Tunisia's ICT in education policy

Engaging teachers

Tarek Chehidi, Ph.D.
ADEA-ICT Task Force coordinator

t.chehidi@afdb.org
www.adeanet.org
Tunisia: geographical situation

Population: 10.7 M ('12)
Tunisia’s Education system: some facts

Ministry of Education
- pre-school + basic + secondary + technical education

Min. of Higher education & Sc. research
- Post-secondary + university research

Min. of Vocational training & employment
- Vocational training

2012 12.93% of gov’t budget
### Tunisia’s Education System: Some Facts 2/2

<table>
<thead>
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<th>Min. of Education System (Oct. ‘12)</th>
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<td><strong>Learners</strong></td>
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<td><strong>Teachers</strong></td>
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| **Public Schools**                   | 4,523 primary  
|                                      | 1,474 Junior & high-schools |
|                                      | > 92% of population of learners in public school |
Phase 1: 80s-90s

- Administration/management of the education system: computerization of the management national examinations / payroll / administrative & pedagogic staff career management / etc.

- Teaching/learning: teaching computing (pilot high school students + to grade 13)

- In 2000: number of computer science teachers estimated to be appx. 1000
Phase 2: 2002-2009

- New Education Act (July 2002) following 4 years of studies / national dialogue on the future of education:
  - **Art 9**: School should provide students with ICT-related knowledge and to develop the capacity of students to make use of this knowledge of in all areas.
  - **Art 22**: ICT should be taught in Junior-high school level.
  - **Art 52**: Learners must be taught to use ICT as a means to access knowledge and to self-training.
  - **Art 67**: Research should help develop new pedagogical approaches based on the utilization of ICT.
Investing in new technologies: description (3/3)

Phase 2: 2002-2009 (2)
- Computer literacy / computing was to be taught in all cycles (basic and secondary education).
- More than 100 K PC were acquired.
- Nearly 4400 computer science teachers were recruited (5,433 teachers in 2009).

2008

MoE commissioned a report on the current situation of ICT in education / recommendations
What the report told us (1):

- Administration: positive development – MoE Depts own ICT expertise and capacity - very fragmented development – lack of shared understanding and common vision.
- ICT programmes and projects led by technology specialists.
- System is not taking advantage of available ICT capacities to improve quality of service delivery and also deal with deteriorating image of school and teachers.
What the report told us (2):

- Need to move from logic of supply to demand-driven ICT integration.
- A pool of innovative projects & initiatives exist. They are not analyzed and exploited for analytical work to draw lessons and eventually scale up those that bring solutions to existing problems.
What the report told us (3):

- Pedagogic inspectors lack ICT skills. This prevents teachers willing to use ICT from doing so.
- Lack of ICT competency framework and ICT competency is not reflected in career development.
- Resistance/ lack of engagement is a primary issue in ICT integration (innovative sector VS conservative attitude)
- Main challenge lies in ICT integration in teaching/learning

Recommendations:

◆ There is need to develop a shared understanding of ICT integration and a common vision among different components of MoE (strategy).
◆ It is crucial to move to a logic of demand (rather than supply) for sustainability of ICT integration, which in turn, should give special attention to usage for learning.
◆ Pedagogic staff, and especially teachers, key to effective and sustainable ICT integration.
◆ Strategic communication and change management should be main components of ICT integration strategy.
1. Pedagogy & learning
2. Administration, Management & communication
3. ICT literacy development
4. Equipment, networks and connectivity
5. Pilot schools
6. Research & innovation
ICT integration strategy 2009-2010 (2/3)

Key drives for the strategic axis?

1. ICT integration in pedagogy / learning
2. Unified / computerized management and communication
3. HR capable of driving ICT integration
4. Better planning of deployment of relevant technology
5. Pilot schools: showcases & reservoir of knowledge/expertise
6. Availability of res. & analytical work as key for inn. and ICT int.
ICT integration strategy 2009-2010 (3/3)

2010: evaluation and revision of the strategy

1. Reorganization of the ministry
2. Infrastructure, network & equipment
3. Content
4. Human capacity development
5. Usage development
Remarks

Several ICT literacy programmes offered, but not systematic and not defined based on a competencies framework (regional directorates, INBMI, motivated headmasters, etc.) – not recognized for career development.

Training became certified and recognized for career development (bonus).

A committee of MoE experts defined 3 level of competencies: 2 of them target all teachers (ICT literacy programmes + ICT integration in teaching) and 1 targeting pedagogical inspectors & optional for teachers – those involved in developing curricular and school manuals.

There was strong resistance coming from Unions, which advocated that teachers should not attend training in case they were not paid.
ICT literacy training – Certificate of digital competency 2Ci (1/3)

- The content of this program is based on INTEL Teach (MoU 2009) and ICDL
- 2Ci: 36 hours of training (15 units): 6 days (funds + availability + dealing with resistance)
- Target (in 2009 for a period of 4 yrs): 135.779 teachers (execution – 2 yrs late)
- Capacities:
  - 19 certified senior trainers (11 ped. Insp. + 8 ICT teach.) – July ’09
  - 5290 ICT teachers were trained & certified master trainers in Sep. – Dec. 2009 (30 hours of training : 5 days)
  - > More than 1400 schools equipped w computer labs (while Curricula & Training Dept. has 24 regional training centers)
  - thousands of ICT teaching hours not delivered
Teachers’ ICT competencies development (3/5)

ICT literacy training – Certificate of digital competency 2Ci (2/3)

• C&T Dept. started on-line registration: 30,000 registered in less than 3 weeks
• Implementation is the responsibility of the regional directorate (then 25 / now 26): regional director assisted by ICT pedagogic inspector negotiates with most motivated pedagogic inspectors (maths, physics & chemistry, French language, Arabic language, history & geography, etc..) to convince them to allocate 6 days of training for the ICT literacy programme and established a work plan
• Main trend for Regional training programmes (regional directorate + subject pedagogic inspectors + ICT pedagogic inspectors + Master trainers)
ICT literacy training – Certificate of digital competency 2Ci (3/3)

• After starting nation-wide training, new implementation trend appeared: motivated headmaster or group of teachers of different subjects negotiated with region and/or inspectors to start the training
• Then, the demand went viral and for the first time, we noticed active pressure/advocacy from teachers (not unions) to provide them with a given training
• Today, more than 44,000 teachers received this training / 29,000 already certified
• Slowdown of implementation due to the major political changes/instability: 2011-2013.
• The programme is being, now, evaluated to be restarted soon.
ICT integration in teaching/learning certificate

- Now, the content of this certification is being finalized by the CNTE (National Center for Educational Technology)
- This training will be given to teachers that already have obtained the digital literacy certificate
- This training is planned to start in 3rd quarter 2014

Digital content development certification

- still being developed by CNTE teams
- Teachers are important contributors to pedagogical content development
Teachers’ career + Research & innovation

Career development

• Certified training: bonus (number of points) are allocated to each teacher whenever an evaluation for career promotion is being undertaken (2010 / 3 to 4 %)

Research & innovation

• Funds are being allocated for R&D and pilot projects – National Center for Innovation and Research in Education
The main challenge to transforming the teaching / learning experience though ICT

The missing link / game-changer

- Teachers ‘evaluation by pedagogic inspectors
- Learner’s competencies evaluation / exam system
- These 2 are structurally related
Thank you for your attention