

CONGRES FORMATIEF EVALUEREN ALS BRUG TUSSEN ONDERWIJS EN LEREN





 een doordacht curriculum
dat doen we *samen*

De kracht van interne feedback: leerlingen als feedbackgenerators

2 november, 2023

Bas Trimbos B.Trimbos@slo.nl & Gerdineke van Silfhout G.vanSilfhout@slo.nl



@bastrimbos Develop a #noseforquality together

Workshop Plan



- Introductie interne (inner/active) feedback.
- **Activiteit 1: [PRODUCEER]**. Deelnemers ontwerpen individueel een feedback genererend proces door een mal te gebruiken [papier]
- **Activiteit 2:** Gebruik de bron die aangereikt wordt [**VERGELIJK**] om zelf feedbackcommentaar te genereren en je werk te verbeteren [**EXPLICIET MAKEN**]
- **Plenair:** Vragen en discussie relevantie interne feedback voor jullie werk [**COMPARE**]

Feedback for learning

Rola Ajjawi, Joanna Tai, and Phillip Dawson, Center for Research in Assessment and Digital Learning, Deakin University, Melbourne, VIC, Australia

© 2023 Elsevier Ltd. All rights reserved.

Feedback can powerfully influence learning. Meta-analyses consistently show that feedback has a statistically significant effect on performance, recently revised from a high (0.7) to medium effect (0.48) (Wisniewski et al., 2020). However, across these reviews and others (Evans, 2013), there is significant heterogeneity in the data indicating diversity in feedback practices and effects with almost a third of interventions reportedly having negative effects on learners (Kluger and DeNisi, 1996). Here we grapple with this diversity of feedback interventions through highlighting differences in conceptualization of feedback and how it has influenced practice and research. We then discuss four contemporary trends in feedback research which show promise for improved cognitive (e.g. achievement of learning outcomes, development of evaluative judgment) and affective (e.g. motivation) effects on learners. Finally, we present several emerging ideas from feedback research.

De kracht van feedback

Is dat zo?

Hoe zien jullie 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

Fabienne M. Van der Kleij^{1,2}  • Anastasiya A. Lipnevich³

Received: 7 April 2020 / Accepted: 29 July 2020 / Published online: 17 August 2020
© Springer Nature B.V. 2020

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.



CONTACT Naomi E. Winstone  n.winstone@surrey.ac.uk  Surrey Institute of Education, University of Surrey, Guildford, UK

© 2021 Informa UK Limited, trading as Taylor & Francis Group

slo

Definities 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.

