning. They acknowledge the advantage of learning (acquiring) the language even without feeling the pain for it. Here also, a significant difference between the two groups remains evident as 76.67% students in urban parts lead the 59.44% students in rural parts. Interestingly, in urban parts, girls (84.44%) outnumber boys (68.89%) in incidental language learning. In rural parts, boys with 62.22% run ahead of girls (56.67%). The insufficient fundamental
knowledge of language and scant chances of regular encounter with the language in class-room or in real life contexts can be attributed to comparatively low incidental learning on the part of students in rural areas (Samir J D, 2010).

Thus, media (particularly computer and the Internet) earn the ‘learner autonomy’ to students as they avail a myriad of authentic resources at any time and at any place. Autonomous learning (independent learning without teacher-mediation) with modern media has numerous psychological effects on learners (Edith Esch and Christoph Zahner, 2000; Young, S. S.C., 2003; Carson, L.,2012; E.B. Robertson, B.H. Ladewig, M.P. Strickland, M.D. Boschung; Dunkel P., 1990; Andrés VD, 2007) which, in turn, bring paradigm shifts in the process of learning (Stephen Downes). 76.67% and 86.67% students in rural and urban areas respectively admit that working independently (without teacher-mediation) on the Internet sets them free not only from the teacher’s mediation but also from the prescribed syllabus and books which, in turn, boosts their interest and enthusiasm. A huge number of girls and boys, 74.44% girls, 78.89% boys in rural parts while 85.56% girls and 87.78% boys in urban areas, feel the freedom and splurge in their love for learning. The binding elements, the limiting factors, the supervising snoopers that the teachers, syllabuses, books turn out to be at times, are at bay. And they feel free to navigate in the deep waters of the ocean of knowledge (of their subjects or related areas), their interest is bound to multiply. The free fall, the free diving, though stringed with many danger zones, can only get them precious jewels. The result also signifies that teachers (over-dominance of teachers) and strict adherence to syllabus and books make the process of learning uninteresting and tiresome journey.
The response of the students holds the proof that media revitalize and rejuvenate their interest in learning.

When away from teachers, syllabus and books, learning on their own with computers and the Internet as their navigational guides, they enter their own world of learning. 57.22% and 76.67% students in rural and urban areas respectively feel both safe and secluded, in their own private den with the whole world in, where they can easily recognize their problem-areas and can solve them with the help of the e-resources available. If we look at the ratio of the girls and boys, 55.56% girls and 58.89% boys in rural parts while 77.78% girls and 75.56% boys in urban areas, feel with themselves and with the e-resources that avail them enough room to figure out what interests them and what does not, what hammers their heads and what brainstorms. The comparatively less utility of media as a source of knowledge / learning on the part of the rural area students can be attributed to their low percentage.

Class-room learning certainly plays a role in their independent learning with media. In fact, class-room learning is the torch-bearer, a lighthouse demarking the disciplinary premises for navigators of knowledge. It is proved when 51.67% students in rural parts and 70.56% in urban areas testify that class-room learning is helpful in searching out answers to the questions / problems that they come across while learning independently. Girls (45.56%) in rural areas are far behind the girls (73.33%) in urban areas. Similarly, boys (57.78%) in rural areas lag behind the boys (67.78%) in urban areas with considerable margin. The reasons that the students in rural parts use media less as learning tools and that the comparatively less use of modern media as teaching aids in
class-room teaching and learning in rural areas can be attributed to their low turnout on independent learning.

Most of the students of Gujarati medium colleges have been found to be indifferent towards learning English (Mr. S. J. Dabhi, MRP MRP entitled ‘Making the Teaching and Learning of Functional (Communicative) English More Effective and Stimulative in Rural Areas’, sanctioned by UGC, Pune in 2007). It has also been found that they get interested in learning their subjects and are good at their subjects but utterly fail, almost crash, when it comes to learning English. Lack of acquisition rich environment, weak grammatical knowledge, insufficient and poor vocabulary are some of the reasons arrived at in that project. With the modern media, their interest in their subjects leads them to incidental learning of English. Though, they may not be interested in English as a subject, they go on acquiring the English language (and not the knowledge of the language) while learning their subjects. 78.89% and 87.78% students of Gujarati medium colleges, in rural and urban areas respectively, admit that the knowledge of their subject terminology in Gujarati help them understand their English equivalents when they surf websites of their subjects in English. The girls (37.78%) in rural areas lag behind the girls in urban areas by margin of 5.55%. The margin between the boys is comparatively less (3.33%) as they stand at 41.11% and 44.44% in rural and urban areas respectively. Boys in rural areas are faster learners with modern media than girls.

Majority of the students in both the areas have never enrolled for online courses. Only a few of them have the experience of online courses. The experience of online courses has been reported to be different. Apart from time and space, language and mode are the
other distinguishing features. English, being the language of instruction of most of the online courses, poses problems for the students of Gujarati medium colleges or rural area colleges. The mode, online (virtual) teaching-learning and testing, also poses problems to learners accustomed to formal / traditional method of education with actual / real class-rooms, class-room instruction, learning and testing. 2.22% and 16.67% students, in rural and urban areas respectively, admit that they have the experience of online courses. Among the students in rural areas 1.11% girls and 3.33% boys while 14.44% girls and 18.89% boys in urban areas have the experience of online courses.

They (those who have the experience of online courses) find online courses very different from the traditional / off-line courses not only pedagogically but also from linguistic point of view. All the rural area students and 63.33% urban area students find the online courses more challenging as they do not have direct teaching like the class-room one. And in that case, they find interpretation and understanding of terminology and theories very difficult. In urban parts, 76.92% girls and 52.94% boys confront with the said difficulties.

At the second place, a discomforting testimonial appears when half of the students in rural areas and 20% in urban areas, who have got the experience of online courses, admit that sometimes even the use of dictionaries – traditional and online – hardly help. The use of certain special terminology, morphed words, newly coined terms etc. need to be understood in reference to various contexts and dictionaries, at times, don’t help in making sense out of certain language use. It needs special focus, scholarly connotations, to make them comprehensible in context at hand. All girls and 33.33% boys and
15.38% girls and 23.53% boys in rural and urban areas respectively, at times, find it tough to comprehend the online stuff related to courses they undertake.

At the third place, there emerges the issue of comprehension of the importance or centrality or significance of certain words or terms or theories in the right context. In rural parts all the students while in urban areas 70% students, 84.62% girls and 58.82% boys, at times, feel confused about the relative significance of terms or theories explained in required contexts. Confusion with respect to proportional importance / significance of key terms, forming the core part of concept/s explained, prevails. Though, the central idea or the core part of the discourse may be discernible, certain pivotal terms or expressions remain out of contexts. As a result, when it comes to independent presentation, their narration or description, explanation or argumentation, précising or expansion of their understanding of the topic in question lacks the edge of the power / effect of the core terms or expressions.

**Graph: 13**
Almost all students, belonging to both the parts, endorse Power Point Presentation as an effective device. 93.89%, 92.22% girls and 95.56% boys, and 96.11%, 96.67% girls and 95.56% boys, belonging to rural and urban areas respectively think that PPT makes difference in their understanding of a topic in English.

Giving reasons for their stand, 71.59% and 80.34% students (71.08% girls, 72.09% boys and 80.46% girls and 80.23% boys), in rural and urban parts respectively, state that the view of the points on the large screen helps to concentrate attention on words, phrases, sentences used. The authenticity of the argument can be verified with respect to viewing any written text on TV, computer or mobile phone screen which stays for a larger time in memory than the manually written text on the black or green board (Gropper, 1963; Gunter, 1980; Graber, 1990; Scott, 1992). The text on the screen of an electronic device can be removed and reproduced in the same style, shape and form which is not possible in case of manually written text on black or green boards with chalk sticks. Secondly, there are ways to classify important words, phrases or sentences from the other parts of the text.

Even greater portion of students in both the parts, 82.24% in rural parts with 84.34% girls and 80.23% boys and 89.02% in urban areas with 89.65% girls and 88.37% boys, find PPT effective as it brings together both oral and written forms of language in presentation. They feel that oral presentation, along with the slides, helps to learn pronunciation and intonation of words / phrases. PPT is an avenue where written text can be accompanied by its oral form also. It not only improves pronunciation of individual words but also attunes rhythm and intonation of phrases and expressions.
Girls in rural areas seem to be more attentive learners of pronunciation, rhythm and intonation than boys. In urban parts too more girls turn out to be enthusiastic learners than boys.

At the third place, the highest number of them once again gets benefitted with the combination of visuals and oral explanations. In rural areas 92.90% students with 90.36% girls and 95.34% boys while in urban parts 97.11% students with 94.25% girls and 100% boys are of the opinion that oral presentation, along with the slides, helps to learn elaboration of points with authentic expressions and sentences. The visual, on one hand, and the related oral explanations, on the other, not only give momentum to the process of perception but also boost the power of expression in the target language (Rüschoff, Bernd. 2009; Saroli, Anna 2009).

And as the PPT is a teaching-learning aide for structured instructions in class-rooms, it contains preplanned and well measured authentic input which prepares the foreground for independent expression of what the learners grasp. The high rate of the students’ endorsement is the evidence of the fact that the PPT is an effective means preparing the learners for authentic language use.

All the students of both the parts are unanimous in testifying the effects of visuals on their minds. They approve the fact that the visual effects (viewing of slides on the screen) stay for a longer time on their minds that, in turn, reinforces their perceptions and conceptions of what they learn. PPT, a structured instruction material, enriched with related video clips, photographs, sound effects, charts, graphs etc. gets penetrated into the mind of a learner through one or the other of the many possible entry points
and, in turn, arouses and invokes his / her understanding. Thus, with clear perception and enhanced conception of a given topic, expression or explanation of it in the target language comes from within.

A cognizable difference is found between the two groups in the matter of viewing / reading blogs. In rural areas a few of them (7.78% that includes 2.22% girls and 13.33% boys) view / read blogs. In urban parts, the number rises to 36.11%, 32.22% girls and 40% boys, who go for blogs.

**Graph: 14**

![Graph 14: Percentage of Students Viewing Blogs](image)

The students belonging to rural parts are not much familiar with blogs. While administering the questionnaires and during informal interviews, it has been noted that more than half of them are even unaware of such a media service called ‘blog’. Some of them have heard the term but are not aware of its form and functions. On the other
hand, in urban areas, most of them are familiar with the term and more than half of them are found to be well aware of its form and functions. Unlike Facebook, though most of them are aware of blogs, many of them show little interest in socializing through it. It requires a separate research to study the factors responsible for the less popularity of blogs in comparison with Facebook as a social networking means.

Out of those who view / read blogs, most of them prefer to do so in both Gujarati and English languages. 78.57% (all girls and 75% boys who read blogs) and 95.38% (93.10% girls and 97.22% boys), in rural and urban areas respectively, prefer to visit blogs written in English language. On the other hand, viewing / reading blogs in mother tongue (Gujarati) is less popular among them as 64.29% students that include all girls and 58.33% boys in rural areas and 32.30% students that comprise 34.48% girls and 30.56% boys in urban areas go for it. A good number of them prefer to view / read blogs in English.
The answer to the question, to greater extent, lies in the fact that a big portion in each group, 78.58% that has all girls and 75% boys and 89.23% that includes 93.10% girls and 36.11% boys, in rural and urban areas respectively, prefer to read on the basis of their liking for the person. On the other hand, some of them, 21.43% in rural and 10.77% in urban areas prefer to read blogs on the basis of language. When they prefer to read blogs on the basis of their liking for the persons, the blogs can be in any language (in which the person writes his / her blogs). Now most of the icons of the youngsters prefer to write in English at least on the computer screen. As a result, the youngsters often come across blogs written in English.

From film stars to religious leaders, distinguished personalities in all spheres are the people whom the youngsters fondly worship as their icons. During informal gatherings
with the youngsters in various colleges and at various functions, it has been marked that one or the other distinguished person belonging to one or the other field engraves a core place in the sanctum sanctorum of their hearts. They are, in fact, their role models. A large number of them, 71.43% (all girls and 57.14% boys) in rural parts and 75.38% (72.41% girls and 77.78% boys) in urban parts prefer to view blogs of their favourite film stars. 14.29% that includes no girl in rural areas and 20% that comprises 13.79% girls and 9% boys in urban parts like to visit blogs of their chosen politicians. Some of them, 35.71% with 50% girls and 33.33% boys and 27.69% students with 24.14% girls and 30.56% boys. in rural and urban areas respectively, go for blogs of social workers / activists. The blogs of academicians are viewed by boys only (21.43%) in rural areas and by 13.79% girls and 16.67% boys making it 15.38% in total in urban areas. The blogs of sports persons attract 50% girls and 33.33% boys totaling 28.57% in rural areas while 24.14% girls and 30.56% boys taking it to 27.69% in total in urban parts. Religious leaders have also got a place as 7.14% students (boys only as no girl shows any preference) in rural parts and 18.46% students that have 6.90% girls and 27.78% boys in urban areas visit blogs maintained by religious personalities. Blogs of industrialists have got no takers among students of rural area colleges. In contrast, 23.07% students with 13.79% girls and 30.56% boys in urban area colleges have declared their interest in the blogs of industrialists. The blogs of thinkers and bureaucrats have also got no viewers in rural area colleges. In urban area colleges, 15.38% students (10.34% girls and 19.44% boys) get interested in the blogs of thinkers. A very few students (3.08%) that includes boys only (as no girl shows any interest) get attracted to the blogs of bureaucrats.
From the figures as mentioned above, it becomes quite clear that more number of students in urban areas than their counterparts in rural areas visit blogs of various people. In fact, the statistics of percentage and the comparison between the two groups presented here may lead to misconception at times with respect to the comparative
proportions of students in each category because the calculation is on the basis of the total number of the students viewing blogs which is, in fact, too low in the case of rural area colleges. For instance, out of 180 students in rural areas only 14 (7.78% mentioned above) that includes only two girls (2.22% mentioned above) view blogs. In urban areas total number of students viewing blogs is 65 (36.11% as mentioned above) out of 180 with 29 girls (32.22% mentioned above) and 36 boys (40%).

