

CONSTRUCTION
FUTURES



SCHOOL EXCURSION

PROGRAM

YEAR 8

*ENTERPRISE AND INNOVATION IN THE
CONSTRUCTION INDUSTRY*



PURPOSE OF THE LEARNING ACTIVITY

LEARNING ACTIVITY OVERVIEW

Students identify innovative practices in the construction industry and how these have contributed to change in how buildings and infrastructure are constructed, increased viability of the construction industry and increased environmental sustainability.

CURRICULUM LINKS

Design and Technologies P-10 Syllabus

- Technologies and society.
- Development of products, services and environments through the creativity, innovation and enterprise of individuals and groups.

English P-10 Syllabus

Interacting with others, Oral presentations

- Formal oral presentations that students engage in including presenting recounts and information, and presenting and arguing a point of view.
- Plan, rehearse and deliver presentations, selecting and sequencing appropriate content, including multimodal elements, to reflect a diversity of view points.

General Capabilities

Numeracy

Investigating with ICT element

- Define and plan information searches.
- Use a range of ICT to analyse information in terms of implicit patterns and structures as a basis to plan an information search or generation.

General Capabilities Information and Communication Technology

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General Capabilities Information and Communication Technology

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- Locate, generate and access data and information
- Locate, retrieve or generate information using search facilities and organise information in meaningful ways.

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- Select and evaluate data and information.
- Assess the suitability of data or information using appropriate own criteria.

General Capabilities Creative and Critical Thinking

Inquiring – identifying, exploring and organising information and ideas element

- Pose questions.
- Pose questions to probe assumptions and investigate complex issues.

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- Organise and process information.
- critically analyse information and evidence according to criteria such as validity and relevance.

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LEARNING ACTIVITIES

BEFORE VISITING THE CONSTRUCTION FUTURES CENTRE

Students design and complete an Internet search to identify innovations in the construction industry and list what they consider to be the top five, using triangulation to support their decisions.

Students write questions to guide them to learn more about these innovations on their visit to the CFC.

DURING THE VISIT

Students list innovations in the construction industry they identify while at the CFC, comparing these with the lists they prepared prior to their visit and noting information about why each is an innovation and how it has influenced construction processes and products.

Students select a particular innovation in construction they would like to focus on post their visit to the CFC, ensuring they collect as much information as they can from the exhibits about the innovation.

Data collection should focus on how the innovation came about, how it has changed the construction industry and how the innovation contributes to the sustainability of the construction industry, both economic and environmental.

AFTER THE VISIT

Students apply what they have learned about their chosen innovation to create designs for a construction and plan its construction, showing how the innovation will have a positive impact on the building.

In doing so, students create drawings of their construction and annotate these to show how their selected innovation will contribute to the effectiveness of the construction process and the resulting building.

Students identify and explain the key benefits of their chosen innovation with a focus on how it has changed the construction industry and how the innovation contributes to the sustainability of the construction industry, both economic and environmental.



SKILLS RELATED TO THE CONSTRUCTION INDUSTRY

The Construction Futures Centre has identified core skills that relate to careers in the construction industry. As students complete learning experiences before, during and after their visit to the Construction Futures Centre, they should be encouraged to work in ways that enable them to apply and demonstrate these core skills and to identify how these relate to and are applied in roles in the construction industry.

THE CORE SKILLS ARE:

- reading;
- writing;
- speaking;
- listening;
- numeracy;
- technology;
- teamwork; and
- problem solving.

SUGGESTED WEBSITES

www.yourhome.gov.au/
www.commerce.wa.gov.au/building-and-energy/industry-information
[www.business.gov.au/planning/templates-and-tools/industry-factsheets/
building-and-construction-industry-fact-sheet](http://www.business.gov.au/planning/templates-and-tools/industry-factsheets/building-and-construction-industry-fact-sheet)
www.australiabydesign.com.au/abd-innovations-2019/
www.buildyourcareer.com.au/
ctf.wa.gov.au/careers/
www.aapathways.com.au/



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