



Impact of Information Technology to Enhance Education System at High School in Egypt

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Abstract

The purpose of this study is mentioned to improve the quality system in high schools of education in Egypt. Applying new modern of information technology which have different characteristics than the regular methods due to the very specific nature that can be applied to achieve the aforementioned purpose. Technology has greatly affected and impacted the way things are presented and taught in the classroom. Technology has had a large impact on the materials that are used and the way we use these materials to teach in the schools. Most everything that is used in today's classroom has been a result of technology. All materials, including textbooks and the Internet, have been invented and have had some connection to the growth of technology in the school setting. The importance of technology in schools cannot be ignored. In fact the use of technology has made the process of teaching and learning all the more enjoyable.

Keywords

Education, quality, and Information technology.

Introduction

Simply now an era of technology. The impact of technology can be felt in every possible field one such field is Education. Education and technology has been considered the main key to human progress. Education feeds technology which in turn forms the basis of education. It is therefore evident that information technology has affected changes to the methods, purpose and perceived potential of education. Being able to access large databases of information fundamentally changes education, since learners can now be creators and collaborators in the access and construction of discourses of information. Due to their technological literacy, young people can derive cultural capital from their understanding of modern information technologies, and thereby have input into educational change. The same technology also facilitates the rapid exchange of information by researchers on specific topics, so that the speed of the distribution of information is greatly increased. The increased access to huge amounts of data means students need help selecting, evaluating and analyzing information, and they need to learn how to determine the currency, validity and veracity of the information itself. All of these changes in learning have implications for teaching practice as well.

Modern Technology in Education

According to the latest insights as to how exactly modern students of today prefer to use technology and how does their learning get an impact if they use technology, it was revealed that the use of modern equipment technology and tools, the learning and interactivity of students increases. They also find it much more interactive, as well as full of interesting areas, when aided by technology. The transfer of knowledge becomes very easy and convenient, as well as effective. What this means is, that our minds now tend to work faster when assisted with the use of modern

technology, be it any part of life, here we talk about education. The reliance and dependence of such an innovation, that simply makes life an easy, smooth journey is completely unavoidable these days even in schools, universities and colleges.

Students today can make use of technology in the following ways:

- Internet connection and round the clock connectivity.
- Using projectors and visuals.
- Digital footprint in the education sector.
- Online degrees with the use of technology.

Technology Contribution in Education

- No lack of time
- Easy to access
- Available resources
- Excess of expertise
- Excess of support
- Computer can improve the student learning and basic skill area.
- Computers not only improve the learning process, and increases retention of the students.
- Effective and adequate teacher learning is an integral element of the successful learning program.

Positive impact of IT on education:

1. Enhanced Teaching and Learning:

-Technological developments like digital cameras, projectors, mind training software, computers, Power Point presentations, 3D visualization tools; all these have become great sources for teachers to help students grasp a concept easily.

-It has to be understood that visual explanation of concepts makes learning fun and enjoyable for students. They're able to participate more in the classroom and even teachers get a chance to make their classes more interactive and interesting.

. 2- No Geographical Limitations:

-With the introduction of online degree programs there is hardly any need of being present physically in the classroom. Even several foreign universities have started online degree courses that student can join.

-Distance learning and online education have become very important part of the education system now a day.

Negative impact of IT on education:

-Declining Writing Skills due to excessive usage of online chatting and shortcuts, the writing skills of today's young generation have declined quite tremendously.

-Lacking the spelling of different word.

-Increasing Incidents of Cheating.

-SMS or text messaging has become a favorite pastime of many students. Students are seen playing with their cell phone, iPhones day and night or driving and very often even between lectures.

Top Advantages of software

Software development refers to a set of computer science activities dedicated to the process of creating, designing, deploying and supporting software.”

Software itself is the set of instructions or programs that tell a computer what to do. It is independent of hardware and makes computers programmable. The advantage of software are :

1. Reduced time to benefit
2. Lower costs
3. Scalability and integration
4. New releases (upgrades)
5. Easy to use and perform proof of concepts.

One of the management software system is documentation management software System (DMS) which can be explain in detail as follow.

Documentation Management Systems (DMS)

DMS: refers to managing and accessing the documents electronically. Electronic Document Management System should contain the components given below to be proven efficient:

- Import: To open a new document into the system.
- Storage: To maintain system files and utilize storage.
- Identity: To retrieve documents with accuracy by assigning indexes.
- Export: To remove items from the system.
- Security: Password-protection on certain files for authorized users.

Integrated Software for Online Exam

Online exam is a part of DMS. Online examination is conducting a test online to measure the knowledge of the participants on a given topic. The teacher or course builder creates an account with an exam builder. In such an exam system you can create questions and add them to the exam. You can choose between multiple choice questions or free text questions or any type of questions. The integrated software program interface as shown in figure (1).



Figure (1). The Integrated Software Program Interface

Preparation of Exam

Online Application System: for collecting online applications, pre exam data management and hall ticket generation

Question Bank Software: for maintaining a bank of Questions with diagram, formula, equation, images in Word/Excel to generate printable question papers or to serve as online Question Bank.

Modules (Examination and Evaluation)

1-OMR Software: OMR (Optical mark recognition) Capable of reading OMR, OCR, ICR, Barcode, Lithocode, Qcode & Photo capture as shown in figure (2). The use of the OMR software involves four steps which are explained in detail as follow.

