DAFFI 2020: Designing Automated Feedback for Learning

Redesigning feedback involves addressing the feedback literacy of students and staff

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Overview

- What are the necessary consequences of shifting feedback to a learning-centred process?
- The notion of feedback literacy
- Framework for student feedback literacy
  - How would we recognize if a student was feedback literate?
- Framework for staff feedback literacy
  - How would we recognize if a staff member was feedback literate?
- Implications
  - Do different players require different levels of literacy?
  - How can the promotion of feedback literacy be built-in to courses and professional development?

Shifting feedback to a learning-centred perspective

Feedback can ultimately only be judged on what students do

A shift of focus:

- From inputs to processes
- To closing the loop
- To looking for effects on learning
- To ensuring students are necessarily engaged

The notion of feedback literacy

Feedback literacy:

“the understandings, capacities and dispositions needed to make sense of information and use it to enhance work or learning strategies”.

Key elements identified:

- appreciating feedback
- making judgments
- managing affect
- taking action.

Carless and Boud (2018)

Student feedback literacy

- What capabilities do students need if they are to benefit from well-designed feedback processes?

Empirical student feedback literacy study

Research question:

How can learners demonstrate feedback literate behaviours or approaches within their courses of study?

Approach

- Secondary analysis of a student survey at two large Australian universities (n=4514), plus focus groups exploring student responses to feedback practices
- Looked for expressions/indicators of feedback literacy in open-ended statements
- Iterative development of framework items checking against student views

Molloy, Boud & Henderson (2019)

Developing a framework for feedback literacy

A: *Understands feedback processes and purposes (10 items)*

B: *Initiates and participates in information sharing and processing (10 items)*

C: *Plans and acts (12 items)*

A learner exhibiting well developed feedback literacy (*Section A)*:

Understands feedback processes and purposes

1. Understands the role of feedback processes in improving work and refining judgements and learning strategies
2. Appreciates the role of standards and criteria in judging the work of oneself and others
3. Knows that feedback loops needs to be completed for information provided by others to be effective
4. Recognises that feedback should build capacity to develop their own evaluative judgment over time and over different learning outcomes
5. Realises that feedback requires active elicitation and not just expect others to provide unsolicited information
6. Is aware that feedback from multiple sources—teachers, trainers, peers, practitioners, consumers etc—provides different scope and opportunities for learning
7. Recognises that feedback information comes in many different modes , eg. individual and group, written and through various other media, structured and informal
8. Acknowledges that they will have roles as both user and provider and that skill in one role helps skill in the other
9. Recognises that different stakeholders may have different perspectives, experience and levels of investment in the process
10. Appreciates others' involvement, steers them appropriately and thanks them for the contributions they make

A learner exhibiting well developed feedback literacy (Section B):

Initiates and participates in information sharing and processing

1. Acknowledges that mastery/expertise is not fixed, but changes over time and context
2. Develops a disposition to continually improve their work
3. Recognises that effective learners are active in identifying their own learning needs
4. Builds the capacity to identify and utilize standards, criteria and exemplars
5. Anticipates their own learning needs and communicate these to appropriate others
6. Builds trust in facilitating honest and meaningful information exchanges with others
7. Is aware of the potential influence of high stakes assessment on the way individuals engage in dialogue about their own performance
8. Is open to receiving comments from others without displaying defensiveness
9. Composes useful information for others about the nature of their work
10. Exhibits cultural sensitivity through not assuming that others are likely to react in the same way as oneself in receiving and responding to information

A learner exhibiting well developed feedback literacy (Section C):

Plans and acts

1. Develops a repertoire of strategies to elicit appropriate information from others to assist learning
2. Seeks cues from the environment and the task itself that indicate the appropriateness of their work
3. Responds to feedback information from others through goal-setting and planning how it might be utilized in future work
4. Engages in dialogue to elicit useful information about standards, criteria and the nature of good work
5. Recognises and interprets language peculiar to education containing important cues about the task or related outcomes
6. Seeks out exemplars as a way to make sense of standards of work
7. Selectively accepts and rejects views of others in coming to their own appraisals
8. Extracts key actionable information from others, which may require prompting for more detail or clarity
9. Has the confidence and volition to approach suitable others to elicit suggestions and to continue dialogue with them as needed
10. Manages the emotional challenges of receiving and sifting information which may be unwelcome or misjudged
11. Analyses and records information in appropriate forms for the purposes of acting on it subsequently
12. Monitors their own progress to discern where feedback might be helpful and to influence the setting of new learning goals

Using the framework

- Prompt feedback design—position students as active players through all feedback activities
- Develop elements of feedback literacy in all units, with a particular emphasis on core first year units
  - see Malecka, Boud & Carless, 2020 for curriculum examples
- Develop an instrument to enable development of feedback literacy to be tracked over time
  - first stage of testing is underway by a team led by Phill Dawson

Teacher feedback literacy

- What capabilities do those involved in promoting learning need if they are to create and utilise effective feedback processes?

