Need and Acceptability of Mother Tongue as Medium of Technical Education at Higher Level in State of Punjab

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Abstract

Present paper is the report of the survey conducted to make a consensus whether technical education at Higher level should be provided in mother tongue in the state of Punjab. Survey has been conducted with primary data collected through structured questionnaire. Questionnaire was filled by various stake holders like students and teachers. Data was analyzed by the help of percentile, mean and presented by tables and figures.

Keywords

Technical Education, Translation, Transliteration, Survey, Mother Tongue, Medium of Instruction

1. Introduction

India is a multilingual country where local language plays the major role in educational structure, environment and progress of education in different regions of India. 20th century is computer era, so providing computer education to all students is very important. But it is noteworthy that computer education isprovided mostly in English. In a state like Punjab where most of the population lives in villages and students gets their primary and middle education in their mother tongue i.e. Punjabi, it is very difficult for them to adopt technical education like computers in English at later stage. So it is important to understand whether language can be a barrier for the students which restrain them to get technical education at the later stage. Students and teachers are two main stake holders in education system so in this study we evaluate the feedback received from both and interpret it to understand the impact of language on technical education

Objective of the study

- To study the problem and benefits of translating the technical education in mother tongue
- To make the consensus regarding translating the computer text into Punjabi
- To study whether the technical terms related to computer should be translated or transliterated.

2. Literature Study

- 1. Tse S.K, Shum M.S.K, Ki W.W,Wong C.P.C [1] This study was to identify the problems encountered by schools and administrators once the mode of instruction was switched from English to Chinese. Main objective of this study was to observe the attitude of the teachers towards development of Chinese as medium of instruction. It also studied the requirements of the teachers to implement the policy of development of mother tongue as medium of instruction. For this study data was collected through survey, interviews and case studies. After evaluation of all the data an overall view was that teachers gave a positive response for implementing mother tongue as a medium of instruction for education except few points where there was some confusion.
- 2. **Oren R.** [2] Subject of this study was to explain the problems which foreign technical writer meets while writing in English. This paper primarily treats with two issues. First, the problems encountered by non-



English authors in technical writing in English. Second, the problem encountered by the translators when they translate the technical writing from English to their mother tongue.

- 3. **Hettige B, Karunananda A.S** [3] This research paper explained the need and development of transliteration system to extend the translation system from English to Sinhala. Through this paper the author has explained the need of transliteration module for technical terms along with the development of the same.
- 4. **Mitra B, Raj A** [4]Purpose of this study was to understand the problems which could arise by providing education in mother tongue and also suggested the remedies to overcome those problems.
- 5. **Fujii A, Ishikawa T** [5] This study targeted to retrieve and translate the technical documents from Japannese to English and visa versa. It explains the various problems related to translation of technical terms. So this work is related to develop and test a transliteration system which can convert technical documents from one language pair to another language pair.
- 6. **Hwang M, Jeong D H, Kim T, Song S K, Lee J, Jung H, Kim D J**[6]This study suggested a new method that has collected reliable translation of technical terms between Korean and English. Collected Korean-English pairs were evaluated in terms of reliability and compared with Google translator.
- 7. **Jayaram N** [7]This study examined the various issues and trends in the language mystery in education specially at the level of higher education. This article explained the background in which this language issue became meaningful and also statistically gave the language problem in relation to education and language as medium of instruction.
- 8. **Ren F, Zhu J, Wang H** [8]This paper proposed an approach to get technical terms translation pairs in patent domain from web automatically. This approach used an extraction algorithm to extract the keywords from web. Technical terms were picked from the text.
- 9. **Manso A, Marques C G, Dias P [9]**This paper explained the development of a tool named Portugol IDE. This tool allows a algorithm to be coded in mother tongue of portuguese students. Purpose of the development of this tool is to teach the programming to the students of Portugol.
- 10. **Malone S, Paraide P** [10]This paper described the background of bilingual education program in Papua New Guine and provides an overview of its main features and positive outcomes as well as the problems encountered.
- 11. Ciatoh B A [11]This paper focused on the inter community self help initiative as local response framework and argued that this initiative is a strong indication of the desire of the communities to learn and promote learning in their own languages.

Research Methodology

4.1 Research Design

This study was descriptive in nature which was based on primary data collected through survey. Primary data was collected through structured questionnaire. The questionnaire was filled by various stake holders like students and teachers which were further segregated on the basis of their present class and geographical location.

4.2 Questionnaire Design

All the questions of questionnaire were divided into three different categories (Table 3). Questions in category A were related to take the view of various stake holders on the issue whether computer education should be given in Punjabi. In Category B also questions weretranscribed with the same purpose as in Section A so as to reframe the decision of the stake holders in category A in a distinctive way. Category C covered the questions related to take a view of the stake holders regarding issue of translation or transliteration of computer terms into Punjabi. For every question in each category respondent had to choose one option from the following five options.



 Table 1. (Possible Responses from Respondents in Punjabi/Roman/English)

Response (In Punjabi)	Roman Translation	Meaning (English)
ਪੂਰੀ ਤਰ੍ਹਾਂ ਸਹਿਮਤ	pūrī tarhā? sahimat	Completely Agree
ਸਹਿਮਤ	Sahimat	Agree
ਪਤਾ ਨਹੀਂ	patā nahī?	Do Not Know
ਅਸਹਿਮਤ	Asahimat	Not Agree
ਪੂਰੀ ਤਰ੍ਹਾਂ ਅਸਹਿਮਤ	pūrī tarhā? asahimat	Completely Not Agree

4.3 Sampling Framework

Following were the respondents in the present study.

a. Teachers

b. Students

Data had been collected from various schools and colleges of Punjab on convenience basis. Following were the sample size from each category of respondent.

Table 2. (Number of Respondents for each category)

Category	No of
	Respondents
Students doing their 10+2 from Rural Areas of Punjab with Punjabi	1031
Medium	
Students doing their 10+2 from Urban Areas of Punjab with Punjabi	526
Medium	
Students doing their 10+2 from Urban Areas of Punjab with English	208
Medium	
Students doing computer course from ITI	78
Students doing Computer Courses from Polytechnic College	104
Students doing Engineering Courses	250
Computer Teachers Teaching in Govt. Schools	377
Teachers teaching in Engineering Colleges	47

As per table 2 total sample size was 2621 where respondents varies in the age group of 15 to 45 years.

3. Analysis and Interpretation

3.1 Analysis and Interpretation of feedback from students for question in Category A:

Table 4shows the detail of feedback received from students for the questions in category A. Figures clearly show that the sum of average of "Agree" (32.31%) and "Completely Agree" (26.75%) students was 59.06%, whereas, the sum of average of students who were "Not agree" (21.62%) or "Completely not agree" (12.69%)



was 34.31%. While the data was analyzed on the basis of various categories of students, students who were in Punjabi medium were more in the favour of providing computer education in Punjabi, whether they belonged to Rural area or Urban areas. 70.25% Students who were taking education in Punjabi medium from rural areas were either "Completely agree" (31.28%) or "Agree" (38.97%) whereas 62.05% students of urban area who were in Punjabi medium were in favour of the same. 72.57% students who were doing computer course from ITI gave their feedback in favour of the providing computer education in Punjabi and for Polytechnic colleges, the percentage is 73.84% which again shows their nod for issue. Although, the feedback of students doing Engineering and students of urban areas who were taking education in English medium was different. Only 41.53% students from urban English medium schoolswere in favour, whereas figure was lesser incase of Engineering colleges, where only 34.10% students were in favour. Another important aspect which can be analyzed from the table4is that although there was a variation in the feedback from the students from different categories, yetdeviation in feedback of question no 15 was quite less. It shows that majority of the students of all the categories agreed on that, more technical knowledge will lead to more employment options which can curb the social problems like drug addiction in the state of Punjab.

