

# Enhancing Radiation Safety in Australia through Applied Training and Outreach

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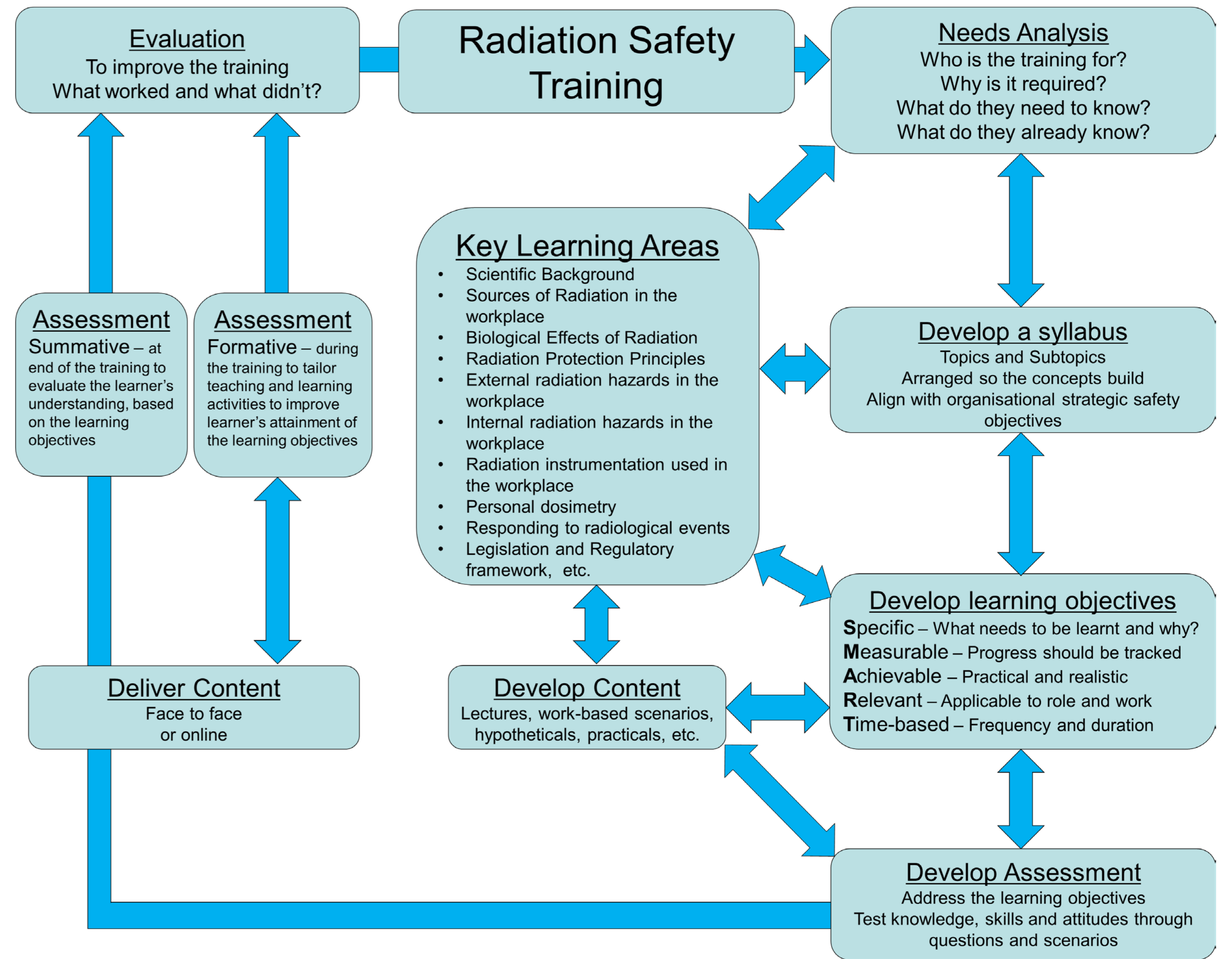
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## Introduction

The Australian Nuclear Science and Technology Organisation (ANSTO) is the centre of Australia's capabilities and expertise in nuclear science and technology, operating the nation's only multi-purpose reactor, OPAL, in Sydney and the Australian Synchrotron in Melbourne. In order to run all infrastructure efficiently and effectively, ANSTO needs suitably qualified and experienced workers who understand and embrace radiation safety culture. This is achieved, in part, through in-house development and regular delivery of applied training to ensure knowledge, skills and experience in radiation safety are fostered and sustained.

ANSTO has been recognised for setting the benchmark for radiation safety training in Australia and also offers radiation safety training to external clients in mining, health care, government, education, universities and research sectors.

To maintain and enhance our social licence to operate our nuclear and radiological facilities, and to demonstrate leadership in the education of Australia's next generation, ANSTO communicates to a wide range of stakeholders, including community groups, students, teachers, regulatory officers, industry and government representatives, and international partners. This is done using various methods, such as tours, teacher professional development, school workshops, online resources, and interactive community events.



Bus, J., "A Systematic Approach to Radiation Safety Training", Australasian Radiation Protection Society (ARPS) 41st Annual Conference, Adelaide, Australia, September 2016.

## ANSTO Radiation Safety Framework for Training



ANSTO specific training			Commercially available training															
Basic radiation safety	Radiation safety workshop	Facility specific radiation safety	Radiation safety for laboratory workers	Safe use of industrial gauges	Safe use of x-ray devices	General Radiation Safety Officer	Industrial Radiation Safety Officer	Advanced Radiation Safety Officer										
<b>Objective</b> is to develop sufficient radiation protection knowledge and skills to be able to: Recognise the need for an operational and management framework for the safety and security of radioactive material and radiation apparatus.  Be aware of radiation safety responsibilities when working in a controlled or supervised area with ionising radiation.			<b>Objective</b> is to develop sufficient radiation protection knowledge and skills to be able to: Recognise the need for an operational and management framework for the safety and security of radioactive material.  Be aware of radiation safety responsibilities when working in a controlled or supervised area with radioactive material.															
<b>Audience</b> includes: Workers who enter or have the potential to enter a Radiation or Contamination classified area: and are to be enrolled on the ANSTO dosimetry service. and require specific knowledge of that designated area.			<b>Audience</b> includes: Personnel that have operational or management responsibilities for radioactive material and/or radiation apparatus as part of their work: • at a research facility, such as laboratory technicians, visiting researchers, post docs, academics. • with fixed or portable gauges that emit ionising radiation at geotechnical, construction, mining and manufacturing sites. • transporting Class 7 dangerous goods. • at a radiopharmaceutical production facility, such as quality assurance and production workers. • at hospitals in nuclear medicine or oncology departments.															
<b>Duration</b> 3 hours			5 hours		Local schedule of training		1 day		1 day		1 day		3 days		3 days		5 days	

## ANSTO Outreach



### School Tours

Primary School Up and Atom Tour  
Introduction to the Atom and Nuclear Science  
HSC Chemistry & Physics  
Science Discovery  
Careers Q&A  
HIFAR Historical Tours

### Education Events

Teacher Professional Development  
Teacher Conferences  
Science and Engineering Challenges  
National Summit

### Workshops

Science Workshop for Kids  
Coding and Robotics Workshop  
Atomic Workshop

### E-learning

"Meet an expert"  
Nuclear Science  
Inquiry Skills  
HSC revision  
Human Endeavour  
Online resources  
Apps and Games

### Resources

Apps and Games  
Posters  
Workbooks  
Factsheets  
Videos

### Community

Fact or Fiction show  
Citizen Science programs  
Sponsorship of key local events  
Science Awards  
Guest presentations