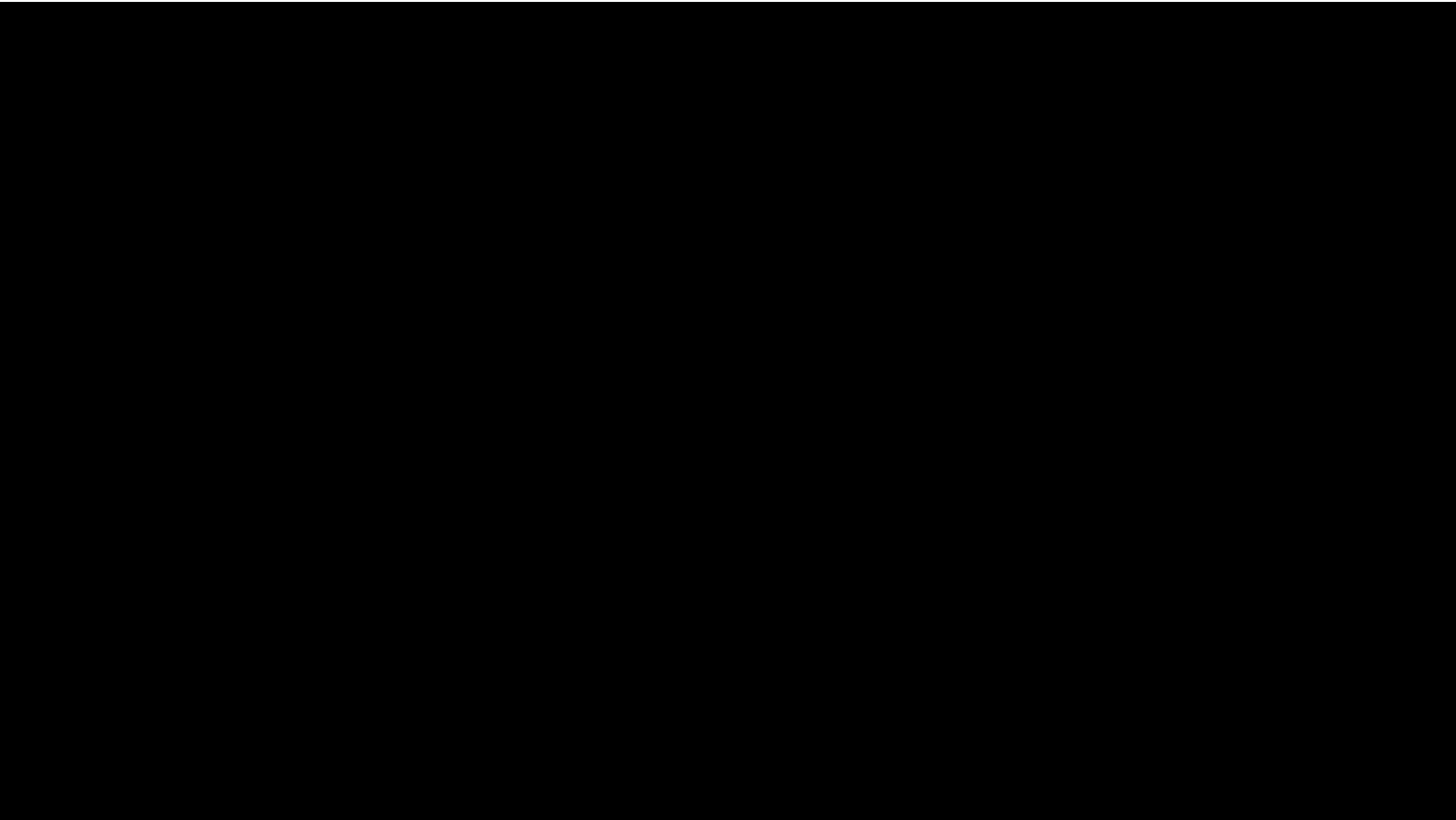
Carless (2015)

- "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)



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

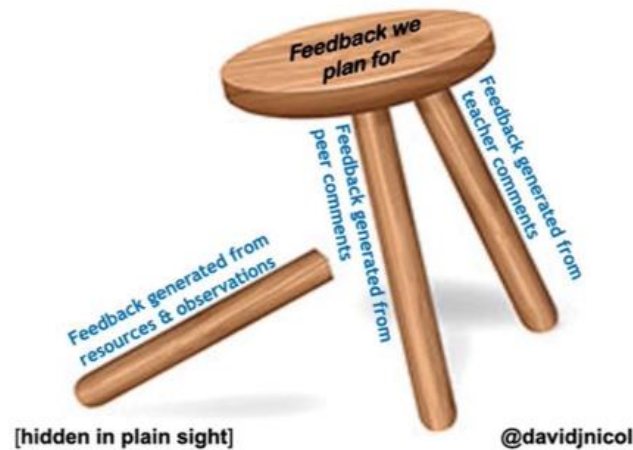
Educational historians will express surprise that for 50yrs we assumed that f/b was comments teachers provide rather than what Ss generate from them. They'll be even more surprised we failed to capitalise on all the other info sources that Ss use or could use to generate f/b.



