

USE OF TECHNOLOGY TO IMPROVE SCHOOL EFFICIENCY



CASE STUDY OF UCSKM, BHIWADI

PRESENTED BY



Dr. Prabhat Kumar Kaushik
Principal, UCSKM, Mentor, Master Trainer &
Chairman – CBSE Sahodaya Alwar

TABLE OF CONTENT

1.	Introduction	2
2.	Factors affecting technology uses in Schools	4
3	Implementing “Adoption” of Technology	6
4.	Current situation @ schools	7
5.	UCSKM Way of technology adoption	9
6.	Education Plus @ UCSKM	10
7.	Challenges before us	11
8.	Impact of Education Plus on our School	17
9.	Way Forward	17

INTRODUCTION

Technology plays a transformative role in all walks of life. The technology has transformed sectors like banking, insurance, medical, diagnosis, manufacturing, music, arts, cinema, travel, and retail etc. All these sectors have been changed fundamentally by the effective and innovative use of technology. These sectors have brought in “convenience”, transparency, and efficiency through early adoption of technology their day to day operations. With technology benefiting various fields, life has suddenly become a joyful journey for everyone. In the simple forms, like electronic stoves, telephones displaying caller's ID and automobiles the ride of life has become a pleasure.

Currently the students, their parents and teachers are increasingly using technology to find information, carry out transactions and connect to other people and services as and when or where it is needed. In the same way, the lives of students have also taken a leap towards easiness with abundant information available at any time on the internet.

Our future in education must grow along with the increasingly digital and connected world. Recent innovative technology within education sector includes some of these technology tools ...

- Classroom assessment tools which enable teachers to understand what children can and can't understand and comprehend.
- When we talk about technology in education the first and foremost advancement is the computer and internet. If a student has the Encyclopedia of Britannica or Microsoft's Encarta Encyclopedia or Wikipedia on his/her computer, he rarely finds himself in a library. But for those who don't have these encyclopedias have the entire world of internet information at their finger-tips.



- Teachers can find gaps in understanding for student needs, tailoring their pedagogy and delivery techniques accordingly. For instance, Fayetteville schools in Arkansas have measured the reading achievement gap between high and low performers and narrowed the gaps significantly.
- With the help of data analysis and management tools that offer the potential for greater tailoring of learning and feedback, and better management information for school leaders.

- Lesson videos and clips online, which enable teachers to learn more about the successful techniques and approaches of others, and offer pupils access to excellent teaching beyond the classroom. The projects of connecting classrooms in different continents may prove to be boon for education.
- The students can join Distant Learning Education programs (DLEPs) with the help of internet and modern technology. There are many players like coaching institutions and medical education.
- A variety of rich media resources, and other ways of accessing knowledge such as online subject communities, experts and other educators. For example increasing traffic of students, parents and teachers on the websites like Google Search, khanacademy.com and educators.com, etc.
- Games and interactive software help students acquire skills and knowledge in most engaging and effective ways. For example the Li Ka-Shing Foundation is funding a UK pilot of proven mathematics software that helps pupils develop understanding of complex mathematical problems. Adaptive software can understand and respond to different learning needs.
- Online learning and virtual schooling plays an important role alongside traditional approaches.
- Even a school going 6th grader has enough luxuries with the availability of technology. Assignments are doable no matter how tough they are. If there is a presentation to go along with, then projectors come very handy. Children also bring along their self made slide shows if the facilities are favorable.
- Use of technology improves in learning outcomes of students. The schools that use innovative technology are more likely to reap all round benefits.

TECHNOLOGY IN SCHOOLS - What does this mean for schools in India?

In developing plans for technology, schools may like to:

- Consider how technology can help to deliver excellent teaching, effective school management and improved accountability at all levels of school education.
- Understand the need of transparency and sustainable connectivity between students, teachers , parent community and school management.
- Utilize the scope of the knowledge and resources available to pupils beyond the bounds of the classroom and the textbook, to the very best online lessons, digital resources and tools.
- Consider the scope of professional tools in the hands of teachers, so that they can carry out assessment, record and access data easily when they need to.
- Equipped all the teachers with the skills to integrate digital technologies and new approaches successfully into their teaching, and set a clear expectation that no teacher should ignore the importance of technology in teaching-learning process.
- Deliver an ICT curriculum that engages pupils and equips them with the skills and knowledge needed for further study and the 21st century workplace.
- Manage infrastructure and services with the help of innovative technology, offering access to tools and resources anywhere, anytime.