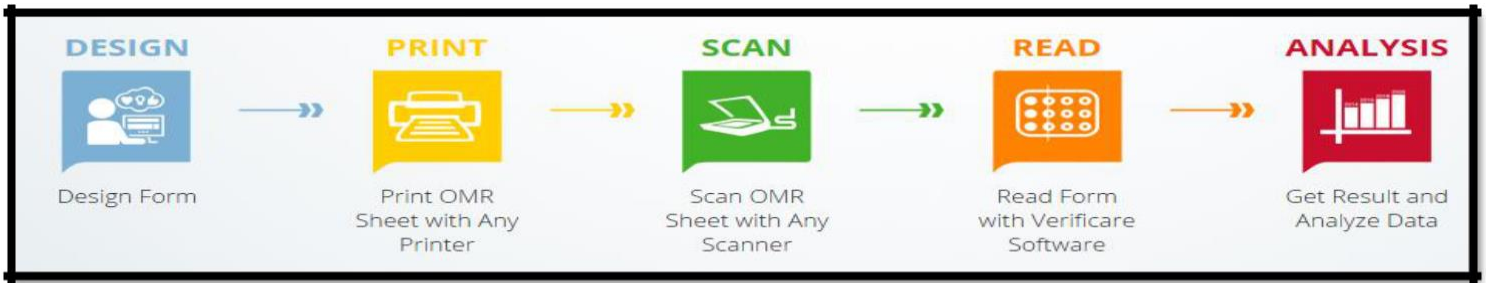


Figure (2). OMR (Optical mark recognition) steps.

A-Define OMR Test :The first step is to set OMR test name, date, subjects, number of questions per section, etc as shown in figure (3).

B- Check OMR Sheets: Third step is done once the sheets are filled and scanned. The software evaluates the answers in this stage. Read the scanned OMR sheets and store the data collected. Runtime correction of wrongly-filled sheets is also available as shown in figure (4).

C- OMR Test Answer Key: Second, the answer key is set either manually or by importing it from an Excel sheet. A correctly filled answer paper can also be used.

Create answer key by copy pasting the answers from Excel or manually feeding them. You can also copy-paste a correctly filled answer sheet. Assign marking scheme and topic tags as shown in figure (5).

D-View OMR Results: Fourth step involves generating the results of the test. The results are detailed ones, often involving graphical reports along with tabular ones. View detailed OMR results like mark lists, checklists, detailed graphical analysis and OMR sheet data in different pre-designed layouts. The results can be exported to Excel, XML, Access, Dbase, etc. as shown in figure (6).

OMR CHECKER STEP 1

CERATE TEST		
TEST TITEL (DURATION)		
CLASS TEST		
TEST DATE	TEST ID	
05 SEP 2019	019030	
SUBJECT SECTION	QUESTION	CUT OFF
PHYSICCS (1)	15	
CHAMISTRY (2)	15	
MATH (3)	15	
SOCIAL STU (4)	15	

Figure (3). Define OMR Test

QNo	ANSWER KEY	BLOCK TYPE	SCORE SCHEME
1	D	GENERAL	Section 1_1
2	B	GENERAL	Section 1_1
3	C	GENERAL	Section 1_1
4	C	GENERAL	Section 1_1
5	B	GENERAL	Section 1_1
6	AC	GENERAL	Section 2_1
7	CD	GENERAL	Section 2_1
8	9A	NUMERIC DECIMAL	Section 2_1
9	S	NUMERIC DECIMAL	Section 1_1
10	>00000000000000000000	X-MATRIX	Section 3_2
11	C	GENERAL	Section 1_1
12	B	GENERAL	Section 1_1
13	C	GENERAL	Section 1_1
14	C	GENERAL	Section 1_1
15	C	GENERAL	Section 1_1
22	A	GENERAL	Section 1_1
23	C	GENERAL	Section 1_1
24	A	GENERAL	VOID_3
25	D	GENERAL	VOID_3
26	B	GENERAL	VOID_3
27	C	GENERAL	VOID_3
28	S	NUMERIC DECIMAL	VOID_3
29	B	NUMERIC DECIMAL	VOID_3
30	>00000000000000000000	X-MATRIX	VOID_3

Figure (4). Check OMR Sheet

The screenshot shows the OMR software interface. On the left, there's a file list and a '2P2 CLASS TEST' selected. The main area displays a scanned OMR sheet with a grid of bubbles for answers. The sheet is divided into three sections, each with a table of questions and answer options (A, B, C, D). Handwritten text on the sheet includes 'Candidate Sign: Coaching Student', 'Investigator Sign: [Signature]', and 'Mobile No: 77300066'. Instructions for filling the sheet are also visible. A yellow circle highlights a specific bubble on the sheet.

Figure (5). OMR Test Answer Key

SRNO	ID/RNo	CANDIDATE NAME	Maths (10:0)				Physics (10:0)				Chemistry (10:0)				TOTAL	%	Rank	
			R	W	L	MARK	R	W	L	MARK	R	W	L	MARK			Grp	Test
1	5000051	Coaching Student11	3	7	0	3.00	4	6	0	4.00	0	10	0	0	7.00	23.33	0	5
2	5000052	Coaching Student12	1	9	0	1.00	3	7	0	3.00	1	9	0	1.00	5.00	16.67	0	6
3	5000053	Coaching Student13	4	6	0	4.00	3	7	0	3.00	3	7	0	3.00	10.00	33.33	0	2
4	5000054	Coaching Student14	6	4	0	6.00	5	5	0	5.00	4	6	0	4.00	15.00	50.00	0	1
5	5000055	Coaching Student15	4	6	0	4.00	2	8	0	2.00	1	9	0	1.00	7.00	23.33	0	5
6	5000056	Coaching Student16	3	7	0	3.00	3	7	0	3.00	2	3	5	2.00	8.00	26.67	0	4
7	5000057	Coaching Student17	1	9	0	1.00	1	9	0	1.00	2	8	0	2.00	4.00	13.33	0	7
8	5000058	Coaching Student18	2	8	0	2.00	3	7	0	3.00	4	6	0	4.00	9.00	30.00	0	3
9	5000060	Coaching Student20	3	7	0	3.00	4	6	0	4.00	3	7	0	3.00	10.00	33.33	0	2

Figure (6). View OMR Results

2-Online Test Software

Computer based test software for Assessments and Practice, can be deployed locally in Lab or online on cloud. It can be used for conducting test with following setups:

-Web Based Online Test: the student attempts the test in internet browser on a windows computer at his home.