They have very interesting reasons for visiting / reading the blogs of their favourite people. The tremendous love, liking, attraction, fascination of their age towards the people whom they, knowingly or unknowingly, establish as their ideals and role models and that forms the base of all the reasons. All the students of both rural and urban area colleges who visit blogs feel it very much interesting to know what their favourite people think and do. During informal meetings with these youngsters, it has been marked that they visit the blogs of famous film stars like Amitabh Bachchan or politicians like the former Chief Minister of Gujarat and the present PM of India Mr. Narendra Modi with utmost interest as these people regularly update their blogs expressing their views, opinions, feelings on every important or crucial incident or issue. Knowing what their favourite people think, believe and say is not only thrilling to them but is also instrumental in fashioning their views and opinions. And those who design their views, opinions and beliefs in the molds of others, also fabricate their language in the similar patterns as of the others (Verbal Behavior by B. F. Skinner).

If it is interesting to know the thoughts and beliefs of the people of their liking, it is double interesting to find their thoughts and beliefs match with those of theirs
(students’). 14.29% with equal number of boys and girls in rural areas while 18.46% students with 17.24% girls and 19.44% boys in urban area colleges get exalted as and when they come across any such similarity. That accelerates their interest in the blogs and along with that what is signified (thoughts, ideas, feelings etc.) in the blogs, the signifier (language or linguistic elements) also gets internalized. (Semiotics for Beginners by Daniel Chandler). It remains an interesting phenomenon when one reads or listens to one’s own unexpressed thoughts, ideas, feelings etc. in the writings or in the mouth of somebody whom one adores. The thoughts, ideas, feelings etc. which have as yet not known any form of language with the reader, are found not only begotten but also reared up in one or the other school of thinking. Or if the reader / viewer may have molded his ideas, thoughts, feelings in a form of a language, he / she comes across the same ideas, thoughts, feelings in another form of another language while visiting blogs. It avails an opportunity not only to critically compare and contrast thoughts, ideas, feelings but also the vehicle (language) which moves them.

When one reads or listens to one’s own unexpressed thoughts, ideas, feelings in the writings or in the mouth of somebody whom one keeps in high esteem, one finds it very interesting as one gets them endorsed and justified. It is a valuable certificate that boosts one’s way of thinking or behaving in a particular pattern. The visit to the blog becomes the meeting of two people with similar mindsets or thinking alike. 35.71% students that includes 50% girls and 33.33% boys in rural area colleges while 27.69% students that have 27.58% girls and 27.78% boys in urban area colleges find it more interesting when their favourite people’s thoughts, opinions, views etc. happen to justify their behavior. Such an endorsement from a well-recognized personality not only enhances their
interest but also boosts their self-confidence in thinking or behaving. The endorsing or justifying language also finds a convenient place along with the certified line of thinking or behaving.

Visiting blogs of favourite people, knowing their thoughts and ideas, feelings and emotions, drawing similarities or contrasts, getting recognition or justification of our own ways of thinking and behaviors, gives a feeling of nearness with them (favourite people). 14.29% students in rural areas with equal number of boys and girls while 23.08% students that includes 27.56% girls and 19.44% boys in urban area colleges have a kind of feeling of intimacy with their loved and cherished ones. It is like a personal meeting as the blogs avail the facility to respond also. It gives a feeling of one-to-one communication in the full public view. The feeling of acquaintance gives rise to the feeling of intimacy, which in turn, throws open the floodgates of informal or intimate communication. And the language generally used in such a communication fluctuates from formal to informal and vice-versa (Rodino, 1997; Huffaker and Sandra, 2005).
A very few students (3.89% which includes no girl) in rural colleges while 13.89% students that includes 6.67% girls and 21.11% boys in urban area colleges try their hands at blogs. They maintain their own blogs sharing their thoughts and ideas on subjects / topics of their interest. Interestingly, more number of students, 57.14% with no girl included and 68% with 66.67% girls and 68.42% boys in rural and urban area colleges respectively write in English. On the other hand, 42.86% (boys only) in rural area colleges and 32% that has 33.33% girls and 31.58% boys in urban area colleges make use of their mother tongue i. e. Gujarati to maintain their blogs.
Those who make use of English have reasons for doing so. 25% and 52.94% (25% girls and 61.54% boys), in rural and urban areas respectively, justify their use of English saying that it is a common language accepted by the people on global level. The argument should be referred in the light of the fact that English is the lingua franca of the modern world passing through the age of globalization. The wide-spread use of the language in all fields – from education to entertainment – impress upon them the popularity of the language. It is the language that can earn them acceptance in such a globalized world. Secondly, the argument can also be understood in the light of the fact that English is even today the language of the elite in India. Economically and educationally well off in India have English as one of the sharp-edged distinguishing features on their side. Making use of the language in public or for the tasks meant for public consumption earns the much sought after entry into the elite class. To ambitious youngsters, particularly the college-going teenagers, it is a priceless achievement (Sheorey, 2006).

Again, 25% in rural area colleges and 41.18% comprising 50% girls and 38.46% boys in urban area colleges make use of English as it is a widely used language of the modern media. Among other reasons, as it has been noted earlier in this research with respect to SMS and e mails, are: English is a widely used and commonly accepted language for the purposes; English is the only language for the operation and utility of the modern electronic gadgets / ICTs and so its use becomes an obvious choice for communication also; most of the text (hypertext) on the Internet is in English; English is so common with ICTs that they unknowingly turn to it every time. However, the number of students writing blogs in English is far less than the number of the students.
making use of English for writing short messages and e-mails. During short formal
meetings and interviews with these students, it has been noted that they find it
comparatively easier to make use of English for short messages and e-mails because of
their short form. The short form of short messages and e-mails, according to the
students, lures them to the use of English. Sometimes a single word or phrase is
sufficient to put the meaning to the other side. That single word or phrase can either be
in English or in the mother tongue (written in English script) or in a mixed sort of
language. The students further argue that the various short forms of words or phrases
especially used in short messages and e-mails are in English. They cite many examples
such as ‘GM’ (Good Morning), ‘GE’ (Good Evening), ‘n’ (and), ‘xtra’ (extra), ‘bcoz’
(because), ‘c u’ (see you) etc. that make their task easy and speedy. The freehand use of
the alphabets, numbers, symbols etc. to mean words or phrases such as ‘2’ (to), ‘4’ (for)
etc. has been on increase. It is also known as SMS or mobile phone language which
makes the task of sending and receiving of messages easy. Such easy tasks are possible
only through English.

Secondly, short messages and e-mails are generally meant for selected, known or
familiar persons with known or familiar contexts. The well-acquaintance between the
sender and the receiver avails them the ease required for the freehand use of the
language. There they have the room for the use of whatever word or phrase, even in
their mother tongue, with no more regard for grammar. There is no question of being
misunderstood or failure of communication as both or all (the sender and the receivers)
have the knowledge of the contexts also. In such an informal communication, message
or meaning is valued more than the language or its correctness or appropriateness as it
makes use of content words alone building propositions that make sense and parse the sentence into constituents accordingly (Clark and Clark, ibid: 72-9)

In sharp contrast to writing short messages and e mails, blogs are not written for specific persons or people. It is for all. The sender is unfamiliar with the receivers and this very factor, according to the students, makes them conscious of everything – content, context, correctness and appropriateness of the language. Unlike short messages and e mails, a blog is more like a formal writing having serious issues or issues related to interest of the general public or certain section of society demanding not only correct and appropriate but also responsible use of the language. It also calls for a considerable volume of knowledge about the issues at hand.

The last reason that they put forward for making use of English to maintain their blogs is related to their close association with the modern media gadgets and devices. Not much difference is found between the two groups as 50% (with no girl included) in rural area colleges and 17.65% with 25% girls and 15.38% boys in urban area colleges say that they have almost got used to English for writing with modern electronic gadgets like mobile phones and computer. Though almost all of them, as mentioned earlier, are quite used to these gadgets and also make use of them abundantly for making phone calls, sending short messages and e mails, a very few make use of their expertise for writing blogs because, as informed by them during informal meetings, they (blogs) unlike short messages and e mails, do not form a part of their routine / common requirement or necessity and so most of them, though good at using the modern media
and are also fond of the gadgets, are away from it. Those who write / maintain blogs do it sheer out of hobby / passion for it.

It is their hobby or passion that propels them to write blogs as all of them (who write blogs) admit that writing blogs gives them a good chance to express themselves. Many of them, during friendly conversations, say that it has availed them a stage from where they can address the world, can harangue, preach, rebuke, request and persuade the people. Thus, their bubbling desire to let the world learn what they have in their hearts and on their minds gets satisfied. To some, the response of friends, familiar people and teachers is the greatest propellant to their thoughts and feelings expressed in the blogs. To some, it is like joining the elite club of thinkers and intellectuals. To some, it is a passion, writing for the sake of love for writing.

All of them take writing blogs as a chance to reach friends, well-wishers, admirers and the mass. It is an opportunity to reach to the people in the world with their ideas, thoughts and feelings. Most of them confess that they derive almost the same volume of happiness or excitement as would be claimed in communication in person. They have the experience of intimacy with the people as the virtual world defies the actual distance when they write the blogs. A relationship through the window of the virtual world, in fact, opens the floodgates of their minds and hearts and there floats streams of thoughts and feelings incessantly through the virtual channels. Thus, with the evolving relationship, there emerges a myriad of references and contexts that, in turn, begets text with numerous contexts.
Twitter is one of the most favourite avenues on the Internet bringing the interested people together, keeping them in touch and availing them opportunities to exchange their thoughts of each moment. Though it is one of the hottest line for communication, the young college-going generation does not seem to be much fascinated with it. A very small portion of only 5% (with no girl included) in rural parts while comparatively a little larger portion of 11.67% (with 8.89% girls and 14.44% boys) read comments on twitters. All of them prefer to read comments of their favourite film stars, sports persons and politicians.

Explaining their love for reading comments on twitter, all of them give reasons which are almost similar to those given for the love for reading blogs. They feel interesting to learn what the famous / distinguished (their favourite) people think and do. Like reading blogs, they feel elated when they find their (the famous people’s) thoughts and beliefs match with theirs. Again, it is a matter of jubilation when the students find their favourite people’s opinions / thoughts / views supporting and justifying their behavior. And that, according to them, creates a kind of intimacy with their loved and cherished people. During informal communication with the students, it has been noted that they form and fashion their way of thinking and behavior on the molds of their models. Many of the students say that the thoughts and views of their favourite people help them derive their own and independent pattern of thinking. Many of them are found to be judging views and opinions of their favourite people critically also. The art of critical thinking sprouts which forms the backbone of autonomous language learning (Young, 2003).
Lastly, they put forward the reason of interesting / critical contemporary issues being focused upon in blogs. Live issues (issues going on at the moment) are generally taken up in blogs / twitters and such issues attract the youngsters’ attention as they find their direct or indirect involvement in them. Or the issues touch them either at personal or social or political or educational or economic levels in one way or the other.

About the language that they come across in blogs / twitters, they have half-a-dozen comments to make. All of them who go for blogs / twitters find it easy to understand the language used in them as almost all the content is related to contemporary issues. The more or less familiarity with the contents (issues focused upon) is instrumental in clarifying contexts which, in turn, helps decoding the linguistic signs and symbols (Donna Reseigh Long, 1990; Schmidt-Rinehart, Barbara C., 1994). A portion of them, 28.57% with 50% girls and 25% boys, in rural area colleges while 41.54% which includes 41.38 girls and 41.67% boys in urban area colleges, finds the language easy to understand as generally small or short sentences and expressions are used. According to them a message expressed with economical use of language about any familiar matter / issue is easy to grasp. It reflects the semantic strategies of Clark and Clark (ibid; 72-9) according to which the use of content words alone builds meaningful propositions and parses the sentence into constituents accordingly.

Another feature of the language in blogs / twitters is similar to the above one to some extent but it stands in complete contrast to the literary and academic language that has pompous, hyperbolic and archaic lexicons, terminologies and registers, complex and compound grammatical structures. 71.43% students, all girls and 58.33% boys, in rural
areas while 69.23% with 72.41% girls and 66.67% boys in urban area colleges say that the language used in blogs / twitters is easy to understand as it is generally devoid of the loftiness and complexities of the literary, academic and professional languages with special terminologies, registers and methods of expressions. During informal conversations, the students draw a clear line between the language that they come across in books and study materials related to the topics prescribed in their syllabuses and the language in blogs / twitters. The obvious difference between the two and the comparatively ‘easy to grasp’ and ‘stylist’ (as every blogger or twiterrati has his / her style of expression) language in blogs / twitters leaves a lasting impression on their minds and hearts.