5.2. Analysis and Interpretation of Feedback from students for question in Category B:

Purpose of the questions in category B is the same as of questions in category A. But due to the reverse structure of the questions, interpretation of feedback will be in reverse order. In this case number of "Agree" or"completely agree" means percentage of students who were not in the favour of providing computer education in Punjabi whereas the figure "Not agree" or "Completely not agree" means percentage students who were in favour. Table5shows the data related to feedback of different kinds of students for the questions of category B. Sum of the average of "Agree" (25%) and "Completely agree" (19.69%) students was 44.69%, whereas, sum of average of students who were either "Not agree" (29.30%) or "Completely not agree" (20.33%) was 49.63%. So according to this more students gave their feedback in favour that, computer education should be provided in Punjabi. In this category, there was variation in the feedback received from students in different categories. Only 29.67% students from Rural areas were either "Agree" (17.03%) or "Completely agree" (12.64%) that if computer education is provided in Punjabi then it can cause some problems whereas 66.48% students werethose who either "Not agree" (35.71%) or "Completely not agree" (30.77%) with the same. Figure is not much different for the students from urban areas who had a background of Punjabi Medium. 37.91% students are either agree (19.23%) or completely agree (18.68%) whereas 56.60% students are either not agree(32.42%) or completely not agree(24.18%). In ITI 39.56% and in Polytechnic colleges 33.52% students believe that by providing education in Punjabi can cause some problems while 53.85% students of ITI and 59.34% students of Polytechnic did not agree with this. Just like in category A, feedback was different from students of English medium and students of Engineering colleges. 71.98% students of English medium and 55.50% students of Engineering colleges gave their feedback in either "Agree" or "Completely agree" whereas 23.04% students of English Medium and 38.46% students of Engineering colleges were not agree.

5.3. Analysis and Interpretation of Feedback from students for question in Category C:

Table 6 shows the data regarding feedback from the students for questions in category C. Purpose of this category of question was to interpret whether technical terms of computer should be translated or transliterated. Unlike a considerable deviation in feedback of students of different categories for category A and B questions, very marginal deviation was observed in the feedback for questions of Category C. 67.79% students of rural area with Punjabi medium, 64.43% students of urban area with Punjabi medium, 63.94% students of urban area with English medium, 59.13% students of ITI, 54.33% students of Polytechnic colleges and 66.35% students of Engineering college had an opinion that technical terms of computer should not be translated, but these terms should be translated. Sum of the average of students "Agree" (33.81%) and "Completely agree" (28.85%) is



62.66%, whereas, sum of the average of students who were either "Not agree" (19.23%) or "Completely not agree" (10.42%) is 29.65%.

5.4. Analysis and Interpretation of feedback from teachers for question in Category A:

Feedback received from the teachers as shown in Table 7was correlated with the feedback received from the students of Govt. Schools and Engineering colleges. Sum of the average of "Completely agree" (19.99%) and "Agree" (26.17%) was 46.16% whereas, Sum of the average of "Not agree" (28.25%) and "Completely not agree" (20.53%) was 48.78%. So, according to this more teachers are in favour that technical education should not be provided in Punjabi. But it is note worthy that when we compared the data of teachers who were teaching in the Govt. schools mostly in the rural areas, 23.85% teachers were those who "Completely agree" and 31.88% teachers were "Agree", which comes to 55.73% in aggregate. On the other hand, 23.17% teachers of Govt. Schools were "Not agree" and 15.31% teachers were "Completely not agree" which comes to 38.48% in aggregate. So more teachers of Govt Schools who were teaching in the rural areas were in the favour of providing technical education in Punjabi.

5.5. Analysis and Interpretation of Feedback from teachers for question in Category B:

While answering these questions teachers gave their view more strongly for providing computer education in Punjabi. As perTable 8sum of the average of "Completely agree" (24.10%) and "Agree" (31.21%) was 55.31% whereas, sum of the average of "Not agree" (23.29%) and "Completely not agree" (15.19%) was 38.48%. So, there is substantial difference of 16.83% between percentage of teachers who were in favour and who were not in favour. Further, on the comparison of the figure of the teachers of Govt School teachers, a marginal difference of 5.67% was observed. 49.83% teachers were either "Completely agree" or "Agree" with the questions asked in category B whereas 44.07% teacherswere either "Not agree" or "Completely not agree".

5.6. Analysis and Interpretation of Feedback from teachers for question in Category C:

Like feedback received from the students regarding issue of translation or transliteration, response of teachers was also in the favour of transliterationTable 9. Sum of the average of teachers "Completely agree" (26.29%) and "Agree" (35.02%) was 58.56% whereas, sum of the average of teachers "Not agree" (20.73%) and "Completely not agree" (13.44%) was 34.17%. Another important point to note is that among teachers of engineering colleges and teacher of Govt. schools there is substantial difference of opinion regarding providing computer education in Punjabi, but when it came to the issue of translation or transliteration of technical terms there was not much difference of opinion. In aggregate 63.6% teachers of Govt. schools and 59.01% teachers of Engineering colleges preferred transliteration over translation.

4. Conclusion

As mentioned earlier regarding different but related objectives of the survey, the study can be concluded in three different parts. For the first objective, regarding benefits and problems of translating the technical education in mother tongue, it was found that main benefit would be increase in skilled manpower which could lead to more employment opportunities and would reduce the social evils like drug addiction in the state of Punjab. Another benefit could be increase of students interest in technical education. Main problem which could be encountered in this is the acceptability of the teachers, who have done their computer education in English. On concluding the second objective of the study, it is observed thatstudents feels that the language is a barrier for their technical education and more students could probably opt for technical education if it could be provided in their mother tongue. Although teachers had different opinions regarding this, specially teachers from Engineering colleges. Regarding third objective of the study, results clearly showed that both students and



teachers were in the favour that technical terms related to computer education should be transliterated and not translated.

5. Implication

Present study can be used to frame and implement the education policy, especially in the field of technical education. This study can also be used to understand the role, benefit and problems related to providing technical education in the mother tongue in the region of Punjab.

6. Limitation of Study

Primary data used in this study is taken from the *Malwa* region of Punjab, which is considered as backward region of Punjab as compared to the other regions like *Doaba* and *Majha*. Due to variations in the advancements in the rural and urban areas of *Doaba* and *Majha* there could be variations in the feedback received from students and teachers.

7. References

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Table 3. (List of All question in Punjabi and Roman Translation)

