



Completing final project outcomes to a professional standard is the best way to ensure pupils are developing their learning habits. How can we, as facilitators, support this? In the final article of her series, **Alexis Shea** presents a teacher's guide to the critical cycle of drafting, feedback and improvement in PBL.

How to give effective feedback in PBL

This series has established that each project-based learning (PBL) unit is part of a continuum of 'real life' experiences, with the overriding aim of developing pupils' learning habits. It is easy to see individual project outcomes as separate from and perhaps even less important than learning habits, but in fact, they are closely interlinked. If a pupil has created project outcomes to a professional standard, it should follow that they have had to use learning habits at a high level. Therefore, the importance of quality project outcomes should not be underestimated.

The process by which effective feedback is given on project outcomes can have a significant impact on the quality of that outcome and, in turn, on the level to which pupils grow their learning habits. But how can facilitators develop effective feedback in PBL?



It will quickly become apparent that effective feedback in PBL is essentially the same as engaging learners in good formative assessment processes. It is important to note, however, that throughout this article (and series), feedback refers to project outcomes, whereas reflection is discussed in reference to learning habits.

Laying the foundations

Developing effective feedback begins in the planning stages of your project. As discussed in the second article in this series¹, the structure of PBL, which involves pupils working towards one final outcome with mock exhibitions along the way, creates an excellent opportunity to use drafting and feedback processes to great effect. Drafting and feedback sessions should thus be woven into the fabric of each project through the planning process. Just as would be expected in most jobs and real-life situations, PBL should give pupils the chance to have a few practice runs before presenting the real thing. The aim for pupils is to use these drafting and feedback sessions to produce outcomes

of a professional standard – or as close to this as possible! This process will require them to simultaneously use learning habits at a high level.

Ron Berger has had a strong influence on the way in which I carry out both drafting and feedback sessions, and indirectly on the structure of projects. His book, *An Ethic of Excellence*², is an easily digestible read with many useful ideas. He uses the word ‘critique’ rather than feedback, and these terms can be easily interchangeable.

At the very beginning of a project (after the initial open-ended enquiries), as pupils are about to embark on creating their final outcomes, it is important for them to gain a sense of what a quality final outcome will look like. Take some time with pupils to look in detail at similar ‘real world’ outcomes and encourage learners to analyse them with a critical eye. This will help to give pupils a sense of what they should be aiming towards.

At this stage, pupils should ideally be given criteria for success, which, where possible, explicitly states each of the ingredients required

for a professional, quality outcome. If it is feasible, you could try to create these success criteria with learners and ask experts who have skills relevant to the project outcomes to also help with the process. This is an essential aspect of the drafting and feedback process, because learners will use the success criteria as the benchmark from which to compare each of their drafts.

Helping learners understand why

Before asking learners to present their drafts, it is important to help them to consider why they are going to receive feedback on their products.

It is useful to spend time introducing or reminding learners of one or two underlying assumptions about how people learn. Firstly, pupils need to believe that they are capable of improving, which links closely to Carol Dweck's research on mindsets.³ If pupils don't believe they can make their project outcomes better, then the drafting process could be a waste of time and simply a surface practice which they don't buy into.

Pupils also need to realise that effort will be the essential ingredient in improving their products and, by this, we mean focused effort or 'deliberate practice'⁴ – that is, concentrating on the specific parts that need to be improved. If pupils understand what deliberate practice is and how it works, they should see value in receiving specific feedback on their project outcomes. Hopefully, they will use it to concentrate on improving the aspects of the project outcome that have been identified as needing it the most, rather than 'looking busy' by refining the parts which are already a decent standard.

Finally, teachers should aim to instil the idea that the experts also make mistakes. Pupils need to understand that making mistakes is part of any learning process. It is always possible to improve things; however, this requires the courage to risk failing a few times and the perseverance to keep going. With this in mind, pupils should want to receive the kind of feedback that challenges them to continually aspire to create even more superior products.

