# Fast feedback for online learners

Rapid feedback on performance is one of the principles for best practice in undergraduate education (Chickering & Gamson, 1987). Timely feedback helps students to self-regulate their learning as they balance their goals with the reality gleaned from feedback on their performance (Ambrose *et al.*, 2010). On campus we provide feedback to students in class and when we mark assessments, but when teaching online, there are several different ways that rapid feedback can be provided to online learners. This is helpful, as student learning outcomes are enhanced when the time between performance and receiving feedback is minimised (van der Kleig *et al.*, 2012).

In the *Guide*, we will look at what effective feedback is and consider a range of online tools that provide rapid feedback to students with minimal ongoing facilitation requirements for the teaching team.

Feedback and Learning
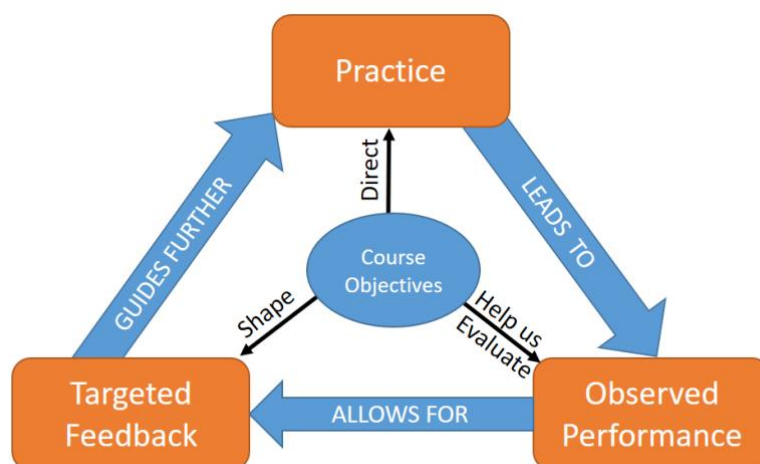
The Feedback Cycle (based on Ambrose *et al.*, 2010, pp 126)

The purpose of feedback is to identify and minimise the discrepancies between students' performance and the desired goals, which are the course objectives. Ideally, students then use this feedback to adjust their approach to learning. Effective feedback has three elements - it **feeds up,** by discussing the course objectives, **feeds back** by discussing their performance in achieving the course objectives (or related criteria) and **feeds forward** by recommending what should be done next to improve their performance (Hatttie & Timperley, 2007).

Online tools that support feedback

Many online tools are available in learnonline that integrate feedback on student performance to replicate the type of learning conversations that teachers and students would normally have in the classroom. Tools can either allow students to select an answer option from a list before receiving feedback, make decisions and experience the consequences as feedback, or require students to provide extended responses before receiving feedback, as outlined in the table below.

Answer options	Decision making	Extended Response
• Moodle Quiz • H5P Quiz set	• Moodle Lesson • H5P Branching scenario	• H5P Essay • Moodle Feedback • Activity completion with restrictions

Answer options – Moodle Quiz

Moodle quiz has a large number of question types and offers different feedback fields that allow teachers to provide effective feedback.
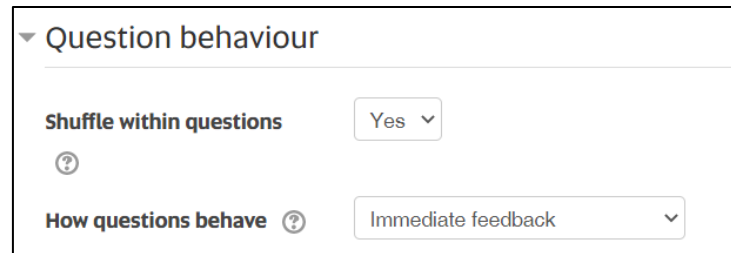
One field, called **General feedback,** is available in most question types. General feedback is presented to the student after they have made their attempt at the question, irrespective of their performance. General feedback is the best place for the teacher to **'feed up'**, that is, to describe the principle being assessed by the question and emphasise its link to the course objectives.

