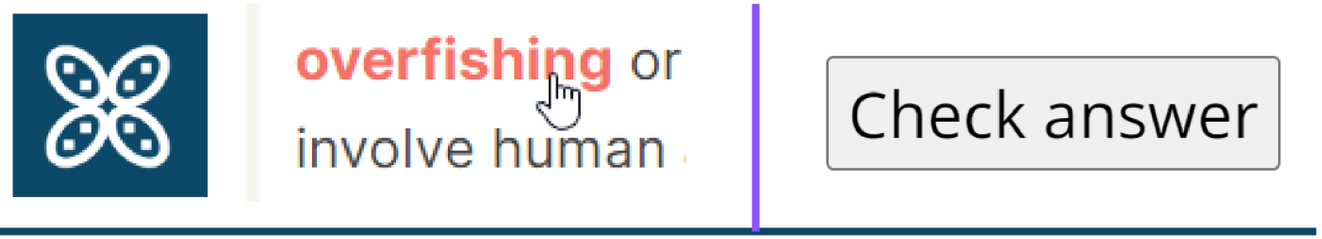
gavink7@gmail.com



Design for learning

This webpage can also be viewed
on your mobile phone

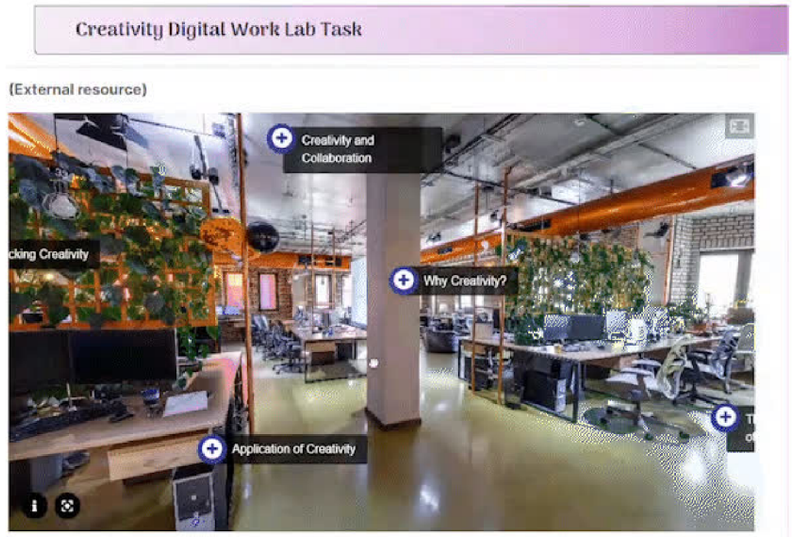
Portfolio

Sample 3

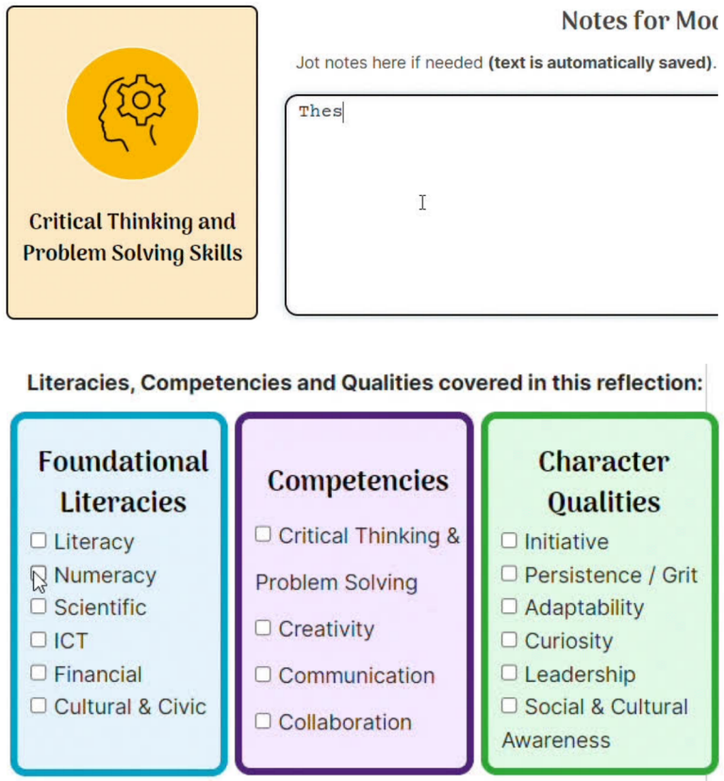
FutureWorkX: A 21st Century Workplace Lab