I feel these messages should be reinforced regularly when carrying out drafting and feedback processes, because pupils are more likely to take it seriously when they can identify the value it holds. When they do understand the value, they'll put more thought into the feedback they give their peers, and hopefully make full use of the feedback they receive themselves to improve their outcomes.

Choosing the most effective form of feedback

As with any new learning strategy, helping pupils to learn how to give good feedback is something that will take time. It is, in itself, a skill that pupils will gradually improve. Accordingly, it is worthwhile investing time and effort into the process. Furthermore, effective feedback is shown to have a big impact on learners' progress according to the meta-studies by both the Education Endowment Fund⁵ and John Hattie⁶.

As with many aspects of PBL and teaching, there are several ways in which this can be carried out. These are:

- feedback from the pupil themselves
- peer assessment from other pupils who are also carrying out the project
- peer assessment from pupils who have experience of similar projects (e.g. GCSE PE pupils peer assessing a healthy living information poster by Year 7s)
- feedback from adults and experts.

Whoever is chosen, it is important that they have a good understanding of what will make a good final outcome.

Self-feedback

My preference would be to ask the pupils themselves to give the first round of feedback on their own first drafts. This not only helps them to learn how to write effective feedback, it also gives the teacher an indication of whether the pupils understand what will make a high quality project outcome. The amount of structure given to pupils at this stage is dependent on the learners' experience of giving feedback. Pupils well-practised at this task may simply be asked to give details on the content and presentation of their product, with reference to the success criteria. Less experienced pupils could require a template, such as the one for an informative poster or leaflet featured on the opposite page. This would obviously be tailored to suit the specific project.

The benefit of a success criteria form like the example here is that pupils are encouraged to write about specific things, rather than make general, bland comments. Once complete, the teacher should collect the feedback forms and check that each pupil is aware of the positive and negative aspects of their project outcome at this stage.

Example success criteria template for an informative poster or leaflet (taken from the Ethical Living PBL unit featured in Creative Teaching and Learning, volume 5.4).

Success criteria	Critique (Please be kind, specific, helpful and honest.)
Information	
Is the written information easy to understand? Does it all make sense?	
Is the organisation of the information easy to follow? Is it broken into chunks? Do sections move obviously from less to more complicated ideas?	
Is everything included? Are all sections fully complete, clearly explaining each point?	
Is it written in a succinct way, giving detailed information that is relevant to the point without waffling?	
Is the information clearly based on evidence? Have any sources been referenced?	
Has the audience been considered? Is the tone of the written information appropriate?	
Is there a range of vocabulary? Have subject specific words been included and used accurately?	
Is all the spelling, punctuation and grammar accurate?	
Presentation	
Is it clear that the layout has been planned in advance so the whole page looks professional?	
Is there a common design theme running throughout which has been thoughtfully chosen to complement the information?	
Has attention to detail been paid? Does every aspect look complete and neat?	
Is it eye-catching? How have they used presentation techniques effectively, e.g. colour themes, fonts, layouts, etc.?	
Is the presentation or information creative? What's different that might catch the readers' attention?	
Any other kind, specific, helpful and honest points?	

Peer feedback

Dylan Wiliam, a leading figure on formative assessment approaches, has highlighted the positive impact that peer feedback can have on both the pupil receiving feedback and the one giving the feedback. He has found that, for the pupils giving feedback, 'in thinking through what it is that this piece of work represents and what needs to happen to improve it, the students are forced to internalise a success criteria and they're able to do it in the context of someone else's work, which is less emotionally charged than [their] own.'⁷

Moreover, he suggests pupils are more likely to be tougher than the teachers because there are less emotional/power relationships involved. It is important, then, that the learners take peer feedback seriously and not regard it as a 'cop out' by the teacher. This can be avoided by stressing to pupils that giving feedback also helps them to understand how to achieve their own final outcomes, and also if the teacher makes the effort to comment on the quality of the peer feedback.

As with self-feedback, there are no strict rules about the structure of the peer-feedback session; it really depends on the purpose.

