



 een doordacht curriculum
dat doen we *samen*

De kracht van interne feedback: studenten als feedbackgenerators

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Mbo Taal

ACADEMIE

De kracht van feedback. Zinvol reflecteren in het mbo.

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Werk

- Leraar MVT in VO en MBO (14 jaar)
 - www.bastrimbos.com
- > 20 jaar curriculum ontwikkelaar MVT
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Interesses

- Formative assessment
- Inner feedback
- Self-regulation

- Twitter @bastrimbos



- [Develop a #noseforquality together](#)
- <https://www.slo.nl/thema/meer/formatief-evalueren/>
- <https://www.formatief-toetsen.nl/InformED-project/>

INTRODUCTION

Research indicates that effective feedback has the power to improve student learning and performance, regardless of the context or discipline (Hattie and Timperley 2007; Shute 2008; Winstone and Carless 2019). However, even though feedback is considered to be a socially constructed process (Henderson et al. 2019b) in which instructors are responsible for establishing and maintaining the milieu of the classroom (Boud and Molloy 2013), student perspectives on what makes for effective feedback have taken precedence in the literature (Shields 2015; Winstone et al. 2017). Dawson et al. (2019) argued that instructors are more likely to make decisions about the feedback processes they use based on their own opinions, rather than based on published evidence. Therefore, research of effective feedback processes must also include the perspectives of academic staff, especially across a range of contexts (Dawson et al. 2019).

De kracht van feedback

Is dat zo?

Hoe zie jij feedback?

Despite the potential power of feedback to influence learning and development, policy and practice in this area are rife with challenges, complexities, and contradictions. In this paper, we seek to engage with one such complexity inherent to feedback processes: that whilst the individual or team whose performance is being evaluated should be the primary audience for feedback comments, such information often serves multiple purposes and can be directed towards multiple audiences. For example, in the context of school education, comments form part of an evidence trail that are scrutinised as part of internal and external audit processes such as school inspection (Dann, 2018). In higher education, internal moderators and external examiners may scrutinise comments provided by educators. Even in the workplace, comments provided by an appraiser to an appraisee are often subject to scrutiny by more senior managers (Brown, 2019). Feedback givers, then, are often aware that the developmental advice they are providing to the

Student perceptions of assessment feedback: a critical scoping review and call for research

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Abstract

The potential of feedback to enhance students' performance on a task, strategies, or learning has long been recognized in the literature. However, feedback needs to be utilized by a learner to realize its potential. Hence, examining student perceptions of feedback and their links to effective uptake of feedback has been the focus of much recent feedback research.



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Mentimeter

<https://www.mentimeter.com/app/presentation/5e6020cc3c3de64cd0a7bce20ebd1c54/9c8e159667a6>

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Definitives feedback

Ramaprasad (1983)

- Feedback is information about the gap between the actual level and the reference level of a system parameter which is used to alter the gap in some way.

Sadler (1989)

- The learner has to (a) possess a concept of the standard (or goal, or reference level) being aimed for, (b) compare the actual (or current) level of performance with the standard, and (c) engage in appropriate action which leads to some closure of the gap.

Hattie & Timperley (2007)

- Information provided by an agent (e.g., teacher, peer, book, parent, self, experience) regarding aspects of one's performance or understanding.