- The **four key competency icons** form the basis for the module colours and design

- **a wide range of interactive tools** were created to enhance the immersive learning environment and improve engagement for the learner.



- responsive design
- slick graphics implementation
- learner-centred interactive and immersive components



Understanding Critical Thinking & Problem Solving

▶ How Would You Define Critical Thinking & Problem Solving in Your Place of Work?

Before we begin, we would like to find out what you already know about Critical Thinking and Problem Solving.

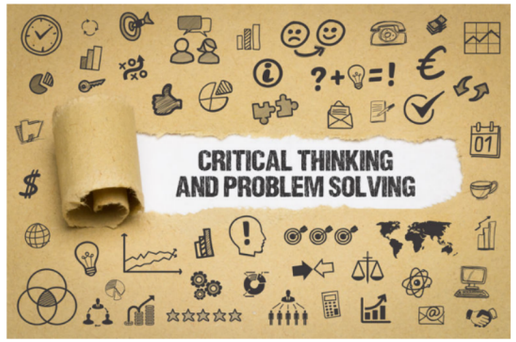


Image source: *Critical thinking and problem solving. By magele-picture, Adobe Stock.*

Activity

Word Cloud

Finish this sentence: Critical thinking in a workplace involves...

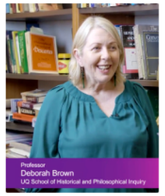
Save

Your words were:

Explain, Interrupt and Transform

▶ The Interplay of Critical Thinking and Other Competencies

The Interplay of Critical Thinking with Other Competencies



One of the questions you might be asking after hearing Deb Brown is why does this course include a framework that separately distinguishes all the 21st Century Skill elements? When Deb speaks, she indicates that **we need to consider skills, competencies and qualities as woven together** to form our ability to work with complex problems, new work environments and the influx of technology in our lives.

The framework we've shown you is not meant to be understood as categorised, separate branches extending into our work and life. We break down the different aspects of 21st Century Skills to teach you the main characteristics and nature of how we must consider how we work in the future.

For you to gain a sense of how the **framework elements are fluid and dynamic** within how we work and live, we have provided one or two case studies throughout the course.

Up next, we take a look at Andrew, who is a teacher and recognises how he lives out Critical Thinking. As we look deeper into his story, you will start to see **other elements of the framework interplay with his value of Critical Thinking**. Our challenge to you is to spot these elements in Andrew's story and reflect on how different elements work together.

Lived Example of Critical Thinking

> *"As a teacher I mainly use critical thinking to develop and evaluate arguments when deciding which teaching methods to use, grading student work and reflecting upon my own practice. Approaching my work in this way gives me a greater degree of confidence that my decisions are well justified, and that I have the tools to overcome complex problems I may encounter. I also find that thinking critically helps to take the conflict out of disagreements with colleagues or superiors as I have learnt to take the time to acknowledge my own fallibility, evaluate other people's perspectives fairly and prosecute my own case in a calm and logical manner. When thinking critically I always aim to adopt a curious mindset as I find it is a more authentic and enjoyable place to come from. For example, when I am genuinely curious about other teacher's perspectives, my own biases or, possible solutions to complex problems, these potentially confronting situations are transformed into opportunities for discovery. Going forward I want critical thinking to be a completely normal way of collaborating with my colleagues so that we can support each other more effectively, even when we don't agree."*
>
> – Andrew Beencke, Teacher