	IONS IN CATEGORY A
1 ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਸਮਝਣ ਦੀ ਸ਼ਕਤੀ ਵਧ ਜਾਵੇਗੀ। ੍	vidiārthīāṃ dē samjhaṇ dī shaktī vadh jāvēgī.
2 ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਦਾ ਮਾਧਿਅਮ ਸਿਰਫ਼ ਅੰਗਰੇਜ਼ੀ ਹੋਣ ਕਰਕੇ ਵਿਦਿਆਰਥੀਆਂ ਇਸ ਨੂੰ ਚੁਣਨ ਤੋਂ ਗੁਰੇਜ਼ ਕਰਦੇ	taknikî sikkhiā dā mādhiam siraf angrēzī hōn karkē vidiārthīām is nūm cuņan tōm gurēz karadē han.
3 ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਦੀ ਸਮੱਗਰੀ ਪੰਜਾਬੀ ਵਿਚ ਉਪਲਬਧ ਹੋਣ ਨਾਲ ਵਿਦਿਆਰਥੀਆਂ ਵਿਚ ਤਕਨੀਕੀ ਸਿੱਖਿਆ	taknikî sikkhiā dī samggarī pañjābī vic uplabadh hōṇ nāl vidiārthiāṃ vic taknīkī sikkhiā laī rucī vadhēgī.
4 ਅਧਿਆਪਕ ਅਤੇ ਵਿਦਿਆਰਥੀ ਵਿਸ਼ੇ ਨੂੰ ਲੈ ਕੇ ਬਿਹਤਰ ਗੱਲਬਾਤ ਕਰ ਸਕਦੇ ਹਨ।	adhiāpak atē vidiārthī vishē nūm lai kē bihtar gallbāt kar sakadē han.
5 ਵਿਸ਼ੇ ਨੂੰ ਮਾਤ ਭਾਸ਼ਾ ਵਿਚ ਸਮਝਣ ਨਾਲ ਵਿਦਿਆਰਥੀ ਹੁਨਰਮੰਦ ਬਣਦੇ ਹਨ।	vishē nūm māt bhāshā vic samjhan nāl vidiārthī hunarmand bandē han.
ਿਮਾਤ ਭਾਸ਼ਾ ਵਿਚ ਵਿਸ਼ੇ ਦੀ ਸਮਝ ਨਤੀਜਿਆਂ ਨੂੰ ਜ਼ਿਆਦਾ ਬਿਹਤਰ ਬਣਾਉਂਦੀ ਹੈ।	māt bhāshā vic vishē dī samajh natījiām nūm ziādā bihtar baṇāundī hai.
7 ਜੇਕਰ ਸਮੱਗਰੀ ਮਾਤ ਭਾਸ਼ਾ ਵਿਚ ਹੋਵੇਗਾ ਤਾਂ ਤਕਨੀਕੀ ਤੌਰ ਤੇ ਵਿਦਿਆਰਥੀ ਵਧੇਰੇ ਨਿਪੁੰਨ ਹੋਵੇਗਾ।	jēkar samggarī māt bhāshā vic hōvēgā tām taknīkī taur tē vidiārthī vadhērē nipunn hōvēgā.
8 ਪੰਜਾਬ ਵਿਚ ਕਿੱਤਾ ਮੁਖੀ ਸਿੱਖਿਆ ਦਾ ਮਿਆਰ ਅਤੇ ਪੱਧਰ ਉੱਦਾ ਉੱਠੇਗਾ।	pañjāb vic kittā mukhī sikkhiā dā miār atē paddhar uccā uṭṭhēgā.
9 ਸਿੱਖਿਆ ਖੇਤਰ ਵਿਚ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੇ ਪ੍ਰਯੋਗ ਨਾਲ ਪੰਜਾਬ ਦਾ ਵਿਕਾਸ ਹੋਵੇਗਾ।	sikkhiā khētar vic pañjābī bhāshā dē prayōg nāl pañjāb dā vikās hōvēgā.
10 ਵਿਸ਼ੇ ਨੂੰ ਸਮਝਣ ਵਿਚ ਪੇਂਡੂ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਸਮਰੱਥਾ ਸ਼ਹਿਰੀ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਬਰਾਬਰ ਆ ਜਾਵੇਗੀ।	vishē nūm samjhan vic pēņdu vidiārthīām dī samratthā shahirī vidiārthīām dē barābar ā jāvēgī.
11 ਵਿਸ਼ੇ ਦਾ ਉਦੇਸ਼ ਵਧੇਰੇ ਸਪੱਸ਼ਟ ਹੋਵੇਗਾ ਜਿਸ ਨਾਲ ਵਿਦਿਆਰਥੀ ਵਧੇਰੇ ਯੋਗ ਬਣਨਗੇ।	vishē dā udēsh vadhērē sapshshaṭ hōvēgā jis nāl vidiārthī vadhērē yōg bannagē.
12 ਇਹ ਕੰਪਿਉਟਰ ਸਿੱਖਿਆ ਦੇ ਵਿਵਹਾਰਿਕ ਪੱਖਾਂ ਵਿਚ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਸ਼ਮੁਲੀਅਤ ਨੂੰ ਸੌਖਾ ਬਣਾਵੇਗੀ।	ih kampiūtar sikkhiā dē vivhārik pakkhām vic vidiārthīām dī shamūlīat nūm saukhā baņāvēgī.
।3 ਇਸ ਨਾਲ ਵਿਦਿਆਰਥੀ ਲਈ ਸੌਖਾ ਹੋ ਜਾਵੇਗਾ ਕਿ ਉਹ ਨਿੱਜੀ ਜ਼ਿੰਦਗੀ ਦੇ ਤਜ਼ਰਬਿਆਂ ਨੂੰ ਪੜ੍ਹਾਈ ਨਾਲ ਜੋੜ	is nāl vidiārthī laī saukhā hō jāvēgā ki uh nijjī zindgī dē tazrabiām nūm parhāī nāl jōr sakē.
14 ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਤਕਨੀਕੀ ਵਿਸ਼ਿਆਂ ਵਿਚ ਸ਼ਮੁਲੀਅਤ ਪੰਜਾਬ ਵਿਚ ਕੁਸ਼ਲ ਕਾਮਿਆਂ ਦੇ ਪੱਧਰ ਨੂੰ ਉੱਚਾ	
- स्वेगी।	 vidiārthīāṃ dī taknīkī vishiāṃ vic shamūlīat pañjāb vic kushal kāmiāṃ dē paddhar nūṃ uccā cukkēgī.
15 ਤਕਨੀਕੀ ਗਿਆਨ ਚੁਜ਼ਗਾਰ ਦੇ ਵਧੇਰੇ ਮੌਕੇ ਪੈਦਾ ਕਰੇਗਾ ਜਿਸ ਨਾਲ ਬਾਕੀ ਸਮਾਜਿਕ ਬੁਰਾਈਆਂ ਦੂਰ ਹੋਣਗੀਆਂ ਜਿਵੇਂ ਕਿ ਨਸ਼ਾ ਆਦਿ।	taknīkī giān ruzgār dē vadhērē maukē paidā karēgā jis nāl bākī samājik burājām dūr hōngīām jivēm ki nashā ādi.