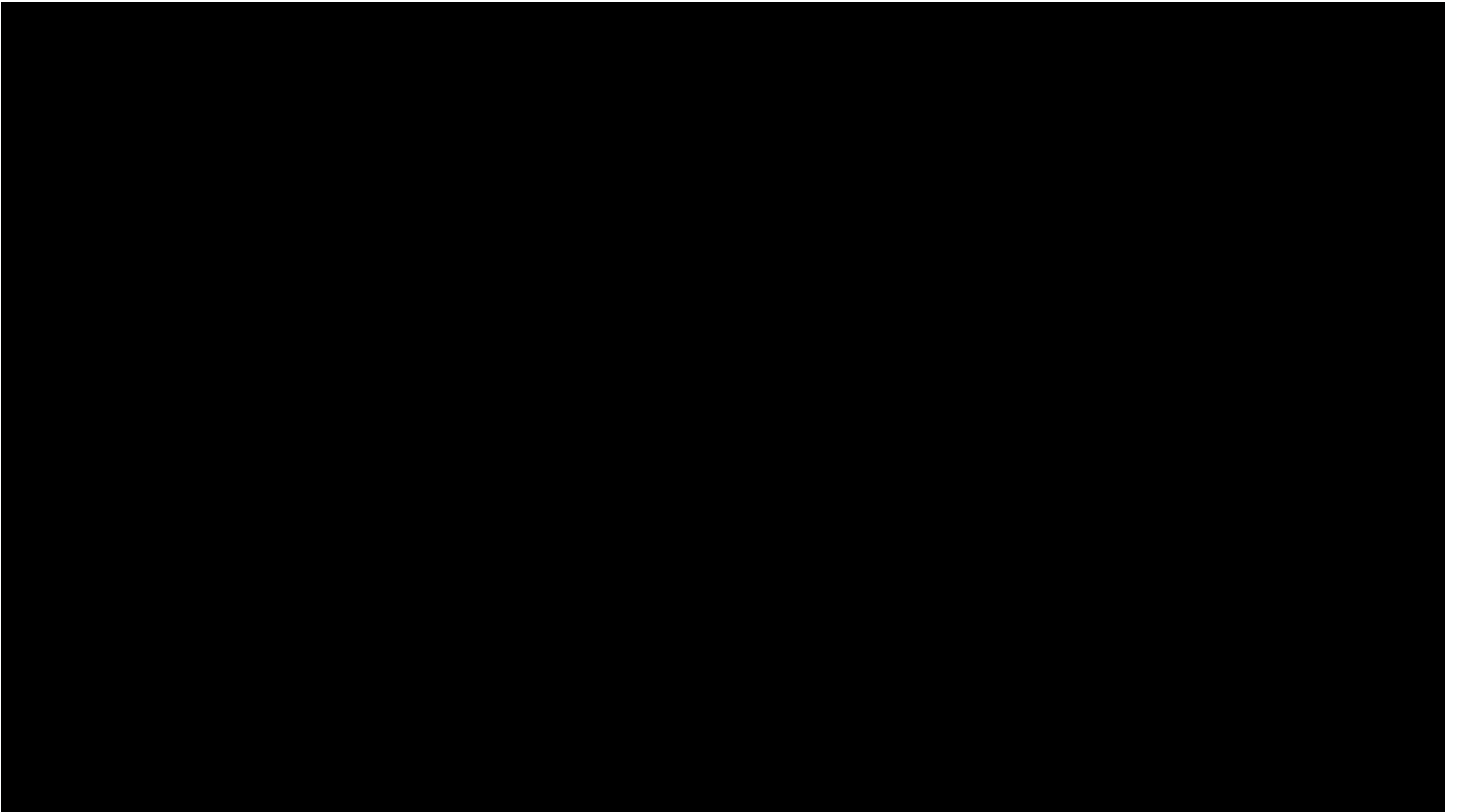
Carless (2015)

- "A dialogic process in which learners make sense of information from varied sources and use it to enhance the quality of their work or learning strategies".

Nicol (2020)

Carless (2022) feedback

- approaches which emphasize students generating and acting upon feedback inputs of different forms. These inputs are ideally self-generated or from peers, but they might also come from teachers or others.