David Nicol @david... · 13-04-2022

@davidjnicol

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



2



9

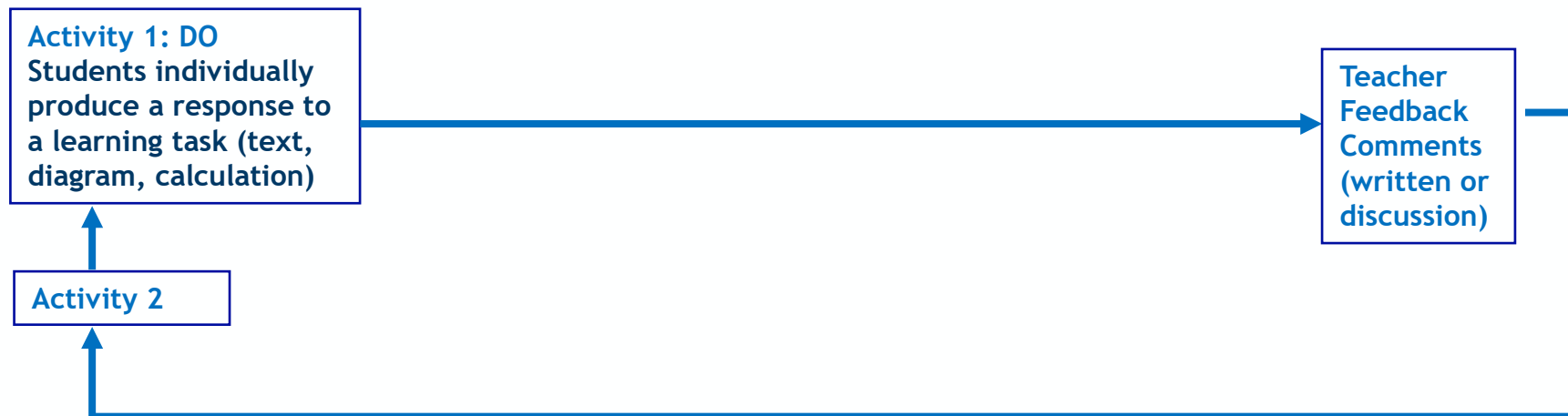