Activity - Workplace Scenario 3

Image source: Portrait By insta_photos, Adobe Stock

Workplace Scenario 3 - Emma was tasked with developing an impact assessment model which would be universally accessible for all local governments involved in with her organisation. To ensure the impact assessment model represented community ideals and opinions, Emma was also tasked with developing a questionnaire to be released on the website for members and citizens to voice their priorities and concerns, this feedback would then be summarised and would inform the model.

Image source: Questionnaire icon on a digital window By MarutStudio, Adobe Stock

Emma was not familiar with designing and implementing questionnaires, so this piece of work took some time, as she needed to familiarise herself with good survey design and then learn how to use the survey software and to embed the survey into her organisation's website. She discovered as she developed the tool, that many of her questions were unsuitable for the audiences that they needed information from, which necessitated some modifications to the language and the tone of the survey, as well as to the types of questioning used. Several iterations of the survey were tested and amended before she was satisfied with the final product. She also encountered some issues with embedding the survey tool into the existing web pages and ensuring that data would be captured securely and in accordance with data management policies. By working with her IT team they were able to fix the issues and the survey was launched on time.

Emma used the data provided through the survey responses to develop an impact assessment model that addressed the issues raised in the questionnaire. Her final model was accepted by the community and utilised by local government partners.

Emma's Demonstrated 21st Century Skills

4 points possible (ungraded)

Read through Emma's work scenario and check the box of the skills or attributes you think she has applied:

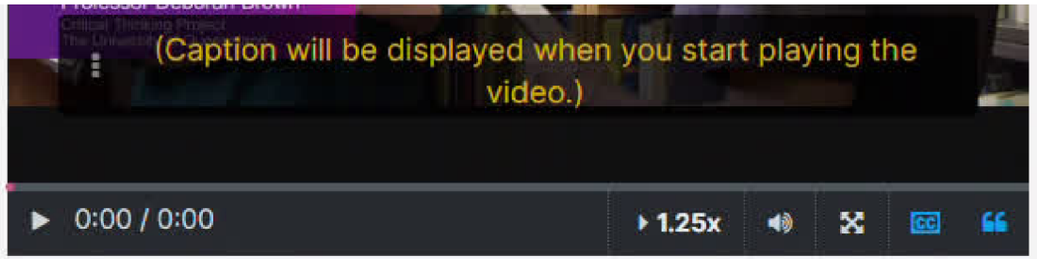
Literacies

- [ ] Financial literacy
- [ ] Literacy
- [ ] Scientific
- [ ] Numeracy
- [ ] ICT
- [ ] Cultural and civic

Competencies

- [ ] Communication
- [ ] Creativity
- [ ] Critical thinking
- [ ] Collaboration

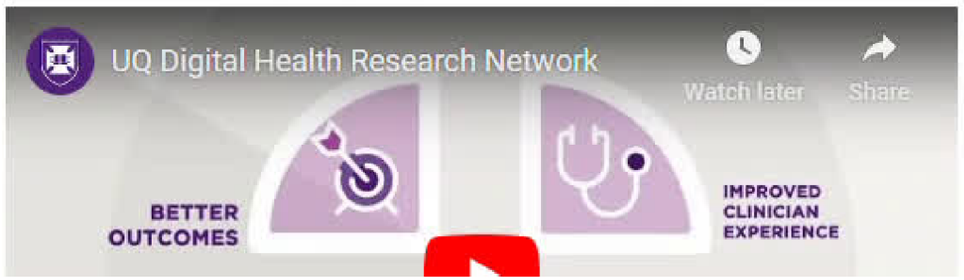
Interactive H5P in slideshow (FUTUREWORK)



So, you know, in so far as, work
has always relied on innovative thinking,
innovation presupposes critical thinking
- the ability to analyse
problems, and generate solutions, and
subject them to critical evaluation.

