# Chapter – 5

# Integrating Internet-based / Technological Tools in Classroom

#### 5.0 Introduction

This chapter presents the significant findings of the study with reference to the hypothesis laid out by the researcher and suggests recommendations based on the findings.

In this research, the researcher incorporated Internet and Computer-based Tasks to improve speaking, writing and critical thinking skills of postgraduate management students. The basic aim of this study was to find out the effectiveness of incorporating technology in teaching speaking and writing to MBA students. Another objective was also to encourage educators to utilize more ICT resources in their classrooms for enhancing the teaching-learning process and improving the skills of students to make them employable for the 21<sup>st</sup> century office spaces.

#### **5.1 Major Findings**

The major findings of the study are that implementation of Internet and Computer Based Tasks used for teaching speaking and writing resulted in

- a) enhancement of writing skills of MBA students
- b) enhancement of the speaking skills of MBA students
- c) enhancement of thinking skills of MBA students

Managers have to be effective communicators, both in speaking and writing. Whether it is writing an email or crafting a case, effective writing plays a pivotal role in the careers of managers. Therefore the tasks were designed keeping in mind all qualities and thinking skills that an MBA graduate is required to have for his/her professional and personal growth. These tasks were implemented during the research intervention which developed in them the skills of writing, speaking and critical thinking. The major findings in all the three components mentioned above are presented below.

#### **5.1.1 Writing Skills**

The application of Internet and Computer-based Tasks showed significant improvement in the post-test scores of experimental group students. These findings were reflected in both qualitative and quantitative analysis of the data collected by administering a pre-test and a post-test after research intervention.

Students showed **significant improvement in writing skills** in different aspects. The students under experimental group **improved in vocabulary use, analytical ability and persuasiveness**, overall writing pattern and use of structures. There was also a noticeable **decrease** in their **writing anxiety**.

The key findings in the area of writing skills are elaborated further.

A. Post-test data analysis showed a **significant improvement** in the **analytical skills** of the experimental group students. These students were better able to present their ideas and information by adopting the strategies such as analysis, evaluation and creativity. As compared to the pre-test, their post-test answer scripts reflected a noticeable improvement in the analysis of graphs, cases and financial data given as part of the test.

B. As presented in the Chapter IV, the students' **writing anxiety decreased** and the length of their answer scripts increased with the research intervention. Such improvement was not seen in the post-test answers of the control group students.

C. The experimental group students also projected **better use of vocabulary** and used **proper language structure** during the post-test.

D. Apart from the above three, another important observation was improvedlearner autonomy that the students achieved due to group work assignments givenduring the research intervention.

The findings in terms of improvement observed in the writing skills of the MBA students match with that of Ybarra & Green (2003) who stated that web-based instructions for writing courses enhance the quality of writing among students of various levels. The application of tasks helped the students develop their writing skills which corroborates with Al-Jarf (2004) who opined that **web-based lessons are more effective than only textbook teaching**. The findings are also in agreement with the findings of Breese (1996) who advocated the use of word processors to improve the writing skills of the students. Finally, the writing analysis corroborates with the study of Barrera, Rule and Diemart (2001) who found that when students used computers to practice writing, they performed better than those students who did not use computers.

Through their feedback, students expressed that they were able to improve their written expression because of the tasks given to them during the research intervention. In their feedback, 70% students said that their writing skills improved due to the tasks given to them, 90% opined that the Internet-based tasks helped them improve their vocabulary, and 92% stated that after working on the writing tasks, they were able to elaborate and express information in written manner more effectively.

The paired-samples t-test also corroborated the qualitative findings that the experimental group after research intervention improved on their writing skill as compared to control group.

#### 5.1.2 Speaking Skills

The findings of the study show that in speaking 74% of the experimental group students showed improvement as compared to 19% students of the control group.

A. Post-test data observations reflected that the experimental group students were better able to analyse the problems assigned to them and were able to **present the information in a clear, concise and effective manner**. Rare presence of fillers proved that these students were quite relaxed while answering their speaking post-test questions as compared to the pre-test. On the other hand, there was no such significant improvement found in the control group students. The **confidence** of experimental group students **reflected in the creativity they showed while answering** respective questions. They **achieved greater control over their speech and were able to focus on the right content delivery.** 

B. The findings relating to improvement in the speaking skills of the students corroborates research of Lu (2008) and Muller (2005) which revealed that positive influence of technology-based task-based speaking activities on speaking skills of students. Apart from the use of blogs, the major role of podcasting in the development of speaking corroborates with the studies of Ashton-Hay & Brookes (2011) and O'Bryan & Hegelheimer (2007) who found that podcasts can greatly help develop students' speaking skills. Chan et al. (2011) and Kaplan-Leiserson (2005) have also stated that podcast can accelerate students' learning language areas such as pronunciation, vocabulary, grammar, speaking and related learning activities which corroborated with the findings of this study.