-LAN Based Online Test in Lab: the student attempts test in internet browser on a computer in the school Lab connected to the offline server in the Lab through local intranet.

- Offline Computer Based Test using Android Device: the student temporarily connects his Tab/ Smartphone to the Lab-server or internet-server, downloads the test on his device, solves the test offline, and later connects again through internet to upload.

3-Android EduApplet

Android App interface for OMR, Quiz Pad, and Online Test and Online Result modules.

-The results of the tests conducted at the institute to the students and their parents has always been a big task. Most institutes resort to sending bulk SMS which conveys only limited information and is also costly. The email option has never really worked out as there are always complains about non delivery and spam blocking of emails. The other alternative to display results on the website which students access using their roll nos., has little visitors as people avoid doing any extra effort to get the results. Now as soon as the result is checked in the OMR software it can be broadcasted directly to smartphones of the user without any extra cost. No hassle of SMS sending regulations and DND delivery issues.

4-Digital Evaluation System: for computer assisted manual evaluation & scoring of Answer scripts image through online access.

5-Online Result System

For display of scores, answer sheets and graphical reports, it can be explain as follows:

-On the Online Result dashboard, each candidate can view all his results compiled on a single page.

-The online Score Board not only provides a summarized information in comprehensive charts but also allow to draw very detailed assessment report for every test.

-The online result and processes the scores data to generate dynamic results and detailed graphical reports. The Online Test Software is directly integrated to the online Result facility.

-Question by question responses to the MCQ question and the online MCQ question paper analysis and graphical performance reports can be generated automatically.

-In case of both online testing software and OMR test checker software the online test result facility is able to show cumulative online results from both type of MCQ tests and the OMR answer sheets can be uploaded to the online result system using FTP.

-A link is given which you can add to your website which is directed to the server where you can store your results and OMR sheets and analysis reports and solutions.

-The Online result appears as a part of your website.

Process Online Test

- All the test are listed in the test schedule.
- Few details about the test like sections, no of question, duration, activation of period.
- Test that have been answered already and submitted finally will show the view results.
- Press start button to start exam.
- You can conduct pen and paper test in the OMR sheet.

- Online test can be conduct on android tab or smartphone.
- All the various question type MCQ type, Integer response type, Matrix matching type, passage comprehension type and descriptive answers type.
- Integrated results from all platform can be shown on the online score board on the website figure (7) & figure (8). Type of question and method of answers as shown in figure (9).

-Login (username – password)

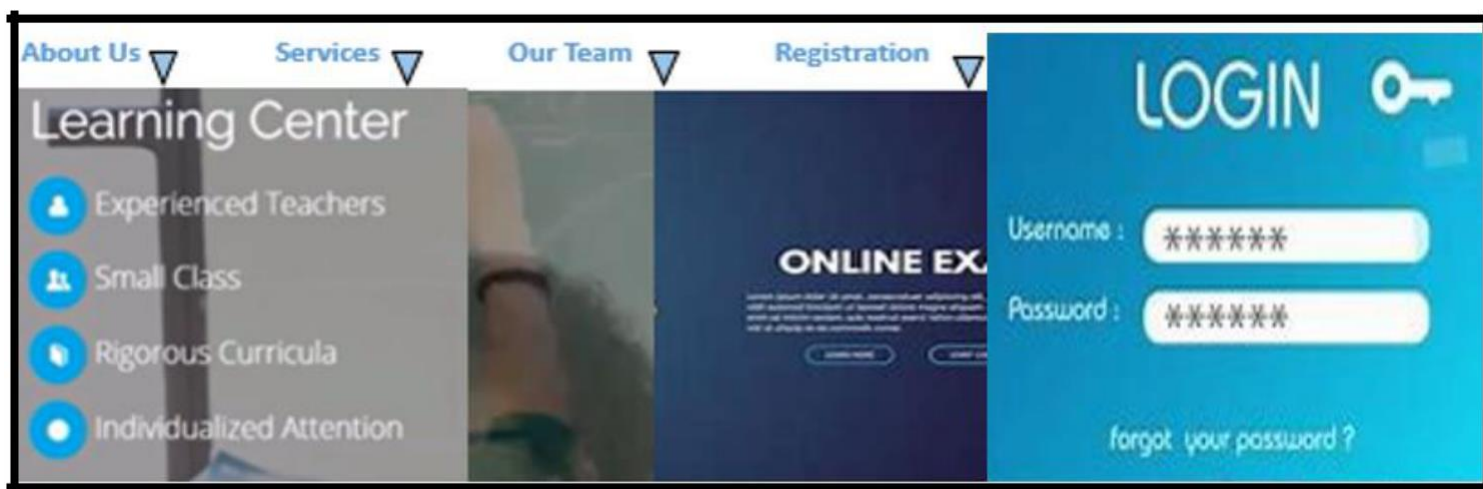


Figure (7). Login Screen

- Dash Board

TEST NO	TEST (SECTIONS)	QUES	MINs	SCHEDULE	
1002	IT JEE Mock Test 04 [Maths, Physics]	20	60 min	01-Oct-2017 10:00 31-Dec-2017 23:59	Coming
1001	IT JEE Mock Test 03 [Chemistry, Maths, Physics]	30	30 min	01-Sep-2017 11:16 30-Sep-2017 11:16	Open Test
104	IT JEE Test Simulated 03 (OMR Standard Sample) [Chemistry, Maths, Physics]	40	60 min	15-Jan-2016 10:00 15-Jan-2016 23:59	Buy Test
103	IT JEE Mock Test 02 (Std Combined Sample) [Maths, Physics]	20	60 min	19-Jan-2016 10:00 31-Dec-2017 23:59	View Result
101	IT JEE Mock Test 01 [Chemistry, Physics]	20	20 min	01-Jan-2016 11:05 31-Aug-2017 11:05	Missed