Snack Learning: Evaluating Future Work Spaces

Digital Health – A case study to examine contexts where the FutureWorkX framework is described and evidenced, with the aim to provide you a sense of what can be achieved when you consider the future of work.



Portfolio

Sample 4

Coral Reefs: Introduction to Challenges and Solutions

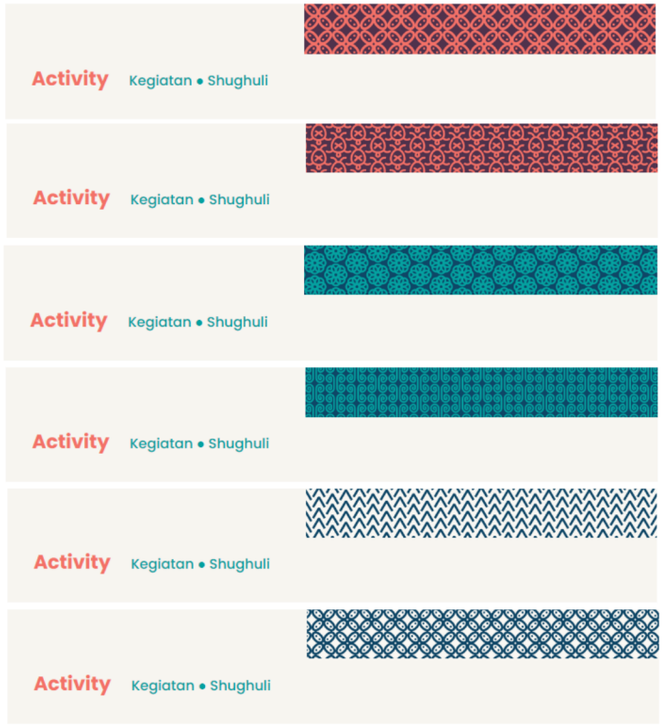
- **custom styled** to emulate the original CRRI styling guidelines

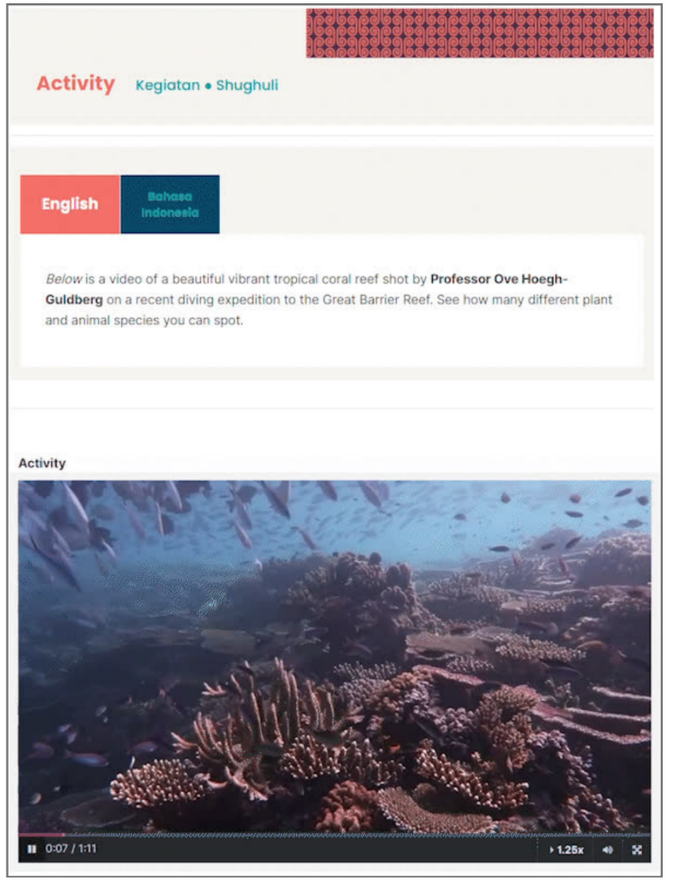
- **a wide range of learner-centred tools and devices** were implemented to deepen the cognitive learning experience and create multidimensional learning links

We are aware that **sea level rise** poses a significant threat to a considerable portion of our planet.