4.2 Analysis and Interpretation of the Data Received through Teachers’ Questionnaires, Interviews and Observations

With the rise of the age of the technology in the field of education in the 80s, the use of the advanced electronic gadgets and devices have been being viewed and utilized to adjust the human learning behavior (Lieberman, 2000). The modern means of electronic media have always been on the radar of researchers to evaluate their various possible and actual impacts effecting different learning behaviors under numerous situations. A lot of research has tried to establish feasibility, authenticity, reliability with respect to teaching, learning and evaluating with the electronic devices. All the language teaching and learning theories (Communicative Language Theory, TBLT, CBLT, NA etc.) with all their rationale, objectives and methodologies have been tried to be traced in CALL and CALT. It has also been assessed as to how the various technological advancements,
at different points of time, have proved to be effective language teaching-learning aids across the spectrums of numerous pedagogical hypotheses and theories (Levy, 1997; Chappelle, 2001). With the advent of multimedia, Internet and other technological advancements, there have been efforts to take these information and communication technologies to new heights searching for new possibilities endowing them with human behavioral patterns while keeping the mechanical accuracy, punctuality, reliability intact (Eugene and Patricia O’Connor Wilson, 1997). With the increased capabilities every time, the modern means of mass media have been being tried to be made authentic source for teaching, learning and testing language at all levels.

Even after having substantial body of research enumerating advantages of incorporating the means of modern media in language pedagogy, the promised revolutionary outcomes are not observed so far as various linguistic competencies and proficiencies are concerned (Salomon, 2002). A hypothesis that ‘the means of modern mass media have equal impacts on the teaching and learning of English as an L2 among groups with varied backgrounds and another one that ‘the modern mass media, seemingly very popular means of mass communication with the common mass in general and with the youngsters in particular, is as popular from pedagogical point of view also’ are tested here.

Forty eight teachers of English teaching language, literature and communication skills in colleges belonging to rural and urban areas of Gujarat were approached with a questionnaire containing queries with respect to various aspects (pedagogical, psychological, socio-cultural etc.) of teaching and learning of English as an L2 or
foreign language. All care has been taken to see that substantial number of teaching experiences in all possible shades is captured and so teachers teaching in arts, commerce, science, management, social work have been approached. The queries test, at various levels, the hypothesis that the incorporation of mass media in language pedagogy is instrumental in bringing about the promised revolution in the acquisition / learning of English as an L2 among students of varied backgrounds belonging to various colleges of rural and urban areas in Gujarat.

The tendency and frequency to incorporate the various popular means of mass media in L2 pedagogy seem to be different in rural and urban area colleges. 48% teachers in rural area colleges while 68% in urban area colleges make use of various means of mass media in classroom teaching with varying frequencies. The comparatively high frequency in urban area colleges has its own pedagogical, social, cultural, administrative, infrastructural reasons. Informal meetings with the teachers of various colleges have revealed all these reasons. The first and foremost among them is of the availability of required infrastructures. Though the U G C generously avails funds under various schemes and heads for the development of institutions of higher education, a considerable number of rural area colleges are found lacking in required infrastructure to support and to enhance higher education as viewed and defined according to the present international standards / criteria. Again, the comparatively poor infrastructural scenario in rural area colleges has numerous reasons ranging from acute dearth of local funds or non-existence of certain (career oriented or vocational or professional) courses. Other reasons include the abysmally low educational background of the students with stint interest in studies, career or educational or social advancements, shortage of staff
etc. However, not all the rural area colleges lack all important infrastructures. Some of them are comparatively exemplary with respect to infrastructure required for higher education and also the overall academic performance. In contrast to the scenario in rural area colleges, the scenario in urban area colleges can be adjudged as comparatively improved. Almost all the urban area colleges, visited to collect data for the present research, are found to have better infrastructural facilities such as sufficient classrooms and libraries equipped with latest ICTs, advanced language laboratories etc. The majority of educationally and professionally motivated students with comparatively better educational and social standing is their asset. In fact, such a lot of students is the fueling factor of any institution of higher education that gives it the necessary momentum to move on the path of progress and development. Motivated students are, in fact, instrumental in maintaining the motivation and initiation of their teachers. The urban area colleges too have internal differences or problems related to the administration / management of the college but they are not found to be the ultimate thwarting tendencies on the path of infrastructural or overall development of the colleges. So far as requirement of staff is concerned, urban area colleges take good care to see that necessary teaching positions are availed. In case of delay in the sanction of any teaching position or during the required procedure time for the recruitment of the necessary teaching positions, teachers are hired on ad hoc basis to ensure that the students do not suffer. The self-financed institutions of higher education are found to be doing better than the grant-in-aide institutions. However, the stress factor is found higher among the teachers in self-financed institutions. The much hyped ‘corporate
culture’, the present day notion to squeeze seemingly better out of the common-placed, fondly boasted of by certain educational institutions, at times, is proved to be diabolic.

All these together form an environment / culture of the institution and that has psychological effects on teachers. Motivated, demotivated, encouraged, discouraged, initiative, stereotyped teachers are the final products of all these. As a result, certain institutions are found with better infrastructure but lying either unused or less utilized. On the other hand, there are institutions, as found during visits to a number of institutions for the present research, that have not only better infrastructure facilities but also have motivated manpower to effect the optimal use of them, ultimately benefitting the students there.

These are the well-known secret narratives of the institutions of higher education in our land and no proof is required to conclude that they directly affect the quality of education imparted and the learning that take place there. The implications of all these for second and foreign language teaching and learning have far reaching effects.

The various electronic gadgets or devices used in the classrooms are: computer, Internet, OHP, MMP, CDs, DVDs etc. in both rural and urban area colleges. All these means of mass media are utilized to accomplish various educational and other tasks like teaching, examining, evaluating and co-curricular and extra-curricular activities. Teaching or classroom teaching means teaching of syllabus. Both rural and urban area college teachers have been found to be using these apparatus and applications in various contexts such as teaching syllabus contents, citing or availing references / contexts from other books / resources, exhibiting related visuals, availing scholarly lectures etc. A
very few of them have been found to be using these facilities for examinations also. Listening and speaking tests are conducted by a very slim portion of teachers. Again, a very few of them have been found to be using these aides to enhance the students’ performance in co-curricular and extra-curricular activities.

8% and 12% teachers out of the total who make use of the means of mass media, in rural and urban areas respectively, recourse to computer for teaching syllabus contents. The use of the Internet has been employed by 6% in rural while by 16% in urban area colleges. OHP, though seems out-dated in this age of virtual reality, 8% and 16% teachers in rural and urban area colleges find it worth incorporating in L2 pedagogy. Multi-Media Projector (MMP), one of the widely used devices, has been found to be at the most equal height of popularity in both the areas. 14% teachers in rural while 10% in urban area colleges find it effective to teach syllabus using the apparatus. CDs and DVDs, as teaching aides, are used by 12% and 14% teachers in rural and urban area colleges respectively. Thus, in urban area colleges greater number of teachers makes use of computer, Internet, OHP, CDs and DVDs, than their counterparts in rural area colleges. Surprisingly, the use of MMP finds greater portion of teachers in rural area colleges.

Equal portion (8%) of teachers, in both the areas, turns to computer to cite references and contexts from other books. A difference of 6% comes up between them when 12% and 18% teachers, in rural and urban area colleges respectively, declare that they make use of the Internet. Again, equal portion (2%) in both the areas makes use of OHP. A difference of 2% exists between them when it comes to the use of MMP (16% in rural
and 14% in urban areas). A considerable difference (6%) is found in the use of CDs and DVDs when 8% and 14%, in rural and urban area respectively, show their preference for the gadgets. The numerical presented here places the urban area colleges ahead of rural area colleges in the use of the electronic devices to serve the purpose of bringing in references / contexts from other books / sources while dealing with the prescribed syllabus.

Teachers employ the gadgets and devices to exhibit related visuals (photographs, slides, film clips, videos etc.) while teaching the syllabus. The use of the computer is slightly greater (8%) in urban area colleges than (6%) in rural area colleges. Again, a marginal variation of 2% is noted when 14% in rural and 16% in urban area colleges go to the Internet for the purpose. A cognizable variation of 14% is registered in the use of OHP as only 2% in rural parts while 16% in urban areas trust OHP to bring in related visuals. The use of MMP places the rural area colleges slightly ahead of their counterparts in urban areas as 14% portion in the former group while 12% in the later group employ the device for the purpose. A margin of 4% (12% in rural and 16% in urban area colleges) remains between them in the use of CDs and DVDs.

Variations among them are spotted with respect to the use of these gadgets for the purpose of availing scholarly lectures of eminent teachers to students. The use of computer is found as low as 2% in rural parts while it rises to stop at 10% in urban area colleges leaving a considerable variation of 8%. The use of the Internet for the purpose exhibits both the groups almost on the same plane with a nominal variation of 4% only as 12% in rural and 16% in urban area colleges make use of it. The urban area colleges
are ahead of the colleges in rural areas by a slight difference of 2% as 12% and 14% portion of teachers, in rural and urban areas respectively, make use of MMP for the purpose. When it comes to the use of CDs or DVDs for the purpose, the teachers of urban area colleges keep their counterparts in rural areas back by clear 10% margin as 18% and 28% teachers, in rural and urban areas respectively, go for the device.

Not much variation in the number of teachers making use of all these electronic gadgets have been found for the purpose of teaching poetry in classroom. A remarkable variation is found in the use of computer. There is absolutely no one (teacher) in the rural area colleges while 8% teachers in urban area colleges incorporate computer in their teaching of poetry. In the use of the Internet for making the students listen to poetry, the teachers (22%) of urban area colleges once again outnumber their counterparts (10%) in rural area colleges leaving the margin of 12%. The use of MMP finds slightly more users among rural area teachers (10%) than among urban area teachers (8%). A thin difference of only 2% keeps the teachers of urban area colleges ahead of the rural area teachers as 30% and 28% teachers of urban and rural area college teachers put to use CDs or DVDs for teaching poetry in classroom.

Though the use of these means of electronic media has found base in the realms of teaching and learning of L2, it has received a very narrow floor space in the critical area of language testing / examination in both the parts. Though no provision has been introduced to take online tests at colleges, various electronic gadgets have been employed for listening and speaking tests (for vocational courses and SCOPE examinations). Greater number of teachers of urban area colleges resort to these means
than their counterparts in rural area colleges for listening and speaking tests. Only 2% teachers in rural area colleges as against 10% in urban area colleges make use of computer for listening tests. The use of the Internet has found no takers in rural areas while it has as low as 4% in urban area colleges for various language skills. Again, a minor difference is found in the use of CD and DVD or other USBs as 4% and 6% teachers, in rural and urban area colleges respectively, employ these apparatuses for testing purposes. For the speaking test purposes, no use of computer has been found in any of the colleges whereas a very little use of the Internet among the teachers of both the areas (2% in each of them) has been reported. CDs and DVDs (and other USBs) have also been used by 6% teachers in urban areas while 2% in rural areas. The meager use of the means of mass media for language testing purposes can be attributed to the existing pattern of college examination which is based on pen and paper pattern. The CBT (Computer Based Testing) or WBT / online testing that provides base to a number of second and foreign language testing patterns have yet not been adopted as examination system for regular courses in colleges.

Apart from curricular activities, all the popular means of electronic media have been utilized for co-curricular and extra-curricular activities like essay writing, poetry recitation, debate (written or oral) quiz, various cultural programs etc. Variations in the number of teachers using them help us derive a simple conclusion that greater inclination for the use of the apparatuses and devices of modern media exists among the teachers of the urban area colleges. Computer finds 2% and 8% users in rural and urban areas respectively. The margin of difference gets reduced to 2% with the Internet that has teachers 6% in rural and 8% in urban areas. 8% teachers in rural area colleges bring
in the use of MMP also in their co-curricular and extra-curricular activities whereas no use of the means has been reported in urban area colleges for the purpose. CD and DVD are used by comparatively greater number of teachers, 12% in rural and 10% in urban area colleges.

The numerical mentioned above holds the proof that a little less than half (48%) portion and more than half (68%) portion of the total number of teachers approached, in rural and urban areas respectively, opt for the various means of mass media for curricular, co-curricular and extra-curricular activities. Though all of them do not include these gadgets in their teaching activities, their teaching experiences have helped them derive their own views and opinions about the numerous effects that the use of these gadgets bring about (or do not bring) in their teaching. Cognizable differences have cropped up in rural and urban area teachers that, on one hand, obliquely point at a myriad of other related factors like infrastructure, educational environment, students’ educational background, prevalent education and examination system and, on the other, speak aloud about the numerous implications that the incorporation of these gadgets may count for in second and foreign language pedagogy.

Despite being proved on several fronts such as popularity, reliability, authenticity (Chapelle, 2001), the means of mass media do not seem to avail an alternative to the classroom teaching / lecture method or the traditional methods of teaching. According to whopping majority of the teachers (78% and 92% in rural and urban area colleges respectively) find the modern media complementary to the traditional / lecture method. Among those who frequently make use of the gadgets, 20% in rural and 22% in urban
parts, strongly agree with the view while a considerable portion in both the groups, 28% and 46% in rural and urban areas, are in simple agreement with it on the basis of their classroom teaching experiences. They have observed positive effects on the process of learning on the part of the students as, according to them, the incorporation of the means of mass media not only reinforces what they teach in the classroom (through the traditional method) but also renders authenticity of various contexts, that in turn, makes the process of language learning as good as language acquisition. Interestingly, 30% and 24% teachers in rural and urban area colleges respectively, have taken the middle position on the view indicating neither distinguishing positive nor diminishing negative effects of the mass media on their classroom teaching. In their opinion the incorporation of the various means of mass media in classroom teaching does not guarantee better learning of language. The stand goes parallel to what Mark Warschauer has observed ‘Computer technology is not a panacea for language teaching; using it demands substantial commitments of time and money and brings no guaranteed results’ (Warschauer, 2000). Secondly, they have marked no distinguishing socio-cultural or psychological change in their learning behaviors / patterns. In sharp contrast to all of them, a few teachers, 22% in rural and 8% in urban area colleges, disagree with the statement. They argue that though there has been considerable empirical research and a myriad of undocumented teaching experiences supporting the hypothesis, the learning process has remained, more or less, unaffected as hardly any difference has been observed in their test performances.