Figure (8). Dash Board Screen

Start test

The screenshot displays a digital test environment with several question panels. At the top left, a panel for 'Q No. 18' shows a math problem about natural numbers. Below it, a panel for 'Q No. 1' features a diagram of two masses on a rotating turntable. To the right, a panel for 'Q No. 19' presents a matrix matching question about collisions. Further right, a panel for 'Q No. 4' contains a physics problem about a quarter-section of a circular disk. At the bottom, two panels are visible: 'Q No. 7' on the left, which is a passage comprehension question about 'Why Lighters Matter', and another 'Q No. 7' on the right, which is an essay or descriptive answer question. The interface includes navigation buttons like 'Clear Response', 'Mark for Review', and 'Submit'.

Figure (9). Types of Question

Online Result Dashboard

- On the Online Result dashboard, each candidate can view all his results compiled on a single page.
- The online Score Board not only provides a summarized information in comprehensive charts but also allow to draw very detailed assessment report for every test.
- The online result and processes the scores data to generate dynamic results and detailed graphical reports.
- The Online Test Software is directly integrated to the online Result facility.

- Question by question responses to the MCQ question and the online MCQ question paper analysis and graphical
- Performance reports can be generated automatically.
- In case of both online testing software and OMR test checker software the online test result facility is able to show cumulative online results from both type of MCQ tests and the OMR answer sheets can be uploaded to the Online result system using FTP. After the student finished his test, he will get his results via online score board as shown in figure (10).

Online Score Board

Student ID

Password

Show Result

ID : 5000041
GROUP : Coaching Course
C/o : Demo Father01

OMR Scored Test Computer Based Test
 Manually Scored Test OMR+CBT+APP Test
 [Duration in Minutes] (Scaled Score) (Percentage)

RESPONSE	ANALYSIS	Q/A	TEST DATE TEST NO	TEST NAME [MINUTES]	_UND	PHY	CHE	MAT	BIO	ESSAY	TOTAL	RANK %ILE
			01-May-17 E516	Essay Writing						30 / 50 (60%)	30 / 50 (60%)	6 66.67
			25-Jan-16 106	P2 IIT JEE Mock Test 05 (Std Sample QuizPad) [30]				8 / 60 (13.33%)			8 / 60 (13.33%)	2 89.47
			15-Jan-16 104	IIT JEE Test Simulated 03 (OMR Standard Sample) [60]		7 / 30 (23.33%)	-5 / 30	1 / 30 (3.33%)	-9 / 30		-6 / 120	12 21.05
			10-Jan-16 103	IIT JEE Mock Test 02 (Std Combined Sample) [60]		-3 / 30		8 / 30 (26.67%)			5 / 60 (8.33%)	2 84.21
			24-Jan-15 101	Regular Class Test (Std Sample OMR) [60]		4 / 10 (40%)		2 / 10 (20%)			6 / 20 (30%)	1 94.74

Figure (10). Online Score Board

ASSESSMENT REPORTS

1- Online results admin interface

SERIES	TEST	DATE	RECORDS	
<input type="checkbox"/> 0	<input type="checkbox"/> 2001 [MASTER MULTI PAGE FORM]	25-Oct-2017	0	<input type="button" value="CHECK DATA"/>
<input type="checkbox"/> 10	<input type="checkbox"/> 1003 [SAT P3 ESSAY]	05-Aug-2017	0	<input type="button" value="CANDIDATES"/>
<input type="checkbox"/> 100	<input type="checkbox"/> 1002 [SAT P2]	05-Aug-2017	0	<input type="button" value="DELETE"/>
<input type="checkbox"/> 20	<input type="checkbox"/> 1001 [SAT P1]	05-Aug-2017	0	<input type="button" value="1a - MERGE TEST"/>
<input type="checkbox"/> 200	<input type="checkbox"/> 1000 [SAT MASTER]	05-Aug-2017	0	<input type="button" value="1b - CALCULATE"/>
<input type="checkbox"/> 40	<input type="checkbox"/> 408 [AUS VOCABULARY]	21-Jul-2016	0	<input type="button" value="1c - MANUAL SCORES"/>
<input type="checkbox"/> SURVEY-1010...	<input type="checkbox"/> 407 [AUS OC TRIAL SINGLE]	21-Jul-2016	0	<input type="checkbox"/> Recent Only
<input type="checkbox"/> SURVEY-1010...	<input type="checkbox"/> 406 [AUS OC TRIAL]	21-Jul-2016	0	BASIC RESULTS - [Required Step 1b]
<input type="checkbox"/> SURVEY-1010...	<input type="checkbox"/> 405 [AUS SELECTIVE COMBINE]	21-Jul-2016	0	2a - REPORT TYPE
<input type="checkbox"/> SURVEY-1120...	<input type="checkbox"/> 404 [AUS SELECTIVE WRITING]	21-Jul-2016	0	EXCEL- Score List (Condensed) <input type="button" value="v"/>
	<input type="checkbox"/> 403 [AUS SELECTIVE MATHS]	21-Jul-2016	0	2b - SELECTED IDs (Comma Separated)
	<input type="checkbox"/> 402 [AUS SELECTIVE RC]	21-Jul-2016	0	<input type="text" value=""/>
	<input type="checkbox"/> 401 [AUS SELECTIVE GA]	21-Jul-2016	0	2c - ORDER
	<input type="checkbox"/> 201 [PSYCHOMETRIC TEST]	21-Jul-2016	0	RollNo Order <input type="button" value="v"/>
	<input type="checkbox"/> 101 [RECRUITMENT FORM TEST]	25-Nov-2016	0	2d - PERCENT
	<input type="checkbox"/> 2 [CLASS TEST (IIT)]	09-Sep-2017	0	Percentage <input type="button" value="v"/>
	<input checked="" type="checkbox"/> 1 [DEMO TEST]	11-May-2017	0	2e - CUT-OFF
				All <input type="button" value="v"/>
				<input type="checkbox"/> Group Rank <input type="checkbox"/> Include Blocks <input type="checkbox"/> Export Sheets
				<input type="button" value="2 - GENERATE"/>
<input type="checkbox"/> Select All Group				ADVANCE RESULTS - [Required Step 1b]
				<input type="button" value="3a - TRANSFER TO SQL"/>
				<input type="button" value="3b - OPEN REPORT PANEL"/>
				<input type="button" value="SEND SMS"/>