Go to the Carbon Map: https://www.carbonmap.org/#Area (opens in a new tab)

- responsive design
- multi-language features
- learner-centred interactive and immersive components – mouse hover definitions and searchable glossary!





Making Data Accessible

Module 5

STAFF DEBUG INFO

Making Data Accessible

Data analysis and interpretation in the realm of coral reef conservation has traditionally been directed primarily at scientists and other professionals with high levels of education. This approach, while valuable for scientific research and management decision-making, can pose a significant barrier for coastal communi
coral reefs. It is crucial to bridge this in
communities for several reasons. Firstl
knowledge and insights into reef ecosy
to more effective conservation strategi
challenges and need access to informa
such as **coral bleaching** or **unsustainable fishing practices**.

Definition

Fishing practices that, if continued, pose a threat to the health and sustainability of fish populations and the broader marine ecosystem

Image source: "Top-view of coral reef with a sand island". By Allen Coral Atlas. AllenCoralAtlas.org, modified.

Local Strategies

Module 4

English | Bahasa Indonesia

Strategies for Addressing Local Threats

Local strategies are indispensable in combatting the numerous threats that coral reef ecosystems face. These strategies often involve a combination of measures, such as **the establishment of Marine Protected Areas (MPAs)**, **implementing Integrated Coastal Zone Management (ICZM)**, **fostering community involvement**, and **prioritising gender and indigenous-inclusive education and awareness**. These approaches are not only practical, but also insightful in their ability to address the complex challenges threatening coral reefs.

Image source: Portrait of a young African girl with other African women of different ages behind her. By Media Lens King, Adobe Stock.

English | Bahasa Indonesia

Mibu Fischer *(video berikutnya)* adalah seorang etnoekologis laut yang terkenal yang menjelajahi bagaimana pandangan dunia kita mendefinisikan hubungan kita dengan lingkungan dan mengapa penting untuk menyadari berbagai cara terumbu karang dapat dinilai oleh kelompok yang berbeda. Mibu memiliki beberapa pandangan dunia sebagai seorang wanita pesisir asli dengan hubungan dengan Orang Noonuccal, Ngugi, dan Goenpul dari Quandamooka Country di Australia, dan sebagai seseorang yang tumbuh dalam masyarakat Barat.

Export Reflections (External resource)

Download Word Document

- Module 1 Reflection Journal
- Module 2 Reflection Journal
- Module 3 Reflection Journal
- Module 4 Reflection Journal
- Module 5 Reflection Journal
- Module 6 Reflection Journal

Stressors

Stressors are factors or influences that *induce stress* on the coral reef environment.

Example: Pollution can be a stressor if it causes stress to coral reefs by reducing water quality, hindering coral growth, and impacting the health of marine organisms. If it is not addressed, it could then transform into a threat.

Threats

Threats are often *specific identifiable actions* or conditions that can *cause potential harm or damage*, such as overfishing, pollution, and coastal development.

Example: Severe or continuous pollution can become a significant threat if it leads to coral reef degradation, loss of biodiversity, and long-term damage.

Image sources: (Top-left) Plastic on a coral reef. By Alex Mustard / Ocean Image Bank. The Ocean Agency, modified. (Bottom-left) Dynamited coral reef, Indonesia. By Martin Colognoli / Ocean Image Bank. The Ocean Agency, modified.

