

Article Summary

Tazmeen Sultan is part of the Educational Technology team at a Private School, in Lahore, Pakistan. Her responsibilities include facilitating the effective use of computers and other instructional technology programs at the regional and school level, assisting in the development of short- and long-range plans (Projects) for the integration of technology across the curriculum. Furthermore, she also implements and coordinates staff development and training for the purpose of Technology Integration. In this case study she explains how she introduced computers in the school and experimented with the value of ICT in her lessons, opening new pathways for her learners, stimulating their imagination for thinking and giving way to student centred learning approach through ICT in her classrooms. She also uses ICT for assessment, designing tasks through online help where her learners could get instant feedback in a more stimulating way. The progress of her learners is often monitored through graphical analysis, after recording their assessment marks. These graphs were then shared with the parents through e-folios. Presently, she is working with the department team on online assessments in schools, which would be more practical and hands on.

Emerging Use of ICT for Teaching and Learning in Schools of Pakistan

My name is Tazmeen Sultan and I am currently working as the Technology, Innovation and Research Coordinator at a Private School's Group Head Office, Lahore, Pakistan. I have also worked as an early year's teacher at a Private School System, in Lahore. I was a second grade class teacher with a Masters of Science in Home Economics Degree. My teaching experience as an early year's teacher lasted 3.5 years. I joined in 2011 and working as a teacher gave me a great learning exposure, especially in relation to teaching with ICT. I attended numerous workshops and seminars regarding new ways of teaching. I completed a foundation course about ICT use in my class room, in 2013.

Being the class teacher, I had multiple responsibilities in my account. I taught English, Math, Science and Social Studies. I ensured to help and support my learners in learning and gaining experience. I also had to respond to the queries of their parents, regarding various issues.

The hallmark of my branch was technology where ICT integrated lessons and classrooms are offered. It is a private school system in Pakistan, with the medium of instruction being English, but is popular amongst all sects of life. The School System is being led by educational experts and curriculum designers who make sure that they establish a teaching community which aims to provide quality education of an international standard.

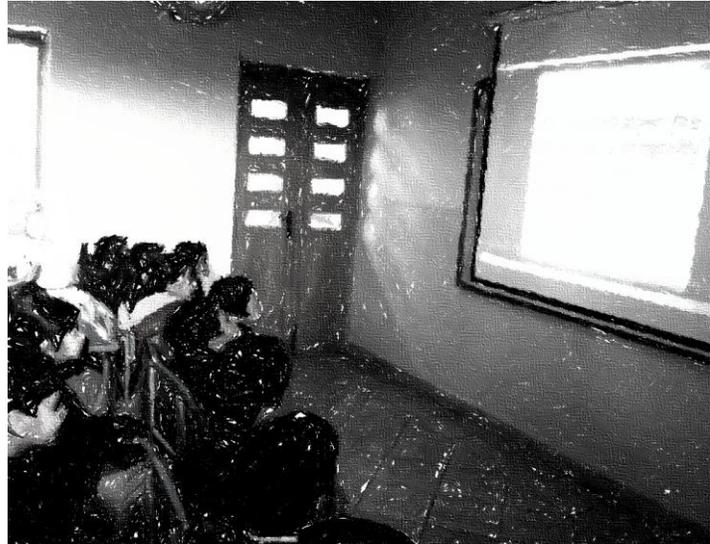
My learners of second grade ranged between 6 to 8 years of age. English was their second language, Urdu being their primary. My learners by the end of the year had a strong hold on various educational skills and became more confident with technology.