2- Results for students

SRNO	ID/RNo	CANDIDATE NAME	Maths (10:0)				Physics (10:0)				Chemistry (10:0)				TOTAL	%	Rank	
			R	W	L	MARK	R	W	L	MARK	R	W	L	MARK			Grp	Test
1	5000051	Coaching Student11	3	7	0	3.00	4	6	0	4.00	0	10	0	0	7.00	23.33	0	5
2	5000052	Coaching Student12	1	9	0	1.00	3	7	0	3.00	1	9	0	1.00	5.00	16.67	0	6
3	5000053	Coaching Student13	4	6	0	4.00	3	7	0	3.00	3	7	0	3.00	10.00	33.33	0	2
4	5000054	Coaching Student14	6	4	0	6.00	5	5	0	5.00	4	6	0	4.00	15.00	50.00	0	1
5	5000055	Coaching Student15	4	6	0	4.00	2	8	0	2.00	1	9	0	1.00	7.00	23.33	0	5
6	5000056	Coaching Student16	3	7	0	3.00	3	7	0	3.00	2	3	5	2.00	8.00	26.67	0	4
7	5000057	Coaching Student17	1	9	0	1.00	1	9	0	1.00	2	8	0	2.00	4.00	13.33	0	7
8	5000058	Coaching Student18	2	8	0	2.00	3	7	0	3.00	4	6	0	4.00	9.00	30.00	0	3
9	5000060	Coaching Student20	3	7	0	3.00	4	6	0	4.00	3	7	0	3.00	10.00	33.33	0	2

3 - Collected results for students

Roll No	Candidate Name	PHYSICS			CHEMISTRY			MATH			Sub Total		Grand Total	Test Rank
		P1	P2	Total	P1	P2	Total	P1	P2	Total	Total P1	Total P2		
11002	AJAY TRIPATHI	10.00	2.00	12.00	2.00	14.00	16.00	6.00	6.00	12.00	18.00	22.00	40.00	1
11104	SHAYAM CHAWLA	10.00	4.00	14.00	2.00	15.00	17.00	-2.00	5.00	3.00	10.00	24.00	34.00	2
11004	MAYANK KUSHWAH	15.00	6.00	21.00	-2.00	0	-2.00	2.00	12.00	14.00	15.00	18.00	33.00	3
11103	RAJAT VARMA	22.00	5.00	27.00	2.00	-6.00	-4.00	6.00	4.00	10.00	30.00	3.00	33.00	3
11102	MITALI SHARMA	14.00	13.00	27.00	-1.00	-7.00	-8.00	-1.00	12.00	11.00	12.00	18.00	30.00	4
11005	PRATAP SINGH	0	21.00	21.00	-5.00	-9.00	-14.00	0	9.00	9.00	-5.00	21.00	16.00	5
11001	MANISH SHARMA	5.00	7.00	12.00	4.00	-7.00	-3.00	0	1.00	1.00	9.00	1.00	10.00	6
11101	CHANDRESH SRIVASTAVA	6.00	-2.00	4.00	-2.00	2.00	0	-6.00	1.00	-5.00	-2.00	1.00	-1.00	7
11003	MANISHA ARYA	-7.00	2.00	-5.00	-1.00	-2.00	-3.00	3.00	-8.00	-5.00	-5.00	-8.00	-13.00	8
11105	RAJ PAL SINGH	-8.00	6.00	-2.00	-2.00	-5.00	-7.00	1.00	-6.00	-5.00	-9.00	-5.00	-14.00	9