Nicol, D. (2021, November 18). Improving learning by building pupils' natural capacity to generate inner feedback. [Webinar]. SLO. retrieved from: <https://player.vimeo.com/video/654039642?h=6685b01d6a%22> (8m25s-12m01s)

Interne feedback

Definitie

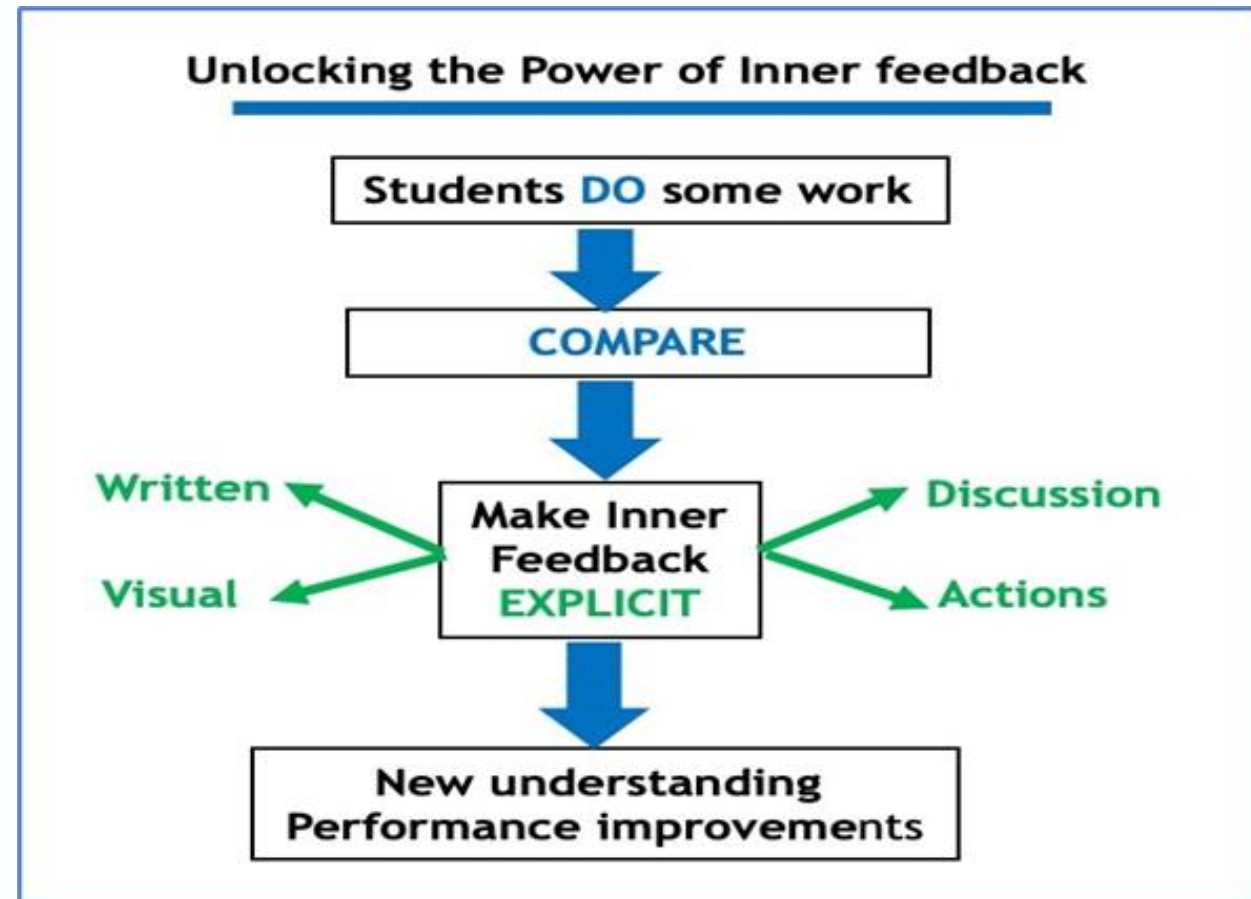
de nieuwe kennis die studenten genereren wanneer zij hun huidige kennis vergelijken met informatie uit bronnen gestuurd door hun doelen. (Nicol, 2022)