Other feedback fields in quizzes are called **Specific feedback** (and the related **Combined feedback**). These are the ideal places to provide **'feed back'** to correct common misconceptions. Specific feedback is associated with each answer option and will be returned to the student when they select that answer option. In a similar way, Combined feedback will return the same response for any correct or incorrect answer option selected.

The last type of feedback in Moodle quizzes is called **Overall feedback** – which is returned to the students after they have completed all the questions in the quiz. The feedback is dependent on the grade received and is the ideal place to **'feed forward'**, that is, to help the student to identify what they need to do to get a better result next time.

- Learn**online** help – Adding Questions to a Quiz

You can control when feedback is presented to students using the Question behaviour and Review options section of the Moodle Quiz settings. The settings that are best for fast feedback are **Quiz settings > Question behaviour > How questions behave > Immediate feedback.**
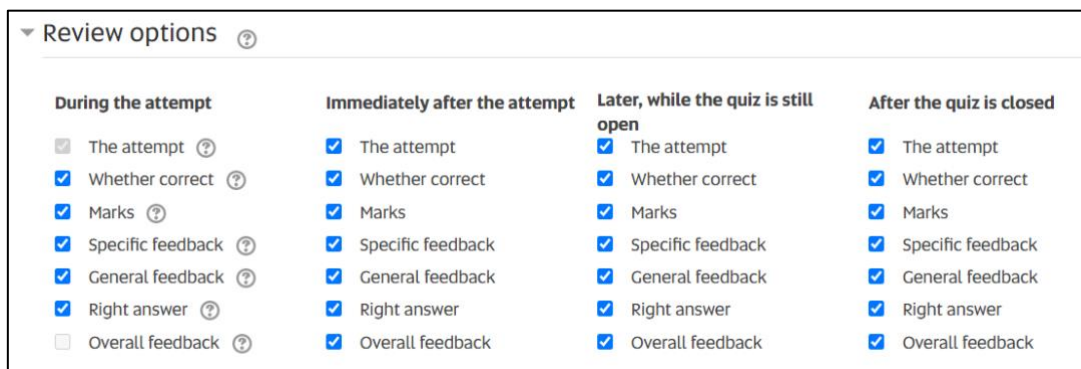
> ▾ Question behaviour
>
> **Shuffle within questions**   Yes ⌄
> ⑦
>
> **How questions behave** ⑦   Immediate feedback ⌄

And just underneath that, all Review options selected.

> ▾ Review options ⑦
>
> | During the attempt | Immediately after the attempt | Later, while the quiz is still open | After the quiz is closed |
> |---|---|---|---|
> | ☑ The attempt ⑦ | ☑ The attempt | ☑ The attempt | ☑ The attempt |
> | ☑ Whether correct ⑦ | ☑ Whether correct | ☑ Whether correct | ☑ Whether correct |
> | ☑ Marks ⑦ | ☑ Marks | ☑ Marks | ☑ Marks |
> | ☑ Specific feedback ⑦ | ☑ Specific feedback | ☑ Specific feedback | ☑ Specific feedback |
> | ☑ General feedback ⑦ | ☑ General feedback | ☑ General feedback | ☑ General feedback |
> | ☑ Right answer ⑦ | ☑ Right answer | ☑ Right answer | ☑ Right answer |
> | ☐ Overall feedback ⑦ | ☑ Overall feedback | ☑ Overall feedback | ☑ Overall feedback |

Answer options – H5P Interactive Content – Quiz Set

Another tool that provides feedback to students based on the answer option they select is H5P. H5P is a new activity type that is available in learn**online** that is listed as '**Interactive content'**.