▶ ***Did you know ...?*** *Fishy Fun Fact*

EN Coral reefs cover less than 1% of the ocean floor, but they are home to more than 25% of all known marine species. This incredible biodiversity makes coral reefs some of the most important ecosystems on the planet.

Exploring the Reef Through the Lens of The Food Web

Module 1

Biological Diversity of Tropical Coral Reefs

This section of the module will provide an overview of the biological diversity of tropical coral reefs. **Biological diversity** is measured as the number of different species that call tropical coral reefs home. Due to limited scope, we can only provide a short introduction to the rich and diverse life that exists on reefs. If you're interested in learning more about the fascinating organisms on coral reefs, there are online courses and textbooks that provide in-depth explorations (e.g. Australia's Coral Reefs; https://www.publish.csiro.au/book/8046/).

Image source: Blacktip Reef Shark. By anemone. Adobe Stock.

Welcome to the Glossary of Terms

Search marginalis

Term	Definition
Gender and social inclusion	A foundational principle in conservation and development projects. It entails recognising and addressing the diverse needs, perspectives, and roles of individuals from various genders, ethnicities, backgrounds, abilities, and social statuses in project planning and implementation. This principle underscores the importance of involving and empowering all stakeholders, with particular attention to marginalised and underrepresented groups, in decision-making processes and project activities. By prioritising inclusivity, projects strive to foster equality and ensure that all voices are heard and considered, thereby promoting more holistic and effective approaches to conservation and development.
Marginalised communities	Marginalised communities have limited access to ecosystem services, and therefore may suffer economic and social consequences. Unequal access to coral reef ecosystem services impacts the health and well-being of all members of society.

Activity

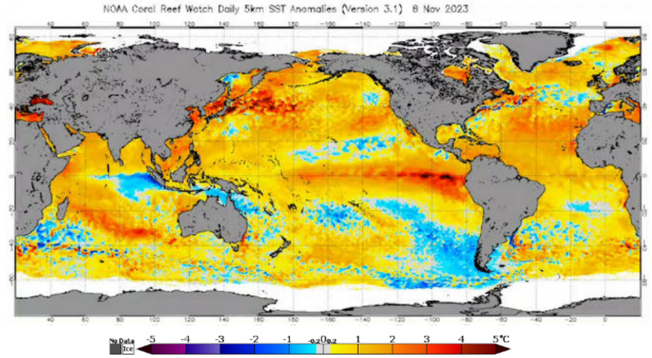


Image source: Daily Global 5km Satellite Sea Surface Temperature Anomaly (Version 3.1, Global 90-day animation). By NOAA Coral Reef Watch.

Click on the image to view at a larger size (opens in a new tab)

The *animated image above* displays **global sea surface temperature anomalies over the last 90 days**. The NOAA Coral Reef Watch (CRW) daily global 5km Sea Surface Temperature (SST) Anomaly product displays the difference between today's SST and the long-term average. The scale ranges from -5 to +5 °C. Positive values mean the temperature measured is warmer than average; negative values mean cooler than average.

We know that when sea surface temperatures exceed the long-term average temperature, coral reefs are exposed to increased risk of **bleaching**, disease and death.

What conclusions can you draw from the data presented above?

Discussion

Hide Discussion

Topic: Module 3: The NOAA Coral Reef Watch (CRW) Daily Global 5km Sea Surface Temperature (SST) Anomaly / Topic-Level Student-Visible Label

Add a Post

Show all posts by recent activity

- Warming Anomalies — There are a few significant warming anomalies shown in the data presented above. Firstly, and most relevant to me – the Gulf of Maine is one ... 1
- Sea water temperature raise — From the data of NOAA, that's seen at a 90 days interval from 5 September to 3 December, at far Nordic regions an huge temperature differe... 1
- Ocean Warming — From the data presented, we can easily conclude that there is a trend for ocean warming. Moth of the ocean surface is warmer than average,... 1

overfishing or
involve human

Check answer

Design for learning

gavink7@gmail.com