1. Feedback is een intern proces (Nicol, 2019)
2. Onderliggend mechanisme van feedback is vergelijkingen maken (Nicol, 2020)
3. Start met wat student geproduceerd heeft en wat de informatie is waartegen vergeleken moet worden. (uitleg, exemplaar, youtube, wiki, peer comments, teacher comments enz.) (Nicol, 2021)

Rol student

Concreet

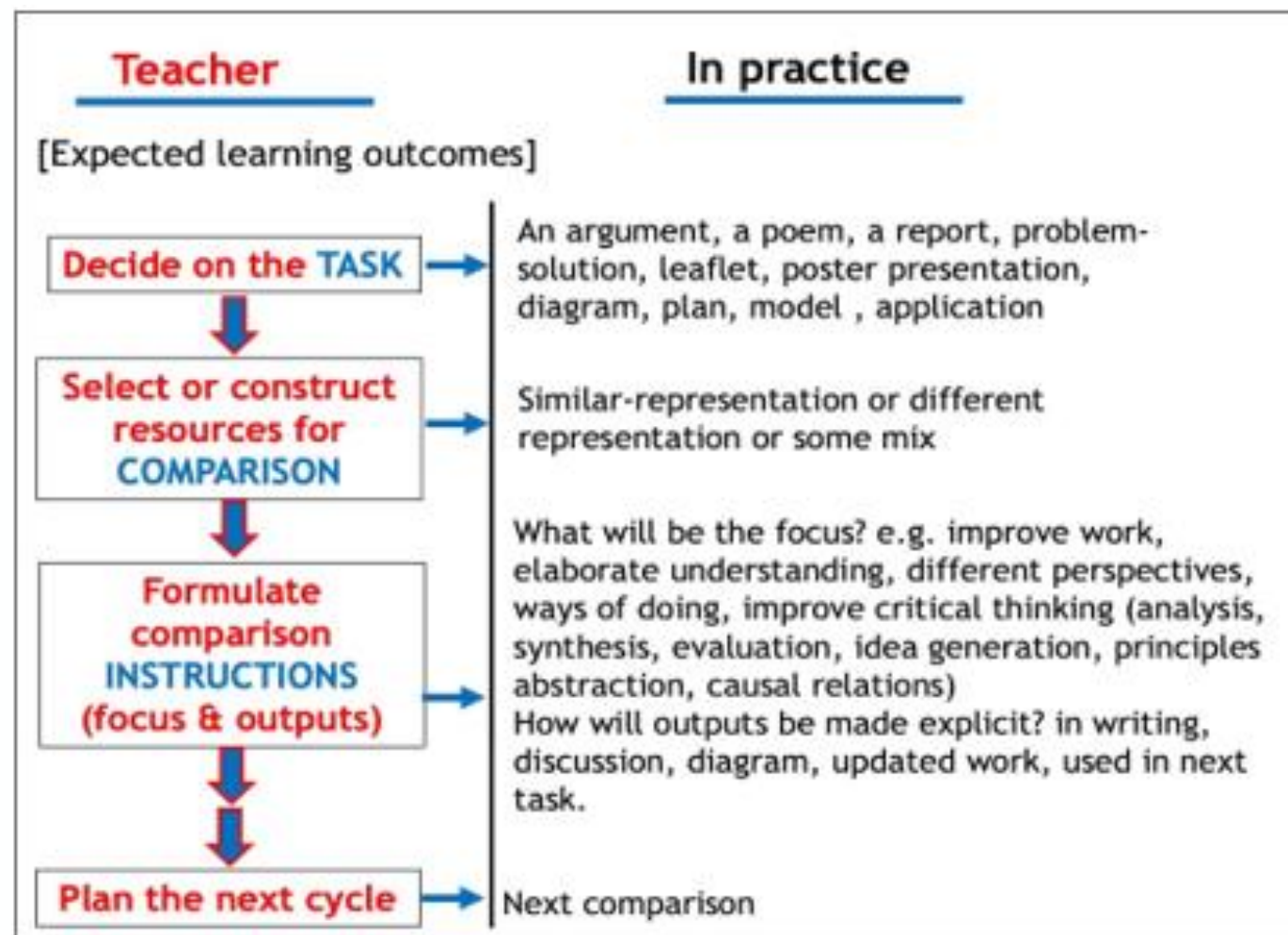
Studenten **produceren** iets. Ze **vergelijken** dat werk met informatie uit één of meerdere bronnen. Ze **maken** de uitkomsten uit die vergelijking **expliciet**.



