



*Association of  
Egyptian-American Scholars*

*founded in the United States  
and Canada in 1974*

**New Visions for Education and Technology**

**PROCEEDINGS**

*Of the*

**AEAS' 2000 Conference**

**Toronto, Ontario, Canada**

**June 2 – 4, 2000**

## INTRODUCTION AND ACKNOWLEDGEMENTS

On behalf of the Organizing Committee, I would like to welcome all participants to this annual Conference, which promises to be one of the best and most memorable in the Association 26 years history. The last such annual Conference held in Canada, was held seven years ago.

The Program theme this year is: *"New Visions for Education and Technology"* which is most timely with regard to Egypt's needs in preparation for the new millenium and for the globalization of the world economies. The Conference, as reflected in these Proceedings, contains a strong participation by the Egyptian Scholars living in Canada, Egypt, the United States and beyond. The technical program includes five Sessions dealing with: *Advanced And Emerging Technologies, Education Models, Impact Of New Technologies On: Education, Human Development, Cultural, Legal And Socio-Economic Factors.*

We were indeed most impressed with the response from our colleagues to the invitation to meet in Canada, as a prelude for "Egypt' 2000" bi-annual Conference to be held in Cairo in December 2000. The large number of contributed papers, presentations, Panel discussions promises to make this meeting one of the busiest and most productive ones. The Banquet Key-note presentation by Dr. Ismail Serageldin (Vice-President, The World Bank Group) is very appropriately entitled: *"Education, Science and Values: Producers and Consumers in the New Knowledge Economy"*.

As you know, the aim of the AEAS is to strengthen the cultural, scientific, and educational ties between the Egyptian Scholars in North America and the Motherland, our beloved Egypt. To all contributors and participants, who are helping with this aim, and for providing assistance and vision to help with the challenges of the future, we express our thanks and gratitude. I would be remiss if I neglected to thank the Organizing Committee team for their tremendous effort and dedication. I particularly acknowledge Dr. Mohammed A.R. Osman for his initiative to produce the available full length papers on CD, to me made available during the Conference.

Finally, we would like to wish you a productive and enjoyable Conference.

Waguih ElMaraghy, Ph.D., P.Eng.  
Editor  
Chair, AEAS'2000 Organizing Committee

# Opening Session

**Welcome & Opening Remarks By:**

**Dr. Hoda ElMaraghy,  
Vice-President, AEAS**

**Dr. Badr ElDin Ali  
President, AEAS**

**Keynote Opening Address:**

**Dr. Mohamed Zayed  
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## **Session I:**

# **Advanced and Emerging Technologies**

# Information Technology In Egypt: The Past, The Present And The Future

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## Abstract:

### The Past : EDP - Electronic Data Processing

Automation of manual systems in Government Agencies, large Organizations, Universities, Scientific Research Institutes and large Corporations etc..... started on a modest scale by the late 1950's and early 60's. The number of Computer installations in Egypt (main frames of second generation) were limited. EDP was at that time the state of the art that helped in Automating the Applications of services rendered to the public, and improving the quality of management and business environment. The conventional machines used at that time for Card Punch, Card Readers, Punched Paper Tapes, Tabulators...etc. were the available devices as Main Frame Computer peripherals. The Assembler, Low level Languages and High Level Languages like COBOL & Fortran were the dominant ones by the late 60's and mid 70's.

### The Present : MIS - Management Information Systems

The concept of MIS Management Information Systems started to be the trend of the years to follow. DSS Decision Support Systems, Expert Systems and Artificial Intelligence, CAD/CAM (Computer Aided Design and Computer Aided Manufacturing) together with the new Generations (the third and fourth generations) of main frame computers. Mini Computers and Computer Networks for Centralised and Decentralised Data Bases with Dumb and Intelligent terminals at the end, were increasing in numbers by the years but not as fast as when the Micro Processors started with the first 8088 XT -AT 286/386/486 Pentium I, II, and III. DOS Applications, the Windows Environment allowed for a fast Growth of computer utilization. User-friendly Software Packages contributed to this growth.

It is worth saying that I am lucky and proud to be the first to introduce the Arabic alphabet and the set of numerics used in Arabic speaking countries (other than North African Arabic Countries- Algeria, Tunisia and Morocco) to be the data entry alphabet for Computer users. As for the first time in history the data entered to computers and displayed on the Visual Display Units and Line Printers were in Arabic. I recommended that we use the Arabic Numerics instead of the Hindu set of Numeric that we use, but it was not practically possible at that time. This development was introduced together with the first online real time Teleprocessing Nation Wide Network that was implemented by the Ministry of Interior Computerization Project in the early 70's, under my direction.

Technology provides us now with better software solutions and hardware capabilities. Since the mid 80's and till the end of the twenty century, Egypt, as all over the world, Information Technology grew in the fast developing computer hardware and software industry resulted in a fast and wide expansion of Micro Computers and Micro Computers Applications. By the emerging new Millennium, the 21st Century, Information Technology in Egypt is Heading towards a new Era and new Dimensions.

### The Future : IT - Information Technology

The Government of Egypt decided to join the world Information Technology Revolution. A new Ministry of Communication and Information Technology was established recently. A budget of over 1 Billion Egyptian pounds has been initially allocated. A National plan to define the needs, the methods and the different actions to create and encourage this vital industry. (Training, Internet, E- Commerce, Distance Learning, R&D etc..) [slides of last two months news on that subject].

Statistical Data show that Egypt's share in software development does not exceed 50 Million Dollars, while a country like China produce almost 30 Billion dollars, Ireland 6.3 Billion, India more than 5 Billion dollars a year. The total produced world wide is 1.2 Trillion (1200 Billion Dollars). Egypt's population is about 60 million, the world population is about 6 billion, It is fair enough, to say that our share of Information Technology Industry has to reach 12 Billion Dollars a year. Egypt with the help of Egyptian Scholars in North America and other Countries together with the software developers & expertise in Egypt are able to achieve this goal.



# **Anti Terrorist Computer Systems**

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## **Abstract:**

Computers can be used to protect countries against some terrorist attacks by preventing their legal entries and by monitoring them wherever they are. Computers may also be used in monitoring kidnap victims to help locate them for later rescue operations. This paper will discuss some of the basics of such systems and some of the non-confidential details.

If a country knows, through its intelligence or otherwise, the picture of a terrorist as he/she was, even decades ago and/ or his/her finger prints, the suspect may be identified at a point of entry without having him/her be aware of any suspicions. For this the system requires data bases with image ageing, positive or negative. The finger prints of the suspect are taken without the suspect being aware of being checked. Modern imaging systems and intelligent use of some available hardware will be discussed.

With the availability of Global Positioning Systems (GPS), with enough accuracy to about one metre (three feet), a terrorist or a kidnapped victim may be located with a follow up, on the computer system, along the time variable. In some terrains inside some countries, reasonable height towers may be used to do the same, using Local Positioning Systems (LPS). GPS and LPS may be used separately or together according to a cost/benefit analysis for each case and its situations. The availability of chips for GPS and LPS monitoring now allow much better capabilities for efficient systems, almost at any situation.

# Biometrics-based Identification Security In 21<sup>st</sup> Century Technologies

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## **Abstract:**

Computer-Mediated Communication (CMC) has become an integral part of scientific work. The biometrics-based security impacts of CMC on the organization of the scientific work in identification of the legitimate ownership or user is discussed.

The Biometrics Identification Technology (BIT) is the science of automatically identifying individuals based on their physiological or behavioural characteristics (known as positive personal identification). As information technology becomes the key to wealth in the 21<sup>st</sup> century, biometrics security will play a central role in providing a high level of security to the existing and future products. Currently most people use personal identification tools such as, ID cards, Passport, PIN number, or even password, or any other user secret codes. However, these tools are not accurate enough, because any one of these tools can be frauded, lost, forgotten, or stolen.

In today's interconnected information society (Inter/Intranet, e-Commerce, Globalization, Distance Learning, Communication Technologies, and the other CMC), accurate identification tool has become very important. Biometrics technology has advanced tremendously over the last few years and has moved from research labs and Hollywood to real-world applications. Like any technology with commercial applications, it has been difficult, until now, to assess the state of the art in biometrics in the open literature.