Evaluating their classroom presentation, most of them, 48% and 82%, in rural and urban areas respectively, with varying degrees of intensities, give consent to the statement that
the incorporation of mass media in classroom teaching makes their presentation more lively and apprehensive. They find it easy and also convenient to bring in authentic references and contexts that, in turn, present the language more like a necessity for everyday communication than a dead corpus lying in unauthentic and decontextualized texts and contexts. On the other hand, a few (18%) teachers in urban area colleges and more than half (52%) of the lot in rural area colleges remain balanced on the view. What they emphasize is that it is not only the incorporation of various gizmos but also the interactive method of presentation on the part of the teachers that makes it lively and apprehensive. They seem to be viewing teacher’s style of presentation at par with the incorporation of mass media as teaching aids in classroom teaching.

A remarkable variation is scaled with respect to a commonly acknowledged conception of revolutionary powers fused in ICTs that, in turn, is instrumental in theorizing the popular hypothesis that ‘ICTs certainly equip the teacher with a number of new and innovative techniques of classroom teaching’. 92% teachers, with varying degrees of intensities as shown in the graph, in urban area colleges stand in favour of the statement which in itself cannot be counted as the evidence of its near absolute truthfulness as comparatively a far less portion (52% teachers) in rural area colleges set in for agreement (with varying degrees – 24% strongly agreeing while 28% simply agreeing with the statement). Among the 68% teachers in urban area colleges, as mentioned above, for whom ICTs form a part of their classroom teaching, almost half of them facilitate learning by guiding the students to navigate through websites and other online and off-line materials specifically designed for the learners of English as an L2 or FL. There are websites launched by teachers (urban area colleges) that offer online tutorials
and tests also. A few of them like ‘VCALP’ keeps an option open for other teachers to conduct online short-term courses. According to these teachers, the learners feel free to express the difficulties that they come across.

Activities like forming groups of bloggers sharing thoughts and ideas on particular topics have also been come across in certain colleges of urban areas. It is the teacher who leads and encourages students to take up topics of their interest. A teacher says that he hardly brings grammatical errors to the notice of his students directly but leaves it to the students to mark for themselves the correct use in his updates. The students, thus, remain in touch with one another and also with the teacher throughout the tenure of the whole course. The teacher, while sharing his experiences, says that some of his students prefer to visit online libraries and like to refer e-books on sites like ‘Gutenberg’ over the college library and hardcover printed books.

Such online educational activities have been found on slow burner in rural area colleges. Albeit, an individual case may be different from the common trend found in rural area colleges. More than half (52%) of the total teachers approached fondly incorporate ICTs in classroom teaching and they have been found to be techno-savvy in their general work-culture. They have been found to be quite informed about the rapid paradigm shifts effected by ICTs in classroom teaching. According to these teachers, certain new and innovative techniques become handy with the help of the ICTs for classroom teaching which may or may not be effecting profound learning there and then but are certainly instrumental in arousing the students’ interest in the topic at hand, let alone the language, as they get comparatively greater exposure and s/he occupies the
dominant / center stage in the classroom. The students happily oblige the teachers by paying attention with interest. The problems crop up for the teacher the moment s/he tries to shake off his / her dominant position and stop direct teaching so as to pave the way for other innovative techniques (blogging, e mail writing etc.) rendering center stage and autonomy to students facilitating learning. It has been one of the common experiences of rural area teachers that majority of the students turn off learning the moment the teacher switch off direct teaching. Unlike the major portion of the urban area colleges, most of the students of rural area colleges shy away and do not respond when innovative teaching techniques (as mentioned above), warranting their active and innovative participation, are tried on them.

Looking to the wide-spread use of ICT for all professional tasks and its deep penetration in our interpersonal and social communication, it is not exaggeration to state that we live more in virtual world than the actual one. The world is on the super highway of ICTs that have made it a small entity and have opened up the floodgates of knowledge. We frequently use the word ‘knowledge economy’ for today’s world. ICTs have introduced us with a new capital called ‘knowledge’ or rather ‘information’ to be precise much in sharp contrast to what had been predicted about computer technology in education in the early years of its inception (Dunkel, 1997). ICTs (computer and Internet in particular) have transformed the world in an unprecedented manner not only by effecting knowledge revolution but also by availing instant connectivity with almost any entity under the Sun. The radius of its reach and velocity of its speed have been enhancing with the advent of every new technological advancement. Opening up the closed boxes of classrooms and bringing in the whole world of knowledge into it is
fondly attributed by the teachers to all these amazing aspects and fascinating features of the modern mass media technologies.

60% teachers in rural while 80% in urban area colleges readily agree with the statement that the modern mass media technologies keep their classroom teaching not limited to the prescribed text only but also bring in new references and contexts. 40% and 20% teachers, in rural and urban area colleges respectively, stay away from giving any crystal clear response. Explaining the reasons for doing so, some of the teachers (rural area colleges) agree that the abysmally low computer and language literacies on the part of the students make it of little use for them to go beyond the prescribed text. While some of them (urban area colleges) say that it is difficult to incorporate ICTs in the class.

Equal number of teachers (71.43%) in both the groups have been found to be in agreement (with varying degrees – see Graph) with an argument that says that the use of mass media for pedagogical purposes reduces teachers’ dominance in the class and makes it learner centered. Again, equal number of them (14.29%) in each group thinks it wise not to judge the use of mass media either in favour or against the argument. In their view the concept of ‘teacher dominance’ is a misplaced one. They argue that nothing like ‘dominance’ exists in the matter of classroom teaching and learning. The teacher simply leads the learners into the realms of knowledge and thus, teacher is the leader in the class. The teacher leads taking upon him / her various roles such as innovator, facilitator etc. with the help of the means of mass media as and when needed. Their teaching experience has made them believe that such a leadership on the part of
the teacher is well desired by students. In fact, in their view, such a leadership forms the essence of ‘learner-centered’ classroom teaching. 14.29% teachers in each of the areas, rural and urban, prefer to disagree arguing that the teacher’s dominance remains in the class as teachers may be employing various means of mass media in the class but still the new roles of teachers and students have not been adopted thoroughly. In fact most of the teachers find it hard to leave their traditional roles to adopt the new ones (Glaser and Cooley, 1970).

**Graph: 18 ICTs in L2 / Foreign Language Pedagogy**

Among the numerous new teacher’s roles, the role of a facilitator has been endorsed by 85.71% teachers in rural area colleges. They agree (with varying degrees) with the statement that the teacher has to be a facilitator sometimes to make learning occur at its own pace. The stand is explained with an argument that the means of mass media have opened up all the sources and resources of knowledge / information. The teacher needs to guide his / her students through the myriad of alleys of information lending to the formation of knowledge. According to them with the incorporation of the media gadgets, there emerges a paradigm shift in the L2 / FL pedagogy that, in turn, effects
basic changes in the various roles that a teacher performs in the class. The teacher creates opportunities through which learning happens as if on its own or in a quite natural manner. The process of learning takes place more in the manner of acquisition.

A small portion in each group, 14.29% and 28.57% teachers, in urban and rural areas respectively, have neither accepted nor rejected the statement. According to their experience the role of a facilitator does not effect equal results in all contexts such as teaching mixed abilities groups and for all linguistic aspects.

All of them (in varying degrees) agree with an argument that states that the incorporation of ICTs in classroom interests the students as they make it possible for the teacher to introduce numerous teaching materials. From PPT to online materials such as Webpages, audio and video clips, various types of online (free) tests can be easily incorporated in classroom teaching. The teachers have observed that it is instrumental in bringing about comparatively lighter / informal sort of atmosphere in the class that, in turn, makes learning more like a fun.

**Graph: 19**

![Graph showing the interest of students in ICTs with percentages](image)
The group stand quite divided with respect to an argument that has to say that ICTs help to bring about learner autonomy gradually. 71.43% and 50% teachers, in urban and rural areas respectively, agree (with varying intensities as shown in the Graph) with the argument.

Graph: 20

They have seen their motivated students learn in their own, at their own pace and according to their own needs with ICTs and thus, learning does not remain restricted to classroom or to prescribed syllabus. Among the numerous experiences cited by teachers, some of them can be categorized as the initial stages of learner autonomy. They are: some of the first year commerce students in Arts, Commerce and Science College, Borsad (a rural area college) made a PPT of five to six slides presenting not only the pictures of flowers and vegetables but also placed related quotes along with them. This they did in response to an assignment that asked them to search out names of five flowers and five vegetables. Again, some students, in the same college, surfed
various sites and downloaded poems on flowers to use them in a poster-making competition. They did not stop there but went on to search out how to recite these poems as they wished to present the poems in poetry recitation competition. In the same college, a number of students went on to surf sites on their own to search out famous quotes of Swami Vivekanand along with the monk’s various postures to include them in their essays that they prepared for an essay writing competition. While there are examples of advanced type of autonomous language learning from urban area colleges. SEMCOM, a self-financed English medium college offering various courses in commerce and management, is a reputed institution with an innovative work-culture, holds ad-making (advertisement making) competition among other numerous talent nurturing and promoting activities. The participating students shoot and edit advertisements on their own. All the advertisements stand to be fine examples of the students’ skills of marketing strategies and interesting blend of socio-cultural linguistic aspects.

After noting the numerous impacts and implications of ICTs with respect to their pedagogical use in classroom teaching, the corresponding effects on learning are also marked and documented from teachers’ point of view. All the teachers who make use of various means of mass media in classroom teaching mark numerous effects on the learning behavior of their students. On the basis of the account of various effects on learning behavior, it (learning) can be categorized into two major heads: Learning at Individual Level (Individual Learning) and Learning at Community Level (Community Learning). Though certain aspects of language learning cannot be confined strictly to
either of these two categories, the other falling in one of these categories have their impacts and implications spread over the rest of them.

In response to a statement inquiring about language learning at individual level, making comparison of not only the knowledge of vocabulary but also of its various contextual meanings acquired by the students who habitually make use of the various means of mass media and by those who are not habitual users, the teachers give a clear picture showing the habitual users of the electronic media (ICTs), specifically computer and the Internet, better off. A huge majority in both the groups, 78.57% and 85.71% teachers, in rural and urban colleges respectively, agree (as shown in the graph) with the statement that students who make use of ICTs possess comparatively rich English vocabulary, their contextual meanings and grammatical insights. According to these teachers they (the students) may not be well-versed with the text-book vocabulary and the complexities of the syntax or grammatical structures, their general vocabulary is commonly found to be richer. On the other hand 21.43% and 14.29% teachers, in rural and urban areas respectively, find no difference (see graph). They argue that media may be adding into their vocabulary in general and ICTs terminology in particular but that does not make their vocabulary remarkably richer. Their experience says that they may be using the vocabulary randomly in their informal communication but such a vocabulary helps them neither in their academic persuasion nor in day-to-day formal communication.
The modern electronic mass media have been instrumental in bringing about consensus among the people world over on critical social and political issues. In the recent history, we have the examples of the Tehrir Square Movement, the Arab Spring, the Wall Street Movement, the Slut Movement and the likes. The world has experienced coming together of people for social and political causes through the electronic mass media that eventually resulted in landmarking movements. Across the length and breadth of nations, people come together and communicate in a common language for a common cause through the modern mass media. A massive portion of the teachers, 78.57% and 85.71% teachers, in rural and urban areas respectively, with varying intensities (see graph) agree with the statement that says that the modern mass media effect positive interdependence among students that causes collaborative learning which is co-operative in nature that nurtures human qualities like understanding of one’s own self.
and that of others, social and political harmony etc. that prepare the foreground for the evolution of a community communicating in a common language for common causes.

Graph: 22

<table>
<thead>
<tr>
<th></th>
<th>Rural Area</th>
<th>Urban Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly Agree</td>
<td>64.29%</td>
<td>57.14%</td>
</tr>
<tr>
<td>Agree</td>
<td>14.29%</td>
<td>35.71%</td>
</tr>
<tr>
<td>Average</td>
<td>21.43%</td>
<td>7.14%</td>
</tr>
<tr>
<td>Disagree</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

The modern mass media effect positive interdependence among students causing collaborative learning, nurturing human qualities and the sense of community.

All the teachers of both the areas talk about the fondness and fascination of their students for ‘Facebook’. They say that most of their students have their Facebook account and regularly log in. They find it more exciting to exchange comments on Facebook. The teachers have noted that their students simply love to post / forward a punch-line or a thrilling comment or a quote or piercing poetic lines etc. to their friends on Facebook. At times such exchanges include social or political issues also. The teachers believe that such exchanges of wisdom, feelings, awareness in the form of comments, quotes, poetic lines etc. have almost no place in their actual (in-person) meetings. The virtual world is a new rendezvous with its own incredible norms creating equally incredible human relationships that converts even strangers into friends by availing them a common language for common causes. Some urban area college
teachers say that they (students) may not be exchanging certain comments in their meetings in person but they certainly do it on Facebook and in the process, they educate themselves and that is how they grow and evolve to be a collaborative and co-operating community.