> ○ H5P Interactive
>   Content
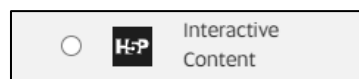
H5P creates HTML5 content - so it works well in a browser and on mobile devices. It is visually attractive, and is easy to embed directly onto the web page – both attributes which can help catch students' attention and engage them in the learning activity.

There are many different types of H5P interactive content, but not all types give feedback. Some H5P content types give general, specific and/or overall feedback in a similar way to Moodle quizzes. Use the chart below to find out

what each H5P type can do in relation to providing feedback, using the traffic light colour-coding as a guide.

- Chart – H5P content types for teachers
- Resource – H5P - The basics for authors

H5P activities are formative, rather than summative, and are therefore ideal to replace the learning conversations that you would normally have with students in and around your face to face teaching. H5P activities remain a part of your course website going forward, providing future students a blended learning experience that will require little to no ongoing maintenance or facilitation from the teaching team.

Decision Making

The next group of online tools (Moodle Lessons and H5P Branching scenario) are focused on providing students with rapid feedback based on their decision-making. Typically, a scenario is used in which students are introduced to a problem and then are required to make a decision based on several available options. That decision impacts which part of the scenario they see next, so the feedback is the sequelae of their decision. These experiences can be designed to be an online form of work-integrated learning as this next example demonstrates

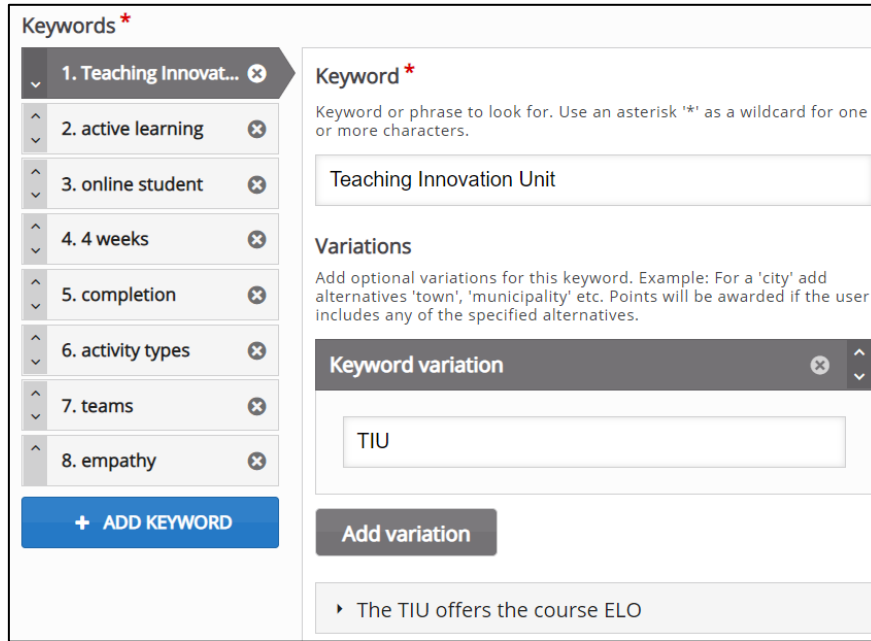- Example - H5P Branching scenario – Home visit by health worker

The planning and resources required to develop this type of online learning experience are considerable and you are advised to connect with a member of the Teaching Innovation Unit if you wish to develop something like this in your own course.

Extended Response

The online tools that we have discussed so far have focused on providing students with feedback based on students' selection of an answer option. But how can you provide automated feedback if it makes more sense for your students to be writing an extended response? There are three commonly used options in online courses that you can consider: H5P Essay, Moodle Feedback and Activity completion with restrictions.

The **H5P Essay** content type allows students to receive instant feedback to text that they have composed. Teachers define a set of keywords (and variations)

that will trigger feedback if they are found, or missing in the submitted text, as this example from the short course *Engaging Learners Online* shows:

- Resource – [Tutorial on using H5P essay](#)

The **Moodle Feedback** tool is normally used to collect information from students, but it can be adapted to return a model answer as feedback to students who submit an extended piece of writing.