Rol leraar

Implementatie

Leraar **beslist** wat studenten produceren. Ze **selecteren** of **creëren** passende vergelijkers. Ze **formuleren instructies** om de uitkomsten expliciet te maken. Beslissen over volgende stap hoe de feedback die studenten hebben gegenereerd uit verschillende bronnen **versterkt** kan worden.



Opdracht (werkblad)

1. Bedenk iets wat je studenten moeten produceren.
2. Bedenk waartegen je dat product wilt laten vergelijken.
3. Bedenk welke instructie je geeft aan de student om de uitkomsten van die vergelijking expliciet te maken.
4. Bedenk wat je doet om de zelf gegenereerde feedback uit die vergelijkingen te versterken.

Resource comparisons

Vergelijk jouw product (per kolom) met de volgende tien voorbeelden

Hoe verschilt jouw idee van de ideeën uit de voorbeelden?

Wat leer je daarvan?

Hoe zou jij je eigen idee verbeteren?

Schrijf die verbeteringen op.

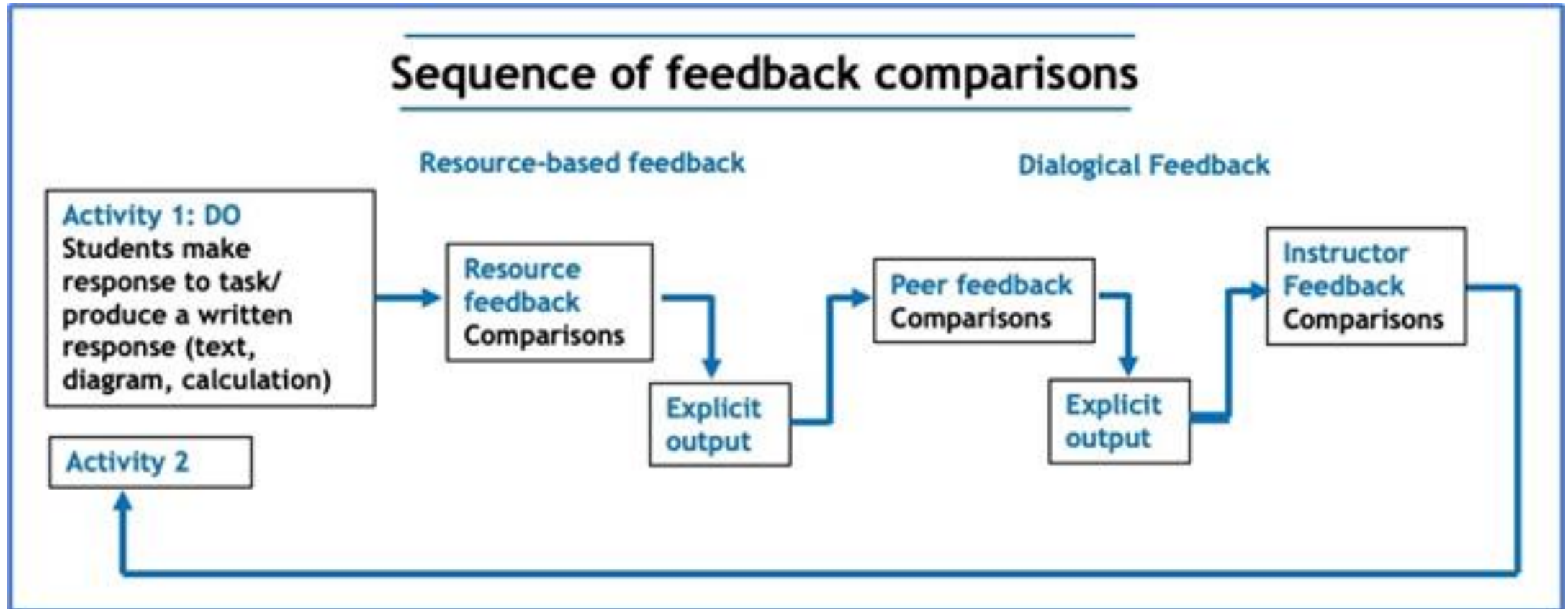
DO [Students...]	COMPARE [against]	INSTRUCTIONS [to make feedback generation explicit]	AMPLIFYING resource generated feedback
[1] Write concept definition, draw flow-chart of process, or propose example of application of a concept. This 5-10 min activity might occur in-class after short lecture input, or before class as homework.	Lecture input (5-10 mins) that elaborates on concept definition, gives more insight into process, or that highlights some issues related to concept application	Write notes on what you learned from comparing what you wrote with the lecture input. Update your concept definition, your flow chart diagram, your application proposal. Identify and write down what questions the comparison raised for you.	Students share their activity and comparison outputs with peers and discuss further and answer questions, identifying any unresolved or new ones for the lecturer.