In Simpler terms, Technology should be a tool to help educators meet the educational needs of all children. As such, technologies cannot function as solutions in isolation but must be thought of as key ingredients in making it possible for schools to address core educational challenges.

In a nutshell, Technology can serve as an enabler in teaching and learning to:

- Help organize and provide structure for material to students.
- Help students, teachers, and parents interact, anytime and anywhere.
- Facilitate and assist in the authentication and prioritization of operational needs of the school.
- Simulate, visualize, and interact with scientific structures, processes, and models.
- Help in learning history and depicting trends to teachers to enable plan their future goals.
- Serve as an enabler for “information flow” within the Education Ecosystem

However, technology and equity are not inevitable partners. Simply providing access does not ensure that technology will effectively enhance teaching and learning and result in improved achievement. Nor does providing access imply that all teachers and students will make optimal use of the technology.

Technology may mean little without appropriate objectives and goals for its use, structures for its application, trained and skillful deliverers, and clearly envisioned plans for evaluating its effectiveness.

But while they may have abundant computers, schools may not use technology in the best ways to enhance learning or improving the school efficiency. With multitude of independent operating solutions, schools often spend large portion of their time in “authentication” of data. Dependence on “outdated application and lack of effective support / training” leads to lower quality of information output and also becomes the source of dispute / delay in support services.

It is a well known fact that in India, majority of the Principals spend excessive amount of their quality time in just generating reports or getting reports generate through their admin staff. A small portion of them actually find time to work on such reports and take necessary corrective action based on the reports. **Some of these issues can be attributed to lack of exposure of the principals in these areas as well which we will address in the article separately.**

A great deal depends on the levels of planning, structure, preparation, and evaluation of the potential impact that technology will have on teaching, learning, and achievement. Experts believe that increasing capacity depends on enhancing the technology skills of teachers and administrators.

Many states, for example, have taken steps to provide guidelines for how to use educational technology more effectively; and over 50% have developed standards for teachers and administrators that include technology.

CBSE has an advanced Portal (www.cbse.nic.in) aimed at imparting ready information to staff and students. Similarly, most states have their online Information portals which provide ample data related to students and to some extent on the schools as well.

In terms of utilization, technology has expanded from use primarily as an Instructional delivery medium to an Integral part of the School Environment. Increasingly Technology is serving at least four distinct purposes in the schools:

- To teach, drill, and practice using increasingly sophisticated digital content.
- To provide simulations and real world experiences to develop cognitive thinking and to extend learning.
- To provide access to a wealth of information and enhanced communications through the SMS, Internet and other .
- As a productivity tool employing application software such as Education Plus to manage information and operation in the complex environment.

This article covers the extensive support lent by Technology in the 3rd and the 4th area mentioned above, sharing examples on how technology has come to the rescue of improving School Efficiency in today's complex and ever changing routine.

The article aims at sharing how we can transform the current role of a Principal from being a “Passive Information Generator” to an “Active Decision Maker” using modern tools of Technology.

FACTORS AFFECTING TECHNOLOGY USES IN SCHOOLS

Why isn't technology used effectively in schools in sustainable manner?

Why can't innovations that seem to hold great promise be adopted by schools in spite of great efforts? Or simply speaking, why are schools still shying away from using technology to improve their efficiencies ?

In my mind, there are 4 factors that inhibit successful implementation of technology in schools.

- a. Organization factor
- b. Teacher factor
- c. Technology factor
- d. Fear of failure, fear of transition, transparency, accountability (may be included), old mindset which restrains from experimentation.

At the same time, there is “no reward to successful implementation” as well!

Organization Factors

Schools have been cast as directly at odds with new technologies. The goal of schools as organizations, is “not to solve a defined problem but to relieve stress on the organization caused by pressure operating outside of or overwhelming the capacity of normal channels.” In other words, schools naturally and necessarily resist changes that will put pressure on the existing practices.

“What appears to outsiders as a straightforward improvement can, to an organization, be felt as undesirably disruptive if it means that culture must change its values and habits in order to implement it.” The introduction of computers requires serious changes in the curriculum, teaching practices, reallocation of resources, and perhaps rearranging the fundamental structure of school . Consequently schools and teachers may be less impressed by the promises of the computer delivered than its advocates.

Besides this inherent resistance to change, schools are also said to have a structure that prevents wide spread uses of computers. The implementation team associated the Apple Classroom of Tomorrow (ACOT) project cites limited classroom space and the bulky size of computers, teachers' unwillingness to take the students to the lab, and lack of access to computers at home as factors that limit the use of technology in schools.