This paper is attempted to disseminate the technological aspects and implications of biometrics-based security for the new-century's CMC. In particular, the paper addresses survey, the biometrics methods in CMC use, assess the capabilities and limitations of the different biometrics, understand the principles steps of design biometric systems, and to recognize personal privacy and security implications of biometrics-based identification technology.

The biometrics which seem best suited for the most information security applications are fingerprint, voice, iris/retina, DNA, and face recognition, either singularly or in combination. Currently, the performance of biometric systems is gauged mostly by error rates. In order to describe the performance of a system, both the false accept rate (FAR) and false reject rate (FRR) must be determined. These FARs and FRRs are accepted as the metrics by which biometric system performance is judged today. Although, the final judgement dependent on many other issues, such as universality, uniqueness, permanence, acceptability, collectability, plus the area of the application.

**Keywords:** Biometrics, Fingerprint/Iris/Retina Identification, Face/Speech/Ear Recognition, Signature Verification, Feature Encoding, Features Matching.

# **Recent Advances In Quality Of Service Support Over Internet Protocol Based High Speed Networks**

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## **Abstract:**

Recent growth in the Internet traffic volume has influenced telecommunications carriers and internet service providers to develop a new infrastructure for their future internet based networks. The new infrastructure is radically different from today's internet. It is characterized by high speed transport rates, support for voice, video, as well as data, seamless interfacing with wireless cellular services among others.

This talk will shed some light on the design, and architecture principles for the future Internet Protocol (IP) based high speed networks. Recent advances in quality of service support to ensure that voice, and video are transmitted with the highest quality will be explored in depth.

## **Basic Requirements Of Virtual Business On The Internet**

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### **Abstract:**

The pervasive connectivity of the Internet and the attractive graphical user interface of the World Wide Web "WWW" allow businesses to pursue new growth opportunities in electronic business (e-business or Virtual Business) for selling, customer relationships, product/service design, user support, geographical expansion and supply chain integration on top of business functions automation and integration including processing equipment.

Virtual Business platforms for the Internet environment need flexibility to integrate with business critical applications or functions; scalability to grow with the business, robustness to handle complex transactions reliably, extensibility to encompass future requirements and integration of a highly automated supply channels.

### **E-business Challenges:**

- Poorly defined requirements, including business and technology requirements and capacity needs
- Lack of development experience with database and, transaction systems
- Poor project management
- Use-what-you-know technology decisions
- Architectures or technologies that don't provide required functionality, flexibility or scalability.

Without the benefit of experience, it's easy to fall into the pitfalls on the road to e-business. Many sites are scrapping first-generation platforms and technologies once the limitations of those technologies become apparent. Technology limitations are typically due to an inability to scale gracefully, an inability to integrate with existing business processes and applications, or the lack of functionality and flexibility to provide the features required to offer a leading-edge site.

## **Digital And Collaborative Manufacturing**

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# Technology For Detection Of Landmines In Egypt

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## **Abstract:**

Egypt is in the unfortunate position of being the country with the largest number of landmines in the world. UNICEF estimates that Egypt has 23 million landmines, which is about 20% of the world's total. In order to clear the way for development projects, Egypt needs to get rid of these mines. Although it costs from \$3 to \$10 to purchase a landmine, it takes between \$300 and \$1,000 to remove a single mine.

The high cost of removal is mainly due to the painstaking task of finding a landmine. In the clutter of a minefield, most of the effort is spent on finding individual landmines. Currently, this is done by poking the ground, inch by inch, using bayonets or sticks (about 250 mm long) to locate solid objects. Metal detectors are also used to locate landmines. However, in a battlefield, metal shreds and debris severely limit the usefulness of this method. Biological sniffing by dogs is also used. This method requires extensive training, and the dogs' limited attention span makes it difficult to maintain a continuous operation. Electronic chemical sniffers can also be used, though they are not as sophisticated as dogs in terms of their detection abilities. Moreover, minefields are usually saturated with residual vapour emissions from recently detonated explosives, which may add to the chemical clutter in the area. Mechanical demining can reduce the need for mine-by-mine detection, as it enables the clearance of large areas at a low cost and high speed. However, this method does not provide a 100% clearance rate. Such a high removal rate is quite important for humanitarian demining. Therefore, the use of such mechanical devices in humanitarian demining will still require a follow-up detection process, to ensure that all mines are removed.

A number of mine detection techniques are emerging as alternatives to the currently used methods that have not appreciably changed since World War II. This paper will summarize the state-of-the-art detection technology and assess the suitability for various techniques for use in the mainly sand-laden conditions of Egypt. Techniques employing infrared thermography, ground penetrating radar, x-rays and nuclear radiation will be discussed. The challenges of this technically difficult task will be emphasised. It is hoped that this presentation will stimulate interest and incite new ideas for dealing with this scourge, which affects Egypt and other countries in the Middle East and Africa.

# Government Role in Workplace Health and Safety

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## **Abstract:**

During one week in 1997, the Ontario Ministry of Labour was notified of the following events: one worker fatally injured by a falling car, another killed when pulled into machinery, a third cut in half after falling into an operating saw, a fourth worker fell 70 ft. to his death from a building under construction and a fifth worker was killed by electrocution. Three others were more "fortunate," escaping with limb amputations, bone fractures and multiple internal injuries.

These are the grim realities behind the statistics of workplace injury, the visible tip rising above the several thousand lesser injuries that occur in the province each week.

The ongoing, high incidence in Ontario workplaces of deaths and injuries, most of which could have been prevented, gives urgency to the notion that the current level of OHS performance can and must be improved. We can always do better. Change is needed not in the parts of the system - they are substantially in place - but in how those parts interact and the results that are produced. The current system can become more effective by building on its demonstrated strengths. The time for autonomous organizations independently pursuing their own goals is over.

The passage of the Workers' Compensation Reform Act, 1997, (Bill 99) sets the stage for a new cooperative approach to workplace health and safety in Ontario.

This paper presents the Canadian experience and describes how the workplace health and safety system will work cooperatively to achieve its fundamental objective: the elimination of incidents like those above and the tragedies they represent for the victims, their families and friends. In so doing, we will move towards achieving this government's goal of making Ontario's workplaces the safest in the world.

Workplace injury is a world wide problem and is a major cause of human suffering as well as economic setbacks. The workplace health and safety system of Ontario has proven to be very effective in reducing the workplace injuries and is considered one of the most advanced in the world.

## **Session II:**

# **Higher Education Models, Technological Tools, and Resources**



## **Multimedia and Virtual Environments In Web-Based Self-Paced Distance Education**

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### **Abstract:**

Demand for continuing education is certainly growing. In fact our industrial competitiveness depends on skill acquisition. We can see a change in career patterns emerging with many people retraining at least twice during their working life.

The rapid technological changes observed today need a more responsive educational process. Open learning centers can be very effective in providing the resources needed which can be accessed in a flexible way.

Large corporations are turning to universities for support in helping to give their staff appropriate skills. Residential training courses are expensive both in cost and time. Thus, the need for an approach that is more accessible and affordable than traditional face-to-face courses.

We are likely to see more education services available on demand. These will be tailored to the client's need. Remote learning could become the norm.

Already, distance learning initiatives are on the rise. These take a technological approach making use of advanced IT and telecommunications. We do however need to look carefully at the educational processes.

We need to consider what the role of universities will be in such a setting. Will they become limited to examinations at undergraduate level and to research? Is there, however, no substitute for hands on learning experiences?

The presentation will provide a personal perspective on the shape of future educational systems and experiences.

# **Interactive Outcome-Based Assessment Using Multi-Media**

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## **Abstract:**

Interactive multimedia learning is becoming more and more popular.

However, the teaching tools used are limited to primitive functionality. The majority of the teaching schedule is based on flip chart presentations and improves with the addition of animation, voice and self navigational tools. The performance assessment of a module is still using only primitive functions.

The most common tools are the calculated answers, the multiple question test and the Yes/No methods. In this presentation we will first show some of the shortcomings of the existing methods.

We will then propose some new tools to better evaluate the performance of learning, based on outcome measurement principles.

We will show a variation of the calculation method using random problem generation techniques. Then we will explore an assessment technique based on graphical interaction showing various techniques of graphical interfacing.

