

An Chomhairle Náisiúnta Curaclaim agus Measúnachta National Council for Curriculum and Assessment

Senior Cycle Science

ChemEd 2012

Messages from the consultation

- Revised approach
 - Learning outcomes
 - Key skills
 - Move away from rote learning
- Second component assessment
- Significant change to written assessment
- Deeper treatment of content- application, evaluation, synthesis
- Range of learner centered practical activities
- Use of ICT to develop concepts and deepen understanding

NCCA

Learners should be able to:

- use observations as the basis for formulating a hypothesis
- design, manage and conduct investigations
- identify variables and select appropriate controls
- collect, organise, interpret, present and analyse primary and secondary data
- describe relationships (qualitatively and/or quantitatively) between sets of data, recognising the difference between causation and correlation
- use secondary data sources; locate and understand relevant information from books, scientific publications, the internet, databases and other resources
- communicate the procedures and results of investigations by displaying evidence and information in various forms, including flow charts, tables, graphs, and laboratory reports

Learners should be able to

- compile and interpret data or other information gathered, to research a topic, solve a problem, or support an opinion
- apply their knowledge and understanding of science to develop arguments or draw conclusions related to both familiar and unfamiliar situations
- make judgments and draw informed conclusions arising from their own and others' investigations and consider the reliability and validity of data



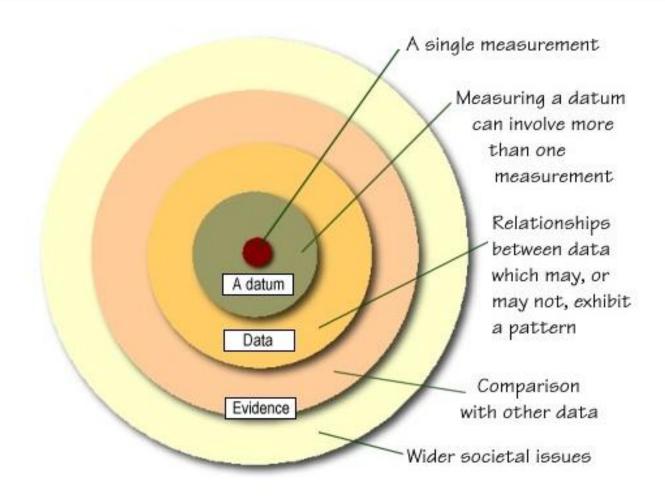


Learners should be able to

- appreciate the limitations of scientific evidence
- critically examine the scientific process that was used to present a scientific claim
- evaluate the ethical issues embedded in scientific decision making processes



Concepts of evidence



Learner activity over the two years

- Experiments
- Investigations
- Research