More serious problems, however, lie in the conceptual structure of schools. *The view of teaching as “transmission of information from teachers to their students” has little place for students using new technologies to accomplish meaningful tasks.* The forty-five-minute period makes it difficult to accomplish anything substantial using technology.

Sharing a similar view, Papert (1999) compares the current school to a 19th century stagecoach while new technologies to a jet engine. *"When they try [attaching the jet engine to the stagecoach] they soon see that there is a danger that the engine would shake the vehicle to pieces. So they make sure that the power of the engine was kept down to a level at which it would not do any harm."* Thus the structure of the school severely hampers the power of new technologies for learning.

Lack of convenient access to computers, inadequate infrastructure, and poor planning are other factors identified to account for the under utilization of computers. An article also blames computer labs for the lack of use of computers because "labs deny teachers the flexibility of deciding when technology should be incorporated into instruction, unwittingly conveying to students that computers are not central to learning and certainly not central to the activities of their classrooms." There are multiple examples of state funded computers lying unutilized in State funded schools. The computers will be lying in some dusty corner as the schools may neither be having infrastructure to use the computer (electricity, software, etc) or skilled users to use them.

Moreover, it was found that many schools lack a healthy human infrastructure that supports technology innovations in the classroom(Zhao et al., 2002). Teachers who are interested in using technology in their teaching often feel that they need better support from school than currently available. Such support includes both technical and social. Teachers need strong support so they can be sure that they have access to functional equipment and network. They also need social support in forms of professional development opportunities, user policies, and a professional community of like-minded colleagues. Other aspects of teachers' working conditions not directly related to technology, such as busy schedules, crowded curricula, lack of access to a professional community and support, have also been identified as important factors affecting technology uses.

Teacher Factors

A more frequently cited set of factors affecting technology uses in schools is associated with the teacher. Following the standard diffusion literature, teachers' attitudes toward and expertise with technology has often been identified as key factors associated with their uses of technology. Unless a teacher holds a positive attitude toward technology, it is not likely that she/he will use it in their teaching. Teacher's pedagogical beliefs and their teaching practices are also factors that seem to influence their uses of technology . For instance, CCE Application enables teachers to just enter the marks and allow the system to convert it into grades. Yet, teachers prefer the old method of creating manual table and doing the conversions manually.

Technology Factors

Technology itself has also been named as the source of a set of factors that affect its uses by teachers. First, there are conflicting ideas about the value of technology and hence conflicting advice to teachers about how technology should be used in school. This leads teachers to a state of confusion about the true educational values of technology.

Second, the constant changing nature of technology makes it difficult for teachers to stay current with the latest technology. Everyday new software and hardware becomes available. Teachers, who are already struggling for time and energy, find it difficult and discouraging to keep chasing this elusive beast.

Third, the inherent nature of unreliability makes technology less appealing for most teachers. Technology is inherently unreliable and can break down at any time but teachers, who have only a limited amount of time in front of students, cannot spend the time troubleshooting problems they may or may not be able to solve. Thus unless there is a strong need for the use of technology and reliable support, teachers may opt not to use it in their teaching.

In summary, there is a long, almost exhaustive, list of factors that may affect the uses (or lack thereof) of technology in schools.

IMPLEMENTING “ADOPTION” OF TECHNOLOGY SUCCESSFULLY

Having stated the challenges earlier, we also have highly successful cases of schools adopting better practices to change the “learning experience” for students.

The success in adoption of technology lies in the following points :

- a. Reduce the “menial tasks” of teachers and bring in automation there. This frees the teachers’ time to do activities which are more constructive
- b. Use technology to share “instant results” thereby leading to transparency. Evaluation has always been a “bone of contention”. By bringing in technology to “generate randomness” in quizzes/question paper, evaluation will be more objective.
- c. Use technology to create knowledge repository.
- d. For any learning activity, we dedicate “manhours” for students. We have to similarly earmark at least 2-4 hours every week towards upgrading the skills of the teachers towards technology.

CURRENT SITUATION @ INDIAN SCHOOLS

While all of us have our share of successes in our respective schools, often tougher questions remain unanswered, both because of our lack of exposure in these areas and also because of lack of technology support in these areas.

Let me share a few cases of standard problems which most of us have faced in our day-to-day operations. I have covered examples spanning most of the core areas that impact a school operation involving the role of the Principal.