4 – EXCEL form results for students

STID	STNAME	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	TOTR	TOTW	TOTL		
	ANSWER KEY	D	D	D	C	B	C	D	C	B	D	A	D	C	B	C	D	A	D	C	B	A	D	C	D	D	D	C	B	C	D	30	0	0		
5000051	Coaching Student11	A	C	B	C	B	A	B	D	B	C	C	B	A	C	B	B	B	A	B	C	B	B	D	C	D	A	B	A	B	C	B	B	7	23	0
5000052	Coaching Student12	A	B	C	B	C	A	B	C	C	B	A	C	B	B	B	A	B	C	B	B	C	B	B	C	B	B	A	C	C	B	5	25	0		
5000053	Coaching Student13	A	C	B	C	B	A	C	C	B	C	A	C	B	C	B	C	B	B	C	B	D	A	C	B	C	D	A	D	B	D	10	20	0		
5000054	Coaching Student14	A	C	B	C	B	C	D	C	B	A	A	C	C	B	C	A	C	B	C	A	A	C	A	C	A	D	C	B	A	C	15	15	0		
5000055	Coaching Student15	A	C	B	C	B	C	B	C	A	C	D	C	B	C	C	A	B	C	B	B	A	C	B	C	B	B	B	C	B	C	7	23	0		
5000056	Coaching Student16	B	C	D	B	C	A	B	C	B	C	A	C	D	B	A	A	B	B	A	B	D	B	C	A	D					8	17	5			
5000057	Coaching Student17	A	C	B	B	C	A	B	C	A	C	A	B	B	C	B	A	B	C	B	C	A	B	C	B	C	A	B	C	B	C	4	26	0		
5000058	Coaching Student18	A	C	C	B	C	D	B	C	B	C	A	C	B	C	B	A	C	B	C	B	A	C	B	C	B	A	C	B	C	B	9	21	0		
5000060	Coaching Student20	A	B	A	C	A	A	B	C	B	C	A	B	C	D	A	A	C	D	B	B	A	C	B	C	B	A	C	B	B	C	10	20	0		
	A	8	0	1	0	1	6	0	0	2	1	7	0	0	0	2	7	0	0	1	1	5	1	1	2	1	4	2	0	1	0					
	B	1	2	5	4	4	0	7	0	6	1	0	3	5	4	5	1	5	5	4	7	0	3	4	2	5	2	3	3	5	3					
	C	0	7	2	5	4	2	1	8	1	7	1	6	3	4	2	1	4	3	4	1	1	5	3	5	2	0	3	4	2	4					
	D	0	0	1	0	0	1	1	1	0	0	1	0	1	1	0	0	0	1	0	0	3	0	1	0	1	2	0	1	0	1					
	CORRECT	0	0	1	5	4	2	1	8	6	0	7	0	3	4	2	0	0	1	4	7	5	0	3	0	1	2	3	3	2	1					
	INCORRECT	9	9	8	4	5	7	8	1	3	9	2	9	6	5	7	9	9	8	5	2	4	9	6	9	8	6	5	5	6	7					
	BLANK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

5 – EXCEL summary results for students

CANDIDATE ID	Chem-Inorganic	Chem-Organic	Chem-Physical	Chem	Math-Algebra	Math-Geometry	Math-Trigonometry	Math	Phy-Light	Phy-Motion	Phy-Sound	Phy
5000051	0	0	0	0	1	1	1	3	1	1	2	4
5000052	1	0	0	1	0	1	0	1	2	0	1	3
5000053	1	1	1	3	1	2	1	4	2	1	0	3
5000054	1	2	1	4	1	3	2	6	2	1	2	5
5000055	0	1	0	1	1	3	0	4	2	0	0	2
5000056	1	1	0	2	1	1	1	3	2	0	1	3
5000057	0	2	0	2	0	1	0	1	1	0	0	1
5000058	2	2	0	4	0	1	1	2	2	1	0	3
5000060	1	2	0	3	1	1	1	3	3	0	1	4

6- Sections / subject SCORE LIST

Roll No.	Name	(%)	Rank	Maths	Physics	Chemistry	Total
5000051	Coaching Student11	7.78	5	6.00	4.00	0.00	10.00
5000052	Coaching Student12	5.56	6	2.00	3.00	1.00	6.00
5000053	Coaching Student13	11.11	2	8.00	3.00	3.00	14.00
5000054	Coaching Student14	16.67	1	12.00	5.00	4.00	21.00
5000055	Coaching Student15	7.78	5	8.00	2.00	1.00	11.00
5000056	Coaching Student16	8.89	4	6.00	3.00	2.00	11.00
5000057	Coaching Student17	4.44	7	2.00	1.00	2.00	5.00
5000058	Coaching Student18	10.00	3	4.00	3.00	4.00	11.00
5000060	Coaching Student20	11.11	2	6.00	4.00	3.00	13.00
Average Score				3.00	3.11	2.22	2.83

7- QUESTION PAPER ANALYSIS REPORT

Test Statistics

Total Possible Points :	90.00	Median :	0.00	Maximum Score :	31.00	Kuder Richardson :	0.74
Total Students :	10	Mean Score :	0.00	Minimum Score :	-13.00	Cronbach's Alpha :	0.58
Std. Dev. :	0.00	Average Score :	5.40	Range of Scores :	44.00	Ferguson's Delta :	0.89