25



Traditionele feedback methode

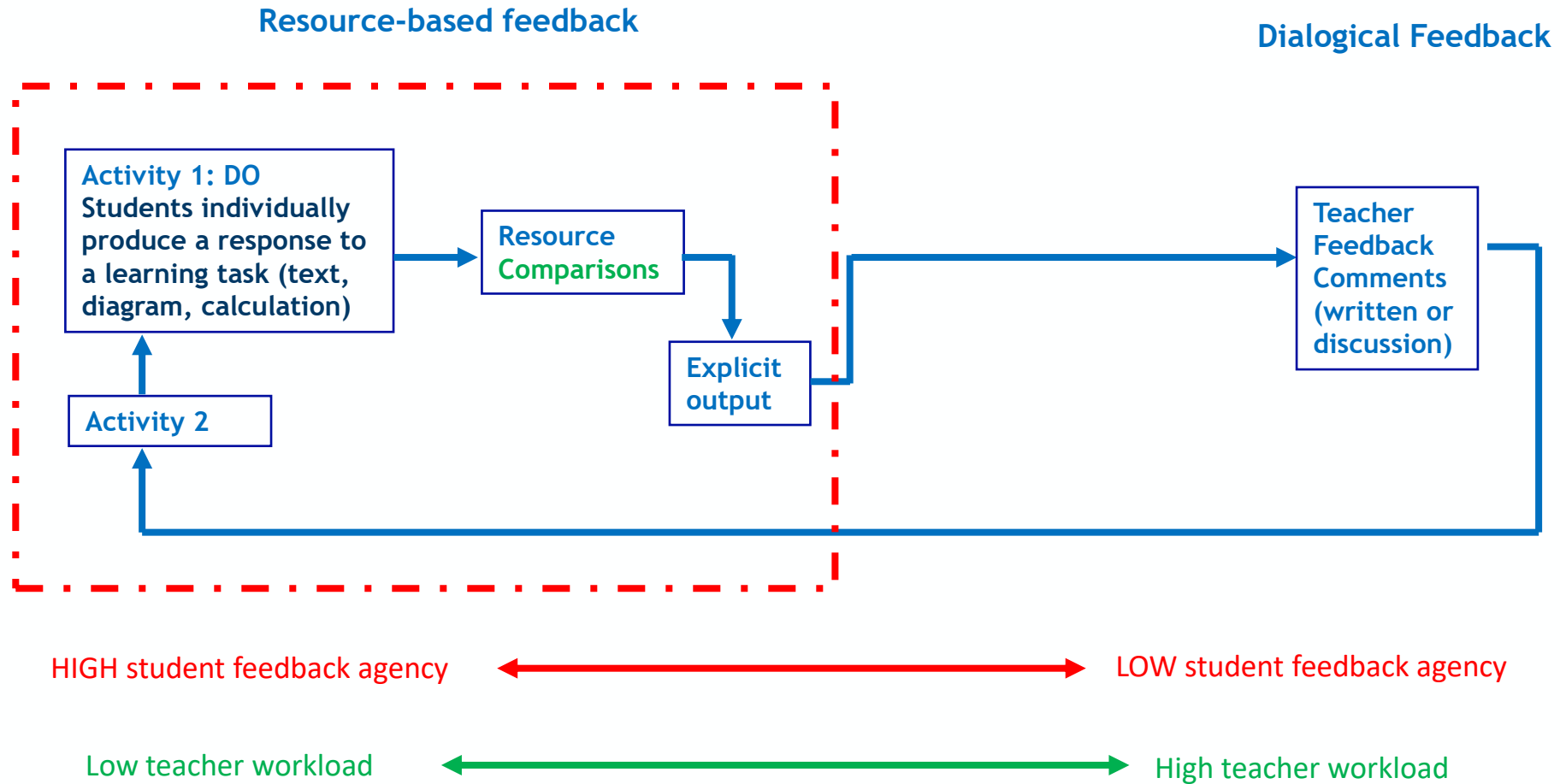
Dialogical Feedback



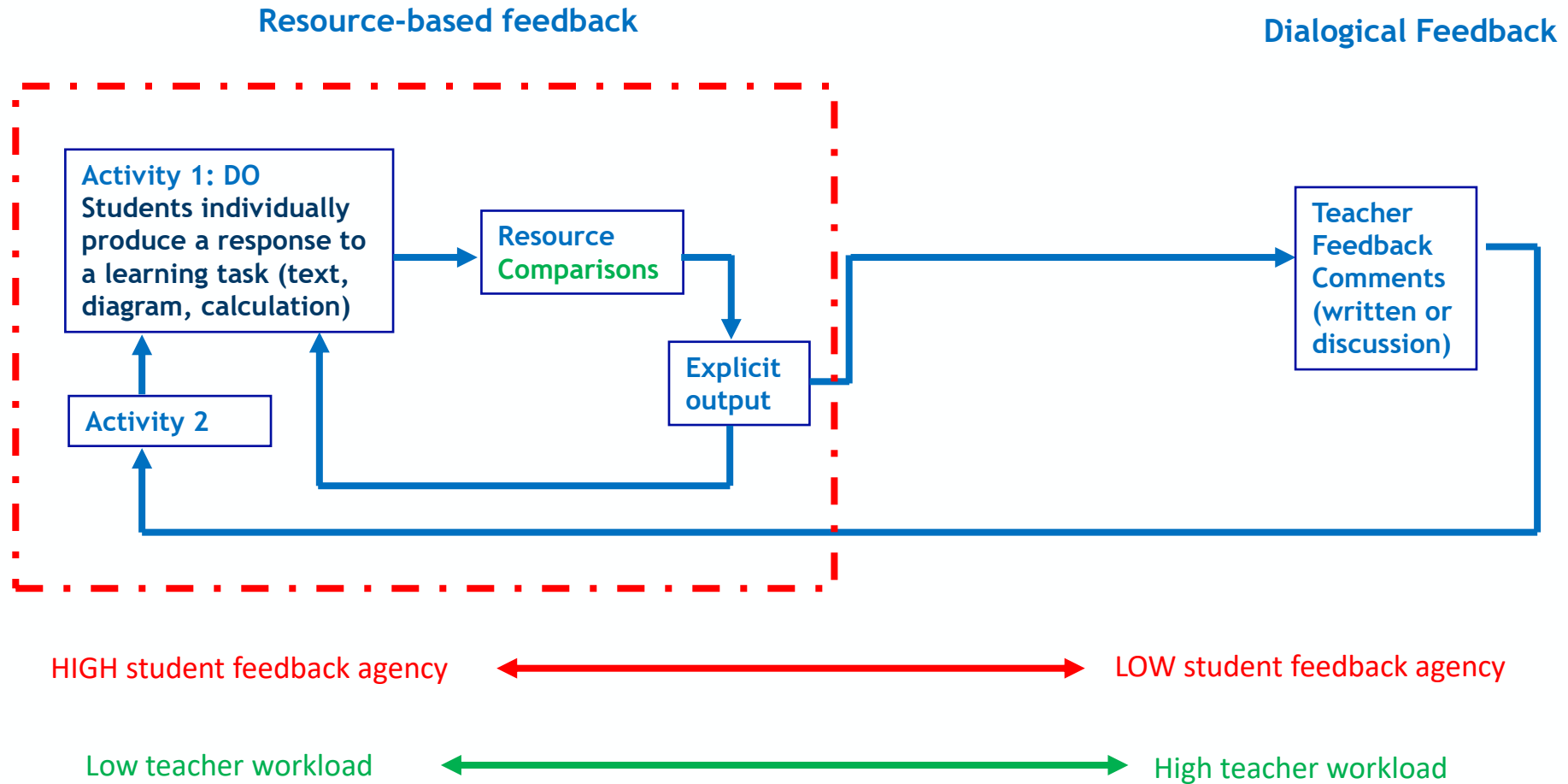