COST AREAS:

- a. How sure are we on the “actual student base” – while registration is in one system, fees collection / fee accounting typically are in different systems. Depend on external auditor to confirm if both the figures match. ☺
- b. Schools often have a problem on getting accurate data on “various fee discounts” being forwarded to needy students. While on one hand, schools tend to provide very high discounts at the cost of their own financial operation, on the other hand, they never have data at hand to share the actual discounts provided to students
- c. Chasing outstanding fees has always been a rough battle. Coupled with lack of information in time and “inability to reach parents” to get the remittances only add to the woes. The fee collection and students ledgers are dependent on a single person i.e. school accountant who may commit mistake, both wittingly and unwittingly.
- d. Transport efficiency has been a big thorn as well as a big revenue drain on school funds. Outsourcing has only compounded the problem and keeping check on expenses in time has been a big issue including the safety risk to students.
- e. Most of the schools depend on Tally but it can be manipulated easily. Hence when required, we never have a dependable information in hand to take financial decisions instantly without having to cross check the numbers. Checks and balances are a must when we handle with public/charitable funds.

ACADEMICS

- a. Are we able to implement any “evaluation changes” instantly. Pre-printed report cards only add to the cost. We are always at catch 22 situation where either we have to write-off the printed stationery expense whenever a new CBSE circular is announced or we take the chance of overlooking such circulars leading to delayed implementation.
- b. Lack of real time information on progress report often leads only to Post Mortem at the end of the year.
- c. Absenteeism of teaching staff is a big issue for all schools. Many man hours are spent in each school trying to “maneuver” the substitution work.
- d. Question Paper are often duplicated – literally same for year’s together because teachers find it convenient to print / copy existing papers than trying to do something new. Children in no time understand this problem and often show “artificial knowledge” addition by just solving these set question papers – leading to them failing badly when coming to public exams.
- e. Transparency in Teacher’s appraisal through quantitative performance reviews with weightage to their academic records in class

MANAGEMENT

- a. Is any Principal really looking at the “Staff Workload” and balancing the periods allot scientifically to give adequate “breathing room” for teachers every week.
- b. Is the Principal looking at the Student – Teacher ratio and ensuring that it is properly benchmarked for quality learning experience in school
- c. Is the Principal looking at the adequacy of the infrastructure regularly through a ready system and comparing with other schools to determine the “adequacy levels”
- d. Are we able to monitor and compare different school performance on “real time” basis.
- e. Are we getting enough and workable suggestions from students and parents to improve the school environment
- f. Are we able to percolate new policy matters to the staff / students in speedy and effective manner?

and many more...

UCSKM WAY OF TECHNOLOGY ADOPTION

To start with, we looked at Technology with a different perspective. Just by having a “computer science” course does not lend itself as advancement when every work in the school was being done on paper.

If in class we were teaching about Internet, our own staff was using paper and pen to communicate with each other. Obviously, we had to break this first. Unless we make our own teachers adopt the modern technology, the learning for students will remain “theoretical”

Keeping this in mind, we focused on identifying a common solution which can aid ...

- Use technology for personal productivity of every eco-system of school viz. Staff, Students, Parents, etc..
- Use technology to support learning in a subject area through effective communication.
- Design or adapt technology-supported learning activities (lesson planning automation)
- Manage student-centered, technology-supported activities (communication beyond classrooms between teachers and their students)
- Assess Staff skills within the context of technology-supported activities.
- Analysis , optimization and utilization of HR skills of school staff with the help of technology.

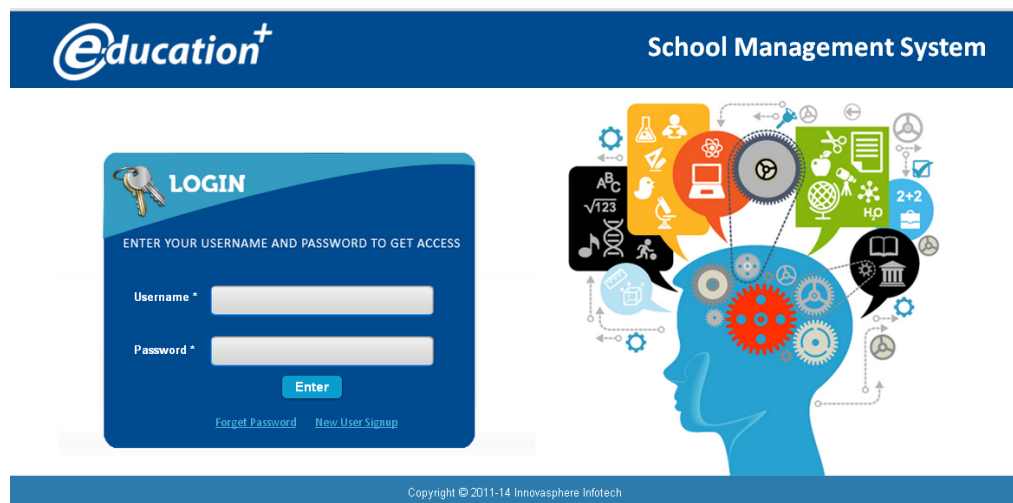
EDUCATION PLUS @ UCSKM

We have recently introduced EDUCATION PLUS (www.innovaepus.com) in UCSKM Bhiwadi after lot of deliberation internally.