[2] Write 200-word argument on topic [in or before class]	Two published arguments on same topic OR 1 published counter argument.	Identify how these arguments have used evidence to support them and identify how to improve the use of evidence in your own argument. Identify how you can strengthen your own argument by addressing this counter-argument.	Discuss your argument and improvement ideas with peers. Select best example [to present in tutorial] OR Link your and peer's argument to form a better argument.
[3] Solve bad debt accountancy problem before or in class. [Accounting & Finance] ** Suzanne McCallum	Video of expert (e.g., teacher) talking through her solution as she solves the problem) OR Flow-chart of the problem-solving process	How did your thinking differ from the expert? What did you learn from that? What questions remain outstanding? Use flow-chart diagram to self-correct your work. Identify any bad debt situations where this flow chart might not apply.	Discuss comparison output with peers and identify any outstanding question worth asking the lecturer. Students poll/vote questions teacher should answer
[4] Groups present findings of their draft project report to class.	Presentations of other groups findings on same report topic.	Individual students answer the following: How did your group findings differ from this group's? What recommendations were common across all groups, and which differed? Based on this write down any improvements for own report.	Individuals share outputs of comparisons with group members and together update report
[5] Write a draft report on management/economics topic	A rubric for the report and exemplars of reports on different topic.	Update your report and submit to lecturer including analysis output from comparison task.	Lecturer grades final report aided by comparison reflections (analyses).

