

# Design, Engineer, Construct! Level 2:

## Unit 4. Evaluating a Sustainable Construction Project

### 4.1 Compare Intentions with Outcomes



Unit	Incomplete (U)	Secure (C)	Exceptional (A)	Comments:
3.2.1				
3.2.2				
3.2.3				
3.2.4				
3.2.5				
3.2.6				

**Name:** Jack Littlewood

**Date:**

**Deadline for Submission:**



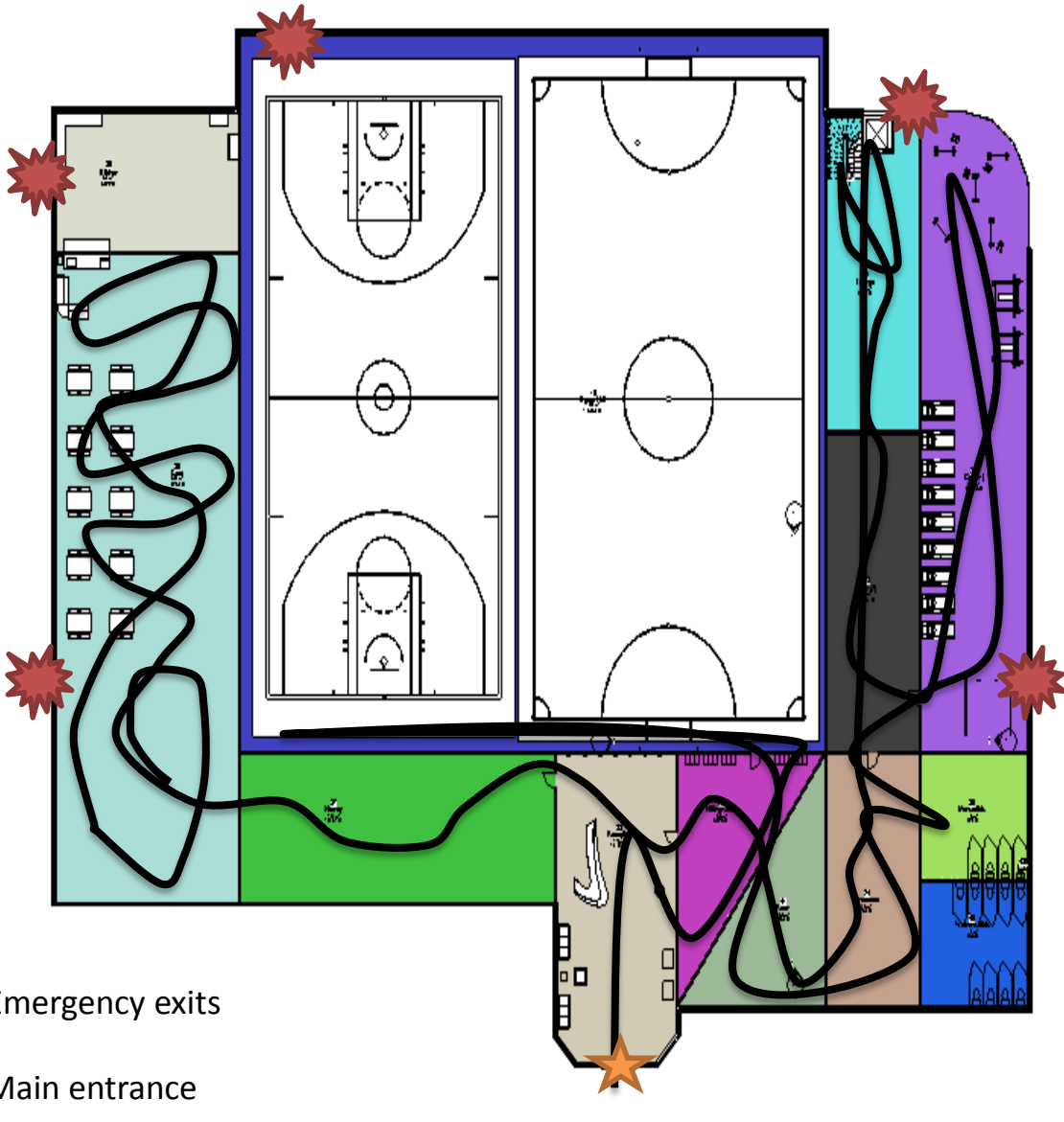
# Unit 4. Evaluating a Sustainable Construction Project

## 4.1 Compare Intentions with Outcomes

### 4.1.1 explain how the building works and what users need to do to optimise performance



1. Insert a floor plan of your building and annotate it to suggest traffic flow around the space. Where are your main entrances/ exits? Where are your fire exits? Where will groups congregate / meet?