My Professional Experiences:

I have been integrating technology since the very beginning of my service as a teacher and it has been an amazing experience throughout. Each year I faced new challenges which pushed me forward in my teaching experiences and I learned more every day. When I joined the School, it was already elevated to the position of a technology branch, however it was still at the initial stages. Most of the facilities were

for the Early Years, however the primary classes were provided with very limited resources i.e. one computer per class in the beginning. Integrating these limited resources, only a computer and an internet access in my lessons, was a great challenge for me. I needed to learn the integration of these resources into my teaching as well. Fortunately the same year I got the opportunity to attend an 'E-Foundation Course' in my school, through which I learned different and new ways of using these limited technological tools in my class room for example, showing videos, extension tasks etc. This course made me think out of the box and as a Grade II class teacher, I started experimenting in my lessons. I started using ICT for simulations, whole class sessions, focused tasks and activities. My achievements made me share my experiences with my colleagues and I was satisfied with the outcome of my learners.

The following year the school was provided with more ICT resources .i.e. a multimedia projector and digital camera in each class, 30 mini net books (for sharing among three sections of Grade I and II), one digital microscope and a Smart Board. I wanted to utilize these resources in the best way possible. However the biggest challenge still remained there, the appropriate use of these resources in my lessons. I realized that my learners belonged to the early primary years with hardly any access to these tools away from school, thus my target was to plan student centred lessons to increase the learner's autonomy and



to provide them with maximum exposure. Handling so many ICT resources with only one class teacher during the lesson brought in a few management issues as well. But external help i.e. workshops by our School Group Office and advice from ICT experts gave me a well-defined pathway to a better use of ICT. I also researched and explored through the internet access and came across different and interesting ways to plan lessons with ICT to increase my learner's autonomy. Furthermore, I also realized different e-safety issues concerning learning and psychological aspects and dealt with them with the help of administration and teachers collaboratively.

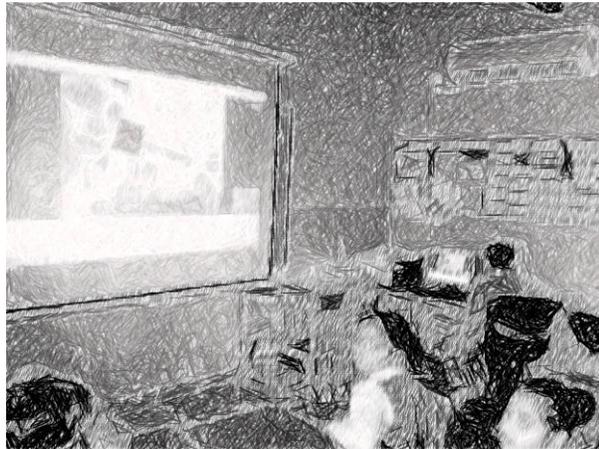
Through proper knowledge and practice I learned that ICT can reduce my work load as a teacher as well. I could bring a whole new world into my classes through various interactive videos. With the help of ICT I was able to plan enjoyable and innovative lessons. I was able to manage and prepare a variety of resources, such as printable flash cards, worksheets and flip charts, prior to my lessons to make my teaching more interesting and fruitful.

Most importantly I learned about differentiation with ICT through the 'Cambridge International Diploma in Teaching and Learning with ICT' during my in-service teaching experience, to benefit my academically weak and strong students. I am now able to plan appropriate lesson plans for all learning styles. In short there is so much that can be done with ICT as a teacher, however this is not possible without proper knowledge and research which is vital for professional growth.

I experienced developing various ICT skills like checking for plug ins, soft wares, wiring issues and dealing with e-safety factors. I learned new ways to support and help my learners through training, tutorials and How to...Guide.

I had always been a hesitant user of social network pages. However during my diploma, I tried to work out some ways with which I could involve my learners and their parents into the class rooms and to share their child's progress on regular basis.

For that I, along with my colleagues, experimented with blogs on multiple sites and other web 2.0 technologies. Initially, I had concerns regarding factors like what will be the privacy and security issues of these blogs, how and who will be handling material and uploading on these blogs etc.



For this purpose I searched different educational blogs to see what options I had. I came across many layouts and contents. With the help of my colleagues I came up with ideas for our school. I encouraged my colleagues to begin the process of their blogs and upload learners work, their profiles and projects/events. This activity was quite rewarding even though it was demanding to maintain the blogs along with curriculum activities.