Finally we will present an expert system engine which allows very sophisticated question/answer testing including appropriate guidance towards correct answer.

We will show the effectiveness of these teaching modules using the new performance assessment with outcome measurement techniques on a Power Electronic sophomore class over the last 5 years.

# Satellite Remote Sensing Data As An Educational Tool

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## **Abstract:**

The technology of remote sensing from space has opened a whole dimension in our ability to observe and monitor many processes of the earth surface.

Images of the earth from satellites provide information on agricultural areas, coastal areas, deserts, ocean, natural hazards such as floods and earthquakes, potential locations for underground water, etc. Information on those applications can be obtained by processing the images digitally using mathematical techniques or just by analyzing the images visually.

In this paper a few examples of satellite images are presented to show the information contents of the images.

A proposal is also presented to use the images and other geographic data such as thematic maps (agriculture, geological, population, road, etc.) as well as texts and photographs in a comprehensive visual system to educate students (at school and university level) and the public (in science centres and museums) about many geographical, social and economic aspects of the country.

# Infrastructure Design And Rehabilitation

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## **Abstract:**

During the era of the Pharos a genius idea resulted in building Egypt's pyramids that are cited amongst the seven world wonders of humanity. In modern Egypt times, significant projects have seen the day such as the High Dam, Egypt's industrial revolutions, the new bridges, transmission and Tele-communication towers, buildings of all purposes, steel and concrete structures, tunnels, water treatment plants, petroleum complex, hospitals, recreation facilities, residential towers and tourist resorts.

It is easy to deduce that all these projects have in common what we can call: Analysis, Design, Verification, Optimization and Materials, which together combined with engineering skills and know how produces all of the previous and wonderful projects and structures.

It is in this wide technological field that SAFI Canada and SAFI Egypt are devoting extensive energy and resources to provide the engineers worldwide with the best analysis and design technology tools to help them design practically any structure.

SAFI is a comprehensive and flexible general purpose structural software for integrated analysis, verification, design and optimization. SAFI may be utilized for analyzing and designing almost all kinds of structures, bridges, towers, transportation, industrial, and various utility structures.

SAFI addresses the entire spectra of structural analysis, verification and design within one package.

The innovative concepts within SAFI make it the structural software package of choice for structural engineers worldwide.

# **Evaluation of Available Transfer Capability of Transmission Systems**

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## **Abstract:**

The Available Transfer Capability (ATC) of a transmission system is a measure of unused capacity of the system at a specific time.

ATC depends on many factors such as the system generation dispatch, system load level, load distribution in the network, power transfers between areas, network topology and the limits imposed on the transmission network due to thermal, voltage and stability considerations.

Information on ATC can help in reinforcing the transmission system and in arranging a variety of power transactions between sellers and buyers of electricity.

This paper describes a simple method for determining the ATC between any two locations in a transmission system under a given set of system operating conditions. The method also provides ATCs for selected transmission paths between the two locations in the system and identifies the most limiting facilities in determining the network's ATC. In addition, the method can be used to compute multiple ATCs between more than one pair of locations. The proposed method is illustrated using the Institute of Electrical and Electronic Engineers (IEEE), Reliability Test System (RTS).

# Multiple-Choice Versus Open-Ended Questions In The Assessment Of Mathematics Computation Skills

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## Abstract:

The question of whether multiple-choice (MC) and open-ended (OE) questions of the same content measure the same traits is far from being resolved. It is of importance not only to know whether or not different formats of the same content measure different skills, but also to know what skills are measured with each format. Many empirical studies on the equivalence of MC and OE formats have been reported. However, their results have not been conclusive and many were seriously flawed in design and analysis (Traub and MacRury, 1990). In general, these results suggest that MC and OE tests of the same content cannot be assumed to be equivalent and that format effect is not uniform across subject matters. It is also conceivable that format effect is not uniform across ages of students.

It has generally been assumed that correct answers to MC questions can be guessed at more readily than OE questions, it is thus expected that MC tests are less difficult, less discriminating and less reliable than OE tests of the same content. In the math computation domain, it is hypothesized that, regardless of the test format, math questions will require the calculation of the answer and that the MC answers given will not be recognized by most students. Nevertheless, having multiple answers - one of which is the correct one - may alert the student who makes a mistake in the computation and ends up with an answer which is not on the list of choices, to check and/or redo the computation. Such guidance can still result in the MC format to have reduced relative difficulty.

The main purpose of this study is to test the equivalence of MC and OE formats as applied to mathematics computation at grade levels two to six.

Data for this study consist of the responses of 1028 students in grades two to six to the mathematics computation component of the Canadian Achievement Tests, Second Edition (CAT/2) (Canadian Test Centre, 1992). Students at each grade level were divided into four groups; group 1 was tested with MC format and retested with OE format, group 2 was tested with OE format and retested with MC format, group 3 was tested with MC format and retested with MC format and group 4 was tested with OE format and retested with OE format. That is, response formats were used in four testing sequences; namely, MC/OE, OE/MC, MC/MC and OE/OE.

Paired t-tests of the difference between the scores on first and the second testing are carried out for each testing sequence at each grade level. Also, test-retest reliability and correlation coefficients corrected for attenuating effect of errors of measurement are calculated and compared to unity. Generalised linear models (GLM) procedure is used to carry out a repeated measures analysis of variance in which components of variance due to carryover effects and format effects are estimated and tested for statistical significance.

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Traub, R. E. & MacRury, K. (1990). Antwort-auswahl- vs freie-antwort-aufgaben bei lernerfolgstests [Multiple-choice vs. Free-response in the testing of scholastic achievement]. In K. Ingenkamp & R. S. Ja(../ger (Eds.), *Tests und trends 8: Jahrbuch der pa(..)dagogischen diagnostik* (pp. 128-159). Weinheim, Germany: Beltz Verlag.

# Adoption of Internet Innovations among Universities in Egypt

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## **Abstract:**

It is believed by many social scientists and scholars that continued advancement of information technology will set this era of globalization apart from any other human experience in history. Globally, the information-based economy is creating parallel communication networks: one for those with access to technology and knowledge; the other for those without technological link and know-how, constrained by high cost and dependency on dated technology. The knowledge economy is beginning to transform few developing countries to start taking part in the digital world. Many developing countries, however, are still catching up with older technologies and they need a major effort in order to enter the new knowledge economy. The challenge of bridging this developmental gap requires massive efforts for the diffusion, integration, and promotion of information technology among higher education institutions.

There are great potentials for information technology applications in higher education fields like health, education, business, and library science. For example, the typical US medical school library subscribes to over 5,000 journals. Cairo University's medical school, one of the best in Africa and the Middle East, subscribes to only 50 journals. The internet makes it possible to access current information in a wide variety of fields at a very low cost. However, most universities in developing countries rely on traditional sources of information. The interface of science, technology, government and high education is probably the most important link to bring universities in Egypt to the new information technology age.

Key scholars from around the world are involved in fostering collaborations among higher education institutions to increase the levels of scholarly exchange and dissemination of knowledge on the importance of information technology to higher education. In this context, Internet technology is usually defined as e-mail and the World Wide Web search capabilities and resources used for the communication of information. This presentation will focus on Internet innovations in a developing country context

where it is more than using Internet technology applications. It can be a gateway to the rest of the world, a mean of becoming linked to people, ideas, organizations and educational opportunities. Therefore, it is essential to understand the factors associated with adoption and utilization of Internet innovations as an integral part of information technology transfer to Egypt. This paper calls for scholarly research that will focus on understanding the complex adoption/ diffusion processes of Internet innovations. The development of this research program will aim to effectively evaluate adoption / non-adoption behavior towards Internet innovations in the higher education institutions of Egypt.

The diffusion of Internet technology to developing countries, while growing is far behind developed nations and no replicable methodologies have been developed to measure its long-term effects. About one in ten of the population in the developed nations (US, Canada, Western Europe, Japan, Australia, etc.) are connected to the Internet, while only one in five hundred of the rest of the world's population have that capability. China, one of the fastest-growing Internet populations, is up to 2.5 million users, less than 0.2 percent of its population. As these numbers grow, it will be critical to have a stable and replicable methodology to evaluate factors associated with the Internet's diffusion phenomenon. In developing countries, does the Internet change the lives of the people who adopt it? Are they more competent and better able to do their jobs? Do they have a different relationship within their organizations? Do they feel more connected with others in their country and beyond? Understanding the long-term factors associated with Internet adoption in the context of developing countries makes it easier to plan for better development of technology sharing programs for the new knowledge economy.