DO [Students...]	COMPARE [against]	INSTRUCTIONS [to make feedback generation explicit]	AMPLIFYING resource generated feedback
<p>[6] Write a 500-word essay</p> <p>** Suzanne McCallum [Accounting & Finance]</p>	Two peer essays and one essay of high-quality on same topic constructed by the lecturer or selected from prior cohort.	How did your essay differ from this essay? What did you learn from that difference? How would you improve your own essay? Based on these three comparisons update your own essay.	Lecturer samples essays and provides some whole class feedback which students compare against own essay.
<p>[7] Write application or produce case study of economics model</p>	<p>Published account of theoretical model relevant to application or case.</p> <p>OR</p> <p>Published account of different model</p>	How well does your application adhere to this published model? How could it be improved? What do you think are the limitations in the model? What have you learned from comparing your application against this alternative model? Improve your application based on this.	Discuss with peers then improve and submit your application or case study – alongside reflections on the outputs of the comparison task.
<p>[8] Individually write 300-word evaluation of international poverty index</p> <p>** Geetha Selvaratnam [Economics]</p>	Students do the same work again but in groups of three. Hence comparators are group discussion and unfolding group output.	Write an account of what you learned by comparing your individual output against the group discussion and the group output? What would you do to improve your own evaluation of the poverty index if there were time? Give a reason for your answer.	Lecturer grades the work and the answers to the comparison questions.
<p>[9] Create a plan (schedule and question sequence) for first meeting (contracting phase) with client of business enterprise where students carry out a consultancy project.</p> <p>** Nick Quinn [Management]</p>	<p>Published article from management journal on how to establish credibility.</p> <p>Video of a doctor interviewing a patient presenting with heart condition.</p>	<p>Use this theoretical article to identify improvements you could make to your meeting plan. [theory-practice comparison]</p> <p>Watch this video and note how the doctor engages with the patient, reassuring him while at the same time soliciting important information. Based on this consider how you might foster empathy in your first client meeting and adapt your plan accordingly.</p>	Students discuss the findings from their comparisons with peers and further update their meeting plan. Any questions are identified and posed to the class and then the lecturer.
<p>[10] Write the literature review for their economics dissertation</p> <p>** Lovleen Kushwah [Economics]</p>	Two published reviews on different topics and different from student's own topic from high-quality economics journals.	<p>Identify three reasons why the published reviews are of high quality. Give a rationale for each reason [focus on structure, argument, and use of prior research in literature reviews].</p> <p>Compare your own review with this rationale and propose improvements to your literature review. Identify any further feedback you would like from your supervisor.</p>	Students submit own review and answers to comparison questions to supervisor. Supervisor comments as necessary. Students update own literature review.

Verzamelen voorbeelden zelfde context: MBO



Volgorde feedbackvergelijkingen



“The comparison process gives structure to the self-generated feedback I already produce when looking at other work. I think because it takes more personal effort to generate it, it holds a lot of weight. Had I started this self-generated feedback process earlier in my university career, I would be a lot more proficient at it and think I would require less teacher feedback as I would have the confidence to build my own feedback system”

[quote from economics student who participated in a study]



David Nicol @davidjnicol · 15-04-2022 ...

Educational historians will express surprise that for 50yrs we assumed that f/b was comments teachers provide rather than what Ss generate from them. They'll be even more surprised we failed to capitalise on all the other info sources that Ss use or could use to generate f/b.



David Nicol @david... · 13-04-2022

@davidjnicol

What would it take to significantly improve learner agency in feedback without increasing teaching workload?



[hidden in plain sight]

@davidjnicol



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Uitdaging

Wat gebeurt er als je studenten ongelijke vergelijkers geeft?

Vergelijk essay met gedicht

Publications:

- Carless, D. 2015. [*Excellence in University Assessment: Learning from Award-Winning Practice*](#). London: Routledge
- Hattie, J., & Timperley, H. (2007). [*The power of feedback*](#). *Review of Educational Research*, 77(1), 81–112.
- Nicol, D. 2019. "[*Reconceptualising feedback as an internal not an external process*](#)" *Italian Journal of Educational Research*, (Special issue on Assessment) pp.71-83
- Nicol, D. (2020). [*The power of internal feedback: Exploiting natural comparison processes*](#). *Assessment & Evaluation in Higher Education*.
- Nicol, D. 2022. "[*Turning Active Learning into Active Feedback*](#)", *Introductory Guide from Active Feedback Toolkit*, Adam Smith Business School, University of Glasgow
- Nicol, D. & McCallum, S. (2021). "[*Making internal feedback explicit: Exploiting the multiple comparisons that occur during peer review*](#)."
- Nicol, D. & Selvaretnam, G. (2021). [*Making internal feedback explicit: harnessing the comparisons students make during two-stage exams*](#), *Assessment & Evaluation in Higher Education*.
- Ramaprasad, A. (1983). [*On the definition of feedback*](#). *Behavioral Science*, 28, 4–13.
- Sadler, D. R. (1989). [*Formative assessment and the design of instructional systems*](#). *Instructional Science*, 18(2), 119–144.
- Trimbos, B. (2020). [*Feedback is meer dan het overbrengen van informatie*](#). Amersfoort: SLO. (Dutch and English version)
- Trimbos, B. (2021). [*Hoe feedbackgeletterd ben jij? Hoe merken jouw studenten dat?*](#) [Powerpoint-slides] Amersfoort: SLO.
- Winstone, N. E., Nash, R. A., Parker, M., & Rowntree, J. (2017). [*Supporting learners' agentic engagement with feedback: A systematic review and a taxonomy of recipience processes*](#). *Educational Psychologist*, 52(1), 17-37.

