

International Conference on Human Resource
Development for Nuclear Power Programmes:
Building and Sustaining capacity
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EDUCATION AND TRAINING

J K Park, Director
Division of Nuclear Power
Department of Nuclear Energy
J.Park@iaea.org



IAEA

International Atomic Energy Agency

CAPACITY BUILDING – EDUCATION & TRAINING

- IAEA Action Plan on Nuclear Safety highlighted the importance of Capacity Building to “*continuously ensure sufficient and **competent** human resources necessary to assume their responsibility for safe, responsible and sustainable use of nuclear technologies*”.
- IAEA Definition:
- *Competence is a combination of **knowledge**, **skills** and attitudes in a particular field, which, when acquired, allows a person to perform a job or task to identified standards. Competence (Competency) may be developed through a combination of **education**, experience **and training**.*

EDUCATION AND TRAINING

Hence education and training (E&T) are essential elements of competence development, but:

- Must be relevant to the work environment
- Must be appropriate for the level of the job
- Must be specific for the tasks to be carried out

THE IAEA AND EDUCATION

- IAEA is not primarily an education organisation, but provides nuclear specific knowledge in different fields, through workshops, fellowships, training courses and various ‘schools’.
- We provide specialist schools, e.g:
 - School of Nuclear Knowledge Management
 - School on Nuclear Energy Management
 - Nuclear Law Institute
- We work closely with Universities and other academic institutions through our Nuclear Knowledge Management Section to try to ensure graduate and post-graduate curricula are relevant to the needs of nuclear power organisations



THE IAEA AND EDUCATION (cont'd)

- We provide guidance documents on Education and training, e.g. “Nuclear Engineering Education: A Competence-based Approach in Curricula Development” (2014)
- Through our Cyber Learning Platform for Networks (CLP4Net) we support educational networks in various regions
 - Asian Network for Education in the Nuclear Industry (ANENT)
 - Latin-American Network for Education in Nuclear Technology (LANENT)
 - AFRA- Network for Education in Nuclear Science and Technology (AFRA-NEST)



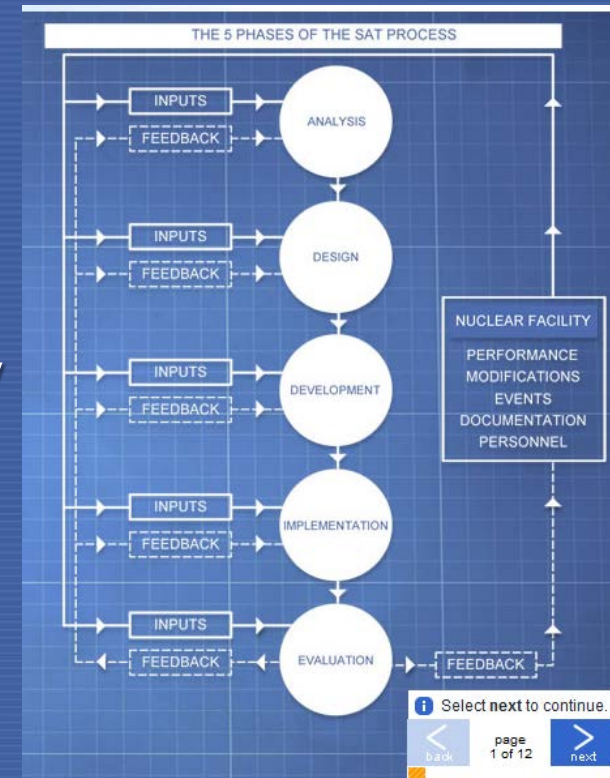
E-LEARNING

- E-learning can be an effective learning tool, for broad audiences, especially at the overview level
- Independent of time and space and suited to learner's learning speed
- Making increased use of e-learning in many areas, especially for newcomers
- Latest project to create e-learning suite based on the IAEA Milestones Approach



TRAINING AND SAT

- IAEA promotes the use of the Systematic Approach to Training (SAT) as the basis for ensuring education and training provided is based on the requirements of the job for which training is being provided
- SAT is applied by all operating organisations to identify job specific training needs
- SARCoN (Systematic Assessment of Regulatory Body Competence Needs) has been developed as an SAT based methodology for ensuring the competence of Regulatory Body personnel
- IAEA encourages the application of SAT to contractors and other organisations supporting the operation of nuclear power plants



TRAINING TOOLS AND TECHNIQUES

- IAEA guidance on SAT currently being updated
- New e-learning module on SAT available on IAEA website – Interactive presentation this afternoon
- SARCoN tool and training for it's use available through Nuclear Safety and Security Department – several examples to be presented this week and Interactive presentations on SARCoN and other Safety related training activities
- Wide range of Management (including Safety Management) Training programmes developed, including new Executive programme implemented by MIT

TRAINING COURSES

- IAEA focuses its training activities in those areas, and for those organisations, where commercial training programmes are not available.
- Wide range of training programmes available in Nuclear Safety, Nuclear Security and Safeguards.
- Lots of information available on the IAEA website and several interactive presentations this week on E&T related products and services
- IAEA also working with MS to develop their 'Outreach' activities: using Educational networks to teach young people about nuclear and to stimulate career interest



SUMMARY

- Many presentations today and during the week about training and the application of SAT in MS.
- IAEA can provide support and assistance in these areas.
- Several Interactive IAEA presentations today and rest of the week to share our tools and services in this area.
- Member States encouraged to continue Education/Industry cooperation to ensure E&T meets Industry's needs
- Such cooperation should also be used to foster Outreach activities to stimulate interest in a career in nuclear for young people, as well as increasing support for nuclear power.

THANK YOU!



...atoms for peace.