EDUCATION PLUS is a fully integrated ERP solution, specifically designed for CBSE schools. Unlike several other products, this application stood out on various parameters as under :

- a. It is a single window system, right from Pre-Admission Process to TC
- b. Being Web Based, enables Two Way communication channel between the entire School Ecosystem i.e. teachers could communicate directly with their students & parents and vice versa. Parents could directly communicate with Principal and teachers

- c. Finance module is integrated with Operations. Most schools do the mistake of keeping finance separate leading to major reconciliation issues and often throwing up incorrect / non comparable results. This application takes care of such concerns.
- d. Integrated Academic Operations as well – teachers can directly manage their respective operating tasks like Lesson Planning, Question Paper generation, Daily Activity Report, Student Evaluation, Class Attendance and all other areas which effect any teacher or class teacher
- e. It has Multiple School Management option i.e. viewing multiple schools performance at the same time



Besides above points, it had several features related to every area of Academic, Administrative and Management functions that gave this application a perfect fit for our school.

CHALLENGES BEFORE US

When we started this exercise of implementing the solution, we had many challenges to start with. Three most important challenges were...

- a. Being a 3rd tier town, Net Connectivity was not the best in class. Adopting a “web-based application with not-so dependable connectivity solution” was in my mind the biggest decision making point for us.
- b. Majority of teachers, as applicable commonly, not very savvy with use of computers
- c. Major resistance to change and adapt new practices – several operational reasons were cited.

While infrastructure was and will remain a challenge for next couple of months, our biggest task was to overcome the “human” resistance through “technology” itself. True to the points mentioned in my previous pages, our school too experienced all the hurdles during the implementation phase.

We found the solution in “simple to use” application. We engaged ourselves thoroughly with the product and ensured that every aspect of the operation is readily covered by the solution and addresses the key need of “reducing teacher’s burden”.

Here is a brief review on how Education Plus has touched every aspect of the school operation

EDUCATION PLUS – A boon for teachers

UCSKM Public School
Welcome : Sarita Srivastava

education+
School Management System

Message (157)

My Corner **Lesson Management** **Exam Planning** **Exam Management** **Evaluation** **Reports**

S.No	Date & Time	From	Subject	Type	View
1	13/02/2014 11:01	Anjana Kaushik	THOUGHT	Mail	
2	12/02/2014 15:37	PRABHAT KUMAR KAUSHIK	Class Attendance	Mail	
3	12/02/2014 15:26	PRABHAT KUMAR KAUSHIK	Term 1 marks and grades	Mail	
4	12/02/2014 15:17	PRABHAT KUMAR KAUSHIK	Mobile phones	Mail	

1 2 3 4 5 6 7 8 9 10 ...

Mode ☐ Individual ☐ Group

Calendar **Notepad**

Ever since the implementation of Education Plus, our communication tasks have become extremely simple. The necessity to put up any notice on the notice board has come down drastically. We are able to share information instantly to every teacher which comes in their inbox, right in the front of their homepage.

The basic application is ICON driven. True to the words, this application is designed for use of any individual who can operate an ATM machine.

What all teachers can do ..



- Manage their Lesson Planning and Session planning
- Complete evaluation – scholastic and non scholastic subjects
- Manage their Daily Activity Report online with approval mechanism.
- Share and communicate with their students and their parents directly
- View entire encyclopedia through Wikipedia (for any solution during break period)
- Manage and retain notes / reminders for future classes
- Normal task of “attendance”

In a nutshell, we have made their job more-or-less paperless.

EDUCATION PLUS – A specialized solution for Accountants

School is a commercial entity. Need for proper accounting has always been a big issue, especially for us Principals who are not so savvy either on computers or on accounts 😊

Education Plus, by virtue of specialized accounting solution for schools, has taken the fear out of accounts.