In conclusion, the long term payoff from the diffusion of information technology may not be limited to the sharing of knowledge for international development goals but may extend to reduce the gap between developed and developing countries which will bring about true world peace.

# Toward A Genuine Climate For Scientific Research

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## **Abstract:**

The turn of the twentieth century has witnessed the historic Egyptian celebrations honoring Dr. Ahmed Zewail, the 1999 Nobel prize winner in Chemistry. The joy of the masses for this event was mixed with high aspirations to see Egypt among the leading nations in scientific research. A new university has been initiated to breed the Egyptian young scholars who will form the future of science and technology in the country. A new era seems to have started carrying a considerable challenge to the top officials and academic circles as well.

One of the main themes echoed during this enthusiastic drive has been the creation of a genuine climate for scientific research that enables Egyptian scholars to compete with their counterparts in the advanced societies.

This paper reflects certain observations and provides a few directives that may enhance the atmosphere of scientific research in the Egyptian universities and research centers.

The above mentioned observations relate to the current practices as they appear in the Egyptian universities and research institutes with special reference to those located in the provinces. The directives are expressed in the form of suggestions and recommendations that should pave the way toward a genuine climate for scientific research in Egypt.

In this regard, the author emphasizes three main components that must exist in order to reach a competitive research level in Egypt. These are:

1. political and social support;
2. qualified staff and facilities; and
3. ethics and traditions of scientific research.

A promising achievement in scientific research and technology requires some basic attitudes on the part of policy makers and the public at large, the availability of the proper skills and devices, and the adoption of ethical measures and procedures that ensure research progress and validity.



**PANEL:**

**"Impact of New Technologies and Regional Development  
on Education and vice versa"**

Moderator:

**Professor Ahmed Kamel**  
University of Waterloo

Participants:

**Prof. Hussein Mouftah**  
Queens University

**Prof. Mohamed Bayoumi**  
Queens University

**Prof. AbedAlhalim Omara**  
Carleton University

**Prof. Magdy Salama**  
University of Waterloo

**Prof. Saied Essa**  
Lakehead University

**Prof. Alaa Mohamed**  
University of New Brunswick

The issues discussed are :

- Characteristics of new technology (being software based, virtual, etc) and evolution of business and marketing models.
- Educational and training needs of new technology.
- Advancement in computer related curricula and its influence on establishing business.
- Role of venture capital and investment in fostering new technologies.
- Infrastructure and other needs.

## **Session IV:**

# **Cultural, Legal And Economic Considerations; Training**

# **Privatization in Developing countries With a special reference to Egypt**

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## **Abstract:**

Since the 1980's most of the developing countries including Egypt have adopted the free market mechanism. This was due to many factors such as the slow rate of economic growth, high budget, and balance of payment deficits, high inflation rate and rapid growth of external debts, besides sluggish performance of productive and services sectors. All of the above factors made most of the governments and policymakers in the developing world look more seriously at other alternative methods of managing the economy and overcome these drastic economic problems.

The economic reform and structural adjustment program was the only alternative available to developing countries supported by the International Monetary Fund and the World Bank. The reform program in most of developing countries suggested by the international agencies and advisors to government wrestled with the question of how to reform. A basic reform strategy consists of the following:

- Restore macroeconomic stability by bringing the budget close to balance and pursuing tight monetary and credit policy;
- Liberalize prices by removing price controls and allowing markets to begin operating.
- Privatize government -owned enterprises by selling them or even by giving them away to citizens;
- Liberalize foreign trade, allowing domestic firms and consumers to have access to world market;
- Establish safety net network so that people who became unemployed do not become destitute;
- Develop as rapidly as possible, the legal framework that a market economy needs in order to operate. (Dornbusch 1998).

The reform program consists of Stabilization program aiming at achieving stable macroeconomic environment and allowing the economy to allocate its resources in the most productive and efficient manner. The structural adjustment aims to enhance the efficiency and makes the prices of goods and services to be determined through the market forces. Privatization is one component of the structural adjustment program besides others, such as tax reform, price liberalization, and the financial sector and trade liberalization.

The paper attempts to shed light on privatization as the most important elements of the structural adjustment program and its impact on the economy. Thus the paper will consist of three sections. Section one includes providing a general definition of privatization, objectives of privatization, and the reasons behind privatizing the public owned enterprises. Section 2 provides an overview of privatization methods, trends of privatization in the developing countries used to privatizing public enterprises and the expected economic impact of it. Section 3 evaluates Egypt's experience concerning the privatization process.

# **Legal Aspects of Distance Education**

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# Wireless Power Transmission Review

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## **Abstract:**

Review of the:

- technical,
- economical and
- developmental aspects

of the futuristic wireless power transmission.

# **The Relevance to Egypt of Changes in the Electrical Utility Industry Worldwide**

**Amir Shalaby**

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## **Abstract:**

The future development of the electricity sector in Egypt continues to receive government priority and high-level policy focus.

Policy choices and strategies are particularly important for electricity because it has a significant impact on society and the economy.

This paper makes a contribution to the policy options being considered by Egypt. The perspective it brings is an attempt to relate the relevance of international trends and experience to Egypt.

This paper takes the view that there are common driving forces that are affecting the electricity industry worldwide. Although different countries take different paths in dealing with their electricity sector issues, there are shared drivers and conditions that are sweeping the industry worldwide.

It is only through the full understanding of external trends and a full analysis of Egypt's own priorities and situation that a good strategy for Egypt can be developed.

This paper will identify major forces shaping the electricity industry worldwide. It will highlight similarities and differences between the electricity sector in Egypt and elsewhere; and describe how various countries and utilities are responding to the driving forces.

The objective of the discussions that follow is to contribute to the formulation of options for Egypt and possible implications and opportunities for Egypt's electricity sector.

The author is convinced that, while major policy initiatives are being taken by Egypt, there is much more to be done and that many options that can benefit Egypt are yet unexplored.

## The Conventional Clock Of Sun And Moon

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### **Abstract:**

Since the start of life on earth the conventional and natural timing embraced the regular routine of daytime and night. It is agreed that one day is always 24 hours. The week is always a standard of 7 days. The month, however, is not this simple of a standard, and also the year. The relatively longer periods of the month and the year as determined by extrapolation have vague timing marks. Assumptions, with trial and error, gave many definitions, number of days and names for the months based on the sun yearly cycle. The moon months are more deterministic by the new moon sight, with its nature of clearly marked night observations.

This paper analyzes the moon and earth periodic dwell around the sun, based on simple orbital motions. It explains the natural synchronism in these motions and determines the sighting criterion of the moon months for different global areas. It uses the standard world time map to show the way the moon month is determined for different locations.

The moon motion around earth is in a near circular orbit with moon distance of 384,403 Km, yielding a sun synchronized monthperiod (with the sun and the moon facing the same longitude line on earth) of 29 days, 12 hrs, 22 minutes and 18.5 seconds. Errors in the moon distance result in errors of few minutes in this monthperiod. As the month is determined by counts of days the moon months can only be 29 or 30 days. The collocation of the moon and sun appears at noon times on earth longitudes that are separated by 180 degrees in alternative months. The influence of this alternation on the month evaluation in different areas is explained based on moon sighting in two world regions, with possible new moon sighting in periods of 10 to 48 minutes after sun set. Examples are worked out for the next 12 months, and compared with existing calendars from the Middle East, U.S.A. and Europe.

# **Evaluation of Transmission Transactions in a Competitive Energy Market**

**Gomaa Hamoud**

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## **Abstract:**

With the introduction of competition into the electricity industry, the number of transmission transactions between sellers and buyers is expected to grow. These transactions, when scheduled, should not violate any of system operating conditions and therefore there is a need to evaluate them ahead of their scheduling time.

This paper discusses a method for assessing the feasibility of bilateral transactions with regard to the system economic dispatch and transmission system constraints.

