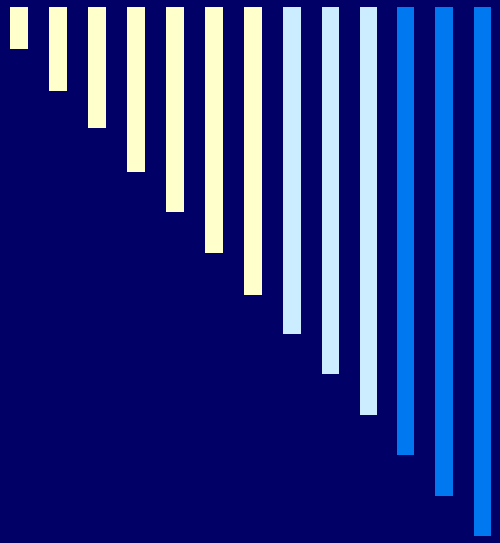
International Workshop on **Knowledge Management** in Scientific Organizations



Syrian Education Oriented Virtual Management of Knowledge

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Samer DAKAK, PhD Higher Institute for Applied Sciences and Technology, Damascus, SYRIA

content

- National education models and policies.
- Approaches to knowledge management.
- Traditional and Virtual education oriented Knowledge management.
- Syrian Education Ministry and Syrian Virtual University.
- Innovative Networking Collaboration with SVU.
- Conclusion

Samer DAKAK, PhD Higher Institute for Applied Sciences and Technology, Damascus, SYRIA

National education models and policies

- Failure of traditional methods and structures to accommodate the current complex world
- All national policies are occupied by upgrading teachers' assimilation of new trends in S&T during the transfer of knowledge to their students.
- Accelerated changes in academic knowledge and spreading use of new technologies supplying knowledge to students.

National education models and policies

- Growing gap between education outputs and labor market needs.
- It is so difficult for a limited number of teachers to stop day to day jobs for few months to follow some upgrading courses.

Approaches to Knowledge Management

- KM : Identify, create, represent and distribute knowledge for awareness and learning.
- Organizations consider KM as a part of IT or HRM. Sometimes reported directly to the head.
- KM programs are intended to achieve shared intelligence, improved performance, competitive advantage, innovation.

Approaches to Knowledge Management

- Increasing effectiveness through faster learning and new knowledge creation (academic teaching)
- KM Techno-centric (technology for sharing), KM Organizational (facilitating knowledge process), and KM Ecological (complex adaptive system).
- The three approaches are approved concerning Syrian education activities (education is a first priority, continuous search for dynamic interaction between players and restructuring education system. Still techno-centric system).

Samer DAKAK, PhD Higher Institute for Applied Sciences and Technology, Damascus, SYRIA

Approaches to Knowledge Management

- Teaching process influences the whole situation of the nation (innovation, health, protection..)
- Teaching players are overcharged and can not follow continuous training (especially in IT and foreign language).
- Imperative seek of innovative method profiting from virtual era and networking communication capacities.

Traditional and Virtual Knowledge management

- Explosion of information science proved the incapacity of traditional management methods.
- Virtual environment induced by the emergence of new technologies (email, internet,..).
- New sources of wealth are knowledge and communication (no more natural resources and physical labor).

Traditional and Virtual Knowledge management

- New organizations decreases dependence on command and control style of leadership toward commitment to virtual technologies.
- JIT Training modules via website, email and Virtual University became the ideal practice.
- SVU offered real time (according to teachers' schedules) and tailored training (anywhere) enabled with illustration tools for all learned subjects.

Traditional and Virtual Knowledge management

- Training organization is soft and suitable to diversified natures of learned subjects (math, electronics….).
- The virtual system of communication permits to education staff to assist sessions on line (night & weekend) and off line (any time later) without leaving offices or houses.

Syrian Education Ministry

- Syria witnesses radical changes. Searching for modern educational formulas matching the scientific evolutions.
- The ministry defined directions to develop educational practices to contribute to the social & economical building process.

Syrian Education Ministry

- Applying various flexible and efficient methods, enriching scholar programs with innovating concepts, training teachers, introducing more foreign languages, enhancing informatics and vocational education.
- Conventional education doesn’t fall in line with the fastness of knowledge bursting.

Syrian Education Ministry

- It was important to emphasize the preparation of qualified teachers and establish training halls furnished with modern equipment.
- Faculties of Education are not sufficient. Teachers needs to acquire a lot of techniques. The complete stop of educator's teaching for one year to follow courses is too expensive.

Innovative Networking Collaboration with Syrian Virtual University

- Syrian first electronic state-owned university in 2002 (5th university) with courses contents from American and European universities (initially concentrated on sciences, engineering and IT).
- In partnership with EDEXCEL (British education council and university of London) SVU developed Higher National Diploma.

Samer DAKAK, PhD Higher Institute for Applied Sciences and Technology, Damascus, SYRIA

Innovative Networking Collaboration with Syrian Virtual University

- SVU is not limited to academic programs. It provides infrastructure, carrier planning, virtual library, programs tailored to specific needs…Building 'telecenters' in popular Syrian regions with computers and speed Internet access.
- Syrian Education Ministry has found its target at SVU in a system of knowledge diffusing via networking virtual process of teachers' qualification upgrading.