	UCSKM Public School	
Welcome : Raj Kumar		
Fee Master	CONCESSION DETAILS REPORT	
Concession Master	UCSKM PUBLIC SCHOOL	
Declare Fee Amount	Account Group * <input type="radio"/> Registration Fees <input checked="" type="radio"/> Regular Fees	
Concession Enrolment		
Edit Concession Enrolment		
Invoice - Regular Fees		
Invoice - Admission Fee		
Invoice - Adhoc Fees		
Fee Accounting		
Fee Adjustment		
Receipt Cancellation		
New Admission Fees		
Reports		
Fee Structure		
Concession Details		
Deposit Details		
Fee Invoice Raised		
Invoice Report		
Fee Due Report		
Class Wise Fees Due		
Daily Collection Report		
Credit Note Report		
Ageing Analysis		
Statement of Accounts		
New Admission Fees Report		

S.No	Class / Section	Admission No	Name	Concession Category	Annual Discount	Net Annual Fees
1	Pre KG or Nursery / Mercury	STUB20134374	Bhupesh Tanwar	RTE	20700.00	0.00
2	Pre KG or Nursery / Mercury	STUB20134383	Miss Kanchan	RTE	20700.00	0.00
3	Pre KG or Nursery / Mercury	STUB20134375	Monika Bhiduri	RTE	20700.00	0.00
4	Pre KG or Nursery / Mercury	STUB20134376	Piyush Tanwar	RTE	20700.00	0.00
5	Pre KG or Nursery / Mercury	STUB20134381	Tejas Bhiduri	RTE	20700.00	0.00
6	Pre KG or Nursery / Mercury	STUB20134384	Vivek Dayma	RTE	20700.00	0.00
7	Pre KG or Nursery / Venus	STUB20134377	Mohit Sharma	RTE	20700.00	0.00
8	Pre KG or Nursery / Venus	STUB20133993	RAGHVENDRA SINGH	Staff Child	20700.00	0.00
9	Pre KG or Nursery / Venus	STUB20134379	Shalu Bhiduri	RTE	20700.00	0.00
10	Pre KG or Nursery / Venus	STUB20134380	Shiksha Bhiduri	RTE	20700.00	0.00
11	Pre KG or Nursery / Venus	STUB20134382	Shweta Tanwar	RTE	20700.00	0.00


The biggest advantage of the solution is the availability of reports on “real time basis”. Moreover, having an integrated solution ensures that our financial accounting is as accurate as it can become. Yes, we do have the flexibility of offering fee discounts or special incentives to staff, etc.. It is recorded and available for viewing. It means more transparency and clarity in working.

Thanks to the application, I did manage to unearth several weak links in my own operation

- Found gaps in admission count which is plugged now
- Found ways to improve my transport fleet efficiency
- Able to have 100% control on the fee discounts and fee dues thereby improving the financial operation of the school, all this without having to depend on someone to feed me information.


EDUCATION PLUS – Making Parents more accountable

In a time when Parents come to school to throw petty issues on us, Education Plus has helped us keep them at bay. It has helped the school multi-fold in improving the relationship with the Parents. It has shifted a lot of onus on the parents due to transparency and bringing in a culture of “involved” education.




UCSKM Public School


Welcome : Suresh Chand Sharma Usha Sharma




Message (185)




Student Corner







Reports




Fees




Mail Request

S.No	Date & Time	From	Subject	Type	View
1	13/02/2014 11:07	Anjana Kaushik	THOUGHT	Mail	
2	12/02/2014 15:23	PRABHAT KUMAR KAUSHIK	Mobile policy	Mail	
3	11/02/2014 12:56	Anjana Kaushik	THOUGHT	Mail	
4	10/02/2014 15:06	Anjana Kaushik	THOUGHT	Mail	



Mode : Select Class Teacher ::



Notepad



UCSKM Public School

Welcome : Suresh Chand Sharma Usha Sharma





Student Corner

S.No	Date & Time
1	13/02/2014 11:07
2	12/02/2014 15:23
3	11/02/2014 12:56

Message :

Dear Students/Parents !

Pl. note that the mobile phones are strictly NOT permitted in the school hours under any circumstances . However , you may provide school landlines to your families for communication in case of any urgency.

This needs to be complied with on urgent and regular basis. VP and HM should check and report.

Regards

Principal,UCSKM

EDUCATION PLUS – Adding value to Management

It is only now that we move from being an Administrator to a Decision Making role. With host of information at hand, enough time is available to review every aspect of the operation and take corrective measures.