I also started sharing my learners' individual progress on regular basis in the form of e-folios through Drop box. I had been looking for ways which would help me and my colleagues share these e-folios through any quick access. We had been e-mailing learners' progress and burning them in CDs for sharing on the result day. But uploading many documents was time consuming and stressful due to unreliable performance of the internet at times. Then through a colleague I learned to use "Drop box" application for sharing learners' work. 'Drop box' gave us easy and quick access to share many documents/presentations/pictures.

Although having a manageable class with ideal ICT Resources (Mini Net Books, MMP, Printer, Scanner, Computers and Internet Access) helped me amazingly with the arrangement and layout of my classes. With 15 shared net books among class 2's, I could arrange pair and trio activities and projects in groups. But during my lessons I realized that excess light from windows and skylights were blurring and blocking the vision of my learners during video and ICT sessions. Hence keeping in mind e-safety factors, I

recommended to my school head about covering these skylights, so that my learners have clear view during lessons.

Although we are well in assessing our learners formatively but I still had never used ICT for this function. I realized the significance of assessment and came across its different types. I carefully began researching resources through which I could assess my learners' performance. For example while searching for suitable online ICT resources I came across games and quizzes which had the feature of showing the player's scores as well as gave total time spent on the activity. The use of such ICT Tools eased my work during the lessons. I designed tasks through online help where my learners could get instant feedback through the ICT Tool in a more stimulating way. I took screen shots of their achievements/progression, add comments with the help of MS Power Point, changed it into JPEG format and share it with their parents through e-folios by Dropbox.

The progress of my learners is often monitored through graphical analysis, after recording their assessment marks. These graphs were then shared with the parents through e-folios

I have developed the ability to critically evaluate an ICT resource for its usefulness and limitations before bringing it into my lesson. I came across queries and suggestions of teachers across the globe and realized the usefulness of such communication. Across the globe the priority of teachers remains to bring the most useful ICT resources which would develop the skill of critical thinking and problem solving in their students. These teaching platforms enable the teachers to seek for solutions through discussion and they bring shared ideas in their classes to improve the quality of teaching which of course directly affects learning.

Apart from the teaching platforms I came across supportive websites which taught me how best to use the available resources. For example I had been taking IWB classes using the Promethean Board. I usually planned online activities for this purpose. There were times when for some reason internet access was denied and I was unable to think of alternate plans for my class. I came across Promethean Planet which is a free online community designed for the needs of the practitioners and educators. A willing practitioner has the facility of going through excellent lesson plans, videos and tutorials for its supportive software and hardware and ideas from across the world.

ICT and Benefit to my Learners:

ICT is very helpful for learners of today as they are the *digital natives* and technology comes naturally to them. Learning through ICT opens new pathways for these learners and stimulates their imagination for thinking and gives way to student centred learning.

Interactive online games and downloadable videos for simulation are an amazing resource for reinforcement of curriculum goals and a better grasp on concepts. Learners can self-assess themselves through trial and error options, they can participate in quizzes and tests and enjoy the whole learning process.

Child friendly software such as 2Publish+, 2Create a Story and 2Animate cater to different learning styles and needs. Learners learn in collaboration and develop their reading, listening and speaking skills. Interactive videos are a good resource to polish their language, mathematical and scientific skills. They also help in improving their vocabulary and accent since English is not their primary language. Interactive videos generate good class discussions and help in understanding new concepts.

Moreover ICT is a great learning tool for these young learners. Learning takes place not only in school but also outside school environment through ICT. Self-learning enhances their experience, opening up new horizons to them. However, these learners need to be made aware of all the social, cultural and ethical issues related to technology for their own benefit.

The best part of learning through ICT is that it is fun; the learners are not burdened with making mistakes and presenting untidy work by frequent rubbing. In short learning remains fun throughout.