LOW student feedback agency

HIGH teacher workload

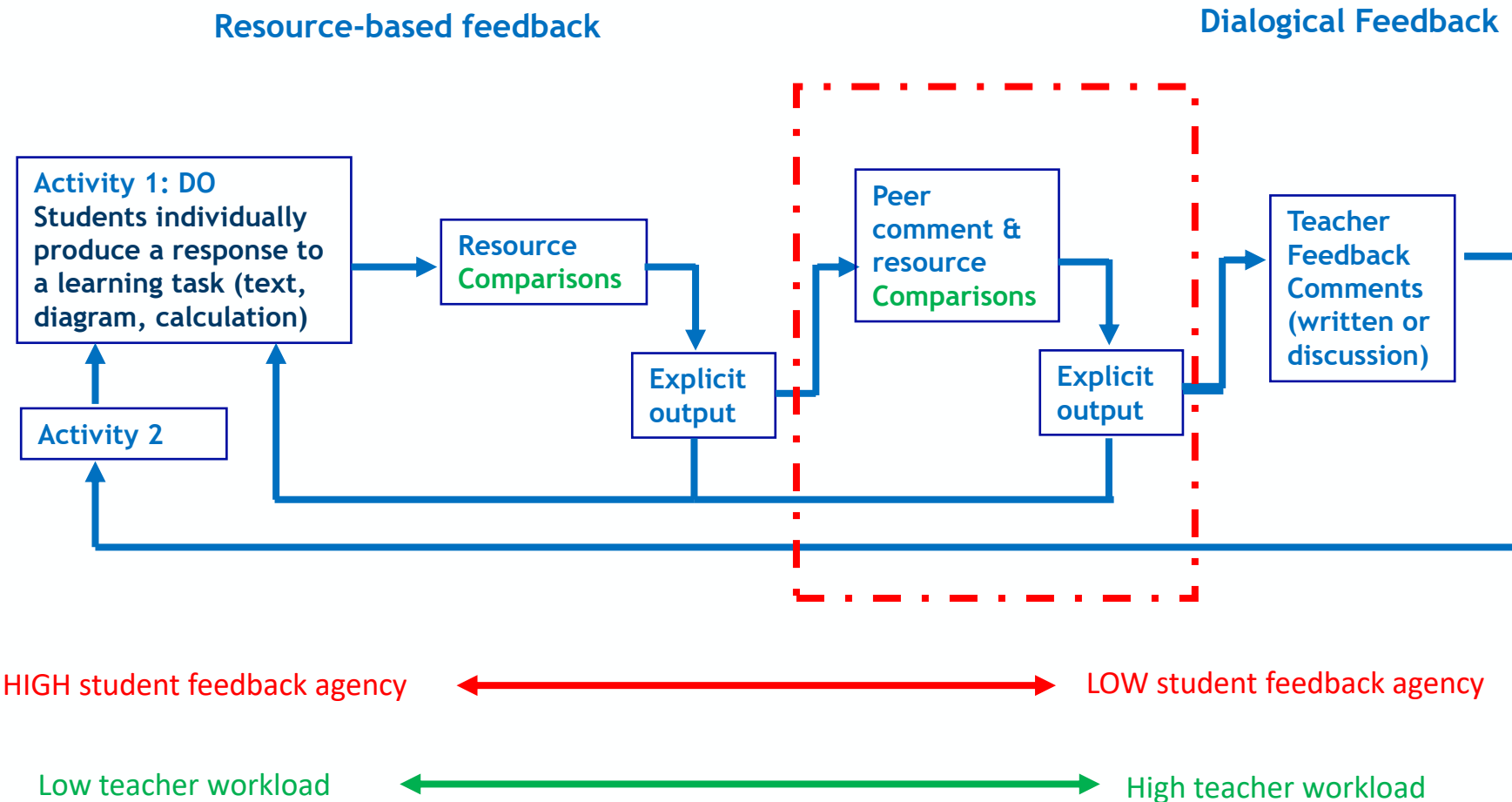
Ombuigen van actief leren naar actieve feedback