Are there any areas/ zones that could get congested?

The corridors near the gym and locker rooms as people use these corridors more than any others since my building is a sports facility.



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#### 4.1.2 explain how well final outcomes meet original intentions



Place your Compliance Matrix in the space below. Score your building out of ten for each target.

No.	Criteria/ Target	Score (0-10)
1	Have a stylish façade that fits the surrounding	7
2	Have a modern design	8
3	Sustainable in all aspects	7
4	Accessibility to all types of people	9
5	Lots of rooms for activities	7
6	Spacious rooms	7
7	Good lighting	8

#### Which are your strongest and weakest areas?

My strongest areas is the special rooms which include the gym and sports facility, my weakest is the design as I think it can be improved.



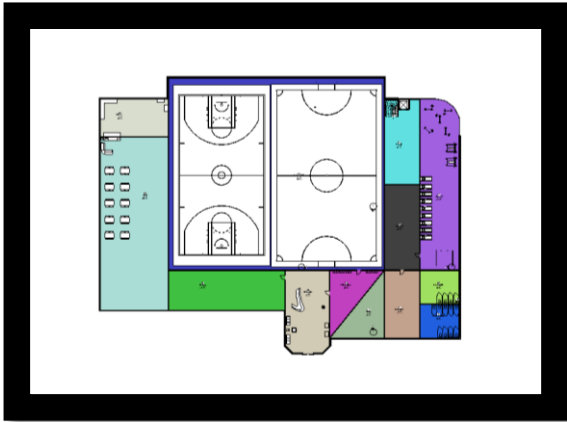
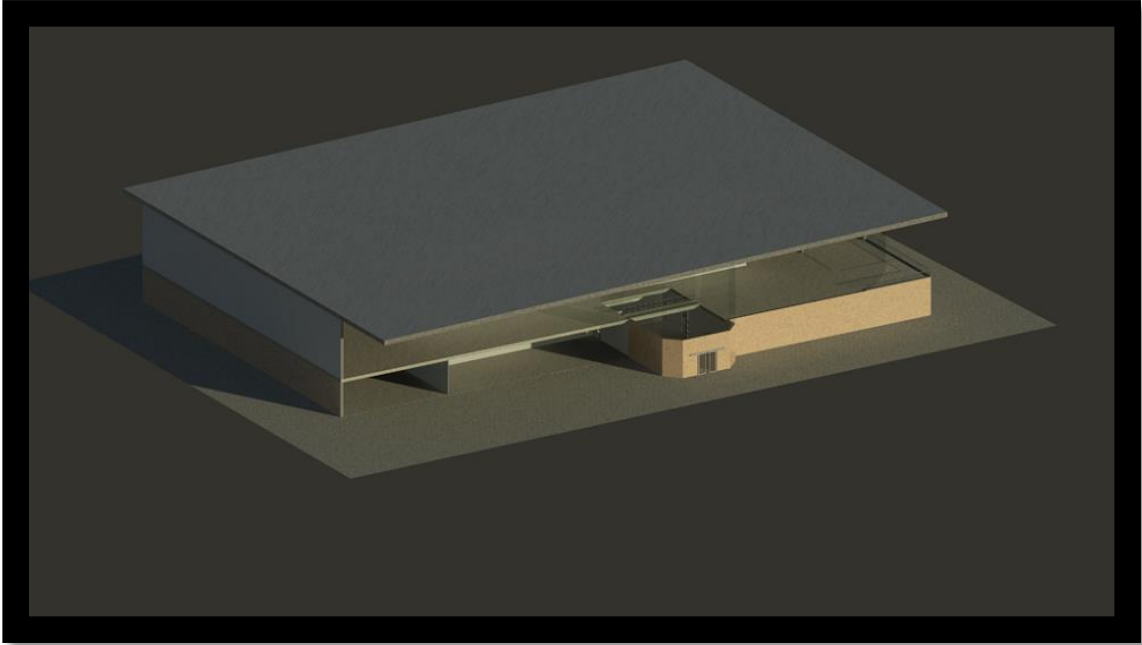
## Unit 4. Evaluating a Sustainable Construction Project

### 4.1 Compare Intentions with Outcomes

#### 4.1.3 evaluate feedback and use it as a basis for improvements in future projects



Present your model to your group. Document the feedback received below:



Positive: Façade and interior

Negative : Spacious areas and roof needs improvement.