The evolution of a community communicating in collaborative and co-operative manner for common causes in a common language thus gives an impetus to collective wisdom (Smith, Eric Alden, 2010). And collective wisdom avails fertile grounds for (linguistic) creativity or cognitive development which is first and foremost inter psychological (Vygotskian Approach). It (cognitive development) arises as a result of the interaction that occurs between individuals engaged in concrete social interaction (Wertsch, 1985). All the teachers in urban and 85.71% rural area college teachers agree (in varying degrees of intensities as shown in the graph) with an argument that the use of the ICTs arouse in the students the feeling of a learning community that shares ideas and information not only to know but also to create.
Numerous supporting instances can be drawn from the recent political and social life of almost all the nations of the world where even the governments had to give in and follow the course of collective wisdom. Reports in the newspapers and social and political surveys hold the proof of the fact that the young generation, also known as generation Y or netizens, has been the driving force of all these movements. Having realized the creative powers of the ever increasing techno-savvy young generation, even political campaigns have gone virtual (Mancini, 1999). It is communication with the robust e community of the youngsters constantly and instantly sharing their minds and thus creating (forming) ideas and opinions that mirror their collective wisdom. All the teachers of both the areas, in varying degrees, agree with an argument that states that the media arouses in them the feeling of learning community that shares ideas and information not only to know but also to create. In a rural area colleges (Borsad college), the students of the first year B. Com. were asked to work individually or in
groups on an assignment asking them to prepare a detailed note on the physical appearance of a business letter. The students worked in groups of two or three or more, surfed various available websites and prepared their notes. Though they were collections from various websites, wisely selected and arranged as per the requirement, they made nice study materials for them. This practice on the part of the students, belonging to rural and urban area colleges, has been acknowledged and complimented by their teachers.

Examples of students’ creativity have been cited by urban area colleges like SEMCOM. The institution, in collaboration with industry, organizes events like ‘Best Business Idea Contest’ every year. The participating students come out with their best business ideas after minute case studies and brainstorming online as well as off-line. Their presentation sessions include people from industry and business along with students and teachers. The English language is not hindrance as the medium of instruction is English there. Though such contests may not have language teaching-learning as one of the objectives, developing business communication skills is certainly one.

The young generation of the present day finds the modern media entertaining also and that is one of the reasons as to why most of them are techno-savvy. All enjoyable activities such as to be in touch with the dear and near ones through SMSs, e mails, chatting, Facebook, playing games etc. are possible with the gizmos of the modern electronic media. All the teachers mark that their students make use of various gizmos as toys. They can live without TV but cannot live without mobile, computer and the Internet (Lee, 2006). The teachers’ observation says that to this new generation working
with ICTs is at par with playing with it and vice-versa. According to all the teachers their students, in fact, learn (acquire) English better and quicker while indulging in enjoyable activities with modern media gadgets. All the teachers of urban area and 92.86% of rural area colleges, in varying degrees as shown in the graph, are in agreement with a statement that says that the enjoyable activities with modern media cause a kind of relaxed atmosphere which helps reserve the acquired language with an ease.

**Graph: 24**

![Graph](image)

Putting the teachers’ observations and markings in a gist, working independently with ICTs which is more like gaming, avails informal sort of atmosphere that, in turn, effects learner autonomy wherein learning / acquisition of L2 / FL occurs much in the same way as in natural environment. Talking about their numerous experiences, the teachers say that the textual vocabulary and grammatical points may get slipped out of their repertoire but the words and sentence structures that they frequently come across
through electronic media easily become a part of their schemata even without knowing the origin or the various forms of words and grammatical rules for sentence structures

All the teachers are witness to positive psycho-linguistic effects of the electronic media on language learning. With greater or lesser intensity (see graph), they agree with an argument that states that the electronic mass media reduce or nullify thwarting tendencies like inferiority complex, shyness, fear and phobia etc. and increase self-confidence.

**Graph: 25**

<table>
<thead>
<tr>
<th>Rural Area</th>
<th>strongly Agree</th>
<th>Agree</th>
<th>Average</th>
<th>Disagree</th>
<th>Urban Area</th>
<th>strongly Agree</th>
<th>Agree</th>
<th>Average</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7.14%</td>
<td>57.14%</td>
<td>35.71%</td>
<td>0.00%</td>
<td>35.71%</td>
<td>64.29%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

The teachers’ observation is that working individually or in groups with electronic media is an equalizer in a sense that it reduces the notion that somebody or certain students is / are better or worse than others / themselves. According to the teachers, working in collaboration / in groups with electronic media makes the learners realize their worth, enhances the chances of meaningful interactions that, in turn, effects mutual
learning and that eventually creates a milieu wherein negative psycho-linguistic forces get decimated.

As mentioned earlier, majority of the teachers consider electronic mass media instrumental in bringing about learner autonomy gradually. According to them learner autonomy is instrumental in carving out opportunities for self-learning. Their teaching experience gives credence to the hypothesis that states that with increased learner autonomy, the learners are endowed with the much needed facility to learn at their own pace and according to their own likings and requirements. They, with varying degrees of intensities (see Graph) agree with a statement that says that with learner autonomy increased, the learner can learn as per his / her needs.

**Graph: 26**

The best example can be, as talked about or referred to by all teachers, the SCOPE exam under OAS (Only Assessment Scheme) conducted by the Dept. of Higher
Education, Govt. of Gujarat in association with TESOL, Cambridge University. The students prepare themselves with the help of online sample tests and study materials. Students, with varying linguistic abilities / skills, go through the practice tests (listening, speaking, reading and writing tests) as per their needs. Some students run the whole tests repeatedly while some rerun certain parts so as to be able to do the tasks successfully.

It has also been observed by the teachers that the students have the habit of navigating through numerous sites irrespective of their subjects or area of interest apart from looking for study materials of their subject / topics. It also happens that they accidentally usher in related or other areas while searching for study materials of their subjects / area of interest. Sometimes they are tempted / encouraged to peep into other matters that generally flash into numerous windows on the home-page of the site. And that is how they happen to come across myriad of other information also which together form a big pool of resources for numerous inputs on various subjects / topics. With increasing data input, linguistic input also gets increased (Krashen and Terrell, 1983) that forms the foreground for linguistic output. All the teachers of urban area colleges and 85.71% teachers of rural area colleges agree, in varying degrees as shown in the graph, with a statement that argues that with an easy access to numerous subjects and topics, the comprehensible input gets increased that clears the way for linguistic output.
The experience of these teachers says that their students are usually found to be well informed about the latest interesting events taking place / occurring in various fields around the world. According to the teachers, their students’ frequent embarking upon the numerous resources availed by the electronic mass media in general and computer and the Internet in particular is one of the major reasons. Some of the teachers of both the areas cite the example of yahoo.com, one of the e mail service providers. They say that their students, while checking their e mail accounts, never miss to go through all news items with video clips and interesting photos that beam prominently on the home
page of the site. In their view, such impromptu excursions are instrumental in enriching contextualized linguistic input.

14.29% teachers in rural areas stay away from agreement or disagreement. They have their own reasons specifically related to rural milieu. They do agree with the fact that their students too come in touch with numerous other information through electronic media in general and computer and the Internet in particular. These teachers find their students’ linguistic output much lower compared to the input. They state that linguistic output does not necessarily guarantee the same or higher volume of output every time and in every case. According to them the input has to be ‘comprehensible’ in order to effect contextualized output. Now ‘input comprehensibility’ or ‘input processing’ differs from learner to learner because processing lexical items simply drains the resources in working memory that would allow for making a connection to meaning for any possible perceived form and this may vary under conditions; increased comprehensibility may result in increased acquisition (Hatch, 1983; Long, 1985; Blau, 1990). That is to say that what is comprehensible to one may not be so to another. Reasoning for such disparities, the teachers say that the interest in the topic viewed and the background knowledge of it, among others, are deciding factors.

Suggestive differences have come up in response to an argument that states that ICTs facilitate various cognitive tasks like ‘project work’, ‘assignments’, ‘PPTs’ and other problem solving tasks in all subjects that cause an unconscious learning of vocabulary and also of grammatical constructions. All the teachers, in varying degrees of intensity as indicated in the graph, agree with it.
Urban area teachers say that their students make use of computer and the Internet extensively for project work and various assignments and also make PPTs for inter-college seminars and competitions. According to the teachers, their students find it very encouraging working all for themselves voluntarily choosing teachers as guides or supervisors. The teachers have witnessed substantial growth in the vocabulary and grammatical knowledge of the language and contextual use of it. A teacher in a social-work institute says that the use of the computer and the Internet for certain tasks boosts their academic language with all those ‘composed features’ found in the language of an academician or an expert. Defining his term ‘composed features’, the teacher says, “…language having texture made of subject / field terminology and expressions that include even the latest coinages in the field also, scholarly knitted with grammatical structures so as to make a meaningfully unique corpus on the subject…”
21.43% teachers neither agree nor disagree with the statement. The teachers belonging to rural area colleges have marked that the use of electronic media gadgets and services for project works, assignments and other educational tasks has certainly enhanced English vocabulary of their students. However, their students differ from those of urban areas in the independent use of the language. Citing the reason the teachers argue that all the rural area colleges work in vernacular medium and so the students find meager chances of making use of English for their other subjects also.

Various levels of agreement have been found among the teachers of both the areas in response to an argument that distinguishes between language learning and language acquisition. All the urban area college teachers and 85.71% rural area college teachers agree (as indicated in the Graph) with the agreement that holds that the modern media make language acquisition an eventual and not a deliberate phenomenon.

Graph: 29
According to the teachers, language learning continues even after the class-room teaching-learning (formal teaching-learning) as the modern electronic media avails authentic materials anywhere and at any time that, in turn, creates the much needed atmosphere of the language (Jung, 2005). The teachers say that it is similar to the natural acquisition of language that is without the pain of conscious and deliberate efforts of language learning. What the teachers say here is parallel to the Natural Approach of language learning based on Stephen Krashen’s theory / hypothesis of comprehensible input. According to that approach acquisition is natural, unconscious or incidental while learning is deliberate and conscious. The approach distinguishes learning as merely knowing / understanding rules of a language which hardly helps learners use the language. It generally helps monitor / correct what is expressed. Language is best acquired through maximum exposure to comprehensible input (Stephen Krashen and Terrel). According to them learners with low affective filter can easily and rapidly get language competence.

The teachers stand divided into normal shades of differences of strong agreement, agreement and neutral on an argument that says that with modern media, the natural sequence of language learning (listening first) is maintained at its best. 85.71% and 71.42% teachers (sum total of strongly agreed and agreed), rural and urban area colleges respectively, agree with the statement.
According to them, the multi-media facilities and the World Wide Web are profusely utilized by their techno-savvy students for personal purposes apart from educational ones. It is a general observation of the teachers that watching and downloading Youtube videos (favourite advertisements, film clips etc.) on their desk-tops, laptops or mobile phones is their passion. Language acquisition, in natural manner as against formal language learning, is more evident in their informal interpersonal communication.

Language acquisition through watching and listening, to certain extent, goes parallel to ‘Suggestopadia’ approach for language learning (Georgi Lozanov) that talks about atmosphere of relaxation and joy with music in the background activating the left hemisphere of the mind that increases its capacity to reserve. Another approach ‘Total Physical Response’ (TPR by Asher, a psychologist in 1960) also supports a particular

<table>
<thead>
<tr>
<th>Degrees of Agreement</th>
<th>Rural Area Colleges</th>
<th>Urban Area Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly Agree</td>
<td>35.71%</td>
<td>50.00%</td>
</tr>
<tr>
<td>Agree</td>
<td>21.43%</td>
<td>71.42%</td>
</tr>
<tr>
<td>Average</td>
<td>14.29%</td>
<td>7.14%</td>
</tr>
<tr>
<td>Disagree</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

According to the graph, there is a significant difference in the percentage of teachers from rural and urban area colleges in agreeing with the statement that with modern media, the natural sequence of language learning (listening first) is maintained at its best.
sequence of language learning with ‘Listening’ first. According to Asher, one can learn any language, first or second, with ‘listening’ at the very first in the sequence.

On the other hand 28.57% and 14.29% teachers belonging to urban and rural area respectively have remained neutral on the point. Their experience says that the natural sequence of LSRW may not be possible in all cases. They say that language learning may start with ‘listening’ first but ‘speaking’ either gets delayed or receives scanty attention as it is difficult to find a place for it in the actual everyday authentic contexts. According to them, the opportunities that the speaking materials with algorithms of international standards avail are found too hard to go through by students even in intermediate level.

Remarkable differences have been noted in response to a query that focuses on ‘linguistic challenges’ and the resultant psychological effects. Unanimously and resoundingly, all of them deny to strongly agree with the statement that says that as the modern electronic media may pose greater linguistic challenges, there are chances of the learners getting frustrated. No teacher from the urban area colleges agree with the statement while 14.29% teachers in rural area colleges find the statement worth agreeing. According to them learning language turns out to be a frustrating experience in case of students with considerably poor knowledge of grammar and vocabulary as they find it rather demanding, posing numerous linguistic challenges.