Transactions are classified into feasible and unfeasible. Feasible transactions can be accommodated without violating the system economic dispatch and transmission network constraints.

Unfeasible transactions violate transmission network constraints and cannot be accommodated fully without altering the system economic dispatch.

The assessment method provides information on where and how much generation is to be rescheduled in order to accommodate an unfeasible transaction. Such information will be useful in deciding whether a particular unfeasible transaction is worth serving or not. The Institute of Electrical and Electronic Engineers (IEEE) Reliability Test System (RTS) is used to illustrate the assessment method.



# **Applications of Fuzzy Weighted Averages in Damage Assessment of Transmission Structures**

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## **Abstract:**

This paper introduces transmission structures damage assessment models that can be used as stand-alone systems or as part of the fuzzy inferences of an expert system.

The models uses fuzzy weighted averages formulas (FWA) and utilise a fuzzy computational technique called resolution identity of fuzzy sets. In this technique the fuzzy sets are decomposed into non-fuzzy level-sets by slicing the fuzzy sets at different membership levels ( $\alpha$ -cuts).

In the proposed models a transmission structure is broken into five major components ranked by their importance to the overall stability of the structure.

The proposed models have the advantage of treating cognitive type uncertainty, which prevail during visual inspection, damage assessment, and decision making for refurbishment Simple illustrative examples are given.

## **Professional Engineering Standards and Practices in Canada**

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### **Abstract:**

Provincial and territorial engineering Associations regulate the practice of professional engineering in Canada. In order to be admitted to the profession and the practice of engineering an applicant must meet certain standards of academic qualifications, knowledge, and experience.

This paper focuses on the importance of engineering by discipline, licensing and professional standards. A deep look into the practice shows changes in job function with age and reveals trends in professional development following graduation and acquiring a certain level of experience. The supply of engineers by discipline to the Canadian economy has been briefly introduced. It indicates that the engineering profession must assure specific trends in directing new entrants and members towards disciplines and specializations that require specific human skills.

Emerging new engineering disciplines and their importance have become indicative of an apparent change in the path of the profession.

Women in engineering, their training, occupation type and trends in job responsibilities are discussed.

Off shore, trained engineers represent an important and vital resource to the Canadian engineering profession. Their role and contribution to the engineering profession is acknowledged.

## **Session V:**

# **Human Development, and Socio-Economic Factors**

# Assessment of Energy Expenditure of Obese Female Subjects During Performance of Low Intensity Physical Activity

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## Abstract:

Subjects for this study were 18 obese and 21 non-obese adult females. All subjects participated in 2 separate sessions of testing. The first session included a hydrostatic weighing (**Underwater Weighing**) test to determine percent body fat, a residual volume test, and a treadmill  $\text{VO}_{2\text{MAX}}$  test (**Maximal Oxygen Uptake Per Minute During Exercise**) that was used as a criterion gold standard to determine individualized speeds for the field test.

A modified version of the Cunningham protocol was employed. The second session was held at least 24 hr after the first session. In this session, the subjects walked at individually prescribed speeds (1 to 5 mph = **1.6 to 8.0 km/h**) on three different walking patterns (circle, oval and shuttle) in random order for a 3-minute period each. A 1-minute gas sample was collected in a meteorological balloon at the end of each period. A 30-second  $\%HR_{\text{MAX}}$  (**Maximum Heart Rate During Exercise**) was used to calculate the 12 energy expenditure components (Kcal) (**kilocalorie**). A mixed design 2 x 3 ANOVA with one independent factor (obese and nonobese) and one repeated measures factor (circle, oval, and shuttle) was used to analyze the data. No differences ( $p > .05$ ) were found between the 2 groups in  $\text{Kcal} \cdot \text{L}^{-1} \cdot \text{m}^{-2}$ . (**Energy Expended Per Liter of Oxygen Consumed Relative to Body Surface Area**).

A significant ( $p < .05$ ) difference was found between the 2 groups in  $\text{Kcal} \cdot \text{L}^{-1} \cdot \text{kg}^{-1}$ . (**Energy Expenditure Per Liter of Oxygen Relative to Body Weight Per Kilogram**). The non-obese group expended higher energy in  $\text{Kcal} \cdot \text{L}^{-1}$  (**Energy Expenditure per liter of oxygen**) in walking on the circle than did the non-obese group and higher energy  $\text{Kcal} \cdot \text{L}^{-1} \cdot \text{m}^{-2}$  in walking the circle than in walking the oval and shuttle patterns. The non-obese group expended the highest energy in  $\text{Kcal} \cdot \text{L}^{-1} \cdot \text{kg}^{-1}$  on the shuttle pattern. No differences ( $p > .05$ ) were found between the 2 groups for the following 9 independent variables:  $\text{Kcal} \cdot \text{L}^{-1} \cdot \text{LBW}^{-1}$  (**Energy Expenditure Per Minute Relative to Lean Body Weight –muscle-**),  $\text{Kcal} \cdot \text{min}^{-1} \cdot \text{m}^{-2}$ ,  $\text{Kcal} \cdot \text{min}^{-1} \cdot \text{kg}^{-1}$ ,  $\text{Kcal} \cdot \text{min}^{-1} \cdot \text{LBW}^{-1}$ ,  $\text{Kcal} \cdot \text{min}^{-1}$ ,  $\text{RPE}_T$  (**Rating of Perceived Exertion Total Body**),  $\text{RPE}_L$  (**Rating of Perceived Exertion Legs**),  $\text{SUDS}$  (**Subjective Unit of Disturbance Scale**), and  $\%HR_{\text{MAX}}$ . No interactions were found for these variables.

## Key Words:

Energy Expenditure, Physiological, Psychological Responses, Obesity, Walking Patterns, Physical Fitness For Women, Low Intensity Physical Activity, Treatment Of Obesity, Testing.

# **Significance of Art Therapy For Art Educators**

**Dr. Aida Abdel Hamid Mohamed**

Professor of Psychology of Art Education and Art Therapy

## **Abstract:**

While the role of art therapist and art teacher are not identical, both have much in common. Both are trying to develop the growth of an individual to full ego realization, to come to grip with and master techniques which are intimately bound to inner psyche. Also both support the power of art as expressive and integrative, they acknowledged it as vital in developing the whole personality.

In spite of these facts, and the existence and rapid expansion of art therapy for more than sixty years, yet it is one of the unknown disciplines for vast number of art educators. Art therapy concepts, aims, and applications, also not fully understood and appreciated by most art educators.

The problem that current emphasis in art education is only centered on making art works. Thus, teacher's main concern is about the product of creativity to the extent that the act of creation takes precedence over their students emotional and psychological needs. So there is limited attention have been given to the therapeutic aspects of art education.

For art therapy the form of communication is often much more important than the content of artwork itself. Communication is to be fostered by spontaneous self-expression to help release unconscious conflicts.

In any school there are children, who for variety of reasons require some forms of remedial activities or therapy, all they need the attention of specialist teachers. So there is urgent need to train art teachers to use their skills and their insights from art therapy to be more effective to deal with children with special needs.

There is more to art education than being a tool of entertainment. It could seriously be used in the process of diagnostic and treatment of different kinds of abnormalities in school settings.

## **Resources in Education and Technology For Science Education Center**

**Dr. Maher Y. Shawer**

Mathematics Department

Indiana University of Pennsylvania

### **Abstract:**

The premise of this paper is Egypt's need to be on a par with modern countries in respect to educational and technological research. In order to do that, Egyptian institutions must be capable of making and applying the same quality research as other modernized countries.

The writer surveys the resources for education technology and research in the Science Education Center (SEC) in Ain Shams University in Cairo. The SEC is an important place to begin because SEC trains science teachers and supervisors who are on sabbatical for one academic year. Most participants at SEC will be responsible for implementing reforms in the teaching of science and mathematics.

Also the Ministry of Education in Egypt and the Arab countries frequently request technical assistance and consultation with SEC in the fields of science and mathematics education.

This paper discusses the resources needed and the characteristics of each resource: books, periodicals, and scientific magazines that are desperately needed in the library of the SEC. The writer also discusses educational media such as videotapes, movies, software, and statistical software needed for education and research. The writer suggests ways the Association of Egyptian-American Scholars (AEAS) can help in providing these resources to the Science Education Center at Ain Shams University.