C. The students were able to **reduce their speaking anxiety** as a result of research intervention. This corroborates the findings of Blake (2009) who stated that facilities to practice and evaluate their oral performance within an online atmosphere reduces the pressure of interacting among students; Abrams (2003) Altun (2005) and Stonebrink (2008) also found that by being in an online environment, students lose their apprehension and are able to better manage their time in improving the speaking

skills. Also corroborating the findings of Gleason & Suvorov (2011) Hunke (2011) and Yaneske & Oates (2010), the change in **students' speaking patterns was the result of their self-correction and peer-evaluation approach** which was implemented during the intervention. Apart from the use of technology and tasks, peer-feedback also played a major role in the positive shift in the speaking skills of the student as it was found in the studies of Abrams (2003), Wang & Woo (2007) and Yaneske & Oates (2010).

The quantitative analysis undertaken also suggested an improvement in the post-test taken by the experimental group students. The paired-samples t-test also corroborated the qualitative findings that the experimental group after research intervention improved on their speaking skills as compared to control group.

The research intervention thus, helped the experimental group students to enhance their oral communication skills and engage themselves in well-organized conversations. An effective manager is one who is able to convey the intent to his/her colleagues and subordinates in a clear way so that the given tasks are completed without hitch and ambiguity. This study revealed that online softwares and services helped in the development of oral communicative skills. Therefore all teachers should prepare such tasks and use it in their classrooms to help students to make their oral conversations more effective, thus helping them chart their future career goals.

As mentioned above research intervention helped experimental group students enhance their written and spoken communication skills by way of presenting their thoughts and ideas in an organized way which also reflected their analytical ability. Along with the development of speaking and writing skills, the students were also found with improved critical thinking skills. Major findings related to it are discussed in the next section.

#### **5.1.3 Critical Thinking Skills**

A detailed analysis of the data showed that the experimental group students showed significant improvement in critical thinking skills. The findings of the study are in agreement with the results presented by King (2002) that Internet based treatment improves critical thinking and Krebs (2004) who found that when students are allowed to work online, they can work at their own speed, be active participants and are intrinsically motivated.

A. In both writing and speaking skills, a clear **improvement was observed in the analytical abilities** of the experimental group students over the control group. This justifies that there was a **positive change in the students' ability to apply critical thinking parallel to language improvement**. These students showed a clear shift to Higher Order Thinking Skills from Lower Order Thinking Skills.

B. It was observed that all the students were using Remembering, Understanding and Applying (Lower Order Thinking Skills) at the time of pre-test. But the post-test data revealed that in case of experimental group students there was a **shift to Analysing, Evaluating and Creating (Higher Order Thinking Skills) after the research intervention**.

C. Another significant finding in both writing skills and speaking skills, was that after research intervention there was an increase in the **number of students** using thinking strategies in Experimental group as compared to the control group. Even **within** the Experimental group one observed that **more number of students** used thinking stratesgies in post-test as compared to pre-test. This clearly reveals that the research intervention triggered off the thinking skills of experimental group students. More number of students comprehended how to approach and solve the given tasks resulting in more number of students using the strategies. The significant part of this observation was that more number of students used the 'creating' strategy (11%) which is at the highest level in the Revised Blooms Taxonomy (2001).

D. In both writing skills and speaking skills, a significant finding observed was the **increase in number of strategies** used by students, especially in the use of analyzing, evaluating and creating strategies. A point needs to be mentioned here that the tasks used gave them exposure to the real-world business environment and helped them develop the use of their thinking skills.

Thus the findings of the present study prove that **Internet and Computer Based Tasks give students liberty to work individually or in group irrespective of the limitations of physical location**. Speaking, writing and critical thinking were enhanced. The possible reason for the positive effects of this study is its learner-centeredness which offers students an opportunity to critically interpret, reflect, analyze and explain in given learning situations. Apart from this, providing students with an opportunity to gain and present their knowledge through a wide platform of Internet helped them take up the tasks in a serious manner. Also the peer-feedback added an element of continuous improvement in their language and critical thinking. The tasks which were sequentially arranged for enhancing their skills, helped them develop their abilities to infer, interpret, analyze and explain.

#### Summary of major findings:

1. Internet and Computer-based Tasks were effective in developing speaking skills of the MBA students. Speaking skills of the students improved after the intervention.

2. Internet and Computer-based Tasks were effective in developing writing skills of the MBA students. Writing skills of the students improved after the intervention.

3. Internet and Computer-based Tasks were effective in developing critical thinking skills of the MBA students. Their creative / critical thinking improved after the intervention.

4. It was found that when the tasks designed with Internet-based content sources such as infographics, blogs, podcasts, students developed interest in analyzing them and as a result they were able to improve their speaking, writing and critical thinking skills.

5. The videos worked as a productive tool for enabling students do receive and reproduce the information. The videos used in the study helped students raise their confidence and comfort levels after the intervention.

