

4.4.4.6 Section F: Analysing and evaluating (20 marks)

Within this iterative design process students are expected to continuously analyse and evaluate their work, using their decisions to improve outcomes. This should include defining requirements, analysing the design brief and specifications along with the testing and evaluating of ideas produced during the generation and development stages. Their final prototype(s) will also undergo a range of tests on which the final evaluation will be formulated. This should include market testing and a detailed analysis of the prototype(s).

Mark band	Description
16–20	<p data-bbox="667 675 1742 791">Extensive evidence that various iterations are as a direct result of considerations linked to testing, analysis and evaluation of the prototype, including well considered feedback from third parties.</p> <p data-bbox="667 815 1778 932">Comprehensive testing of all aspects of the final prototype against the design brief and specification. Fully detailed and justified reference is made to any modifications both proposed and undertaken.</p> <p data-bbox="667 956 1742 1072">Excellent ongoing analysis and evaluation evident throughout the project that clearly influences the design brief and the design and manufacturing specifications.</p>

Student guide – Evaluation

Introduction- have you:

- Fully explained and justified how and why you are evaluating your final outcome.

Testing of final prototype- have you:

- Fully evaluated how successfully your prototype represents your product idea and tests the intended function.
- Included a variety of photos to illustrate the product in use.
- Suggested possible modifications for further iterations.

Client feedback - have you:

- Gained detailed feedback from your client
- Summarised the key strengths, weaknesses and areas for development based on this feedback.

Review against design brief and context – have you:

- Fully justified how you have created a solution that meets the intended brief, where you have not fully achieved this, you should explain why.

Evaluation of Specification– have you:

- Used colour coding to identify whether you have fully, partially or not achieved each of the specification points.
- Fully justified how and why you have fully, partially or not achieved the specification point. (*Note: it is fine if all of the criteria are not fully met as long as you can justify this and it is evidenced in your folder*).

- Written a paragraph that fully explains the key strengths, weaknesses of your final design/ prototype in relation to how well it meets your design brief and specification. Use this identify future modifications to your design.

Future modifications - have you:

- Used all of the information gained so far to identify what modifications you could make at this stage. Create sketches and add a written explanation to explain what you have changed and why, and how you identified these modifications were needed.

Final summary- have you:

- Explained the intention of your project, why you selected this context/brief.
- Explained the iterative design and making process you went through to arrive at your final design concept, talking through each of the iterations and explaining changes you made.
- Explained what the next steps would be to allow your prototype to be suitable for commercial production (e.g. continue the iterative design process).
- Given a final judgement on the success of your project and final design outcome.

Possible extra ideas for inclusion:

- Use CAD (e.g. Google Sketchup) to create computer generated modifications and gain further feedback on these.
- Test the prototype in its intended environment.

Student guide – Examples of evaluation

Photos of products carrying out their intended function.