Examination Board *	CBSE	Class *	Class VI
Term	Term1 ▼		

UCSKM Public School								
Class:	Class VI	Term:				Term1		
SCHOLASTIC SUBJECTS								
	Average percentage of marks in ...							
Section Name	English	Hindi	Sanskrit	Mathematics	Science	Computer Science	Social Studies	Overall
Mercury	66.8	59.8	62.8	50.2	48.3	61.7	58.1	58.2
Venus	72.4	68.5	68.6	62.0	49.5	40.5	2	51.9
Earth	81.2	77.5	75.1	0	66.8	80.8	9.1	55.8
Mars	89.7	82.5	81.1	77.8	74.7	88.3	2	70.9
Jupiter	28.3	66.8	63.7	46.4	45.7	57.7	56.4	52.1
Total	67.7	71.0	70.3	47.3	57.0	65.8	25.5	57.8

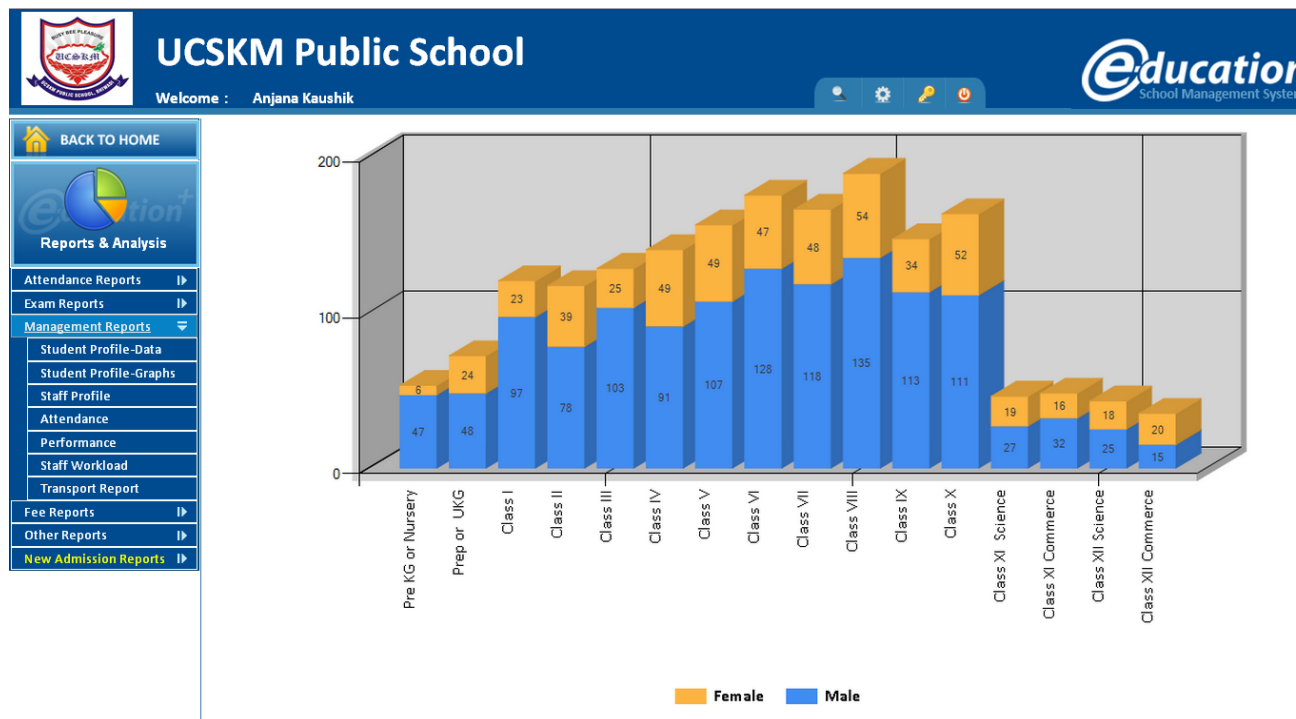
This report may be inaccurate / incomplete as it has not been approved by the respective Class Teacher

So instantly, I have the comparison available for all the sections at one go. Now instantly I can analyze and infer a few points to take decisions (after looking at other reports as well)

a. Couple of teachers have not completed their assessment work (Social Studies for all the sections and Maths/English in once section each. – next move : Call the relevant teachers and find why they not completed their tasks

b. Among the subjects there are huge variation within the average scores – call the relevant subject teachers and find why the average scores are so different and take corrective measures. For instance, the class average for Science is only 57% while one section has provided an average of 75% - share this with the teachers instantly and take corrective measures.

Similarly if I look at the non-academic areas, I have Student Profiles, Staff Profiles, Attendance records, all available on realtime basis for instant review and action.



