Radiation protection culture at school: feedback experience and perspective

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Introduction

- Increasing trend to involve stakeholders in radiation protection
- Members of civil society need basic knowledge in radiation protection together with practical experimentation to be able to improve their protection
- Several experiences of the development of radiation protection culture at school in different contexts: Post-accident management, development of scientific culture, ...
- Content of the presentation:
 - Definition of culture
 - Approach adopted with high schools & feedback experience
 - Partnerships and role of RP professionals



Definition for Culture adopted by UNESCO

- "... in its widest sense, culture may now be said to be the whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or social group. It includes not only the arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs"
- "The overall development of society calls for complementary policies in the fields of culture, education, science and communication with a view to the establishment of a harmonious balance between technological progress and the intellectual and moral advancement of mankind."

Mexico City Declaration on Cultural Policies, World Conference on Cultural Policies, Mexico City, 26 July - 6 August 1982, UNESCO



Defining radiation protection culture

- Orient themselves in relation to risk associated with exposure to radioactivity in their environment;
- Assess, by measuring the levels and patterns of exposure and the radioactivity in the environment, in workplace, in the medical field;
- Update their knowledge and understanding of risks associated with exposure to the radioactivity and identify protective actions to implement in order to maintain their own exposure ALARA;
- Be able to "appreciate" and to evaluate the usefulness of protective actions to be implemented.



Knowledge

- Sciences
- Philosophy
- History
- Economics
- Sociology

Radiation protection practices:

- Research laboratories
- Laboratories of environmental surveillance
- · Nuclear facilities
- Hospitals
- Local Liaison Committees, local authorities, associations,...



Methodological approach

- · Multidisciplinary approach
- Interactions school-children/ professors/experts
- Structured questioning around:
 - · Local context
 - · Societal stakes



Development of radiation protection culture





Feedback experience with schools

- A two steps process:
 - Practical experiments with school professors and RP experts:
 - Environmental measurements on radon, around nuclear installations, on old mining sites...
 - Management of RP at hospital, in research laboratories...
 - Experimental works on radiobiology, metrology, risk assessment...
 - Discussion on precautionary principle, access to information, decision-aiding process...
 - Annual international workshops:
 - Allowing exchange of experience (notably with post-accidental situation)
 - Favouring a multidisciplinary approach and exchange with RP experts



Partnerships and role of RP professionals

- A network of school professors:
 - network of professors who are volunteers to experiment new topics and approaches with their students
- Relationship with professionals for scientific mediation:
 - crucial to favour the development of knowledge and knowhow instead of theoretical approaches of radiation protection
- A real challenge for radiation protection experts:
 - find the good wording, the meaningful experiences and the limited set of useful knowledge to deal with the radiation protection issues with young people



Conclusion

- For enlarging the experiences already developed:
 - Develop pedagogical documents describing the approaches implemented together by teachers and radiation protection experts;
 - Favour local initiatives in establishing relationship between school teachers, scientific mediation professionals and radiation protection experts, notably local ones
 - Organise the sharing of these experiments at the national and international levels, notably through Radiation Protection Societies and IRPA.