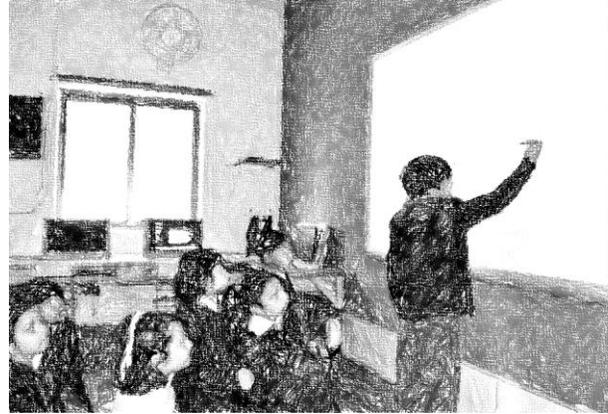
My learners grasped concepts and ideas through the use of web 2.0 technology. They learned to work in collaboration which gave way to creativity, development of social skills, ICT skills, team work and sharing, taking ownership and guided research. They were more focused on their tasks and found How to...Guides and ICT instructions really helpful and supportive. They were able to reinforce topics, self-review and assess their learning and make decisions while solving problems.

My low ability learners responded well to the carefully planned activities. Small quizzes encouraged them to take part in the sessions. I have felt that these learners overcome their shyness and were willing to respond to simple questions. They also created their own accounts and were made aware of privacy online and other e-safety factors. As soon as I began uploading my learners' work on the blog, they were keen to do more activities. It has given them confidence and they look forward to their work being published on the class blog.

Comments/Feedback has been an effective element, whose special effects are now seen on my learners' performance. Since I have been posting and emailing their work through drop-box, and receiving widespread feedback, they have the chance to assess their work and their parents can read out the comments to them. By doing so, I am able to keep the parents informed and repeatedly respond to queries regarding issues, related to their children's' education. Graphical demonstration of learners' performance, when sent to parents gives them an instant and clear picture of their children's performance over a period of time.

Being an ETAC ambassador of my school, it was my duty to share my learning experiences with my colleagues. These joint experiences became a consistent feature of the teaching practices at my school. At the beginning teachers felt that it was a bit difficult to maintain records for their learners' progress, bearing in mind, that it is going to be additional workload. However, after realizing how appropriate such practices become for sharing the learners' growth, everyone was willing to take the initiative. The graphs and data analysis remain in the school development program as a record and enable the institution to progress and undermine its weaknesses by reflecting at an overview of learners' development for the next academic year.

These practices have had a remarkable effect on my institution. Feedback from parents is one of the key elements. They have shown eagerness to receive their children's progress through learning stories and e-folios, since they are one of the major stakeholders. It is stress-free for them to observe their children's progress on regular basis. At the same time they treasure seeing their children achieving different accomplishments and being admired by their teachers. They also like to share their children's work with their acquaintances.



I have been using software and interactive online games which are especially designed to cater to the needs of young students. Use of Promethean Boards has also been very effective with my students and I feel my students are now more engaged in the lessons as they were never before.

Use of educational videos (usually downloaded from video sharing websites) either at the beginning of the lesson or at the plenary has been tremendous resource for my students' learning.

Effect of my Professional Growth on Institution:

ICT has provided my institution to experiment with new teaching and learning strategies resulting in quality education which is the strongest element for any teaching institution. Optimal use of ICT resources catering to individual needs enhances learning potential and confidence of using ICT skills. This in return shows good reflection of learning through better school reports in the community resulting in parents and learners satisfaction. These positive outcomes are evident during sharing of Projects and Inter- School Competitions. The whole practice gives the school a good name and position. Parents naturally being the major stakeholders then are willing to invest in the form of admissions.

A Way Forward:

Presently being part of the Educational Technology team at a Private School, my responsibilities include facilitating the effective use of computers and other instructional technology programs at the regional and school level, assisting in the development of short- and long-range plans (Projects) for the integration of technology across the curriculum. Furthermore, I also implement and coordinate for staff development and training, for the purpose of Technology Integration.



Professionally, I really look forward to gaining international experience and exposure in education and ICT integration.