A cognizable difference has been marked when 42.86% rural area college teachers as against no teacher of urban area colleges remain neutral on the argument. The said portion of rural area teachers say that their students (studying in vernacular medium) are
bound to come across linguistic challenges while learning language with media but that may or may not effect frustration among them. According to them, every individual case is different from the other when it comes to responding to the linguistic challenges posed by media. They have students who zealously continue learning language turning every challenge into opportunity. On the other hand, their certain students turn their back not only to the language learning but also the use of media. According to the teachers, it is more ‘indifference’ than ‘frustration’ towards the language and each individual case has numerous reasons ranging from psychological to socio-cultural.

4.3 Analysis and Interpretation of the Scores of Pre-Tests and Post-Tests

4.3.1 Pre-Tests and Post-Tests

Pre-Tests were conducted before the treatment. The Treatment was, then, conducted with materials (mentioned as above) followed by Post-Tests. The Pre-Tests and Post-Tests scores measure the pre-treatment and post-treatment levels of proficiencies of various language skills of the students belonging to socially and educationally diverse groups. The tests were guided by the research hypotheses as mentioned above. However, other corresponding hypotheses, fit to be measured with the means of modern electronic mass media, were formed and tested. They are as under:
4.3.2 Hypotheses

1. There will be no significant difference between Pre-Test and Post-Test mean scores of rural area students.

2. There will be no significant difference between Pre-Test and Post-Test mean scores of urban area students.

3. There will be no significant difference between Pre-Test and Post-Test mean scores of boys.

4. There will be no significant difference between Pre-Test and Post-Test mean scores of girls.

5. There will be no significant difference between Pre-Test and Post-Test mean scores of Arts faculty students.

6. There will be no significant difference between Pre-Test and Post-Test mean scores of Commerce faculty students.

7. There will be no significant difference between Pre-Test and Post-Test mean scores of Science faculty students.

8. There will be no significant difference between Pre-Test and Post-Test mean scores of urban and rural area students.
4.3.3 Analysis and Interpretation of Pre-Tests and Post-Tests Scores

Hypothesis 1. There will be no significant difference between pre-test and post-test mean scores of rural area students.

Table 10 T Value of Scores of Rural Area Students

<table>
<thead>
<tr>
<th>RURAL</th>
<th>NUMBERS</th>
<th>MEAN</th>
<th>Standard Deviation</th>
<th>t value</th>
<th>t table</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE TEST</td>
<td>30</td>
<td>15.4</td>
<td>1.99</td>
<td>7.6</td>
<td>1.96(0.05)</td>
<td>SIGNIFICANT</td>
</tr>
<tr>
<td>POST-TEST</td>
<td>30</td>
<td>22.87</td>
<td>5</td>
<td></td>
<td>2.58(0.01)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As mentioned in the table 1 t calculated is 7.6. The table value at 0.01 level and 0.05 level are respectively 2.58 and 1.96 .Here, calculated value 7.6 is more than value of t at 0.01 level. Therefore the null hypothesis No.1 “There will be no significant difference between pre-test and post-test mean scores of rural area students” is not accepted.
Mean scores of post-test is higher than mean scores of pre-test for rural area students. The difference is very clear from graph 31.

It is clear from the result that there is shown effect of treatment on rural area students.
Hypothesis 2. There will be no significant difference between Pre Test and Post-Test mean scores of urban area students.

Table 11 T Value of Scores of Urban Area Students

<table>
<thead>
<tr>
<th>URBAN</th>
<th>NUMBERS</th>
<th>MEAN</th>
<th>Standard Deviation</th>
<th>t value</th>
<th>t table</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE TEST</td>
<td>30</td>
<td>23.06</td>
<td>4.66</td>
<td>3.11</td>
<td>1.96(0.05)</td>
<td>SIGNIFICANT</td>
</tr>
<tr>
<td>POST-TEST</td>
<td>30</td>
<td>27.06</td>
<td>5.27</td>
<td></td>
<td>2.58(0.01)</td>
<td>AT 0.01</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(SED) *(SED) 1.650

HYPOTHESIS 2 IS REJECTED AT 0.01 LEVEL

SED 1.284

DEGREE OF FREEDOM: 58 Significance AT 0.01

M1-M2 4

t value 3.11

As mentioned in the table 2 t calculated is 3.11 The table value at 0.01 level and 0.05 level are respectively 2.58 and 1.96. Here, calculated value 3.11 is more than value of t at 0.01 level. Therefore the null hypothesis No.2 “There will be no significant difference between pre-test and post-test mean scores of urban area students” is
not accepted. Mean scores of post-test is higher than mean scores of pre-test for urban area students. The difference is very clear from graph 32.

GRAPH- 32

Significant difference between pre-test and post-test mean scores of urban area students

It is clear from the result that there is shown effect of treatment on urban area students.
Hypothesis 3. There will be no significant difference between Pre Test and Post-Test mean scores of boys.

Table 12  T Value of Scores of Boys

<table>
<thead>
<tr>
<th>BOYS</th>
<th>NUMBERS</th>
<th>MEAN</th>
<th>Standard Deviation</th>
<th>t value</th>
<th>t table</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE-TEST</td>
<td>15</td>
<td>23.4</td>
<td>1.88</td>
<td>6.39</td>
<td>1.96(0.05)</td>
<td>SIGNIFICANT</td>
</tr>
<tr>
<td>POST-TEST</td>
<td>15</td>
<td>27.73</td>
<td>1.83</td>
<td>2.58(0.01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(SED)</td>
<td>0.459</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*(SED)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SED</td>
<td>0.677</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1-M2</td>
<td>4.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t value</td>
<td>6.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HYPOTHESIS 3 IS REJECTED AT 0.01 LEVEL

DEGREE OF FREEDOM: 28 Significance AT 0.01

As mentioned in the table 3 t calculated is 6.39. The table value at 0.01 level are respectively 2.76 and 2.05. Here, Calculated value 6.39 is more than value of t at 0.01 level. Therefore the null hypothesis No.3 "There will be no significant difference between pre-test and post-test mean scores of boys" is not accepted. Mean
scores of post-test is higher than mean scores of pre-test for boys. The difference is very clear from graph 33.

It is clear from the result that there is shown effect of treatment on boys.
Hypothesis 4. There will be no significant difference between Pre Test and Post-Test mean scores of girls.

Table 13  T Value of Scores of Girls

<table>
<thead>
<tr>
<th>GIRLS</th>
<th>NUMBERS</th>
<th>MEAN</th>
<th>Standard Deviation</th>
<th>t value</th>
<th>t table</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE-TEST</td>
<td>15</td>
<td>15.8</td>
<td>2.14</td>
<td>1.96(0.05)</td>
<td>2.58(0.01)</td>
<td>SIGNIFICANT</td>
</tr>
<tr>
<td>POST-TEST</td>
<td>15</td>
<td>24.2</td>
<td>2.8</td>
<td>9.23</td>
<td></td>
<td>AT 0.01</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td></td>
<td></td>
<td>0.828</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HYPOTHESIS 4 IS REJECTED AT 0.01 LEVEL

DEGREE OF FREEDOM: 28 Significance AT 0.01

As mentioned in the table 4  t calculated is 9.23. The table value at 0.01 level and 0.05 level are respectively 2.76 and 2.05. Here, Calculated value 9.23 is more than value of t at 0.01 level. Therefore the null hypothesis No.4 “There will be no significant difference between pre-test and post-test mean scores of girls” is not accepted.
Mean scores of post-test is higher than mean scores of pre-test for girls. The difference is very clear from graph: D.

It is clear from the result that there is shown effect of treatment on girls.
Hypothesis 5. There will be no significant difference between Pre Test and Post-Test mean scores of Arts faculty students.

Table 14 T Value of Scores of Arts faculty students

<table>
<thead>
<tr>
<th>ARTS</th>
<th>NUMBERS</th>
<th>MEAN</th>
<th>Standard Deviation</th>
<th>t value</th>
<th>t table</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE-TEST</td>
<td>20</td>
<td>20.1</td>
<td>5.29</td>
<td>3.29</td>
<td>1.96(0.05)</td>
<td>SIGNIFICANT</td>
</tr>
<tr>
<td>POST-TEST</td>
<td>20</td>
<td>25.2</td>
<td>4.47</td>
<td></td>
<td>2.58(0.01)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(SED) * (SED) 2.398

HYPOTHESIS 5 IS REJECTED AT 0.01 LEVEL

SED 1.549

DEGREE OF FREEDOM: 38 Significance AT 0.01

M1-M2 5.1

t value 3.29

As mentioned in the table 5 t calculated is 3.29. The table value at 0.01 level and 0.05 level are respectively 2.58 and 1.96. Here, Calculated value 3.29 is more than value of t at 0.01 level. Therefore the null hypothesis No.5 “There will be no significant difference between pre-test and post-test mean scores of Arts faculty students” is
not accepted. Mean scores of post-test is higher than mean scores of pre-test for Arts faculty students. The difference is very clear from graph: E.

It is clear from the result that there is shown effect of treatment on Arts faculty students.
Hypothesis 6. There will be no significant difference between Pre Test and Post-Test mean scores of Commerce faculty students.

Table 15  T Value of Scores of Commerce faculty students

<table>
<thead>
<tr>
<th></th>
<th>There will be no significant difference between Pre Test and Post-Test mean scores of Commerce faculty students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Significant difference between pre-test and post-test mean scores of Commerce faculty students</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Commerce</strong></td>
<td><strong>NUMBERS</strong></td>
</tr>
<tr>
<td>PRE-TEST</td>
<td>20</td>
</tr>
<tr>
<td>POST-TEST</td>
<td>20</td>
</tr>
<tr>
<td>TOTAL</td>
<td>40</td>
</tr>
<tr>
<td>(SED)</td>
<td>1.135</td>
</tr>
<tr>
<td>*(SED)</td>
<td></td>
</tr>
<tr>
<td>SED</td>
<td>1.065</td>
</tr>
<tr>
<td>M1-M2</td>
<td>7.15</td>
</tr>
<tr>
<td>t value</td>
<td>6.71</td>
</tr>
</tbody>
</table>

HYPOTHESIS 6 IS REJECTED AT 0.01 LEVEL

DEGREE OF FREEDOM: 38 Significance AT 0.01

As mentioned in the table 6  t calculated is 6.71. The table value at 0.01 level nd 0.05 level are respectively 2.58 and 1.96 .Here, Calculated value 6.71 is more than value of t at 0.01 level. Therefore the null hypothesis No.6 “There will be no significant difference between pre-test and post-test mean scores of Commerce faculty
students” is not accepted. Mean scores of post-test is higher than mean scores of pre-test for Commerce faculty students. The difference is very clear from graph: F.

It is clear from the result that there is shown effect of treatment on Commerce faculty students.
Hypothesis 7. There will be no significant difference between Pre Test and Post-Test mean scores of Science faculty students.

Table 16 T Value of Scores of Science faculty students

<table>
<thead>
<tr>
<th>Science</th>
<th>NUMBERS</th>
<th>MEAN</th>
<th>Standard Deviation</th>
<th>t value</th>
<th>t table</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE-TEST</td>
<td>20</td>
<td>20.3</td>
<td>4.43</td>
<td>1.96</td>
<td>2.58</td>
<td>SIGNIFICANT AT 0.01</td>
</tr>
<tr>
<td>POST-TEST</td>
<td>20</td>
<td>26.6</td>
<td>1.98</td>
<td>5.81</td>
<td>2.58</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(SED)</td>
<td></td>
<td>1.177</td>
<td></td>
<td>HYPOTHESIS 6 IS REJECTED AT 0.01 LEVEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*(SED)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SED</td>
<td></td>
<td>1.085</td>
<td></td>
<td>DEGREE OF FREEDOM: 38 Significance AT 0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1-M2</td>
<td></td>
<td>6.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t value</td>
<td></td>
<td>5.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As mentioned in the table 7 t calculated is 5.81. The table value at 0.01 level and 0.05 level are respectively 2.58 and 1.96. Here, Calculated value 5.81 is more than value of t at 0.01 level. Therefore the null hypothesis No.7 “There will be no significant difference between pre-test and post-test mean scores of Science faculty students”
is not accepted. Mean scores of post-test is higher than mean scores of pre-test for Science faculty students. The difference is very clear from graph: G.

![Graph showing significant difference between pre-test and post-test mean scores of Science faculty students](image)

**GRAPH-37**

Significant difference between pre-test and post-test mean scores of Science faculty students

It is clear from the result that there is shown effect of treatment on Science faculty students.
Hypothesis 8. There will be no significant difference between Pre Test and Post-Test mean scores of rural and urban area students.

Table 17 T Value of Scores of rural and urban area students

<table>
<thead>
<tr>
<th>Ho 8</th>
<th>Significant difference between pre-test and post-test mean scores of rural and urban area students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ALL STUDENTS</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>POST-TEST</td>
<td>60</td>
</tr>
<tr>
<td>TOTAL</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>(SED)</td>
</tr>
<tr>
<td></td>
<td>*(SED)</td>
</tr>
<tr>
<td>SED</td>
<td></td>
</tr>
<tr>
<td>M1-M2</td>
<td></td>
</tr>
<tr>
<td>t value</td>
<td></td>
</tr>
</tbody>
</table>

As mentioned in the table 8 t calculated is 7.28. The table value at 0.01 level and 0.05 level are respectively 2.58 and 1.96. Here, Calculated value 7.28 is more than value of t at 0.01 level. Therefore the null hypothesis No.8 “There will be no significant difference between pre-test and post-test mean scores of rural and urban area
students” is not accepted. Mean scores of post-test is higher than mean scores of pre-test for all students. The difference is very clear from graph: H.