You may want two classes doing the same project to have the chance to observe the other outcomes that have been created, in which case it may be useful to have a simple exhibition of the project outcomes in their current state. Lay them out on tables, and have the pupils walk around, adding sticky notes with comments about things they like and suggestions for improvements. Alternatively, if the purpose is for pupils to receive very detailed feedback, then pairing pupils up carefully and asking them to each use a template like the one in this article may be more appropriate.

Whatever format is chosen for a peer-feedback session, pupils should be encouraged to think very carefully about what they write and how they word it. The example success criteria form highlights the need for pupils to 'be kind, specific, helpful and honest'. The 'kind, specific and helpful' are words Ron Berger uses. The 'honest' is one I've added as I feel this is something that some learners were avoiding because they did not want to upset their friends. This needs to be addressed with pupils regularly, so they understand that dishonest feedback won't help pupils to improve in the longer term and will falsely boost their self-esteem.



The framework below will help pupils think about how to word their feedback comments.

	This means...	Bad example	Good example
Be kind	Word things carefully so they are not offensive. Make comments about the product, not the person.	'I don't think she's done well because the colouring looks rubbish.'	'The colouring would look more professional if it was in the lines.'
Be specific	Don't write bland comments that are too vague. Give details and examples about the actual project outcome.	'I like the poster because it's good.'	'The poster is eye-catching because it uses original images.'
Be helpful	Give comments which offer useful ideas or suggestions about the project outcome.	'This isn't very good – she should start again.'	'You could go to library to find a book about X, which will help with the information.'
Be honest	Say what you really think about the outcome in a kind way; in the long run, it will help someone to improve.	'I love your poster. I wish mine was as good as yours.' (From best friend)	'This isn't very eye-catching yet. There are a few things you could do such as think about the colour scheme, find a font which matches the purpose more closely, or select images which are of a higher resolution.'

As pupils give each other feedback, the teacher should take the opportunity to highlight to pupils examples of good and poor practice, like the examples shown in the table above. This is all part of training pupils to become better at giving feedback.