Question Distribution

Section wise
Count of Questions

Subject	Count	Marks
CHE	10	30.00
MAT	10	30.00
PHY	10	30.00
Total	30	30.00

Section wise
Marks of Questions

Subject	Count	Marks
CHE	10	30.00
MAT	10	30.00
PHY	10	30.00
Total	30	30.00

Difficulty wise
Count of Questions

Difficulty	Count	Marks
Easy	29	87.00
Very Tough	1	3.00
Total	30	90.00

Difficulty wise
Marks of Questions

Difficulty	Count	Marks
Easy	29	87.00
Very Tough	1	3.00
Total	30	90.00

8- QUESTION STATISTICS

Question	Response Frequency Percent	Summary Statistics				Non Distractor	Percent Correct			Reliability																	
		Graded	Correct	Incorrect	Missing		Total %	Upper 27%	Lower 27%	DL	IDI	PB															
Question : 1 (D)	<table border="1"> <tr><td>A</td><td>8</td><td>80</td></tr> <tr><td>B</td><td>1</td><td>10</td></tr> <tr><td>Miss</td><td>1</td><td>10</td></tr> </table>	A	8	80	B	1	10	Miss	1	10	10	0	9	1		0.00	0.00	0.00	0.00	0.00	0.00						
A	8	80																									
B	1	10																									
Miss	1	10																									
Question : 2 (D)	<table border="1"> <tr><td>B</td><td>2</td><td>20</td></tr> <tr><td>C</td><td>7</td><td>70</td></tr> <tr><td>Miss</td><td>1</td><td>10</td></tr> </table>	B	2	20	C	7	70	Miss	1	10	10	0	9	1		0.00	0.00	0.00	0.00	0.00	0.00						
B	2	20																									
C	7	70																									
Miss	1	10																									
Question : 3 (D)	<table border="1"> <tr><td>A</td><td>1</td><td>10</td></tr> <tr><td>B</td><td>5</td><td>50</td></tr> <tr><td>C</td><td>2</td><td>20</td></tr> <tr><td>D</td><td>1</td><td>10</td></tr> <tr><td>Miss</td><td>1</td><td>10</td></tr> </table>	A	1	10	B	5	50	C	2	20	D	1	10	Miss	1	10	10	1	8	1		11.11	11.11	11.11	0.10	0.00	0.08
A	1	10																									
B	5	50																									
C	2	20																									
D	1	10																									
Miss	1	10																									
Question : 4 (C)	<table border="1"> <tr><td>B</td><td>4</td><td>40</td></tr> <tr><td>C</td><td>5</td><td>50</td></tr> <tr><td>Miss</td><td>1</td><td>10</td></tr> </table>	B	4	40	C	5	50	Miss	1	10	10	5	4	1		55.56	55.56	55.56	0.50	1.00	0.56						
B	4	40																									
C	5	50																									
Miss	1	10																									

Question	LEVEL	SECTION	TOPIC	POS	NEG	KEY	W	L																					
1	Easy	MAT		3.00	0.00	D	0	1																					
							<table border="1"> <tr><td>Batch 01</td><td>0</td><td>0%</td><td>1</td><td>100%</td></tr> <tr><td>Batch 02</td><td>9</td><td>100%</td><td>0</td><td>0%</td></tr> <tr><td>Total</td><td>9</td><td>90%</td><td>1</td><td>10%</td></tr> </table>		Batch 01	0	0%	1	100%	Batch 02	9	100%	0	0%	Total	9	90%	1	10%						
Batch 01	0	0%	1	100%																									
Batch 02	9	100%	0	0%																									
Total	9	90%	1	10%																									
2	Easy	MAT		3.00	0.00	D	0	1																					
							<table border="1"> <tr><td>Batch 01</td><td>0</td><td>0%</td><td>1</td><td>100%</td></tr> <tr><td>Batch 02</td><td>9</td><td>100%</td><td>0</td><td>0%</td></tr> <tr><td>Total</td><td>9</td><td>90%</td><td>1</td><td>10%</td></tr> </table>		Batch 01	0	0%	1	100%	Batch 02	9	100%	0	0%	Total	9	90%	1	10%						
Batch 01	0	0%	1	100%																									
Batch 02	9	100%	0	0%																									
Total	9	90%	1	10%																									
3	Easy	MAT		3.00	0.00	D	0	1																					
							<table border="1"> <tr><td>Batch 01</td><td>0</td><td>0%</td><td>0</td><td>0%</td><td>1</td><td>100%</td></tr> <tr><td>Batch 02</td><td>1</td><td>11%</td><td>8</td><td>88%</td><td>0</td><td>0%</td></tr> <tr><td>Total</td><td>1</td><td>10%</td><td>8</td><td>80%</td><td>1</td><td>10%</td></tr> </table>		Batch 01	0	0%	0	0%	1	100%	Batch 02	1	11%	8	88%	0	0%	Total	1	10%	8	80%	1	10%
Batch 01	0	0%	0	0%	1	100%																							
Batch 02	1	11%	8	88%	0	0%																							
Total	1	10%	8	80%	1	10%																							
4	Easy	MAT		3.00	0.00	C	0	1																					
							<table border="1"> <tr><td>Batch 01</td><td>0</td><td>0%</td><td>0</td><td>0%</td><td>1</td><td>100%</td></tr> <tr><td>Batch 02</td><td>5</td><td>55%</td><td>4</td><td>44%</td><td>0</td><td>0%</td></tr> <tr><td>Total</td><td>5</td><td>50%</td><td>4</td><td>40%</td><td>1</td><td>10%</td></tr> </table>		Batch 01	0	0%	0	0%	1	100%	Batch 02	5	55%	4	44%	0	0%	Total	5	50%	4	40%	1	10%
Batch 01	0	0%	0	0%	1	100%																							
Batch 02	5	55%	4	44%	0	0%																							
Total	5	50%	4	40%	1	10%																							