Significant difference between pre-test and post-test mean scores of rural and urban area students

It is clear from the result that there is shown effect of treatment on students.
4.3.4 Comparison of Pre-Test and Post-Test Means

Table 18

Rural and Urban area college students:

<table>
<thead>
<tr>
<th>College Area</th>
<th>Pre-Test Mean</th>
<th>Post-Test Mean</th>
<th>Difference in the Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>15.4</td>
<td>22.87</td>
<td>7.47</td>
</tr>
<tr>
<td>Urban</td>
<td>23.06</td>
<td>27.06</td>
<td>4</td>
</tr>
</tbody>
</table>

The difference between the pre-test and post-test means of rural area college students is 7.47 while in case of urban area colleges, it is 4. The post-test performance of rural area students shows greater improvement than that of urban area students.

Table 19

Boys and Girls:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Pre-Test Mean</th>
<th>Post-Test Mean</th>
<th>Difference in the Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>23.4</td>
<td>27.73</td>
<td>4.33</td>
</tr>
<tr>
<td>Girls</td>
<td>15.8</td>
<td>24.2</td>
<td>8.4</td>
</tr>
</tbody>
</table>

The difference between the pre-test and post-test means of boys is 4.33 while in case of girls, it is 8.4. The post-test performance of girls shows greater improvement than that of boys.
**Table 20**

Arts and Commerce Faculties:

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Pre-Test Mean</th>
<th>Post-Test Mean</th>
<th>Difference in the Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>20.1</td>
<td>25.2</td>
<td>5.1</td>
</tr>
<tr>
<td>Commerce</td>
<td>18.45</td>
<td>25.6</td>
<td>7.15</td>
</tr>
</tbody>
</table>

The difference between the pre-test and post-test means of Arts students is 5.1 while in case of commerce students, it is 7.15. The post-test performance of Commerce students shows greater improvement than that of Arts students.

**Table 21**

Commerce and Science Faculties:

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Pre-Test Mean</th>
<th>Post-Test Mean</th>
<th>Difference in the Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce</td>
<td>18.45</td>
<td>25.6</td>
<td>7.15</td>
</tr>
<tr>
<td>Science</td>
<td>20.3</td>
<td>26.6</td>
<td>6.3</td>
</tr>
</tbody>
</table>

The difference between the pre-test and post-test means of Commerce students is 7.15 while in case of Science students, it is 6.3. The post-test performance of Commerce students shows greater improvement than that of Science students.
Table 22

Arts and Science Faculties:

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Pre-Test Mean</th>
<th>Post-Test Mean</th>
<th>Difference in the Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>20.1</td>
<td>25.2</td>
<td>5.1</td>
</tr>
<tr>
<td>Science</td>
<td>20.3</td>
<td>26.6</td>
<td>6.3</td>
</tr>
</tbody>
</table>

The difference between the pre-test and post-test means of Arts students is 5.1 while in case of Science students, it is 6.3. The post-test performance of Science students shows greater improvement than that of Arts students.

4.4 Analysis of Machine Translation Data

4.4.1 Analysis of Questionnaire

The first question is an inquiry as to whether they have ever made use of Google Translate or not. The response is not so surprising. A majority of the students in rural areas (93.33% that included equal number of boys and girls) while comparatively less number of students (76.67% that included 86.67 girls and 66.67% boys) in urban areas say that they have never made use of Google Translate.
The second question is addressed to those who make use of Google Translate. The question inquires about the frequency with which they make use of the system. In rural area colleges those who have made use of the system are not frequent users. Only two students out of thirty use the system. Both (one boy and one girl) say that they make use
of the system occasionally. Seven out of thirty students in urban area colleges make use of the system. Two students (girls) say that they ‘occasionally’ make use of it while five students (boys) say that they ‘sometimes’ make use of the system.

The third question is about the purpose for which they make use of the system. In response to the question both the students of rural area colleges say that they make use of it for translation of individual words and sentences that they find difficult to understand. These terms and sentence structures are stuff they come across while learning English or other subjects in the classroom. All the seven urban area college students say that they make use of it for educational purposes. They get translation of their study materials. One student has the experience of translation of legal documents also. Two boys added another reason also. They say that they make use of Google Translate System for fun also. They enjoy the translation of various vocabulary and expressions in English. They say that they have learnt a lot of new words and expression thus.

The fourth question is about the correctness and acceptability (fidelity and fluency) of the machine translation. The two students of the rural area colleges say that the translation is not always true or correct. All words are not correctly translated or certain words are missed. The urban area college students also have similar views. One thing that they add is that some words or sentences are mistranslated. All the students are of the opinion that the machine translation is not always useful and it needs to be edited. A student with the experience of translation of legal document says that such translation is
found to be more than 70% absurd. That is to say that it is found to be not even worth editing.

The fifth question asks whether they edit the translated text or not. One of the two boys from rural area colleges says that he edits the translated text but hardly succeeds to do so completely. The other student says that he never tries to edit the translated text. Both of them confess the fact that their knowledge of English falls short for the task. The urban area college students say that they edit the translated text. Out of seven, three students say that most of the time they succeed to do so while four students say that they sometimes succeed to edit the translated text. According to them sometimes they need to change or to replace words or entire sentences or phrases.

The sixth question inquires about their views on the task of post-editing. In response to the question both the students of rural area colleges say that they find the post-editing task difficult. According to them one needs good command of the language in order to edit the translation of complicated text. They find it difficult with text having complicated sentence structures. There they find a number of mistranslated, missing, not translated terms as well as phrases. The urban area college students also face the problem but they manage to add or to replace the terms or phrases as per their need and knowledge. They find the grammatical errors also in the translated text. The rural area students find it difficult to rectify the grammatical error as it requires good knowledge of grammar on their part. The urban area college students find it comparatively easy to overcome the grammatical errors as their grammatical base is found to be stronger than that of their counterparts in rural area colleges.
4.4.2 Analysis of Translated Text (Common Task)

4.4.2.1 Analysis of Rural Area College Students’ Performance

The rural area college students (Level 1Group) wrote their introduction first without using Google Translate. They wrote directly in English. Then they wrote it using the MT system. They wrote it in L1 (Gujarati) and got it translated into English.

The number of words and quality of the text produced with and without Google Translate are as under.

Graph 41

![Graph showing the number of words produced by rural area college students with and without Google Translate.](image-url)
4.4.2.2 Analysis of Urban Area College Students’ Performance

The urban area college students (Level 2 Group) wrote their introduction first without using Google Translate. They wrote directly in English. Then they wrote it using the MT system. They wrote it in L1 (Gujarati) and got it translated into English.

The number of words and quality of the text produced with and without Google Translate are as under.
Urban Area College Students' Performance
(Number of Words) in Common Task (with & without Google Translate)

Quality of Text in Urban Area Colleges in Common Task (with & without Google Task)
Table 23

Mean of the total number of words and comparison of difference of means.

<table>
<thead>
<tr>
<th>Mean of Total Number of Words (Rural Area Colleges)</th>
<th>Mean of Total Number of Words (Urban Area Colleges)</th>
<th>Comparison of Difference of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Google Translate</td>
<td>Without Google Translate</td>
<td><strong>Difference between Means</strong></td>
</tr>
<tr>
<td>46.67</td>
<td>33.2</td>
<td><strong>13.47</strong></td>
</tr>
</tbody>
</table>

Table 24

Mean of markings of quality of sentences and difference between the means and comparison of the difference between the means.

<table>
<thead>
<tr>
<th>Mean of Markings of Quality of sentences (Rural Area Colleges)</th>
<th>Mean of Markings of Quality of sentences (Urban Area Colleges)</th>
<th>Comparison of Difference of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Google Translate</td>
<td>Without Google Translate</td>
<td><strong>Difference between Means</strong></td>
</tr>
<tr>
<td><strong>46.67</strong></td>
<td><strong>33.2</strong></td>
<td><strong>13.47</strong></td>
</tr>
</tbody>
</table>
### 4.4.3 Analysis of Translated Text (Specific Task)

#### 4.4.3.1 Analysis of Rural Area College Students’ Performance

The rural area college students (L1 Group) were asked to develop a dialogue between two friends on their vacation plans. The analysis of number of words and quality of the text produced with and without the help of Google Translate is given under.

Graph 45
4.4.3.2 Analysis of Urban Area College Students’ Performance

The urban area college students (Level 2 Group) were asked to write a news report on a natural calamity. The analysis of number of words and quality of the text produced with and without the help of Google Translate is given under.
### Graph 47

**Urban Area Students' Performance (Number of Words) in Level Specific Task (with & without Google Translate)**

<table>
<thead>
<tr>
<th>Students</th>
<th>Total Number of Words with Google Translate</th>
<th>Total Number of Words without Google Translate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>157</td>
<td>189</td>
</tr>
<tr>
<td>2</td>
<td>168</td>
<td>176</td>
</tr>
<tr>
<td>3</td>
<td>176</td>
<td>184</td>
</tr>
<tr>
<td>4</td>
<td>187</td>
<td>217</td>
</tr>
<tr>
<td>5</td>
<td>196</td>
<td>213</td>
</tr>
<tr>
<td>6</td>
<td>203</td>
<td>209</td>
</tr>
<tr>
<td>7</td>
<td>205</td>
<td>196</td>
</tr>
<tr>
<td>8</td>
<td>208</td>
<td>189</td>
</tr>
<tr>
<td>9</td>
<td>238</td>
<td>197</td>
</tr>
<tr>
<td>10</td>
<td>269</td>
<td>238</td>
</tr>
<tr>
<td>11</td>
<td>156</td>
<td>196</td>
</tr>
<tr>
<td>12</td>
<td>169</td>
<td>181</td>
</tr>
<tr>
<td>13</td>
<td>176</td>
<td>188</td>
</tr>
<tr>
<td>14</td>
<td>183</td>
<td>184</td>
</tr>
<tr>
<td>15</td>
<td>188</td>
<td>176</td>
</tr>
</tbody>
</table>

**Legend**
- Red: Total Number of Words with Google Translate
- Blue: Total Number of Words without Google Translate

### Graph 48

**Quality of Text in Specific Task in Urban Area Colleges with & without Google Translate**

**Legend**
- Blue: (Syntactical and Semantic) Quality of Text without Google Translate
- Red: (Syntactical and Semantic) Quality of Text with Google Translate

300
<table>
<thead>
<tr>
<th>Mean of Total Number of Words (Urban Area Colleges)</th>
<th>Mean of Quality of Text (Urban Area Colleges)</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Google Translate</td>
<td>Without Google Translate</td>
</tr>
<tr>
<td>203.13</td>
<td>193.53</td>
</tr>
</tbody>
</table>

**4.4.4 Statistical Analysis of the Texts Produced with and without Google Translate**

T test was carried out to find out whether there exists any difference between the volume and quality of texts produced with and without Google Translate. The T test was conducted for the quantity and quality of texts in common task and level specific task in rural and urban area colleges. The following hypotheses were formed.

**4.4.4.1 Hypotheses**

1. There is no significant difference between the volumes of text produced with and without Google Translate for common task in rural area colleges.
2. There is no significant difference between the quality of text produced with and without Google Translate for common task in rural area colleges.
3. There is no significant difference between the volumes of text produced with and without Google Translate for common task in urban area colleges.
4. There is no significant difference between the quality of text produced with and without Google Translate for common task in urban area colleges.
5. There is no significant difference between the volumes of text produced with and without Google Translate for level specific task in rural area colleges.
6. There is no significant difference between the quality of text produced with and without Google Translate for level specific task in rural area colleges.
7. There is no significant difference between the volumes of text produced with and without Google Translate for level specific task in urban area colleges.
8. There is no significant difference between the quality of text produced with and without Google Translate for level specific task in urban area colleges.

### 4.4.4.2 Volume of Text (Rural Area Common Task)

**Hypothesis:** There is no significant difference between the volume of text produced with and without Google Translate.

**Table 27 T Value of Volume of Text (Rural Area Common Task)**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>T Value</th>
<th>T Table</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Google Translate</td>
<td>15</td>
<td>33.2</td>
<td>7.09</td>
<td>2.98</td>
<td>4.52</td>
<td>1.753 at 0.05</td>
<td>Significant at 0.01</td>
</tr>
<tr>
<td>With Google Translate</td>
<td>15</td>
<td>46.67</td>
<td>9.12</td>
<td></td>
<td></td>
<td>2.602 at 0.01</td>
<td></td>
</tr>
</tbody>
</table>

The t value 4.52 is greater than the table value of t at 0.01. Thus, the hypothesis is proved wrong. A significant difference at 0.01 is proved between the volumes of texts produced with and without Google Translate for common task in rural area colleges.
The volume of text (post edited) produced with Google Translate contains more words than the text produced without Google Translate.

### 4.4.4.3 Quality of Test (Rural Area Common Task)

**Hypothesis:** There is no significant difference between the quality of text produced with and without Google Translate.