#### How did it feel receiving criticism?

It felt harsh but they were correct, I had some façade issues along with sustainable materials usage but with the feedback provided I'm hoping to improve my model.

#### Did you agree with everything that was said?

Most issues I agreed with but some I did not for example that my building was not spacious enough which I thought it was.



# Unit 4. Evaluating a Sustainable Construction Project

## 4.1 Compare Intentions with Outcomes

### 4.1.4 analyse data and use it as evidence to inform evaluation

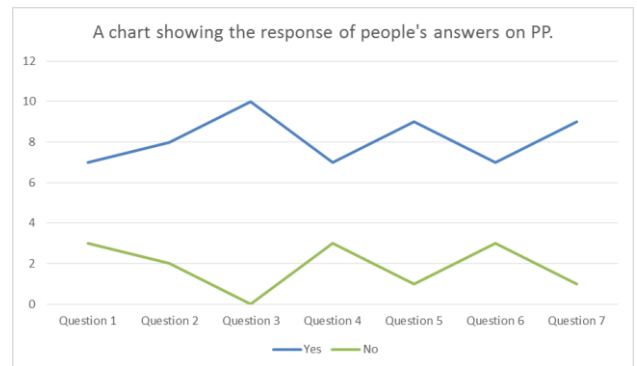
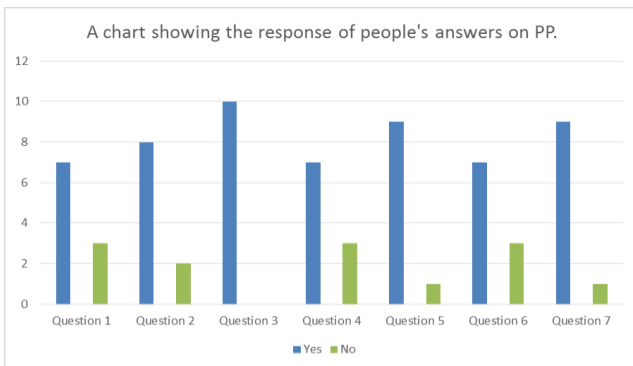


#### Check your building for its aesthetic and sensory impact on its users.

Produce a questionnaire for potential users of the building based on an inspection of the building and identification of issues related to aesthetics and sensory impact. Ensure the questionnaire is free from bias and targeted on getting valid and targeted responses from the users. The question should be completed by 10 users and the results should be collated and summarised.

1. Does the facility benefit you?
2. Does the design look good?
3. Is it accessible for you?
4. Are the food services good?
5. Is the gym facility to a suitable size and contain useful equipment?
6. Is the lighting to your expectation?
7. Overall are you satisfied with the project?

Add graphs to show results here. Write a sentence with each to summarise your findings:



Overall I am quite impressed with the results as they are all positive and provide a good feedback, the questions were not too biased but I do feel in areas I need to improve such as lighting and design.

#### Make some recommendations based on your results:

I'd recommend to acquire better kitchen accessories and to also upgrade or reconsider my lighting strategies.



## Unit 4. Evaluating a Sustainable Construction Project

### 4.1 Compare Intentions with Outcomes

#### 4.1.5 use data to forecast long term performance of the building



##### Forecast your buildings performance:

Scenario	How it will perform:	What you can do to improve performance:	How will this improve the performance?
1. In summer time on a hot day	Solar panels will help keep a good flow of electricity and hot water running through the facility.	Insert more solar panels and provide shelter, along with air con.	It will up the electricity and hot water gain and help keep people cool.
2. In winter on a particularly cold day	It insulates heat to keep the building warm at all times.	Improve air con and temperature control.	I'll be able to keep a stable temperature throughout the building.
3. In spring on a bright and sunny day	Solar panels yet again help generate electricity due to sunlight.	Provide shelter and water fountains around the facility to keep people hydrated.	Helps create a positive attitude towards how the building helps the customers.
4. In Autumn on a windy day	Constructed from strong material which can withstand the wind.	Place wind turbines so I can generate electricity.	Shows that my building is sustainable and receives a positive report.
5. In winter on a dark and rainy day	SUD'S in place to store water and use it.	Improve on the SUD system.	Help store more water.

##### Make some recommendations based on your results:

I should try to be more sustainable when it comes to sunny and windy days as I don't have much in place for them.