Samer DAKAK, PhD Higher Institute for Applied Sciences and Technology, Damascus, SYRIA

Innovative Networking Collaboration with Syrian Virtual University

- Training programs elaborated to assure balance between theoretical & practical aspects using IT tools (figures, auto cad, power point, databases…).
- Audio facilities replaces linguistic laboratories.
- SVU is a radical change of the training mode in order to produce entrepreneurs and technopreneurs thinking critically. It encourages the graduation of suitable people to the needs of the new Syrian Economy.

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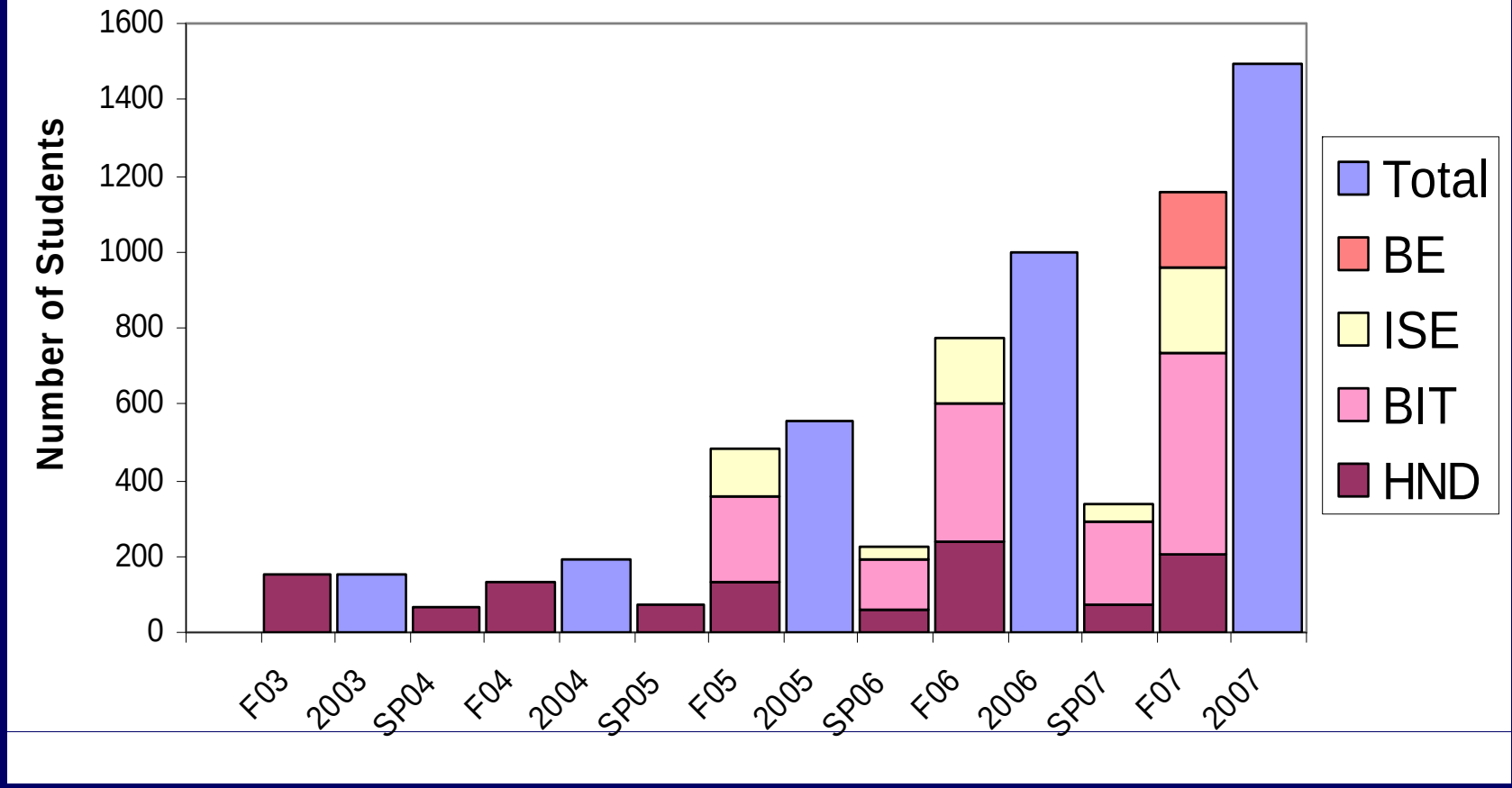
Figure 1 : students number evolution at Syrian Virtual University



Cumulative total= 3500 Students + 1700 learner in 2005 & 2000 Learner in 2007 for the Educational Habilitation Diploma

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Innovative Networking Collaboration with Syrian Virtual University

- SVU is offering a special education to those who wants to learn but can not go to ‘brick and mortar’ university.
- The positive experience has difficulties (augmentation of number of students conducted to infrastructure problems due to network limitations, increasing need to spaces, equipments, people, organizational and scientific management

Samer DAKAK, PhD Higher Institute for Applied Sciences and Technology, Damascus, SYRIA

CONCLUSION

- New knowledge-based economy pushed Syrian institutions to find new elastic organizational forms to deal with challenges.
- Improving teaching process by transferring knowledge through a virtual organization of collaboration has a lot of advantages (efficiency, quality, availabilty)

CONCLUSION

- Innovative collaboration between Education Ministry and SVU with the aid of ICT needs new management forms.
- This new model should be a good example of realizing multiple objectives : innovation, collaboration, profiting from technologies, upgrading qualification, generalizing knowledge, coordinating policies, applying new management rules and formulating smooth organizations.

THANK YOU FOR
YOUR ATTENTION

Samer DAKAK, PhD Higher Institute for Applied Sciences and Technology, Damascus, SYRIA