# **The Need For Professional Training Among Local Urban Planning Officials**

**Salama A. Elshawaf,**

Urban Planning Consultant

## **Abstract:**

The main focus in this paper is on the mounting urban problems and city corruption in greater Cairo versus the lack of qualified local officials to deal with these issues. The current major urban problems and the different sources of city corruption can be summarized as follows:

Random expansion of slum areas, and vacant lands which calls for reconstruction to induce stability for its residents; Over density and patterns of migrants that require adequate planning to keep social mobility moving forwards equilibrium and stable development; Improper use of urban planning devices such as Zoning ordinances and effective placement of residential, commercial and other areas; Random and scattered allocation of public services and utilities which adds to the impotent management of water, electricity, and gas network lines; and Limited quantity and quality of public institutions such as schools, clubs, courts, post offices, and other services.

Add to this, housing problems including lack of buildings maintenance, outdated laws and legislation, owner-tenant conflicts, difficult housing for the poor and newly married, and residents of the cemeteries, short coming of the environmental protection measures to curb the source of air pollution and enhance public awareness of this issue, problems of transportation, parking congestion, school children trips, fuel consumption, noise pollution, public transportation versus overuse of private cars, and time loss in home-work commuting due to heavy traffic and defective inner city roads.

Urban development, however, is accompanied by other socio- economic problems leading inequality, in living standards, educational opportunities, and employment status. No city can prosper without sound administration, nor can any urban service prevail without knowledgeable professionals. We need to appreciate the merits of experienced local practitioners and admit that the healthy existence of the city must rely on planned polices, and on comprehensive understanding and satisfactory provision in its public services.

There is an urgent need for professionals to restructure ongoing plans, develop new ones, or modernize and rebuild deteriorating services. Expansion of needs works against wisdom and peace and tends to increase one's dependence on other forces. Reduction of needs can promote reduction in tension and corruption in service delivery. This requires inputs from professionals and technology experts.

This paper provides an elaboration of evidences that demonstrate that Cairo problems are of human nature and can be controlled, improved, integrated, axes and resolved. This will be possible when local officials undertake the system of ins ervice training, delegate authorities, and allow citizen's participation.

Trained officials can practice the fundamentals of their jobs, know how to provide the proper services, and this enhances the functioning and socio-economic growth of the city.

# **Abu Bakr Muhammad Ibn Zakariya al-Razi, a Man of Research**

**Dr. Chere Winnek-Shawer**

Judge/Retired, State of Pennsylvania

## **Abstract:**

All science must first begin with a philosophical basis. In order to understand science and the research which generates that science it is important to understand that scientific community's world view. For instance, many Islamic scholars of al-Razi's era believed Greek thought was objective and based on disinterested contemplative aims. On the other hand Indian thought, while a mine of wisdom, was considered to be too esoteric in the sense that their main impetus stemmed from magic and spiritualism rather than from logical and rational considerations.

The purpose of this paper is to explore the historical background and world view of early an Islamic philosopher in order to understand the historical underpinnings of modern Egyptian scientific research by giving a brief history of early Islamic rationalism, a tool of scientific research. This will be done by investigating the works of al-Razi.

Al-Razi was born in Rayy, Persia in 864 A.S. At the age of 52 he became physician in charge of the Azudi hospital and was instrumental in its reconstruction. He died at the age of 73.

Al-Razi' medical writings were highly prized in the Muslim ages, alike by Muslims, Jews, and Christians, and were accepted as the basis for modern research. His monograph On Smallpox and Measles was printed in various translations forty times between 1498 and 1866 and has been praised by modern doctors for its clinical accuracy. His research on smallpox and measles, as far as is known, was unique not only as the first of its kind but also because of the depth of his knowledge of the disease and of the human body and psyche in general. A.J. Arberry states "no man so powerfully affected the course of learning in the Middle Ages and the early Renaissance as Rhazes".

This paper will explore the source and form of al-Razi's rationalism and its connection with and difference from ancient Greek philosophy.



# **The Potential Role of Artificial Intelligence Technology in Education**

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## **Abstract:**

The field of Artificial Intelligence (AI) and Education has traditionally a technology-based focus, looking at the ways in which AI can be used in building intelligent educational software. In addition AI can also provide an excellent methodology for learning and reasoning from the human experiences.

This paper presents the potential role of AI in the various aspects of education. Six AI fields are presented. The first presents the knowledge representation (KR) which includes ontologies; new concepts for representing, storing and accessing knowledge; and schemes for representing knowledge.

The second is related to the use of Case-Based Reasoning (CBR) methodology in developing interactive intelligent educational systems for learning and teaching. The third topic is related to the use of Natural Language Processing (NLP) for analyzing the educational Web pages.

The fourth is concerned with the Intelligent Tutoring Systems (ITSs), which are capable of adaptive instruction by means of multiple representations of domain knowledge.

The fifth is the Intelligent Tutoring Systems Authoring Sheels (ITSASs), which allow a course instructor to easily enter domain and other knowledge without requiring computer programming skills.

The last area deals with the learning in Distributed Artificial Intelligence (DAI). Moreover, the paper will explore a proposal for master degree in artificial intelligence in education.

# **Future Strategies for Pre-School Education**

**Ibrahim Metaweh**

# **Information Technology & Information Transfer, A Perspective of the ESANA**

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Egyptian Student Association in North America

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## **Abstract:**

Information Technology has a booming and ever growing market in North America in recent years. This has evolved into what we see today on the internet and in most of our daily lives.

An explosion of information and a totally new dimension of how we access it and use it.

Recently, Egypt has put solid efforts to follow on the footsteps leading to a boast in this domain.

What should be the main objectives of the Egyptian approach?

Should it be an exact copy of the North America experience or should it be different?

What are the requirements needed to make it a successful industry in Egypt?

Can this new and emerging industry flourish without Information Transfer?

The paper presents the perspectives of the Egyptian Student Association in North America concerning this issue.

# **On Developing The Architecture Education : Determinants Of The Design Performance And The Educational Environment**

**Dr Samy Serageldin & Hany B Serageldin**

## **Abstract:**

In light of the targeted development of the educational process in a specialized field like architecture, a field survey had been performed at the architecture department of the Mataryia Faculty of Engineering of Helwan University - Egypt .

The findings of this field research focused on more than one direction.

*A selected axis of analysis for this paper has to do with the teaching environment in its various stages with special emphasis being laid on the directly pre-university stage, the quality of education and the secondary school certificate, survey and analysis of the teaching methods through the school and private tuition lessons, survey and pinpointing of the strong and weak points in the various scientific fields and their relation with the above teaching methods.*

On the other hand, we gave due care to the corresponding facet of all the above research axes, namely the determinants of design performance .

A host of direct and indirect determinants of the design performance had been selected through an evaluation of the students performance in both examinations and design projects and its relation with the different methods of teaching architecture and the students similar abilities in the other architectural studies and their various architectural aptitudes . Meanwhile , an analysis was performed of the architecture teaching process and performance in the different stages of architectural work in its different phases .

The research adopted the statistical testing method of the correlation between the different elements of analysis and dividing these elements into homogenous groups relying on the statistical analysis on the one hand on the experience of the researcher on the other .It was the research's object to cast light on the relation between the elements selected for analysis , to depict a more precise picture about the design performance in the architecture teaching stage and to pinpoint its vulnerable and strong points, hence contribute to the taking of decisions that would help in upgrading it .

# **Democracy and Economic Progress**

**Mohammed ElBeheiry**

# Historical Development of Women Status in Egypt

Samia Khedr

## Abstract:

During the ancient Egyptian era, the organization of society was hierarchical. At the top was the divine world, which was within itself strictly ordered but clearly ranking above human kind. The female principle was embodied in the goddesses worshipped by the Egyptian people. Many female queens occupied the throne at one time or another. However the status of women fell when the Ottoman's took control of Egypt and kept them indoors for 302 years (1499-1801). From that time on, women's rights and autonomy eroded to nothing.

In 1832, Egyptian women began to receive state sponsored for the first time. The government opened a professional school for Hakimas (medical aide for female physicians). During the 1920's, women's organizations began to appear. Egyptian women struggled to repair what more than three centuries of obscurantism had done. In the early 30's, an Egyptian female elite appeared with the first female university student, the first air pilot and the first lawyer and also the first scientific researcher in biophysics.