6. The students were positively disposed towards the application of Internet and Computer Based Tasks in the learning process. Majority of the students opined that the tasks designed for them were relevant to their area of study. They also responded positively to the tasks. They expressed that the tasks were useful, relevant to the topic and proper instructions were given for learning activities in the web environment.

7. Majority of the students expressed that their communication skills can be enhanced by having a learning environment that uses blend of face-to-face interaction and web-based activities.

# **5.2 Recommendations**

Based on the findings of this research, the following recommendations are made by the researcher to the management of the institutes, teachers as well as students.

# **Recommendations for the Management**

1. Adequate ICT environment should be provided to teachers for carrying out their teaching effectively.

2. ICT facilities should be maintained well and the resources available on the Internet should be accessible to students and teachers without any restrictions.

3. Teachers should be made aware of the contemporary technologies and learning tools and should be encouraged to use them in their dealing with the students in a way so that they can achieve better results in terms of teaching-learning output.

4. There should be constant communication between the teachers and students which helps them stay focused on the ongoing learning procedures, based on the interests and use.

5. This study focused on the MBA students; however, speaking, writing and critical thinking skills of other graduate and postgraduate students can be enhanced following a smilar pattern of research intervention.

#### **Recommendations for Teachers**

1. Teachers should create online forums where they can address the students for maintaining a communication thread.

2. Internet services such as podcasts, blogs, wikis, video-sharing platforms should be optimally utilized by the teachers to give multicultural exposure to their students to help them achieve confidence and effective interpersonal communication skills.

3. The softwares which are readily available in all computers such as Microsoft Word should be creatively used by teachers to assign writing tasks to their students. Apart from these softwares, the students should be encouraged to create and maintain their blogs which can be a ready to use platform for enhancing their writing skills. Also the use of services like Twitter can be encouraged as it puts them into an

environment where they have express their thoughts in limited number of words, i.e. 140 characters.

4. Students should also be encouraged to watch effectively delivered presentations on sites like TED and advised to adopt the presentation strategies adopted by the speakers. This can help students in improving their oral presentation skill. Integration of such videos in the ongoing sessions can also exhilarate the teaching-learning process as it adds authenticity to it.

5. There are several podcast publishing platforms available online, the students should be made to create and publish their podcasts in the area of their interest for enhancing their speaking ability and help them become confident while delivering their talks.

6. As applied in this study, Computer Based Tasks should be incorporated in the teaching-learning process to enhance the effectiveness of the teaching. The tasks should be designed in such a way that students are able to carry them out in independent manner.

7. The teachers should consider RBT and focus on the continuous development of critical thinking skills among the students. The students should be made aware of the Higher Order Thinking Skills and the importance of taking a shift toward it.

8. Speaking and writing skills require continuous attention, monitoring and practice. The teachers should make a note of this and monitor the language use of their students in various teaching-learning situations. Proper feedback at the right time can lead to enhanced learner performance so timely feedback should be provided to the students.

9. The teachers should keep themselves abreast of different research works carried out and published from various parts of the world. This can help them stay up-to-date about the tools and methods they should be using in their classroom settings.

10. Students should be made aware about the plagiarism and made to avoid it in any form.

11. The students should be motivated to take up self-learning tasks for improving their speaking, writing and critical thinking skills. This can be done by guiding the students to take up online self-help courses in the areas like critical thinking or creative writing. This act can put the students at par with their international counterparts and can offer them a multicultural environment to learn and enhance their skills.

#### **Recommendations for Students**

The students should

1. use various online communication resources for interpersonal communication and its enhancement.

2. try to observe effective email writing skills of their classmates and teachers and adopt the same.

3. utilize online publishing resources to put forward their thoughts orally and written manner. i.e. Blogs, Podcast etc.

4. avoid plagiarism and try to create original content.

#### **5.3 Limitations of the Study**

Every research has some limitations due to various reasons that may affect the outcome of the study. The present study also has some limitations which may limit the interpretability and applicability of its findings.

The limitation of study was that the participants' interviews and open-ended comments could not be taken which would have helped in understanding the influence of Internet and Computer Based Tasks in a more detailed manner.

Critical Thinking as a component is observed in this study. However, given the global workplaces of 21<sup>st</sup> century the development of critical thinking skills is an area which needs to be studied in detail which can become a topic for another thesis.

# **5.4 Conclusion**

To conclude, this study was significant in establishing that incorporating Internet and Computer-based Tasks enhances the speaking, writing and critical thinking skills of Management students. The positive results obtained from the study, makes the researcher advocate the use of Internet based resources and well-designed Computer Based Tasks for achieving optimum results in terms of development the expressional skills of the Management students. The adaptation of continuously evolving ICT technologies can bring new language learning opportunities to the Management students. This will help them to be effective in expressional skills, thus carving a niche for themselves and their employers, while constantly striving towards professional growth.