QUEST	IONS IN CATEGORY B
1 ਇਹ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਖੇਤਰ (ਸਕੋਪ) ਨੂੰ ਸੀਮਤ ਕਰਦੀ ਹੈ।	ih vidiārthiām dē khētar (sakōp) nūm sīmat kardī hai.
2 ਬਾਅਦ ਵਿਚ ਅੰਗਰੇਜ਼ੀ ਭਾਸ਼ਾ ਦੀ ਸਮਝ ਔਖੀ ਹੋ ਜਾਂਦੀ ਹੈ।	bāad vic aṅgrēzī bhāshā dī samajh aukhī hō jāndī hai.
3 ਵਿਦਿਆਰਥੀ ਅੰਗਰੇਜ਼ੀ ਵਿਚ ਸਿੱਖਿਆ ਦੇਣ ਵਾਲੀ ਸੰਸਥਾ ਦੇ ਵਿਦਿਆਰਥੀਆਂ ਤੋਂ ਪਿੱਛੇ ਰਹਿ ਜਾਂਦੇ ਹਨ।	vidiārthī aṅgrēzī vic sikkhiā dēṇ vālī saṃsathā dē vidiārthīāṃ tōṃ picchē rahi jāndē han.
4 ਪੰਜਾਬੀ ਵਿਚ ਆਨਲਾਈਨ/ਆਫ਼ਲਾਈਨ ਸੀਮਿਤ ਸਾਧਨ ਹਨ।	pañjābī vic ānlāīn/āflāin sīmit sādhan han.
5 ਇਸ ਨਾਲ ਬਾਹਰੀ ਸਾਧਨਾਂ ਜਿਵੇਂ ਅਧਿਆਪਕ ਅਤੇ ਇੰਨਸਟਕਟਰ ਜੋ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਦੇ ਜ਼ਰੂਰੀ ਅੰਗ ਹਨ	
ਅਤੇ ਦੂਜੇ ਰਾਜਾਂ ਤੋਂ ਆਉਂਦੇ ਹਨ ਦੇ ਰਸਤੇ ਵਿਚ ਰੁਕਾਵਟ ਆਵੇਗੀ।	is nāl bāhrī sādhnām jivēm adhiāpak atē innsaṭkaṭar jō taknīkī sikkhiā dē zarūrī aṅg han atē dūjē rājām tōm āunc
6 ਇਹ ਦੂਜੇ ਰਾਜਾਂ/ਮੁਲਕਾਂ ਵਿਚ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਉੱਚ ਸਿੱਖਿਆ ਦੇ ਮੌਕਿਆਂ ਨੂੰ ਸੀਮਤ ਕਰਦੀ ਹੈ।	ih dūjē rājāṃ/mulkāṃ vic vidiārthīāṃ dē ucc sikkhiā dē maukiāṃ nūṃ sīmat kardī hai.
7 ਪੰਜਾਬੀ ਵਿਚ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਦੀ ਪੜ੍ਹਾਈ ਨਵੀਆਂ ਤਕਨੀਕਾਂ ਦੀ ਜਾਣਕਾਰੀ ਦੇ ਵਾਧੇ ਵਿਚ ਰੁਕਾਵਟ ਹੈ।	pañjābī vic taknīkī sikkhiā dī paṛhāī navīāṃ taknīkāṃ dī jāṇkārī dē vādhē vic rukāvat hai
QUEST	IONS IN CATEGORY C
ਪੰਜਾਬੀ ਵਿਚ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਪ੍ਰਦਾਨ ਕਰਨ ਲਈ ਲੋੜੀਂਦੀ ਸਮੱਗਰੀ ਦੀ ਤਿਆਰੀ ਲਈ Transliteration	
Translation (ਅਨੁਵਾਦ) ਨਾਲੋਂ ਬਿਹਤਰ ਢੰਗ ਹੈ।	pañjābī vic taknīkī sikkhiā pradān karan laī lōrīndī samggarī dī tiārī laī transliteration translation (anuvād) nālōm b
ਤਕਨੀਕੀ ਸ਼ਬਦਾਂ ਨੂੰ Transliterate ਕਰਨ ਨਾਲ ਸ਼ਬਦਾਂ ਦੀ ਸ਼ੁੱਧਤਾ ਬਣੀ ਰਹੇਗੀ।	taknikî shabdām nūm transliterate karan nāl shabdām dī shuddhtā baņī rahēgī.
ਵਿਸ਼ਵ ਪੱਧਰ ਤੇ ਸਵੀਕਾਰਿਤ ਤਕਨੀਕੀ ਸ਼ਬਦਾਵਲੀ ਦਾ ਅਨੁਵਾਦ ਉੱਚ ਪੱਧਰੀ ਸਿੱਖਿਆ ਲਈ ਸਮੱਸਿਆ ਬਣ	
ਸਕਦਾ ਹੈ।	vishav paddhar të savīkārit taknīkī shabdāvlī dā anuvād ucc paddhrī sikkhiā laī samssiā baņ sakdā hai.
Transliteration ਉਹਨਾਂ ਅਧਿਆਪਕਾਂ ਲਈ ਲਾਹੇਬੰਦ ਰਹੇਗੀ ਜਿਨ੍ਹਾਂ ਨੇ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਅੰਗਰੇਜ਼ੀ ਮਾਧਿਅਮ	
ਵਿਚ ਪ੍ਰਾਪਤ ਕੀਤੀ ਹੈ।	transliteration uhnām adhiāpkām laī lāhēband rahēgī jinhām nē taknīkī sikkhiā aṅgrēzī mādhiam vic prāpat kītī h
ਕੁਝ ਤਕਨੀਕੀ ਸ਼ਬਦਾਂ/ਕੋਡਾਂ ਨੂੰ ਪੰਜਾਬੀ ਵਿਚ ਅਨੁਵਾਦ ਕਰਨਾ ਮੁਸ਼ਕਿਲ ਹੈ।	kujh taknīkī shabdāṃ/kōḍāṃ nūṃ pañjābī vic anuvād karnā mushkil hai.
ਅਨੁਵਾਦ ਅੰਤਰਰਾਸ਼ਟਰੀ ਪੱਧਰ ਤੇ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਖੇਤਰ (ਸਕੋਪ) ਘਟਾਉਂਦਾ ਹੈ।	anuvād antarrāshtarī paddhar tē vidiārthīām dē khētar (sakōp) ghaṭāundā hai.
ਅਨੁਵਾਦ ਤਕਨੀਕੀ ਟਰਮਜ਼ ਦੇ ਅਸਲੀ ਅਰਥਾਂ ਨੂੰ ਬਦਲ ਦਿੰਦਾ ਹੈ।	anuvād taknīkī ṭarmaz dē aslī arathām nūm badal dindā hai.
ਅਨੁਵਾਦ ਵਿਆਕਰਨਿਕ ਗਲਤੀਆਂ ਅਤੇ ਦੁਬਿਧਾਵਾਂ ਪੈਦਾ ਕਰਦਾ ਹੈ।	anuvād viākranik galtīām atē dubidhāvām paidā karadā hai.