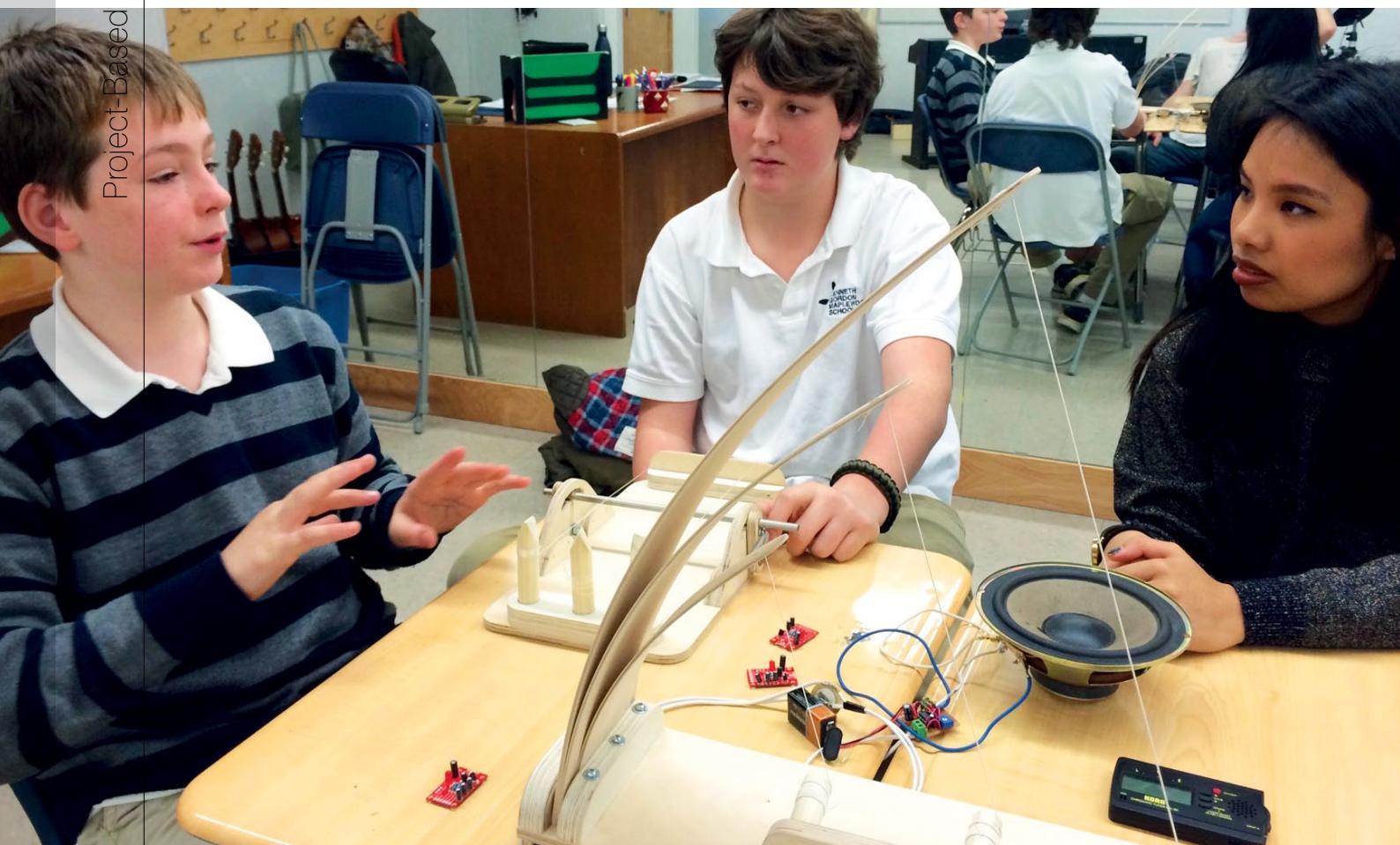
Feedback from experts, parents or other adults

Similar to self and peer feedback, sessions involving adults could take on a range of formats – this will depend on the number of people available, who they are and how long they can spend with learners. If you are fortunate enough to have willing experts who can volunteer a lot of time, you may be able to invite them into your lessons throughout the project to work with different pupils in depth. This can be very beneficial to help challenge those pupils who are really getting stuck into the project to aim for high quality. Alternatively, other staff within your organisation may be time limited but could perhaps offer quick feedback at certain times, such as at the start of the staff meeting. Be creative about getting adults involved in the process, as this will help learners feel a stronger sense of accountability and the desire to produce their outcomes to a high professional standard.

Regardless of whom the adults are or when they are giving feedback, like the pupils, it is important that they understand the reasons why. Try to prepare the adults so they are aware of the 'kind, specific, helpful and honest' framework. I think the 'honest' part is especially significant for adults who are external to the school environment, as they may be fearful of giving an honest comment about the outcome in case they upset a pupil. External visitors need to know that pupils are learning how to become resilient and that the pupils understand the importance of honest feedback to help them to improve.

Group projects

Giving effective feedback on group projects may require more thought. The 'kind, specific, helpful and honest' framework would still apply, but the structure of the session may be different. More consideration needs to be given to who will give feedback and how. For example, if groups are carrying out self-feedback, will they do this together? If they do, will it allow honest feedback or does a mediator need to be present? Alternatively, do the individuals in a group each write their own feedback comments independently and then come together to discuss these, or does



this waste a valuable opportunity for group collaboration?

With peer-assessment, you could pair groups and ask them to give each other feedback. There are no perfect formats, but you will need to consider very carefully how to approach group feedback so that everyone is actively involved in the process.

Receiving feedback and using it

Giving feedback is only one part of the story; receiving and using feedback is equally important. Feedback sessions can only be useful if pupils make use of the comments they receive about their projects. Therefore, it is essential that time is allocated for pupils to read and digest the feedback comments they receive and then, even more importantly, that pupils decide how they will use these comments.