IMPACT OF EDUCATION PLUS ON OUR SCHOOL

While it is too early to quantify the benefit accrued by this move, we have seen a positive impact on all areas of our operation :

- a. Higher visibility to the school. There has been an wholesome appreciation from the parents who are now forced to be more engaged with their ward's progress
- b. There is lesser disconnect between teachers and students. There is a grudging and yet a positive appreciation for the change.
- c. By virtue of teachers becoming more "computer savvy", the students are looking at them with a better understanding than ever.
- d. Of course, there has been savings in various areas, thanks to the transparency in accounting.

WAY FORWARD

This is just the start of our journey. We want to take this ahead and showcase the "adoption of technology" by taking this to the classroom wherein teachers can use the learning on real time basis. This might finally give schools a cost-effective way to place useful technology on teachers, students, parents and principals table.

Some "Internet appliances" might even resemble today's wireless, handheld Personal Digital Assistants (PDAs). These portable devices could support education anywhere: students could use them to take notes, while also accessing information from the Web. Educators are only beginning to discover the applications for these devices.

Our next step would be to take this application forward to the classes through these PDAs and provide the schools with next-generation experience on learning.

Some of the “promising” learning tools through the PDA include

- Assessment tools to help educators evaluate student performance
- Collaborative tools — for example, in online role-playing simulations,
- As “edutainment” applications, such as logic games
- Data collection and analysis, to support student research in science classes

Over the next few years, count on increased Internet penetration in the home and faster Internet connections, as cable modems and Digital Subscriber Line (DSL) connections become commonplace. **Think now about how to use these to strengthen the bonds between school and home. For example, schools might transform their Web sites into community “education portals,” much as Internet search engines have evolved to present a wide range of information and links for Web users worldwide.**

The next-generation elementary school Web “portal” would provide detailed, timely information on the school's academic program. It also might give families up-to-date information personalized to their children's needs, performance, the subjects currently being studied in the classroom, and how parents might support or supplement the curriculum at home.

The School Webportal could also be used to recruit volunteers and support fund-raising. As a School Web portal becomes recognized by its community, it can be used to enhance virtually every task the school performs: providing online parental permission slips, delivering assignments to homebound children, informing parents of the school's goals, and much more.

Bottom line: The first revolution, bringing computers and the Internet into schools, is being won. The more important revolution — using technology to help children learn more effectively — has just begun.

About the Author ...

Dr. Prabhat Kaushik is an M.Sc.(Botany) and holds prestigious degrees in M.Ed., M.B.A. and Ph.D. on Gifted Children. He got trainings & exposure from prestigious institutions of USA, Australia, England including IIM, Bangalore. He has worked for Ministry of defense, GOI also.

He is an innovative educationist with 19 years of rich experience specializing in establishing new projects including SOPs, staff training, motivation, recruitment & governing of educational institutions.

Dr. Kaushik is one of the most sought after educationist for GIFTED & TALENTED globally & he has extensively travelled globally for the same. He has established a huge no. of schools and is on the governing body of many organizations globally. Dr. Kaushik is also an International Leader, British Council (U.K.), for sharing educational best practices in British schools and benchmarking with Indian schools including exchange programs and training for all stakeholders.

He has already established link between schools in India & England for Global School Partnership program run by British Council for guiding paired schools for global connect. Currently he is working on a project named “connecting classroom in different continents”: an initiative of Wirral authority, U.K. He also represented India in International Educational Conferences at ISSET, Rice University & NASA space centre. He has been sharing his innovative ideas globally including Harvard University & A.D.Healey group of schools, USA.

He chaired the meetings of DSAC Collaboration Institute, Framingham, MA, USA for 2011-12 at Boston for assessment & evaluation of state run schools in Massachusetts, USA. Dr. Kaushik has very deeply studied Australian education, society, culture, living, polity, industry, agriculture, environment and sports under Group Study Exchange program of Rotary International in 2008. Global Child Guidance Clinics and Institutes for gifted children are some of his brain child projects.

He also imparts his training & expertise as Mentor, & Trainer to C B S E, Ministry of HRD, and ESIC, Ministry of Labour & Employment, Govt. of India. He qualified Certificate – IV in Business Administration (highest certificate of Australia) from Central Institute of Technology, Perth , Australia (fully sponsored by CBSE, Ministry of HRD and Govt. of Australia. He is now Internationally Qualified Master Trainer for Vocational Education, CBSE, British Council , and Col. Satsangi`s Group of Institutions , New Delhi.

Dr. Kaushik has been conferred with 5 national and 1 state awards for his innovations in education.

Dr. Kaushik can be reached on +91 9414012001 or at vidyatree@gmail.com