Table 4. (Feedback of Students for Questions in Category A)

				ੀ ਤਰ੍ਹਾਂ ਸਹਿ							ਸਹਿਮਤ							ਪਤਾ ਨਹੀਂ							ਅਸਹਿਮਤ							र उत्रं भर्मा			
			Perci	entage Stu	dents					Perce	ntage Stud	ents					Pero	entage Stu	ients					Perce	entage Stu	idents					Perci	entage Stu	dents		
Question No.	Rural - Punjabi Medium	Urban Punjabi Medium	Orban English Medium	3	Polytechnic	Engs	Average	Rural - Punjabi Medium	Urban Punjabi Medium	Urban English Medium		Polytechnic	ВВСШ	Average	Rural - Punjabi Medium	Urban Punjabi Medium	Urban English Medium	∃	Polytechnic	Enge	Average	Rural - Punjabi Medium	Urban Punjabi Medium	Orban English Medium	177	Polytechnic		Average	Rural - Punjabi Medium	Urban Punjabi Medium	Urban English Medium	Ξ	Polytechnic	Engg	Average
1 ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਸਮਝਣ ਦੀ ਸ਼ਕਤੀ ਵਧ ਜਾਵੇਗੀ।	34.62	26.92	15.38	34.62	38.46	11.54	26.92		34.62	19.23	42.31	38.46		32.05	7.69	11.54	3.85	3.85	0.00	0.00	4.49	11.54	15.38	30.77	15.38	11.54	38.46	20.51	3.85	11.54	30.77	3.85	11.54	34.62	16.0
2 ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਦਾ ਮਾਧਿਅਮ ਸਿਰਫ਼ ਅੰਗਰੇਜ਼ੀ ਹੋਣ ਕਰਕੇ ਵਿਦਿਆਰਥੀਆਂ ਇਸ ਨੂੰ ਚੁਣਨ ਤੋਂ ਗੁਰੇਜ਼ ਕਰਦੇ ਹਨ।	30.77	30.77	30.77	42.31	38.46	19.23	32.05	38.46	30.77	23.08	38.46	46.15	30.77	34.62	7.69	7.69	3.85	0.00	0.00	3.85	3.85	15.38	19.23	26.92	11.54	7.69	30.77	18.59	7.69	11.54	15.38	7.69	7.69	15.38	10.9
3 ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਦੀ ਸਮੱਗਰੀ ਪੰਜਾਬੀ ਵਿਚ ਉਪਲਬਧ ਹੋਣ ਨਾਲ ਵਿਦਿਆਰਥੀਆਂ ਵਿਚ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਲਈ ਰੂਚੀ ਵਧੇਗੀ।	38.46	26.92	15.38	38.46	34.62	15.38	28.21	42.31	34.62	19.23	42.31	46.15	15.38	33.33	3.85	7.69	0.00	0.00	3.85	0.00	2.56	7.69	19.23	38.46	11.54	7.69	38.46	20.51	7.69	11.54	26.92	7.69	7.69	30.77	15.3
4 ਅਧਿਆਪਕ ਅਤੇ ਵਿਦਿਆਰਥੀ ਵਿਸ਼ੇ ਨੂੰ ਲੈ ਕੇ ਬਿਹਤਰ ਗੱਲਬਾਤ ਕਰ ਸਕਦੇ ਹਨ।	26.92	23.08	19.23	34.62	34.62	15.38	25.64	38.46	42.31	23.08	38.46	42.31	19.23	33.97	11.54	7.69	3.85	0.00	11.54	7.69	7.05	15.38	19.23	34.62	15.38	7.69	34.62	21.15	7.69	7.69	19.23	11.54	3.85	23.08	12.1
5 ਵਿਸ਼ੇ ਨੂੰ ਮਾਤ ਭਾਸ਼ਾ ਵਿਚ ਸਮਝਣ ਨਾਲ ਵਿਦਿਆਰਥੀ ਹੁਨਰਮੰਦ ਬਣਦੇ ਹਨ।	30.77	26.92	19.23	38.46	34.62	11.54	26.92	38.46	34.62	19.23	38.46	46.15	23.08	33.33	7.69	7.69	0.00	0.00	3.85	0.00	3.21	15.38	19.23	38.46	11.54	7.69	38.46	21.79	7.69	11.54	23.08	11.54	7.69	26.92	14.7
6ਮਾਤ ਭਾਸ਼ਾ ਵਿਚ ਵਿਸ਼ੇ ਦੀ ਸਮਝ ਨਤੀਜਿਆਂ ਨੂੰ ਜ਼ਿਆਦਾ ਬਿਹਤਰ ਬਣਾਉਂਦੀ ਹੈ।	30.77	26.92	15.38	38.46	38.46	15.38	27.56	46.15	50.00	19.23	38.46	42,31	26.92	37.18	0.00	0.00	7.69	0.00	0.00	0.00	1.28	15.38	15.38	38.46	15.38	11.54	38.46	22.44	7.69	7.69	19.23	7.69	7.69	19.23	11.
7 ਜੇਕਰ ਸਮੱਗਰੀ ਮਾਤ ਭਾਸ਼ਾ ਵਿਚ ਹੋਵੇਗਾ ਤਾਂ ਤਕਨੀਕੀ ਤੌਰ ਤੇ ਵਿਦਿਆਰਥੀ ਵਧੇਰੇ ਨਿਪੁੰਨ ਹੋਵੇਗਾ।	30.77	26.92	11.54	34.62	38.46	7.69	25.00	34.62	26.92	15.38	38.46	46.15	11.54	28.85	7.69	7.69	0.00	3.85	0.00	0.00	3.21	15.38	19.23	46.15	19.23	11.54	46.15	26.28	11.54	19.23	26.92	3.85	3.85	34.62	16.6
8 ਪੰਜਾਬ ਵਿਚ ਕਿੱਤਾ ਮੁਖੀ ਸਿੱਖਿਆ ਦਾ ਮਿਆਰ ਅਤੇ ਪੱਧਰ ਉੱਚਾ ਉਠੇਗਾ।	30.77	23.08	19.23	34.62	30.77	11.54	25.00	38.46	26.92	26.92	38.46	34.62	19.23	30.77	11.54	19.23	11.54	3.85	11.54	11.54	11.54	11.54	19.23	23.08	15.38	11.54	30.77	18.59	7.69	11.54	19.23	7.69	11.54	26.92	14.1
9 ਸਿੱਖਿਆ ਖੇਤਰ ਵਿਚ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੇ ਪ੍ਰਯੋਗ ਨਾਲ ਪੰਜਾਬ ਦਾ ਵਿਕਾਸ ਹੋਵੇਗਾ।	30.77	30.77	19.23	34.62	34.62	11.54	26.92	34.62	26.92	26.92	34.62	38.46	23.08	30.77	11.54	15.38	3.85	11.54	7.69	7.69	9.62	15.38	19.23	30.77	15.38	11.54	38.46	21.79	7.69	7.69	19.23	3.85	7.69	19.23	10.9
10 ਵਿਸ਼ੇ ਨੂੰ ਸਮਝਣ ਵਿਚ ਪੇਂਡੂ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਸਮਰੱਥਾ ਸ਼ਹਿਰੀ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਬਰਾਬਰ ਆ ਜਾਵੇਗੀ।	30.77	23.08	7.69	38.46	30.77	3.85	22.44	38.46	30.77	11.54	38.46	38.46	11.54	28.21	3.85	11.54	11.54	11.54	3.85	7.69	8.33	19.23	26.92	50.00	7.69	15.38	50.00	28.21	7.69	7.69	19.23	3.85	11.54	26.92	12.8
11 ਵਿਸ਼ੇ ਦਾ ਉਦੇਸ਼ ਵਧੇਰੇ ਸਪੱਸ਼ਟ ਹੋਵੇਗਾ ਜਿਸ ਨਾਲ ਵਿਦਿਆਰਥੀ ਵਧੇਰੇ ਯੋਗ ਬਣਨਗੇ।	26.92	26.92	11.54	26.92	30.77	11.54	22.44	34.62	34.62	15.38	34.62	30.77	15.38	27.56	15.38	11.54	15.38	19.23	11.54	11.54	14.10	19.23	19.23	34.62	11.54	19.23	30.77	22.44	3.85	7.69	23.08	7.69	7.69	30.77	13.4
12 ਇਹ ਕੰਪਿਊਟਰ ਸਿੱਖਿਆ ਦੇ ਵਿਵਹਾਰਿਕ ਪੱਖਾਂ ਵਿਚ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਸ਼ਮੂਲੀਅਤ ਨੂੰ ਸੌਥਾ ਬਣਾਵੇਗੀ।	23.08	26.92	15.38	30.77	26.92	11.54	22.44	34,62	30.77	19.23	30.77	30.77	19.23	27.56	15.38	15.38	11.54	15.38	19.23	19.23	16.03	19.23	15.38	38.46	15.38	15.38	38.46	23.72	7.69	11.54	15.38	7.69	7.69	11.54	10.2
13 ਇਸ ਨਾਲ ਵਿਦਿਆਰਥੀ ਲਈ ਸੱਖਾ ਹੋ ਜਾਵੇਗਾ ਕਿ ਉਹ ਨਿੱਜੀ ਜ਼ਿੰਦਗੀ ਦੇ ਤਜ਼ਰਬਿਆਂ ਨੂੰ ਪੜ੍ਹਾਈ ਨਾਲ ਜੋੜ ਸਕੇ।	30.77	26.92	19.23	34.62	26.92	7.69	24.36	34,62	30.77	26.92	30.77	34.62	19.23	29,49	7.69	11.54	3.85	11.54	11.54	3.85	8.33	15.38	19.23	30.77	15.38	15.38	46.15	23.72	11.54	11.54	19.23	7.69	11.54	23.08	14.1
14 ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਤਕਨੀਕੀ ਵਿਸ਼ਿਆਂ ਵਿਚ ਸ਼ਮੂਲੀਅਤ ਪੰਜਾਬ ਵਿਚ ਕੁਸ਼ਲ ਕਾਮਿਆਂ ਦੇ ਪੱਧਰ ਨੂੰ ਉਂਚਾ ਚੁੱਕੇਗੀ।	34.62	34.62	26.92	26.92	34.62	19.23	29.49	38.46	34.62	30.77	34.62	38.46	26.92	33.97	3.85	3.85	0.00	15.38	3.85	3.85	5.13	15.38	15.38	26.92	15.38	15.38	38.46	21.15	7.69	11.54	15.38	7.69	7.69	11.54	10.7
15 ਤਕਨੀਕੀ ਗਿਆਨ ਰੁਜ਼ਗਾਰ ਦੇ ਵਧੇਰੇ ਮੌਕੇ ਪੈਦਾ ਕਰੇਗਾ ਜਿਸ ਨਾਲ ਬਾਕੀ ਸਮਾਜਿਕ ਬੁਰਾਈਆਂ ਦੂਰ ਹੋਣਗੀਆਂ ਜਿਵੇਂ ਕਿ ਨਸ਼ਾ ਆਦਿ।	38,46	34.62	38.46	38.46	38.46	26.92	35.90	50.00	46.15	42.31	42.31	42.31	34.62	42.95	0.00	0.00	0.00	0.00	0.00	3.85	0.64	7.69	11.54	11.54	11.54	11.54	26.92	13.46	3.85	7.69	7.69	7.69	7.69	7.69	7.05
Average	31.28	27.69	18.97	35.13	34.10	13.33	26.75	38.97	34.36	22.56	37.44	39.74	20.7	32.31	7.69	9.23	5.13	6.41	5.90	5.38	6.62	14.62	18.21	33.33	13.85	12.05	37.69	21.62	7.44	10.51	20.00	7.18	8.21	22.82	1