In 1956, the State guaranteed to women the right to vote and the right to run for public office. Yet, illiteracy for women (70%) remained a major constraint for strong women's participation in the Country's development.

Government of Egypt social plans try to overcome several impediments. Only 36 % of all pupils and students in Egypt are females. For many reasons, 22% of women in Egypt are economically in charge of their families. Only 10% of the population working in the public sector are females.

Despite social constraints and political challenges, the future of women's status is promising indeed. Many women appeared in the early eighties on the political scene. In 1995, some women succeeded to have a political career. Amal Othman, Faydah Kamel, Galilah Awad, Sorayah Labenah and Sawsan Kilany took part in the National Assembly election and became senators. Four other women have been appointed by the President. Nine out of 454 members of the Assembly are women. Observers realize that this achievement has to be empowered by more political and social participation of women in GEO Institutions and in NGO's. By the end of 1995, there was three women cabinet ministers, and two women were chosen in the new cabinet formed in January 2000. Universities had more than one female dean or deputy dean. The political trend was in favor of more women's participation in the current affairs of the country.

That is why, the Women National's Council, which consists of female leaders of Egyptian society, was established in March 2000. This Council is concerned with women's rights. It aims to empower women to become an influential force in the current economic and social development and also in the recent new national projects in the south of the country and in the Sinai.

# **RITSEC- RDLP: Regional Information Technology and Software Engineering Center-Regional Distance Learning Program**

**Dalia Moawad**  
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## **Abstract:**

RITSEC, was jointly established in 1992, as a regional non-profit organization, by the United Nations Development Program (UNDP), the Arab Fund for Economic, Social Development (AFESD), and was hosted by the Government of Egypt-the Cabinet Information and Decision Support Center (IDSC). Its mission is to help provide technical and professional services to the agencies, institutions and organizations in the Arab region, to support and contribute to the development of information technology in the Region, through utilizing the growing capabilities of computer and telecommunications technologies.

Based on the realization of the growing importance of professional skill enhancement and human resource development, for socio-economic growth in developing countries, and the Arab Region, RITSEC has, for the past few years, been allocating the greater part of its attention and efforts to programs, projects and initiatives that serve this mandate.

The global market has witnessed a remarkable revolution in the area of information and communication technologies, where a number of powerful tools have emerged including the Internet, video conferencing, desktop conferencing, satellite communication, on-demand services as well as a wide ranging array of other applications and innovations. recent advances in the global communications and networking infrastructure have set the stage for a major revolution in the educational process; as well as many other aspects of human life. The removal of the distance barrier allows for a global database of knowledge. This technology milestone presents educators and trainers worldwide with great opportunities and challenges, to promote and develop new methods and models of learning.

## **Regional Distance Learning Program - RDLP**

The RDLP dissolves the geographical barriers through the utilization of modern communications and information technology for the delivery of a universal archive of top notch educational resources offering academic (credit) and professional (non-credit) degrees”.

## **The Global Campus Program**

For the academic degrees, RITSEC-RDLP established the “Global Campus” through which it provides post-graduate degrees (in the areas of information technology, business management and engineering) at a distance, utilizing state-of-the-art learning tools and delivery systems

## **The Regional Distance Learning network - LearnNet**

RDLP also established the Regional Distance Learning Network “LearnNet”, to be an interactive video-conferencing and Internet -based educational network, with the primary mandate of contributing to professional skill development in the Arab region (and other regions in developing countries) and encouraging life-long learning for continuous business excellence and competitiveness. The network was established with the support of the World Bank-InfoDev division, to provide access to quality professional training programs, designed by distinguished international training agencies, and delivered through ‘LearnNet’, to working professionals in developing countries. The regional hub for the network is set up at RITSEC, whereas seven distance learning support centers are being established in seven Arab countries to be the national nodes for the network operation

## **Egyptians Abroad Services (Haneen)**

**Nabil Said**

Information Technology Institute (ITI) -  
Information and Decision Support Center (IDSC)

**Address:**

241 Al-Haram Street

**Zip Code:**

12111

**E-mail:**

nsaid@idsc.gov.eg

**Phone nr:**

(202)3868420 & (202)3868426

**Fax nr:**

(202)3868429

**Web page:**

<http://www.Haneen.com.eg/> or <http://www.Haneen-to-Egypt.com/>

**Description:**

A website that provides Free services to Egyptians Living Abroad in order to link them to their homeland Egypt and serves the Egyptian society by a wide group of Internet activities.

**Objectives:**

Integrating the new information technology tools together with available resources to:  
Create a constant and direct link between Egyptians living abroad and their homeland Egypt, strengthen and enrich this link.

Enhance the services offered to the Egyptian children over the Internet.

Serve the society.

Increase cultural awareness by exploring Egyptian Arts.

***Our project is unique because:***

We introduce many services provided from Egypt for the first time such as: Web-based Marriage service, Web-based Fax service, Egyptian Cooker Service, WhoWhere search/add database for Egyptians, Islamic Questions & Answers from Official Governmental religious entity.

We also introduce for the first time and in Arabic language full coverage of the Egyptian Scout Movement through an educational website for children.

**Results:**

Our website became widely known among Egyptians outside and in Egypt for the uniqueness and quality of services it offers.

Many of our users sent feedback expressing their gratitude towards our site for bringing them close to Egypt and for offering services highly needed and scarcely available.

Users feel ownership towards this site to the point that they suggest new features, services to be added and enhancement on current services.

The number of users accessing the website jumps up with a very high rate at times when a major local or international event occurs.



***Results are measured by:***

Monthly statistics run on the website: report the number of users accessing the website daily, average time, most frequently accessed services, geographical distribution...

The website's guestbook found at:

<http://www.haneen.com.eg/guestbook/guestbook.html>

- Received feedback emails, faxes and voice telephony.

**Project Summary:**

Egyptians Abroad Services (Haneen) is a website which serves Egyptians all around the world out and in Egypt. Its mission is keeping a link between them and their homeland.

To accomplish its mission, it tries to offer *a number of needed services for free*, it also expands its services to include:

\* *Enhancing the services offered to the Egyptian children over the Internet.*

\* *Serving the society.*

\* *Exploring the history of a branch of Art (Music) in Egypt in full details and examples.*

This brief summary will introduce the site's main free services + the above mentioned extended services.

**Main Free Services:**

**Egypt Now:**

Provides weekly-updated news about Egypt in different fields: politics, societal, art, and commerce...

**Fax to Egypt:**

Sends faxes InternationalToEgypt and EgyptToEgypt.

**Egyptians abroad guide:**

**i. Egyptians Abroad Book; ii. Egyptians Abroad FAQs; iii. Egyptian Embassies:**

**Companies' Guide:**

Allows to: Search of a specific activity/type of trade/company/product.

Register an Egyptian company local/international

**Downloads:**

- i. " Learning Arabic ":**  
Downloadable teaches the commonly used Egyptian words and conversations with a sound capability
- ii. Gallery :**  
Collection of downloadable posters and photos of different sites in Egypt ( Luxor & Aswan, Nile, Hurgada...).
- iii. Entertainment :**  
A downloadable-collection of old/new Egyptian: songs, music and jokes.
- iv. Opera Aida:**  
Explains Opera Aida: history, acts with pieces of downloadable music.
- v. " Voice of Egypt ":**  
Dedicated specially for the number one Egyptian late singer "Om kalthoum", provides periodically an old song from her albums.

**A. Enhancing services offered to Egyptian children over the Internet:**

(This service is in Arabic language, as it is directed to Egyptian Children age 6 to 15 and from all education levels)

**C. Serving the Society:**

Expanding our mission to serve Egypt and Egyptians every where from all age groups and with different interests and activities. Working also under the number one Public Information Technology Institute (ITI), we promote the use of new technologies to invest in the welfare of the society

**D. Exploring the history of a branch of Egyptian Arts (Music) in full details and examples**



# Egyptian Abroad Services

## *Haneen*

<http://www.Haneen.com.eg/>

By Nabil Said, Ehab Shalaby and Iman Raslan

Egypt Now  
Send A Card  
Download  
Chatting  
Who Where?  
Mailing List  
Links

Bookmark!