Dimensions of teacher feedback literacy (Carless & Winstone, 2020)

Dimension	Feature
Design dimension	Design assessment and feedback processes to encourage student uptake Support students in making evaluative judgements Use timely guidance and intrinsic feedback to make expectations clear Deploy technology to facilitate feedback uptake
Relational dimension	Show supportiveness, approachability and sensitivity to how feedback is shared Envisage feedback processes as partnerships between teachers and students Deploy technology to strengthen the relational dimension of feedback
Pragmatic dimension	Navigate tensions between different functions of feedback Manage disciplinary factors in feedback processes Deploy technology for timeliness, efficiency and portability Balance teacher workload devoted to feedback with what is useful to students

Table 1. Teacher Feedback Literacy Features and Selected Implementation Strategies.

Dimension	Feature	Selected Implementation Strategies
Design Dimension	Design assessment and feedback processes to encourage student uptake	Teachers design sequences of linked assessment tasks; opportunities for students to develop skills in using feedback
	Support students in making evaluative judgments	Students discuss and evaluate exemplars of different standards; students are involved in composing and receiving peer feedback
	Use timely guidance and intrinsic feedback to make expectations clear	Teachers provide clear and timely assessment task guidance; teachers incorporate intrinsic feedback within learning activities so students have opportunities to clarify meanings and expectations
	Deploy technology to facilitate feedback uptake	Students are enabled to store, access and use previous feedback; teaching teams use learning analytics for individualized feedback at scale
Relational Dimension	Show supportiveness, approachability and sensitivity to how feedback is shared	Teachers provide honest, critical feedback in supportive ways; teachers share and model their own experiences of receiving and responding to critical feedback
	Envisage feedback processes as partnerships between teachers and students	Teachers and students negotiate shared responsibilities for making feedback processes effective; teachers cede some power and students take increased responsibilities
	Deploy technology to strengthen the relational dimension of feedback	Teachers use audio feedback for nuance and rapport, and video feedback to enhance social presence
Pragmatic Dimension	Navigate tensions between different functions of feedback	Teachers strive to overcome multiple functions of feedback processes by focusing squarely on feedback for student learning
	Manage disciplinary factors in feedback processes	Teaching teams build on and adapt existing feedback practices carried out within disciplines
	Deploy technology for timeliness, efficiency and portability	Teaching teams use technology to implement time-saving measures and reduce ineffective marking methods
	Balance teacher workload devoted to feedback with what is useful to students	Teachers strive to design feedback processes that are useful for students and satisfying for teachers; teaching teams strategically reduce end of module comments that cannot be taken up

Carless & Winstone, 2020

Empirical teacher feedback literacy study

- What do university teachers accomplished in feedback identify as important in feedback practices?
- What feedback literacy competencies do they imply?
- What are applicable to all staff, what to those who have a more limited role in feedback?

Data analysed from staff interviews and focus groups in same feedback study as before

Boud & Dawson, in preparation

Level	Category
Macro	
1	Plans feedback strategically.
2	Uses available resources well
3	Creates authentic feedback-rich environments
4	Develops student feedback literacy
5	Develops/coordinates colleagues
6	Manages feedback pressures (for self and others)
7	Improves feedback processes
Meso	
8	Maximises effects of limited opportunities for feedback
9	Organises timing, location, sequencing of feedback events
10	Designs for feedback dialogues and cycles
11	Constructs and implements tasks and accompanying feedback processes
12	Frames feedback information in relation to standards and criteria
13	Manages tensions between feedback and grading
14	Utilises technological aids to feedback as appropriate
15	Designs to intentionally prompt student action
16	Designs feedback processes that involve peers and others
Micro	
17	Identifies and responds to student needs
18	Crafts appropriate inputs to students
19	Differentiates between varying student needs

An empirical approach to teacher feedback literacy
(Boud & Dawson, in preparation)

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Implications

- All parties need a process-oriented view of feedback and the knowledge and skills to design and play their part
- Determine how the promotion of feedback literacy can be scaffolded in courses and professional development
- What aspects of feedback literacy are needed by each player in each situation?
- What feedback literacy is needed for the effective use of automated feedback and for teacher feedback processes that complement it?
- If we overdesign feedback processes in courses, will students be feedback literate in other contexts?

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