Table 5. (feedback of students for Questions in Category B)

			युर	री उत्त [ं] प्रि	HS						मीवभउ							ਪਤਾ ਨਹੀਂ							мяГанз						_	उतुं भर्मा			
			Perce	entage Stu	dents					Perce	ntage Stud	dents					Perce	entage Stu	dents		_			Perce	entage Stu	dents					Perce	entage Stu	dents		_
Question	Rural - Punjabi Medium	Urban Punjabi Medium	Urban English Medium	T	Polytechnic	Engg	Average	Rural - Punjabi Medium	Urban Punjabi Medium	Orban English Medium	ITI	Polytechnic	Engg	Average	Rural - Punjabi Medium	Urban Punjabi Medium	Urban English Medium	ITI	Polytechnic	Engg	Average	Rural - Punjabi Medium	Urban Punjabi Medium	Urban English Medium	П	Polytechnic	M C M	Average	Rural - Punjabi Medium	Urban Punjabi Medium	Urban English Medium	m	Polytechnic	Engg	Average
1 ਇਹ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਖੇਤਰ (ਸਕੋਪ) ਨੂੰ ਸੀਮਤ ਕਰਦੀ ਹੈ।	11.54	15.38	34.62	11.54	11.54	26.92	18.59	19.23	23.08	42.31	19.23	19.23	30.77	25.64	7.69	7.69	3.85	11.54	7.69	3.85	7.05	34.62	30.77	15.38	30.77	34.62	26.92	28.85	26.92	23.08	3.85	26.92	26.92	11.54	19
2 ਬਾਅਦ ਵਿਚ ਅੰਗਰੇਜ਼ੀ ਭਾਸ਼ਾ ਦੀ ਸਮਝ ਅੱਖੀ ਹੋ ਜਾਂਦੀ ਹੈ।	7.69	26.92	38.46	15.38	7.69	30.77	21.15	15.38	19.23	42.31	19.23	23.08	34.62	25.64	3.85	7.69	0.00	3.85	11.54	3.85	5.13	38.46	30.77	11.54	38.46	34.62	19.23	28.85	34.62	15.38	7.69	23.08	23.08	11.54	15
3 ਵਿਦਿਆਰਥੀ ਅੰਗਰੇਜ਼ੀ ਵਿਚ ਸਿੱਖਿਆ ਦੇਣ ਵਾਲੀ ਸੰਸਥਾ ਦੇ ਵਿਦਿਆਰਥੀਆਂ ਤੋਂ ਪਿੱਛੇ ਰਹਿ ਜਾਂਦੇ ਹਨ।	7.69	7.69	34.62	15.38	7.69	30.77	17.31	7.69	11.54	38.46	19.23	23.08	38.46	23.08	0.00	3.85	15.38	0.00	3.85	0.00	3.85	42.31	38.46	7.69	34.62	34.62	19.23	29.49	42.31	38.46	3.85	30.77	30.77	11.54	2
4 ਪੰਜਾਬੀ ਵਿਚ ਆਨਲਾਈਨ/ਆਫ਼ਲਾਈਨ ਸੀਮਿਤ ਸਾਧਨ ਹਨ।	19.23	23.08	30.77	15.38	19.23	19.23	21.15	23.08	26.92	42.31	30.77	23.08	19.23	27.56	11.54	7.69	7.69	7.69	11.54	11.54	9.62	34.62	30.77	15.38	23.08	26.92	30.77	26.92	11.54	11.54	3.85	23.08	19.23	19.23	1
5ਇਸ ਨਾਲ ਬਾਹਰੀ ਸਾਧਨਾਂ ਜਿਵੇਂ ਅਧਿਆਪਕ ਅਤੇ ਇੰਨਸਟਕਟਰ ਜੋ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਦੇ ਜ਼ਰੂਰੀ ਅੰਗ ਹਨ ਅਤੇ ਦੂਜੇ ਰਾਜਾਂ ਤੋਂ ਆਉਂਦੇ ਹਨ ਦੇ ਰਸਤੇ ਵਿੱਚ ਰੁਕਾਵਟ ਆਵੇਗੀ।	15.38	23.08	26.92	26.92	11.54	26.92	21.79	19.23	19.23	38.46	26.92	19.23	34.62	26.28	0.00	3.85	3.85	0.00	3.85	11.54	3.85	34.62	30.77	23.08	26.92	42.31	23.08	30.13	30.77	23.08	7.69	19.23	23.08	3.85	1
6 ਇਹ ਦੂਜੇ ਰਾਜਾਂ/ਮੁਲਕਾਂ ਵਿਚ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਉਂਚ ਸਿੱਖਿਆ ਦੇ ਮੋਂਕਿਆਂ ਨੂੰ ਸੀਮਤ ਕਰਦੀ ਹੈ।	19.23	19.23	30.77	23.08	19.23	26.92	23.08	15.38	15.38	38.46	19.23	23.08	42.31	25.64	3.85	3.85	3.85	19.23	3.85	0.00	5.77	30.77	34.62	23.08	23.08	34.62	19.23	27.56	30.77	26.92	3.85	15.38	19.23	11.54	
र्धनाषी हिस उत्तरीवी मिथिया सी प्रजुष्टी रुहीयां उत्तरीवां सी साठवासी से संपे हिस हुवास्ट वै।	7.69	15.38	26.92	15.38	11.54	11.54	14.74	19.23	19.23	38.46	19.23	15.38	15.38	21.15	0.00	3.85	0.00	3.85	7.69	11.54	4.49	34.62	30.77	23.08	34.62	38.46	38.46	33.33	38.46	30.77	11.54	26.92	26.92	23.08	
†	12.64	18.68	31.87	17.58	12.64	24.73	19.69	17.03	19.23	40.11	21.98	20.88	30.77	25.00	3.85	5.49	4.95	6.59	7.14	6.04	5.68	35.71	32.42	17.03	30.22	35.16	25.27	29.30	30.77	24.18	6.04	23.63	24.18	13.19	9

Table 6. (Feedback of Students for Questions in Category C)

			भृत	ी उसू माँव	HE						FÉN3							ਪਤਾ ਨਹੀਂ							क्राचित्र				77		पुत्री	उत्रं कार्रि	RS		
			Pero	entage Stu	dents					Perce	ntage Stud	ents					Perci	entage Stu	dents					Perce	entage Stu	dents					Perce	entage Stu	ierts.		_
Cupation	Rural - Punjabi Medium	Orban Punjabi Medium	Urban English Medium	m	Polytechnic	Baca	Average	Rural - Punjabi Medium	Orban Puryabi Medium	Urban linglish Medium	3	Polytechnic	E-we	Average	Rural - Punjabi Medium	Orban Punjabi Medium	Urban English Medium	m	Polycechnic	Engg	Average	Rural - Punjabi Medium	Geban Punjabi Madium	Urban English Modium	3	Polytechnic	Dwe	Average	Rural - Punjabi Medium	Urban Punjabi Medium	Urban English Medium	m	Polytechnic	Enes	Average
र्धनाची दिस उवतीवी निर्मिश्य प्रसाद बरह हारी हेडीसी प्रभवती सी डिश्यनो हारी Translateration Translation (व्यक्तस्) हारे डिवडन संड वै।	18.46	34.62	14.62	38.45	34.62	14.62	35.90	45.15	18.46	38.45	42.91	42.31	38.45	41.69	0.00	7.59	7.69	0.00	0.00	3.85	1.21	7.59	11.54	15.38	7.69	11.54	15.18	1154	7.65	7.59	3.85	11.54	11.54	7.69	-
उवहींबी स्वरं है Transliterate । वहह तरह स्वरं सी सुंपड़ा वही दवेंबी।	42.31	38.45	30.77	38.45	30.77	34.62	35.90	4231	42.31	34,52	42.31	30.77	38.45	38.46	0.00	3.85	3.85	3.85	11.54	3.85	4,49	7,69	11.54	25.92	11.54	19.23	15.38	15.38	7,65	3.85	3.85	3.85	7.69	7.69	The same
ਵਿਰਵ ਪੱਧਰ ਤੇ ਸਵੀਕਾਰਿਤ ਤਕਨੀਕੀ ਸ਼ਬਦਾਵਲੀ ਦਾ ਅਨੁਵਦ ਉਚ ਪੱਧਰੀ ਸਿੱਖਿਆ ਲਈ ਸਮੱਸਿਆ ਵਣ ਸਕਦਾ ਹੈ।	38.46	38.46	26.92	30.77	26.92	34.62	32.69	38.46	4231	30.77	4231	26.92	38.45	36.54	0.00	3.85	1154	7.65	11.54	3.85	6.41	11.54	7.69	19.23	11.54	26.92	15.33	15.38	11.54	7.69	11.54	7,69	7.69	7.69	
Transferation ਉਹਨਾਂ ਅਧਿਆਪਕਾਂ ਨਹੀਂ ਲਾਹੇਵੰਦ ਰਹੇਗੀ ਜ਼ਿਲ੍ਹਾ ਨੇ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਅੰਗਰੇਜ਼ੀ ਸਾਧਿਅਮ ਵਿਚ ਪ੍ਰਾਪਤ ਕੀਤੀ ਹੈ।	34.62	ЖÐ	23.08	30.77	25.92	36.92	25.49	34.62	38.46	23.08	30.77	34.52	30,77	32.05	185	11.54	11.54	11.54	11.54	11.54	10.25	1923	11.54	23.08	19.23	15.23	1323	18.59	7.65	185	19.23	7.85	7.63	11.54	
कु इक्तीवी ब्रह्मं/वेडां है र्यसपी दिस बहुस्स वक्त मुस्रवित है।	26.92	19.23	30.77	19.23	19.23	26.92	23.72	25.92	26.52	30.77	19.23	23.08	34.62	26.52	11.54	15.38	7.69	23.08	19.23	3.85	13.45	25.92	30.77	26.92	26.52	26.92	19.23	26.28	7.69	7.59	3.85	11.51	11.54	15.38	Ī
ਅਨੁਵਾਦ ਅੰਤਰਵਾਸ਼ਟਦੀ ਪੱਧਰ ਤੋਂ ਵਿਦਿਆਰਕੀਆਂ ਦੇ ਖੇਤਰ (ਸਕੌਪ) ਖਟਾਉਂਦਾ ਹੈ।	11.54	19.23	3462	11.54	19.23	30.77	21.15	19.23	23.08	38.46	19.23	23.08	38.45	26.92	7.69	1.85	3.85	15.38	7.59	0.00	6.41	34.62	30.77	15.38	26.92	26.92	19.23	25.64	26.92	23.08	7.69	26.92	23.08	11.54	1
कहरर उन्होंनी टरमत से काफी भरमां है बस्त सिंस है।	26.92	76.97	30.77	76.92	23.08	23.08	26.28	45.15	38.46	34.62	26.52	38.46	38.46	37.18	11.54	11.54	11.54	7.65	3.85	1.00	7.85	11.54	23.08	15.38	19.23	19.23	25.92	19.23	3.65	0.00	7.69	19.23	15.38	11.54	ĺ
ਅਨੁਵਦ ਵਿਆਕਰਨਿਕ ਗਲਤੀਆਂ ਅਤੇ ਦਰਿਧਾਵਾਂ ਪੈਦਾ ਕਰਦਾ ਹੈ।	10.77	23.08	30.77	26.92	15.38	26.92	25.64	38.46	10.77	38.45	26.92	19.23	34.62	31,41	11.54	11.54	11.54	7.69	15.38	0.00	9.62	15.38	23.08	15.38	19.23	34.52	23.08	21.79	1.85	11.54	3.85	19.23	15.38	15.38	
	31.25	29.33	30,29	27.88	24.52	29.81	28.85	35.54	35.10	33.65	31.25	29.81	35.54	33.81	5.77	8,65	8.65	9.62	10.10	3.37	7.69	16.83	18.75	19.71	17.79	23.08	19.23	19.23	9,62	8.17	7,69	13.45	12.50	11.06	аll