Evaluation against Specification

Evaluation Against Specification		Evaluation
Aesthetics	The user wants a building which blends with the existing building and the park environment in which it is situated. The building will need to have intricate detail in order for the building to look interesting and a place they would want to visit. The shop uses will need to show an original design but these which they are presented as, will help to keep the design uniform to the brand of <u>Wiggle</u> .	The users of the building will want the building to blend in with the natural environment of the park. It is most important that it will not look like it was made in the town or the park. Also, they want the building to blend in so that it doesn't look out of place in the park. It is most important that they don't change uniform with the customers needs and wants.
Customer	The visitors will be to anyone but it will vary depending on the event which takes place. The customer which the building will appeal to is an events planner.	This building is very modern and it is a building that will appeal to all different types of customer as it is accessible to all.
Cost	Some customers are concerned about the building being built into the existing park as it will mean that the environment will be destroyed or disturbed due to construction. The building needs to be constructed quickly so that it will have minimal disruption.	I used cheaper materials so that it would be cheaper for the client to buy and construct the building. This means that the cost for the users using the building will be lower than most other buildings in the building.
Environment	Some customers are concerned about the building being built into the existing park as it will mean that the environment will be destroyed or disturbed due to construction. The building needs to be constructed quickly so that it will have minimal disruption.	By using the natural timber it means that a lot of the work could be constructed in the factory and then put together on site. This is important because it means that it would have less disruption to the park as it would take a lot of time to construct on site. Also, the use of natural materials helps the building to blend in with the natural environment of the park.
Safety	The users will expect to have fire exits and they will need railings on balconies and stairs. The building will need to have emergency lighting in case the electricity goes out. They will want the building to meet all building regulations in place.	I have ensured the safety of the customer by having large doorways for people to get through and I have put railings on my balconies to prevent customers from falling off. Also, the building will meet all building regulations and I will ensure that it has emergency lighting. However, they may feel that there is not enough emergency exits in the building.
Size	I need to ensure that my design considers the customer which will be using the building as the building needs to be accessible to everyone. This means that it will need to be at least 1m wide and 2m high for children with disabilities. They can also be used to be large so that many people can use the venue and not have to use a car but many stalls or tables depending on the event.	I have ensured that the size of the building is large enough to be accessible to all. This is important as it shows that the building can be used by everyone. Also, I have ensured the rooms are large enough for the different needs of the users because the rooms need to be able to cater for the needs of different users. The size of the building is large so that it will look out of place in the park and it is most important that it is able to blend in with the park.
Function	The function for the size needs to be an open space and is a design which allows things to flow well, easier to enter. They want the venue to provide both indoor and outdoor space so that they can experience the wildlife of the park as well as being indoors if the weather is bad.	The rooms have a lot of open space but the size of the balconies means that more people can fit into the rooms and use the building. Also, I have ensured that there are both indoor and outdoor spaces and the help the building to adapt and take in the natural environment of the park. The balcony will allow users to enjoy the wilderness of the park and the nature it provides.
Manufacture	The user will want the building to be made quickly. They have a quick manufacturer because it means that the building can be made but it is a help to the park. This is because the customer has a contract that means that the building can be made on site and it is a peaceful park environment.	I have ensured that I will use industry manufacturing techniques to ensure that the building will be constructed quickly so that there will be minimum disruption to the park. Also, since the building will be constructed quickly, it means that the customers can use the building as quickly as they want.
Materials	The final building needs to be made from stone to show how the design in the park was uniform and linked to the same company. Also, it is important to use natural features and use natural materials to fit in with the natural environment of the park and the design of the park.	I have ensured that I use materials which fit with the client profile of the business. This is because it will help to make the design look uniform with the existing buildings. Also, the natural wood used was all natural and it fits in with the natural environment of the park and the design of the park.

Strengths	Weakness	Modifications
Most of the specifications were met and it was important that I did this because it meant that my building design was successful and that what the users and client wanted. This was important because it meant that the client and user happy with the building design. For example, I have ensured that I have used the same stone in the building and I have ensured that the brand of the company is used and that the design is consistent.	Even though most of my specifications were met, I felt that my building wasn't perfect and there were still parts of the specifications which I haven't fully met. The few things that I didn't have were enough emergency exits and the use of stone for the building. I felt that stone was too expensive which is why I suggest using other materials and that that that that that of the use of stone. Therefore, the emergency exits will need to be changed so that they can be more as the building could get a lot of people needing to use the building at the same time.	As a result of reviewing the client's feedback, I will need to go back and review my design. Firstly, I could use large stone columns on the building as the usual require a small amount of materials and won't increase the cost of the building too much. Also, I will need to review the floor plans and design of the building and ensure that I have enough exits for the amount of people as a safety precaution.

Client feedback

CLIENT FEEDBACK

CLIENT QUESTIONNAIRE

Do you like the product?

Based on an on-site look over, we took many photos and notes regarding the new design before we do the final copy. Something that we took into consideration was:

Would you use it accurately use it?

Yes, I would use it as an effort to use it as much as I could, as one of the things I like the most is the way it looks and the way it is made. I would use it as a decoration in my room.

Would you buy it?

I would buy it for products like it, which I have seen one, I would probably buy more than one to use in different parts of my room. I would like to see if you find out if you can use it, then you can use it in your room.

Is there any feedback you really dislike?

No, I don't have any feedback to give as I like the design and the way it is made.

Would you encourage you to need customer lifestyle?

Yes, as it can be used in many different ways, it can be used in many different ways, it can be used in many different ways, it can be used in many different ways.

Is it a function something you would consider useful?

Yes, because it provides a good decoration in my room and it can be used in many different ways, it can be used in many different ways, it can be used in many different ways.