For example, students can be presented with a scenario and then asked to respond to questions using the Feedback tool, with a single text response field provided for them to add their response. Once they make their submission, they see a model answer that they can compare with what they wrote. Student responses can be logged with their name and the tutor is able to see student work at a glance, as all the responses appear as a list on one page (i.e. no clicking to see each students' response). This is how teachers know which students have been using the activity appropriately and which are just entering gibberish to get the model answer!

To make the Feedback tool return a model answer, the following settings need to be made:

1. Feedback > Settings > Question and submission settings > Record user names > User's names will be logged and shown with answers.
2. Allow multiple submissions > Yes

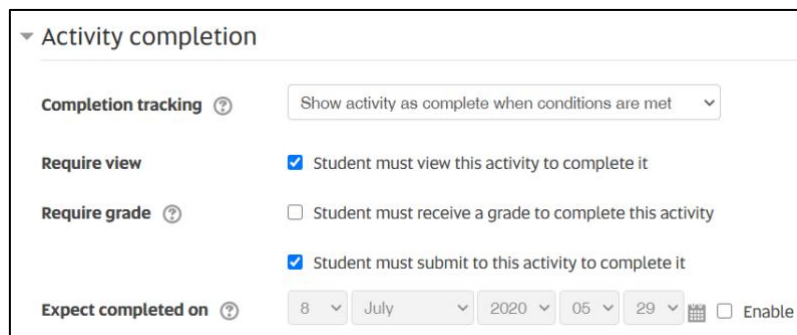3. After submission > Completion message > Enter your model answer here.

This tool is not perfect, but it does offer a way for online students to practice writing extended responses and compare their work to that of an expert.

- Learnonline help - [Feedback](#)

Another commonly used approach to providing model answers as feedback is to use **Activity completion and restrictions**. In brief, students submit a file as a formative assignment (any type of file), and once they do so, the model answer appears. The benefit of using this approach is that you are not limited to text but can use any file type as the submission.

To do this, activity completion must be first turned on in your website. **Course > Administration Block > Edit settings > Completion tracking > Enable completion tracking > Yes.**

You will then need to describe the activity and add a formative Assignment to the website to receive the responses. You then need to define completion of the activity as submitting to the activity: **Assignment > Edit settings > Activity completion> Students must submit to this activity to complete it.**

You can then generate the model answer and upload the file to the website, immediately underneath the assignment submission.

You then apply a restriction to the model answer such that it is not available to students unless they have completed the assignment submission activity above. **File > Edit settings > Restrict access > Activity completion > Choose activity that must be completed.**

Note that the eye icon on the right of the restriction can be toggled to either show or hide the existence of the model answer (and its restrictions) to students as they work on this activity.

Teachers can monitor the submissions to verify that students are attempting the activity before collecting the model answer, however, they will need to click on each students' submission to see what was actually submitted.

Conclusion and further direction

Including more automated feedback in your courses is a worthwhile investment of time that pays dividends for many years to come. But where do you start? Experienced teachers know that there are certain mistakes or misconceptions that regularly occur each time the course's content is taught which means the same feedback needs to be repeatedly delivered to many students. These topics are the ideal ones to start your improving feedback project.

If you would like to ask online teaching and learning questions related to your course, you can look through our FAQs, write to TIU@unisa.edu.au, have an online consultation with a member of the TIU or complete the online modules as part of *Introduction to Engaging Learners Online*.

References

Ambrose, S.A., Bridges, M.W., DiPietro, M., Lovett, M.C. and Norman, M.K., 2010. What kinds of Practice and Feedback Enhance Learning? in *How learning works: Seven research-based principles for smart teaching*. John Wiley & Sons, Incorporated, 2010. ProQuest Ebook Central, <https://ebookcentral.proquest.com/lib/unisa/reader.action?docID=529947&ppg=147 >.

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