**Table 28 T Value of Quality of Text (Rural Area Common Task)**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>T Value</th>
<th>T Table</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Google Translate</td>
<td>15</td>
<td>2.53</td>
<td>0.64</td>
<td>0.25</td>
<td>2.96</td>
<td>1.753 at 0.05</td>
<td>Significant at 0.01</td>
</tr>
<tr>
<td>With Google Translate</td>
<td>15</td>
<td>3.27</td>
<td>0.70</td>
<td></td>
<td></td>
<td>2.602 at 0.01</td>
<td></td>
</tr>
</tbody>
</table>

The value of t is found to be more than its table value at 0.01. Thus, the hypothesis is proved wrong. A significant difference is proved between the quality of texts produced with and without Google Translate for common task in rural area colleges. The text (post edited) produced with Google Translate is found to be better in quality than the text produced without Google Translate.

### 4.4.4.4 Volume of Text (Urban Area Common Task)

**Hypothesis:** There is no significant difference between the volume of text produced with and without Google Translate.
### Table 29 T Value of Volume of Text (Urban Area Common Task)

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>T Value</th>
<th>T Table</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Google Translate</td>
<td>15</td>
<td>58.93</td>
<td>5.95</td>
<td>2.57</td>
<td>3.92</td>
<td>1.753 at 0.05</td>
<td>Significant at 0.01</td>
</tr>
<tr>
<td>With Google Translate</td>
<td>15</td>
<td>69</td>
<td>7.96</td>
<td></td>
<td></td>
<td>2.602 at 0.01</td>
<td></td>
</tr>
</tbody>
</table>

The value of t is found to be greater than its table value at 0.01. Thus, the hypothesis is proved wrong. A significant difference is proved between the volumes of texts produced with and without Google Translate for common task in urban area colleges. The volume of text (post edited) produced with Google Translate contains more words than the text produced without Google Translate.

#### 4.4.4.5 Quality of Test (Urban Common Task)

**Hypothesis:** There is no significant difference between the quality of texts produced with and without Google Translate.
Table 30 T Value of Quality of Text (Urban Area Common Task)

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>T Value</th>
<th>T Table</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Google Translate</td>
<td>15</td>
<td>3.53</td>
<td>0.52</td>
<td>0.21</td>
<td>4.14</td>
<td>1.753 at 0.05</td>
<td>Significant at 0.01</td>
</tr>
<tr>
<td>With Google Translate</td>
<td>15</td>
<td>4.4</td>
<td>0.63</td>
<td></td>
<td></td>
<td>2.602 at 0.01</td>
<td></td>
</tr>
</tbody>
</table>

The value of t is found to be greater than its table value at 0.01. Thus, the hypothesis is nullified. A significant difference is proved between the texts produced with and without Google Translate for common task in urban area colleges. The text (post edited) produced with Google Translate is better in quality than the text produced without Google Translate.

4.4.4.6 Volume of Text (Rural Area Specific Task)

**Hypothesis:** There is no significant difference between the volume of text produced with and without Google Translate.
Table 31 T Value of Volume of Text (Rural Area Specific Task)

<table>
<thead>
<tr>
<th>Without Google Translate</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>T Value</th>
<th>T Table</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>69.07</td>
<td>9.74</td>
<td>4.37</td>
<td>12.63</td>
<td></td>
<td>1.753 at 0.05 Significat at 0.01</td>
</tr>
<tr>
<td>With Google Translate</td>
<td>15</td>
<td>124.2</td>
<td>13.8</td>
<td></td>
<td></td>
<td>2.602 at 0.01</td>
<td></td>
</tr>
</tbody>
</table>

The value of t is found to be greater than its table value at 0.01. Thus, the hypothesis is proved wrong. A significant difference at 0.01 is proved between the volumes of texts produced with and without Google Translate for specific task in rural area colleges. The volume of text (post edited) produced with Google Translate contains more words than the text produced without Google Translate.

4.4.4.7 Quality of Test (Rural Area Specific Task)

**Hypothesis:** There is no significant difference between the quality of texts produced with and without Google Translate.
Table 32 T Value of Quality of Text (Rural Area Specific Task)

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>T Value</th>
<th>T Table</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Google</td>
<td>15</td>
<td>2.33</td>
<td>0.49</td>
<td>0.184</td>
<td>1.087</td>
<td>1.753</td>
<td>Not Significant at 0.05 also</td>
</tr>
<tr>
<td>Translate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Google</td>
<td>15</td>
<td>2.53</td>
<td>0.52</td>
<td></td>
<td></td>
<td>2.602</td>
<td></td>
</tr>
<tr>
<td>Translate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.602</td>
<td></td>
</tr>
</tbody>
</table>

The value of t is found to be less than its table value at 0.05 also. Thus, the hypothesis is proved right. No significant difference is proved between the texts produced with and without Google Translate for level specific task in rural area colleges. The text (post edited) produced with Google Translate is not found to be any better in quality than the text produced without Google Translate.

4.4.4.8 Volume of Text (Urban Area Specific Task)

**Hypothesis:** There is no significant difference between the volume of text produced with and without Google Translate.
Table 33 T Value of Volume of Text (Urban Area Specific Task)

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>T Value</th>
<th>T Table</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Google Translate</td>
<td>15</td>
<td>181.07</td>
<td>22.75</td>
<td>9.91</td>
<td>2.23</td>
<td>1.753 at 0.05</td>
<td>Significant at 0.05 only</td>
</tr>
<tr>
<td>With Google Translate</td>
<td>15</td>
<td>203.13</td>
<td>30.89</td>
<td></td>
<td></td>
<td>2.602 at 0.01</td>
<td></td>
</tr>
</tbody>
</table>

The value of t is found to be greater than its table value at 0.05. Thus, the hypothesis is proved wrong. A significant difference at 0.05 (and not significant at 0.01) is proved between the volumes of texts produced with and without Google Translate for specific task in urban area colleges. The volume of text (post edited) produced with Google Translate contains more words than the text produced without Google Translate.

4.4.4.9 Quality of Test (Urban Area Specific Task)

**Hypothesis:** There is no significant difference between the quality of texts produced with and without Google Translate.
Table 34 T Value of Quality of Text (Urban Area Specific Task)

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>T Value</th>
<th>T Table</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Google Translate</td>
<td>15</td>
<td>3.40</td>
<td>0.51</td>
<td>0.224</td>
<td>2.99</td>
<td>1.753 at 0.05</td>
<td>Significant at 0.01</td>
</tr>
<tr>
<td>With Google Translate</td>
<td>15</td>
<td>4.07</td>
<td>0.70</td>
<td></td>
<td></td>
<td>2.602 at 0.01</td>
<td></td>
</tr>
</tbody>
</table>

The value of t is found to be greater than its table value at 0.01. Thus, the hypothesis is nullified. A significant difference is proved between the texts produced with and without Google Translate for level specific task in urban area colleges. The text (post edited) produced with Google Translate is better in quality than the text produced without Google Translate.

The number of words definitely gets increased with Google Translate in rural area colleges but the quality of sentences (semantic and syntactic correctness and appropriateness - adequacy, fluency and informativeness or fidelity) gets enhanced on a very small scale. In urban area colleges, the volume of text gets increased but here the increase is not as high as is found in rural area colleges. The volume of text gets increased but the quality hardly gets any impetus as the post editing work of the text is not done.
With the use of Google Translate the number of words increases. The increased number of words does not mean good syntactic and semantic quality (adequacy, fluency and informativeness or fidelity) of the text.

In rural area colleges, the volume of text produced with the help of Google Translate gets impetus as they write in L1. The volume of text remains low or limited when they write directly in L2 (English). They find it hard to continue in English while expressing their thoughts. The process of the thinking goes on but language remains a hurdle. That hurdle gets removed when they write in L1 with the help of Google Translate. The increase in the text is greater than the increase found in urban area colleges (the difference between means in common task in rural area is 55.87 while it is 9.6 only in urban areas). They get the raw machine translation but because of insufficient or lack of grammatical knowledge, they fail to edit the text produced through MT system (the difference between means of quality in rural area is 0.07 while it is 0.67 in urban areas).

In urban area colleges also the number of words / volume of text increases. The increase is not greater than the increase registered in rural area colleges but the quality of the text is found to be better. It has been marked that the quality of text produced without the help of Google Translate is better than the quality of text in rural area colleges (in common task the difference between means of quality of text is 0.74 and 0.87 while in level specific it is 0.07 and 0.67 in rural and urban area respectively).
4.5 Analysis of Screenshots

Screenshot 1

A rural area student working with the Google Translate System for Common Task.

Out of eleven sentences seven are erroneous. They have either missing or mistranslated words. There are errors related to prepositions. Errors with respect to agreement between subject and verb or auxiliaries have also been found. Three sentences have completely lost their meanings due to the errors. All the sentences are simple, short and commonly used in day-to-day life. Most of the rural area students have been found to be able to edit the text. That is why the quality of text produced with the Google Translate System has been found to be better than the text produced by writing directly into L2 (English).
Out of thirty three sentences, only six have been found to be correct and meaningful. The rest have been found to be erroneous. Like Common Task, here also are missing and mistranslated words, errors related to prepositions, agreement between subject and verb or auxiliaries. Three sentences have completely lost their meanings due to the errors. But unlike the Common Task, here the sentences are not so common-placed or of routine communication and so the rural area students have found it comparatively challenging to go for post-editing task. All the rural area students have hardly undertaken the task of post-editing in their Level Specific Task. As a result, the quality of the MT text has been found to be degrading.
An urban area student working with the Google Translate System for Common Task.

Out of sixteen sentences, twelve are erroneous. It is full of missing and mistranslated words. The name of the boy ‘Ankit’ and the degree ‘B.B.A’ have also been mistranslated. The name of the boy has been taken as a verb by the System and so it has been translated as ‘inscribed’ (which is the English equivalent of the Gujarati verb). Words like ‘twelfth’, ‘have’, ‘stay’ or ‘live’ etc. are missing. Surprisingly, an English word ‘engineer’ has been mistranslated and has become ‘Anjiniera’. Then there are errors related to prepositions, agreement between subject and verb or auxiliaries. A new error of gender-specific pronoun has been noted here. ‘She’ is use for making brother’s reference. The errors of word order and sentence structure have also been found. Seven sentences have completely lost their meanings due to the errors. They cannot be corrected with editing. Instead they need to be written anew. The rest can be corrected with editing. Like the rural area students, the quality of MT text of the urban area students in the Common Task has also indicated enhancing tendency. Their volume and
quality of text have been found to be greater than the volume and quality of text produced by rural area students in the Common Task.

**Screenshot 4**

An urban area student working with the Google Translate System for Level-Specific Task.

Out of thirteen sentences, seven are erroneous. It is also full of missing and mistranslated words. Words like ‘forecast’, ‘generous’, ‘furious’ etc. are missing. Words like ‘siter’ (seventy) and ‘nadikinarana’ (on the banks of the river) have not been translated into English. There are errors related to prepositions, agreement between subject and verb or auxiliaries. The errors of word order and sentence structure have also been found. Three sentences have completely lost their meanings due to the errors. There are three compound and complicated sentences. Out of them, one is so erroneous that it has lost all meaning while the other two can be corrected with simple editing task. A considerable number of students have fully or partially edited the text.
Their volume and quality of text produced by the urban area college students have been found to be greater than the volume and quality of text produced by rural area students in the Common Task.

**Screenshot 5**

Simple and short sentences commonly used for introduction of self or of other persons and objects.

All the sentences of routine use almost get translated correctly with occasional one or two words missing or mistranslated. Only one sentence has mistranslated word ‘tapeli’. It should be translated as ‘utensil’ at least. Sentences starting with Demonstrative Pronouns and auxiliaries as main verbs mostly get translated correctly. The word at the place of object may or may not get its English equivalent all the time.
Screenshot 6

Simple and short sentences used in everyday communication

Here, instead of the word ‘clever’ or ‘intelligent’, the word ‘gifted’ is used. Again, instead of ‘study’, the word ‘practice’ is there. The noun with apostrophe ‘s’, brother’s, does not appear in the target window against its Gujarati equivalent in source window.

Screenshot 7

Sentences with grammatical (tenses) errors

Grammatical errors with respect to tenses have also been noted. Here, the first sentence, though a compound one, is grammatically correct. The other sentences have
grammatical (tense) errors. Sentences in Present Continuous Perfect, Past Perfect, Future Perfect tenses are hardly translated correctly into English with Google Translate System.

Screenshot 8

Sentences with missing and mistranslated words with grammatical errors

Here, all the sentences have missing and mistranslated words along with grammatical errors. All these together uproot the syntax and semantics of the translated version of the Gujarati sentences. As a result, the translated sentences in the target window either have completely different meanings from those in the source window or they (the translated sentences in the target window) have no meaning at all.
Correction of sentences with pre-editing task.

It has also been found that some of the words or sentences, erroneously translated, get correctly translated when (pre) edited or written afresh in the source window. Some of the words or sentences remain the same retaining the previous errors. Some sentences and words get partially corrected with pre-editing task. The Screenshot 9 shows the words and sentences, mistranslated or erroneously translated previously, with full or partial correction.
Correction of sentences with pre-editing task.

The name of the boy Ankit in source window becomes ‘inscribed’ (the literary meaning of the word) in target window. The name Ankit comes up as it is (as personal name) when written between single inverted commas. The word ‘Engineer’ comes up in the target window only when pure Gujarati word ‘ijner’ is written in the source window. The word ‘eat’ appears in the target window only when ‘khau’ is written in the source window. ‘Eat’ does not appear when ‘khav’ is written in the source window. The word ‘bhaini’ in the source window becomes ‘brother’s’ only when the proper word is chosen from the drop-down list box.
Endnotes and References