Do you like the look of the product?

Yes, I like the look of the product and I would like to see it in my room.

SUMMARY

The client feedback was very positive and they liked the design and the way it was made. They also liked the way it was made and the way it was made. They also liked the way it was made and the way it was made.

MEANING OF FEEDBACK

The client feedback was very positive and they liked the design and the way it was made. They also liked the way it was made and the way it was made. They also liked the way it was made and the way it was made.

IN THE FUTURE

The client feedback was very positive and they liked the design and the way it was made. They also liked the way it was made and the way it was made. They also liked the way it was made and the way it was made.

CLIENT OPINION

Opinion	Score /10
A. I like the way the product looks and it has some things that I like the most of the love too.	9
T. I think the product will help me to be more organized and it will help me to be more organized and it will help me to be more organized.	8
C. I would pay £10 for the product as it is a good price and it is a good price and it is a good price.	9
I. I am very happy that the product is made from wood and it is a good price and it is a good price.	10
E. The table looks quite nice and it is a good price and it is a good price.	7
S. I think the table is a good price and it is a good price and it is a good price.	9
F. The product features will be a good price and it is a good price.	9
H. I like the way the product looks and it has some things that I like the most of the love too.	10
M. I don't like the look of the product because the table is not very nice.	5

Future modifications

FUTURE MODIFICATIONS

My client mentioned wanting a product which a more refined look and suggested making something to cover the different layers of material around the outside. The reason for this was a much more polished, complete look and the product on that instance would be more reminiscent of something you would see in a shop. Another modification that I discovered when testing the product would be necessary in order for the disc to spin correctly. It would also provide a place to put the product when not in use.

currently uses an
 → seeds 7 layers
 → whole material for
 → need to be a few
 → need to be a few
 → need to be a few

use a different material for the disc
 → use a different material for the disc
 → use a different material for the disc

use a different material for the disc
 → use a different material for the disc
 → use a different material for the disc

use a different material for the disc
 → use a different material for the disc
 → use a different material for the disc

Final Summary

FINAL SUMMARY

INTENTION OF PROJECT

The intention of the project was to create a product which was both functional and aesthetically pleasing. The product was designed to be used in a park and to provide a good decoration in the park.

WHY THIS CONTEXT

The product was designed to be used in a park and to provide a good decoration in the park. The product was designed to be used in a park and to provide a good decoration in the park.

DESIGN PROCESS

The design process was very positive and they liked the design and the way it was made. They also liked the way it was made and the way it was made. They also liked the way it was made and the way it was made.

SUCCESS OF PROJECT

The client feedback was very positive and they liked the design and the way it was made. They also liked the way it was made and the way it was made. They also liked the way it was made and the way it was made.

Parent guide – Evaluation

Introduction to this page

The final part of the NEA is for students to evaluate the success of their final design concept and prototype. There are a number of methods they can use to do this and students should aim to complete as many of these as possible to allow them to achieve the highest mark band. These methods include:

- Testing the prototype to see how well it meets its intended function, taking photos of this and writing an analysis.
- Allowing the client to interact with the product and recording their views (if this is not possible, they should still gain client feedback using alternative methods).
- Evaluating how well the final design meets the criteria outlined in the context, design brief and specification (page 6 in their folder).
- Identifying modifications based from the above evaluation methods and creating future development sketches.
- A final summary evaluating the success of their project.

Students also gain marks for their evaluation throughout the entire portfolio and so they should have client feedback and a summary on every page where it is included in the page contents list.

How can you support your child at home?

Look over your child's page. This should be written in enough detail that you understand:

- Whether the product functions as intended (including photos that visualise this) and any modifications that are required.
- What the client thinks are the strengths and weaknesses of product and what modifications are required to make the product more suitable for the client.
- Whether the product fully meets the intended context, design brief and specification, and what is required to be modified where this is not the case.
- How the product would be further developed to address all of the modifications identified using the methods above (these modifications should be presented as sketches).
- Whether the student feels the project and outcome have been successful and anything they would do differently if given the opportunity.

Read over their work and discuss what they have written, could you help them to add anything they are able to discuss but haven't captured in their written work.

Could you encourage them to add in the extra ideas for inclusion (in green) to help them gain more marks.