One option is for pupils to set themselves a number of targets which incorporate the feedback comments. These targets could be used to create or update a plan of action, detailing what they will do over the coming lessons in order to improve their outcome by the final deadline or the next feedback session (depending on the length of the project).

The teacher's role is to frequently remind pupils to refer back to their feedback comments and related targets and encourage them to use these as the starting point for refining their projects. Hopefully, improvements will then begin to emerge. I will again stress the need for pupils to understand the purpose of receiving feedback and recognising that learning is a long-term process; improvement will take time and effort, and may not be perfectly linear!

The final exhibition and feedback session

The final exhibition represents the real assessment of pupils' final outcomes. Ideally, there will be a number of experts present who can give pupils honest and specialist feedback. The aim is for pupils to feel a sense of pride when they present their final drafts. It can also be a worthwhile experience for pupils to present all the drafts they have completed, showing how much they have improved by the time of their final outcome.

For some pupils, this will be a time of celebration, whereas other pupils may not be pleased with their efforts and their consequent project outcomes. It is wise to try to capture these feelings soon after the final exhibition

takes place. Pupils will again need time to absorb the final comments they receive about their project. Rather than writing targets or an action plan for a next draft, they could use these final comments to help them produce a reflection relating to their learning habits. This requires them to make links between the feedback comments about their project outcomes and their learning habits, working from the particular to the general. An example could be where a pupil has a number of comments relating to the scruffy presentation of their final project, so their reflection would emphasise the need to pay attention to detail



and manage time better to ensure things don't get rushed at the end.

These reflections represent the starting point for targets that will be used to inform the next project. Once you're in the thick of a project, it can be easy to focus solely on the physical project outcomes. Indeed, this can be exacerbated by the drafting and critique process, which sometimes causes both pupils and teachers to become side-tracked by the outcomes alone. A skilled PBL facilitator will keep the learning habits in mind throughout a project and interweave them seamlessly with the project outcome. This is one of the most difficult aspects of PBL. It is a recurring challenge for all PBL facilitators: achieving the right balance between discussing feedback on outcomes from each individual project and talking with learners about the development of their learning habits.

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References

1. Shea, A. (2015) How to plan for project-based learning. *Creative Teaching and Learning*, vol. 5(3), pp.53-63.
2. Berger, R. (2003) *An Ethic of Excellence: Building a Culture of Craftsmanship with Students*. Portsmouth, NH: Heinemann Educational Books.
3. Dweck, C. (2006) *Mindset: The New Psychology of Success*. London: Random House.
4. Ericsson, K.A., Krampe, R., Tesch-Römer, C. (1993) The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, vol. 100(3), pp.363-406. Available at: projects.ict.usc.edu/itw/gel/EricssonDeliberatePracticePR93.pdf [Accessed 13 January 2016].
5. Education Endowment Fund (2015) *Teaching and Learning Toolkit*. Available at: educationendowmentfoundation.org.uk/toolkit/toolkit-a-z [Accessed 13 January 2016].
6. Hattie, J. (2009) *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*. London: Routledge.
7. Education Scotland (2014) Self and peer assessment – Dylan Wiliam. [video] Available at: www.journeytoexcellence.org.uk/videos/expertspeakers/selfandpeerassessmentdylanwiliam.asp [Accessed 13 January 2016].

Knowledge trails

1. **Power of family tree** – Geraldine Norman describes the intensive process of drafting and peer critiques that sees students at her school work with their families and the wider community to produce a hand-crafted, high quality family tree.
library.teachingtimes.com/articles/poweroffamilytree
2. **Adding rigour to project-based learning** – Giving constructive critiques is a significant way to ensure PBL projects are academically rigorous – but what is a critique, and how can you teach students to give one?
imcreativeteaching.blogspot.co.uk/2014/10/adding-rigour-to-project-based-learning.html