Implementation

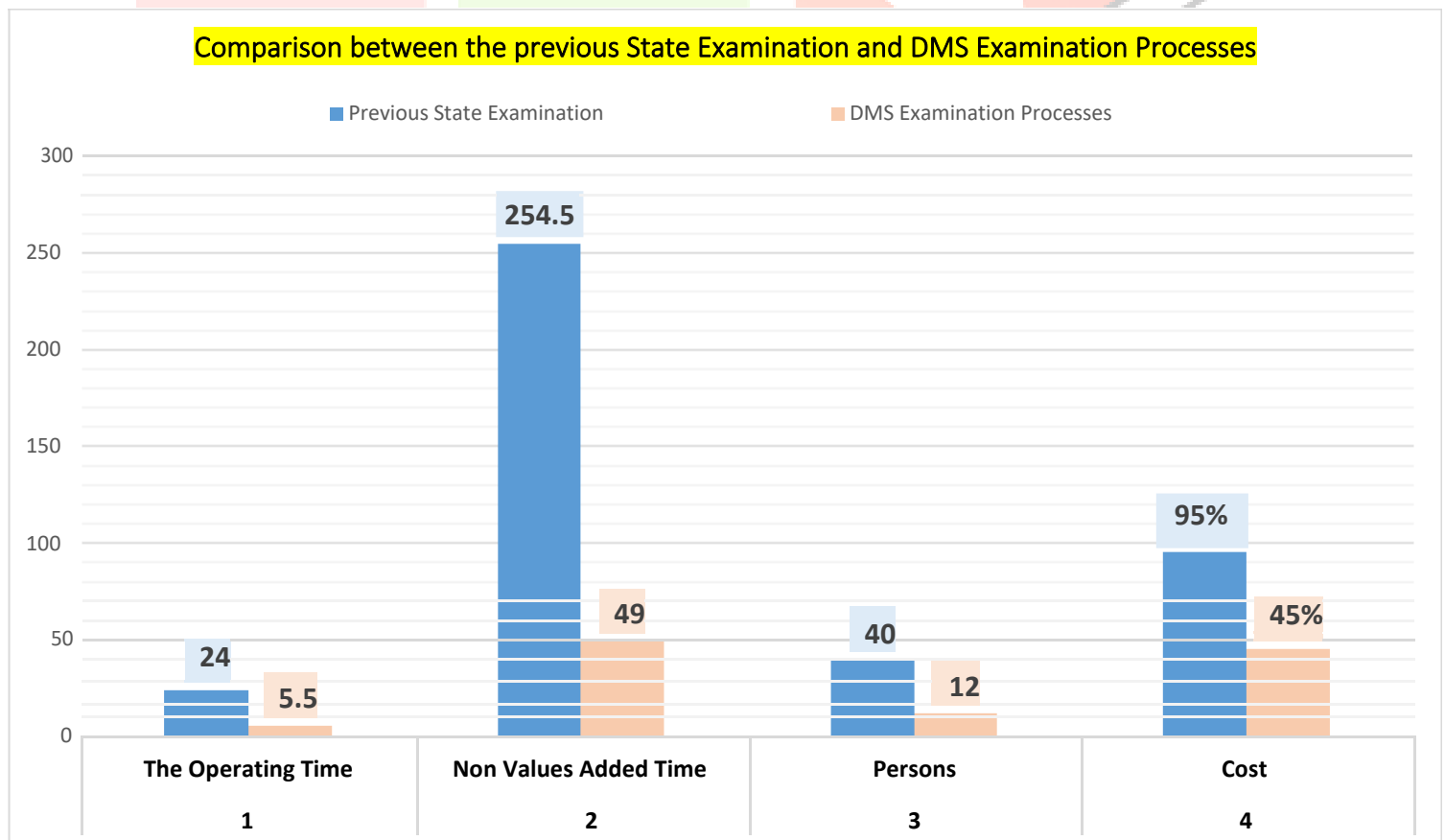
DMS program was implemented in one of the Egyptian languages schools, which had a great impact in developing the school performance and improving the educational process especially in the examination process. DMS contributed to reduce paperwork, cost of material and improves work flow, lead times, cycle times, inventories, hence was achieved customer satisfaction (internal & external).

Improvements

- Eliminates the waste of time and non-value added.
- Enabling continuous improvement.
- Help the schools to apply online exam, classroom.
- Increase the skills for all members in the schools.
- Follow methodology of teaching as American schools.
- Eliminate the communication barriers between the instructors and parents through exchanges the reports, certificates of the students by DMS.
- Elaborate the students' researches as a main concept to enhance the levels of thinking.

Comparison between the previous State Examination Processes and DMS Examination Processes

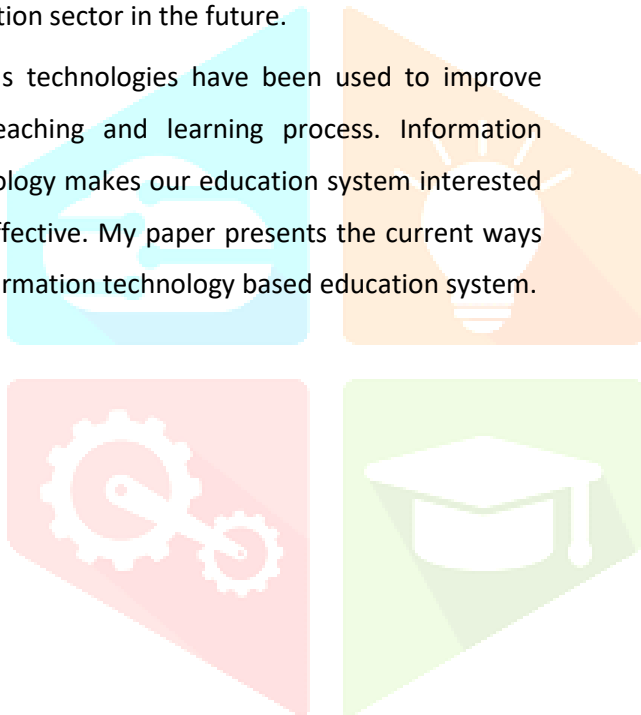
No	Point of comparison	previous State Examination	DMS Examination Processes	improvement
1	The operating time	24 hours.	5.5 hours.	Time decreases to 1/4.
2	Non values added time	254.5 hours	49 hours	Time decreases to 1/5.
3	Persons	40	14	Employment decreases to 1/3.
4	Cost	90%	45%	Cost decreases to 1/2



Conclusion

Technology has a positive impact on education and at the same time may also pose negative effects. Teachers and Students should take advantage of this in the good light and Eliminate the drawbacks which are pulling back many of Students as well as schools from achieving excellence. Every country have to introduce a more technologically equipped education sector in the future.

Various technologies have been used to improve the teaching and learning process. Information technology makes our education system interested and effective. My paper presents the current ways of information technology based education system.



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