Table 7.(Feedback of Teachers for Questions in Category A)

			ੀ ਤਰ੍ਹਾਂ ਸਹਿ			ਸਹਿਮਤ			ਪਤਾ ਨਹੀਂ			ਅਸਹਿਮਤ		_	ਤਰ੍ਹਾਂ ਅਸਟਿ	
		Perce	ntage Tea	chers	Perce	entage Tea	chers	Perce	ntage Tea	chers	Perce	entage Tea	chers	Perce	ntage Tea	chers
	Question	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average
	1 ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਸਮਝਣ ਦੀ ਸ਼ਕਤੀ ਵਧ ਜਾਵੇਗੀ।	30.77	25.58	28.18	38.73	16.28	27.50	0.00	4.65	2.33	19.89	27.91	23.90	10.61	25.58	18.
	2 ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਦਾ ਮਾਧਿਅਮ ਸਿਰਫ਼ ਅੰਗਰੇਜ਼ੀ ਹੋਣ ਕਰਕੇ ਵਿਦਿਆਰਥੀਆਂ ਇਸ ਨੂੰ ਚੁਣਨ ਤੋਂ ਗੁਰੇਜ਼ ਕਰਦੇ ਹਨ।	27.32	16.28	21.80	41.91	16.28	29.09	0.00	4.65	2.33	19.63	32.56	26.09	11.14	30.23	20.
	3 ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਦੀ ਸਮੱਗਰੀ ਪੰਜਾਬੀ ਵਿਚ ਉਪਲਬਧ ਹੋਣ ਨਾਲ ਵਿਦਿਆਰਥੀਆਂ ਵਿਚ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਲਈ ਰੁਚੀ ਵਧੇਗੀ।	27.06	16.28	21.67	38.46	27.91	33.18	0.00	0.00	0.00	23.61	32.56	28.08	10.88	23.26	17.
	4 ਅਧਿਆਪਕ ਅਤੇ ਵਿਦਿਆਰਥੀ ਵਿਸ਼ੇ ਨੂੰ ਲੈ ਕੇ ਬਿਹਤਰ ਗੱਲਬਾਤ ਕਰ ਸਕਦੇ ਹਨ।	23.87	16.28	20.08	33.69	25.58	29.63	3.98	9.30	6.64	23.34	32.56	27.95	15.12	16.28	15.
	5 ਵਿਸ਼ੇ ਨੂੰ ਮਾਤ ਭਾਸ਼ਾ ਵਿਚ ਸਮਝਣ ਨਾਲ ਵਿਦਿਆਰਥੀ ਹੁਨਰਮੰਦ ਬਣਦੇ ਹਨ।	23.34	16.28	19.81	30.24	20.93	25.58	7.96	9.30	8.63	27.06	30.23	28.64	11.41	23.26	17.
	6 ਮਾਤ ਭਾਸ਼ਾ ਵਿਚ ਵਿਸ਼ੇ ਦੀ ਸਮਝ ਨਤੀਜਿਆਂ ਨੂੰ ਜ਼ਿਆਦਾ ਬਿਹਤਰ ਬਣਾਉਂਦੀ ਹੈ।	30.50	23.26	26.88	42.71	25.58	34.14	0.00	0.00	0.00	19.10	34.88	26.99	7.69	16.28	11
	7 ਜੇਕਰ ਸਮੱਗਰੀ ਮਾਤ ਭਾਸ਼ਾ ਵਿਚ ਹੋਵੇਗਾ ਤਾਂ ਤਕਨੀਕੀ ਤੌਰ ਤੇ ਵਿਦਿਆਰਥੀ ਵਧੇਰੇ ਨਿਪੁੰਨ ਹੋਵੇਗਾ।	23.34	20.93	22.14	26.26	13.95	20.11	11.94	6.98	9.46	14.85	30.23	22.54	23.61	27.91	25.
	8 ਪੰਜਾਬ ਵਿਚ ਕਿੱਤਾ ਮੁਖੀ ਸਿੱਖਿਆ ਦਾ ਮਿਆਰ ਅਤੇ ਪੱਧਰ ਉੱਚਾ ਉੱਠੇਗਾ।	19.36	16.28	17.82	27.06	18.60	22.83	11.67	9.30	10.49	19.10	23.26	21.18	22.81	32.56	27.
	9 ਸਿੱਖਿਆ ਖੇਤਰ ਵਿਚ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੇ ਪ੍ਰਯੋਗ ਨਾਲ ਪੰਜਾਬ ਦਾ ਵਿਕਾਸ ਹੋਵੇਗਾ।	26.53	11.63	19.08	23.08	13.95	18.52	7.69	6.98	7.33	23.34	37.21	30.28	19.36	30.23	24.
	10 ਵਿਸ਼ੇ ਨੂੰ ਸਮਝਣ ਵਿਚ ਪੇਂਡੂ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਸਮਰੱਥਾ ਸ਼ਹਿਰੀ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਬਰਾਬਰ ਆ ਜਾਵੇਗੀ।	23.08	13.95	18.52	30.50	23.26	26.88	0.00	0.00	0.00	23.08	30.23	26.65	23.34	32.56	27.
	11 ਵਿਸ਼ੇ ਦਾ ਉਦੇਸ਼ ਵਧੇਰੇ ਸਪੱਸ਼ਟ ਹੋਵੇਗਾ ਜਿਸ ਨਾਲ ਵਿਦਿਆਰਥੀ ਵਧੇਰੇ ਯੋਗ ਬਣਨਗੇ।	18.83	11.63	15.23	26.79	16.28	21.53	11.94	0.00	5.97	22.81	41.86	32.34	19.63	30.23	24.
	12 ਇਹ ਕੰਪਿਊਟਰ ਸਿੱਖਿਆ ਦੇ ਵਿਵਹਾਰਿਕ ਪੱਖਾਂ ਵਿਚ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਸ਼ਮੂਲੀਅਤ ਨੂੰ ਸੌਖਾ ਬਣਾਵੇਗੀ।	18.57	13.95	16.26	19.36	11.63	15.50	19.63	6.98	13.30	30.50	46.51	38.51	11.94	20.93	16.
	13 ਇਸ ਨਾਲ ਵਿਦਿਆਰਥੀ ਲਈ ਸੌਖਾ ਹੋ ਜਾਵੇਗਾ ਕਿ ਉਹ ਨਿੱਜੀ ਜ਼ਿੰਦਗੀ ਦੇ ਤਜ਼ਰਬਿਆਂ ਨੂੰ ਪੜ੍ਹਾਈ ਨਾਲ ਜੋੜ ਸਕੇ।	15.12	11.63	13.37	30.50	27.91	29.21	11.94	4.65	8.29	27.32	25.58	26.45	15.12	30.23	22.
	14 ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਤਕਨੀਕੀ ਵਿਸ਼ਿਆਂ ਵਿਚ ਸ਼ਮੂਲੀਅਤ ਪੰਜਾਬ ਵਿਚ ਕੁਸ਼ਲ ਕਾਮਿਆਂ ਦੇ ਪੱਧਰ ਨੂੰ ਉੱਚਾ ਚੁੱਕੇਗੀ।	22.81	11.63	17.22	34.75	25.58	30.16	0.00	0.00	0.00	30.77	39.53	35.15	11.67	23.26	17.
	15 ਤਕਨੀਕੀ ਗਿਆਨ ਚੁਜ਼ਗਾਰ ਦੇ ਵਧੇਰੇ ਮੌਕੇ ਪੈਦਾ ਕਰੇਗਾ ਜਿਸ ਨਾਲ ਬਾਕੀ ਸਮਾਜਿਕ ਬੁਰਾਈਆਂ ਦੂਰ ਹੋਣਗੀਆਂ ਜਿਵੇਂ ਕਿ ਨਸ਼ਾ ਆਦਿ।	27.32	16.28	21.80	34.22	23.26	28.74	0.00	2.33	1.16	23.08	34.88	28.98	15.38	23.26	19.
_		23.85	16.12	19.99	31.88	20.47	26.17	5.78	4.34	5.06	23.17	33.33	28.25	15.31	25.74	2