Blog:

- Carless, D. (2022), New paradigm feedback practices. Retrieved from: <https://davidcarless.edu.hku.hk/new-paradigm-feedback-practices/>

Webinars:

- McGuire, W., Nicol, D. & Haywood, G. (2022, March 31). Active feedback. [Webinar]. Retrieved from: <https://www.youtube.com/watch?v=hOppIaKDeSU>
- Nicol, D. (2021, November 18). Improving learning by building pupils' natural capacity to generate inner feedback. [Webinar]. SLO. retrieved from: <https://player.vimeo.com/video/654039642?h=6685b01d6a%22>

Website:

- <https://davidnicol.net/>

Feedback gegenereerd door studenten vs leraar

Students' vs teacher feedback

Essay grade (student numbers)	Self-review stage at which teacher feedback comments and student's feedback commentary matched				Incomplete Match with teacher comments
	Match at Self-review 1 (essay 1)	Match at Self-review 2 (essay 2)	Match at Self-review 3 (essay 3)	Match at Self-review 4 (received comments)	
A-grade (12)	2	4	3	2	1
B-grade (19)	2	6	4	5	2
C-grade (10)	3	2	1	3	1
Totals	7	12	8	10	4
Cumulative Totals (%)	7 (17%)	19 (46%)	27 (66%)	37 (90%)	41 (100%)

Table 1: Number of self-reviews (comparisons) required for students' feedback commentary to match teacher feedback comments.

Feedback gegenereerd door studenten

SELF-REVIEW 2 (against inserted higher-quality essay).

Question 1: differences between this essay and yours

This essay is structured very well in comparison to mine.

Problems are broken into three paragraphs and an argument is made then something is used to back it up whereas, looking at it now, my arguments seem like more of a list. The introduction is also much more effective than mine.

Question 2: learning from differences

I now realise I need to structure my arguments more effectively and reference when appropriate. I also know I need to give more information in my introductions that give the reader a better idea of what the essay is about.

Question 3: Which essays is better and why?

Overall, this essay is better than mine. it uses references more effectively, a decent conclusion is included, the introduction has more content and arguments are laid out in a better way.

Proces van feedback genereren

Discussion

'Difference Creates Learning'

Voluntary v compulsory

Exemplars v non-exemplars

Other regulation v self-regulation

Als we tegen ze [studenten] zeggen, kijk naar dat artikel



Commentaren van leraren naar achter

Discussion

'Difference Creates Learning'

Voluntary v compulsory

Exemplars v non-exemplars

Other regulation v self-regulation

Door feedback te geven als commentaar naar
achteren te plaatsen in het leerproces



Difficulty in researching internal feedback

While some researchers have made a case for internal feedback (Butler and Winne; 1995; Nicol and Macfarlane-Dick 2006; Andrade 2018) and others have identified comparison as its core and generative mechanism (Nicol, Thomson, and Breslin 2014; Nicol 2019; Nicol and McCallum, 2021), there is an absence of direct research showing what students actually generate from making comparisons. Current studies either rely on self-reports by students long after the comparisons have taken place (McConlogue 2015; Nicol, Thomson, and Breslin 2014) or on evidence of learning improvements in test-retest situations (Huisman et al. 2018; Lipnevich et al. 2014). This gap in research is unsurprising given that internal feedback is not a mainstream way of framing feedback in educational research much less in practice, and that internal feedback processes are by definition covert and hence not open to scrutiny.