### Egyptians Abroad Services

حنين

Marry Me

Set El Bait

Makh Makh  
A Kids Website

YOUR Company

Fun Pharaoh دليل المصريين بالخارج Reactions

كلمة الياها اسألوا دار الإفتاء تسابيح



**Banquet Key-Note Guest Speaker:**

**Dr. Ismail Serageldin,**  
VP, World Bank

**“Education, Science and Values:  
Producers and Consumers  
in the New Knowledge Economy”**

## LETTER TO THE EGYPTIAN COMMUNITY IN USA

Dear Members of the Egyptian Community,

I have the pleasure to inform you that the Embassy is in the process of establishing a database for Egyptian Americans, and Egyptians residing in the United States, in order to further strengthen our ties with them. Needless to say there is a very important role which Egyptian American organizations and groups can play in further strengthening the ties between the Embassy and the wider Egyptian American community. The Embassy shall use this database to network with you, as well as receive your concerns and comments on different issues. which you could submit on the following Email address: [EGYCONSUL@USA.net](mailto:EGYCONSUL@USA.net)

At a later stage, the Embassy will establish a Web Site that will highlight the Embassy's principle activities, and contain information and developments that could be of interest to you. The site will also link to Official Egyptian Governmental Web Sites containing a variety of Political, Economic, and Cultural issues, in addition to information tailored for immigrants such as laws and regulations, facilities provided, investment opportunities .. etc.

I kindly request your assistance in making this endeavour a success and by forwarding this mail to other Egyptian Americans and residing Egyptians you might know, as well as members of your organization. We would be appreciative if they would be asked to complete the information indicated below and send it to the Egyptian Embassy's email: EGYPT-EMBASSY@USA.net, which is exclusive for the database information and not for personal comments.

**Name :**

**Date of Birth :**

**Educational Background :**

**Profession :**

**Address :**

**Tel No:**

**Fax Number :**

**Email Address:**

I look forward to a prosperous future of ties and cooperation, and remain.

Sincerely,

Nabil Fahmy

Egypt's Ambassador in USA

# **Letter For Egyptian Professors in Canadian Universities**

**From Dr. Ahmed El-Sherbini**



# *Association of Egyptian-American Scholars*

## **BYLAWS**

### **I Name**

The name of the association is “Association of Egyptian-American Scholars, Inc.”

### **II Principal Office**

The principal place of business of this association is Madison, Wisconsin.

### **III Nature of the Association**

The Association of Egyptian-American Scholars is a non-sectarian, private, non-profit, educational, cultural, non-political, association of scholars of Egyptian origin who are either citizens or permanent residents of the United States and Canada.

### **IV Purposes**

To promote and improve Egyptian-American cultural and scientific relations through the development and implementation of specific programs of interest and value to the cultural and scientific development of Egypt.

### **V Membership**

#### **A. Classification**

REGULAR membership is open to those of Egyptian origin who are citizens or permanent residents of the United States and Canada, and whose background and experiences fall within the cultural and scientific purposes of the Association and whose interests coincide with those purposes.

ASSOCIATE membership is open to those of Egyptian origin who are on a temporary stay in the U.S. or Canada, but otherwise meet regular membership requirements.

SPECIAL membership is open to those not of Egyptian origin who have qualifications and interests to contribute to the purpose of the Association.

#### **B. Procedure**

To become a member, the applicant must be recommended by the local chapter, if one exists. If

a local chapter does not exist, then the applications must be recommended by two regular members of the Association, and be approved by a simple majority of the Board of Directors of the Association.

C. Dues

Each member shall pay annual membership dues in such an amount as fixed by the Board of Directors annually.

D. Voting Rights

Voting rights are afforded only to regular members.

## VI Programs and Activities

1. The Board shall develop programs and activities within the scope of the Association's purposes, and in particular the Visiting Scholar Program and the Science Education Fund.
2. The Visiting Scholar Program is a cultural-scientific program in which scholars of Egyptian origin who reside in the United States and Canada and who have achieved recognized academic or professional status through demonstrated expertise in their field, and whose knowledge and experience may be needed in Egypt, would be invited by Egypt to provide such services as they might be able to perform.

The Association will, in conjunction with a counterpart organization in Egypt, assist in matching registered scholars to needed expertise. The final decisions as to the number and type of scholars to be invited at any one time is up to the Egyptian authorities. The registered must also be members of the Association.

3. The Science Education Fund is established to help supply scientific equipment and material to Egyptian educational research institutions. The Fund is collected as part of the annual membership dues as well as from additional voluntary contributions.

## VII Meetings of the Membership

1. There shall be annual meeting of the membership and such other meetings as the Board or membership may schedule.
2. Meetings may be held in Egypt or anywhere in the U.S.A. or Canada, as Membership may decide.
3. Meetings shall be called by an affirmative vote of the Board of Directors at the request of 25% of the regular members.
4. Notice of such meetings shall be in writing at least 30 days prior to any such scheduled meeting.



5. The quorum shall be 20% of the membership of which 10% must be physically present.
6. Voting by proxy is permitted provided that the proxy is in writing and verified by the Secretary.

## **VIII Financial Resources**

The Association shall derive its financial resources from dues and contributions of members and other sources which are acceptable to the Board within the scope and purposes of the Association.

## **IX The Board of Directors**

- A. The Board of Directors shall consist of five elected regular members, and all presidents of Local Chapters ex officio. Only five elected regular members shall be voting. The outgoing president of the Association shall also be ex officio member.

- B. Officers

The officers shall be a president, two vice presidents, a secretary and a treasurer, who shall be elected from among the Directors by the membership.

The President shall chair all meetings of the Association or, in his absence, one of the Vice Presidents, and shall be responsible for the management of the Association within the scope of its purposes subject to the policies established by the Board.

- C. Treasurer

The Treasurer shall be in charge of handling all funds for the Association and shall deposit in a bank, approved by the Board, all the funds received, make all disbursements in accordance with the approved budget; have the right to sign checks. The Treasurer shall be responsible for keeping the financial records of the Association, and shall report annually to the membership.

- D. Nomination of Directors and Officers

1. All nominations shall be made by the regular members and sent to the Secretary who shall compile a list of nominees and a brief biographical sketch, and send a written ballot to all regular members thirty days prior to each annual meeting.
2. Members can vote by written ballot to be sent to the Secretary who shall have the members proxy to vote in accordance with the said ballot.
3. All written ballots shall be verified by the Board.

- E. Term of Office

Term of Office of all Directors and Officers shall be two calendar years from the date of election. No director or officer can serve more than two consecutive terms.

## Conference Organizing Committee:

<b>Dr. Waguih H. ElMaraghy, P.Eng. (CHAIR)</b>	welmaraghy@hotmail.com
<b>Dr. Mohamed A. Osman, P.Eng.</b>	marobeyosman@home.com
<b>Dr. Mohammed Shokr</b>	mohammed.shokr@ec.gc.ca
<b>Dr. Mohamed Elhalwagy</b>	elhalwagym@phibred.com
<b>General Ahmed Ragai El Maraghy</b>	rmaraghy@gega.net
<b>Dr. Hazem H. Gomaa</b>	drhzemgommaa@hotmail.com

**AEAS aims at improving Egyptian-American relations through the implementation of specific programs that contribute to the cultural and scientific development of EGYPT**



### President

Dr. Badr-El-Din Ali  
16 Bersheba Drive  
Louisville, KY 40245, USA  
Phone/Fax: (502) 241-7831

### Vice Presidents

Dr. Hoda ElMaraghy  
Windsor, Ontario

Dr. Marc Massoud  
Claremont, CA

### Secretary

Dr. Nabil Elsayed  
Rockville, MD

### Treasurer

Dr. Ahmed K. Eldahry  
New Rochelle, NY

### Former Presidents

Dr. Mohamed El-Wakil  
1975-78, 1981-84

Dr. M. Cherif Bassiouni  
1979-1980

Dr. Ibrahim Oweiss  
1985-1988

Dr. Mohamed Selim  
1988-1990

Dr. Badr-El-Din Ali  
1990-1994

Dr. Wagiha Taylor  
1995-1998

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