Table 8. (Feedback of Teachers for Questions in Category B)

			ੀ ਤਰ੍ਹਾਂ ਸਹਿਸ			ਸਹਿਮਤ			ਪਤਾ ਨਹੀਂ			ਅਸਹਿਮਤ			ਤਰ੍ਹਾਂ ਅਸਰਿ	
		Perce	ntage Tea	chers												
Question No	Question	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average
	ਇਹ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਖੇਤਰ (ਸਕੋਪ) ਨੂੰ ਸੀਮਤ ਕਰਦੀ ਹੈ।	15.65	23.26	19.45	22.55	25.58	24.06	7.96	4.65	6.30	33.95	32.56	33.26	19.89	13.95	16.92
	ਬਾਅਦ ਵਿਚ ਅੰਗਰੇਜ਼ੀ ਭਾਸ਼ਾ ਦੀ ਸਮਝ ਔਖੀ ਹੋ ਜਾਂਦੀ ਹੈ।	19.89	27.91	23.90	30.24	32.56	31.40	3.98	4.65	4.31	26.79	23.26	25.02	19.10	11.63	15.36
	ਵਿਦਿਆਰਥੀ ਅੰਗਰੇਜ਼ੀ ਵਿਚ ਸਿੱਖਿਆ ਦੇਣ ਵਾਲੀ ਸੰਸਥਾ ਦੇ ਵਿਦਿਆਰਥੀਆਂ ਤੋਂ ਪਿੱਛੇ ਰਹਿ ਜਾਂਦੇ ਹਨ।	19.36	27.91	23.64	30.77	32.56	31.66	0.00	0.00	0.00	27.59	20.93	24.26	22.28	18.60	20.44
4	ਪੰਜਾਬੀ ਵਿਚ ਆਨਲਾਈਨ/ਆਫ਼ਲਾਈਨ ਸੀਮਿਤ ਸਾਧਨ ਹਨ।	27.06	25.58	26.32	34.75	39.53	37.14	7.96	11.63	9.79	18.83	11.63	15.23	11.41	11.63	11.52
5	ਇਸ ਨਾਲ ਬਾਹਰੀ ਸਾਧਨਾਂ ਜਿਵੇਂ ਅਧਿਆਪਕ ਅਤੇ ਇੰਨਸਟਕਟਰ ਜੋ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਦੇ ਜ਼ਰੂਰੀ ਅੰਗ ਹਨ ਅਤੇ ਦੂਜੇ ਰਾਜਾਂ ਤੋਂ ਆਉਂਦੇ ਹਨ ਦੇ ਰਸਤੇ ਵਿਚ ਰੁਕਾਵਟ ਆਵੇਗੀ।	19.89	30.23	25.06	27.06	30.23	28.64	7.43	9.30	8.36	30.24	18.60	24.42	15.38	11.63	13.51
6	ਇਹ ਦੂਜੇ ਰਾਜਾਂ/ਮੁਲਕਾਂ ਵਿਚ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਉੱਚ ਸਿੱਖਿਆ ਦੇ ਮੌਕਿਆਂ ਨੂੰ ਸੀਮਤ ਕਰਦੀ ਹੈ।	27.59	30.23	28.91	31.03	39.53	35.28	11.41	11.63	11.52	18.57	16.28	17.42	11.41	2.33	6.87
7	ਪੰਜਾਬੀ ਵਿਚ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਦੀ ਪੜ੍ਹਾਈ ਨਵੀਆਂ ਤਕਨੀਕਾਂ ਦੀ ਜਾਣਕਾਰੀ ਦੇ ਵਾਧੇ ਵਿਚ ਰੁਕਾਵਟ ਹੈ।	19.63	23.26	21.44	23.34	37.21	30.28	3.98	2.33	3.15	30.50	16.28	23.39	22.55	20.93	21.74
		21.30	26.91	24.10	28.53	33.89	31.21	6.10	6.31	6.21	26.64	19.93	23.29	17.43	12.96	15.19

Table 9. (Feedback of Teachers for Questions in Category C)

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_		Perce	ntage Tead	chers	Perce	ntage Tea	chers	Perce	ntage Tead	chers	Perce	ntage Tea	chers	Perce	ntage Tea	chers
	Question	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average	Govt. School Teachers	Engg. College Teachers	Average
	ਪੰਜਾਬੀ ਵਿਚ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਪ੍ਰਦਾਨ ਕਰਨ ਲਈ ਲੋਤੀਂਦੀ ਸਮੱਗਰੀ ਦੀ ਤਿਆਰੀ ਲਈ Transliteration Translation (ਅਨੁਵਾਦ) ਨਾਲੋਂ ਬਿਹਤਰ ਢੰਗ ਹੈ।	30.77	25.58	28.18	46.15	27.91	37.03	0.00	9.30	4.65	19.10	23.26	21.18	3.98	13.95	8.97
	ਤਕਨੀਕੀ ਸ਼ਬਦਾਂ ਨੂੰ Transliterate ਕਰਨ ਨਾਲ ਸ਼ਬਦਾਂ ਦੀ ਸ਼ੁੱਧਤਾ ਬਣੀ ਰਹੇਗੀ।	30.50	25.58	28.04	42.71	34.88	38.79	3.71	4.65	4.18	15.38	25.58	20.48	7.69	9.30	8.50
3	ਵਿਸ਼ਵ ਪੱਧਰ ਤੇ ਸਵੀਕਾਰਿਤ ਤਕਨੀਕੀ ਸ਼ਬਦਾਵਲੀ ਦਾ ਅਨੁਵਾਦ ਉੱਚ ਪੱਧਰੀ ਸਿੱਖਿਆ ਲਈ ਸਮੱਸਿਆ ਬਣ ਸਕਦਾ ਹੈ।	35.01	25.58	30.30	38.20	34.88	36.54	3.71	4.65	4.18	7.69	16.28	11.99	15.38	18.60	16.99
	Transliteration ਉਹਨਾਂ ਅਧਿਆਪਕਾਂ ਲਈ ਲਾਹੇਬੰਦ ਰਹੇਗੀ ਜਿਨ੍ਹਾਂ ਨੇ ਤਕਨੀਕੀ ਸਿੱਖਿਆ ਅੰਗਰੇਜ਼ੀ ਮਾਧਿਅਮ ਵਿਚ ਪ੍ਰਾਪਤ ਕੀਤੀ ਹੈ।	26.79	20.93	23.86	38.46	37.21	37.84	3.98	6.98	5.48	19.10	18.60	18.85	11.67	16.28	13.98
	ਕੁਝ ਤਕਨੀਕੀ ਸ਼ਬਦਾਂ/ਕੋਡਾਂ ਨੂੰ ਪੰਜਾਬੀ ਵਿਚ ਅਨੁਵਾਦ ਕਰਨਾ ਮੁਸ਼ਕਿਲ ਹੈ।	19.10	25.58	22.34	37.93	23.26	30.59	3.98	2.33	3.15	23.34	30.23	26.79	15.65	18.60	17.13
6	ਅਨੁਵਾਦ ਅੰਤਰਰਾਸ਼ਟਰੀ ਪੱਧਰ ਤੇ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਖੇਤਰ (ਸਕੋਪ) ਘਟਾਉਂਦਾ ਹੈ।	22.81	30.23	26.52	30.24	34.88	32.56	7.96	0.00	3.98	27.32	23.26	25.29	11.67	11.63	11.65
7	ਅਨੁਵਾਦ ਤਕਨੀਕੀ ਟਰਮਜ਼ ਦੇ ਅਸਲੀ ਅਰਥਾਂ ਨੂੰ ਬਦਲ ਦਿੰਦਾ ਹੈ।	19.10	30.23	24.67	37.93	32.56	35.24	3.98	0.00	1.99	27.32	30.23	28.78	11.67	6.98	9.32
8	ਅਨੁਵਾਦ ਵਿਆਕਰਨਿਕ ਗਲਤੀਆਂ ਅਤੇ ਦੁਬਿਧਾਵਾਂ ਪੈਦਾ ਕਰਦਾ ਹੈ।	22.55	30.23	26.39	30.50	32.56	31.53	7.96	9.30	8.63	15.65	9.30	12.48	23.34	18.60	20.97
_		25.83	26.74	26.29	37.77	32.27	35.02	4.41	4.65	4.53	19.36	22.09	20.73	12.63	14.24	13.4