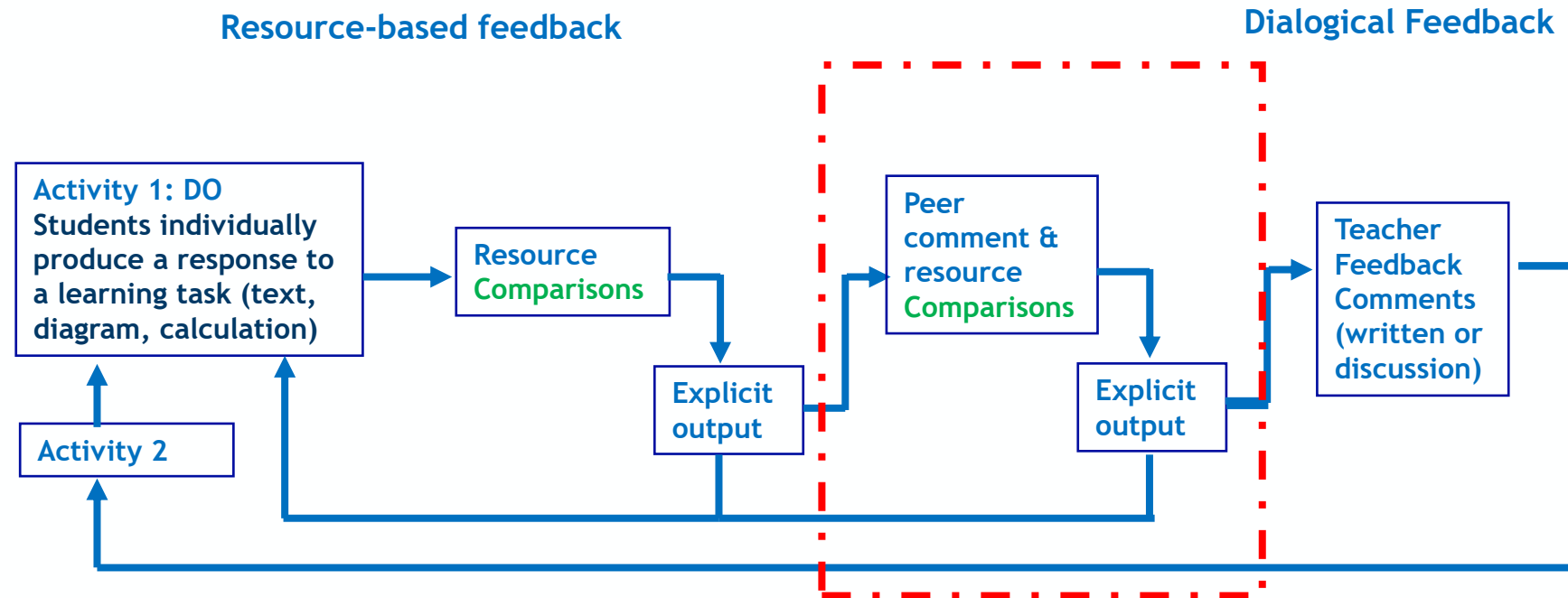
Cycli van feedback gebaseerd op bronnen



Integreren/versterken feedback gebaseerd op bronnen



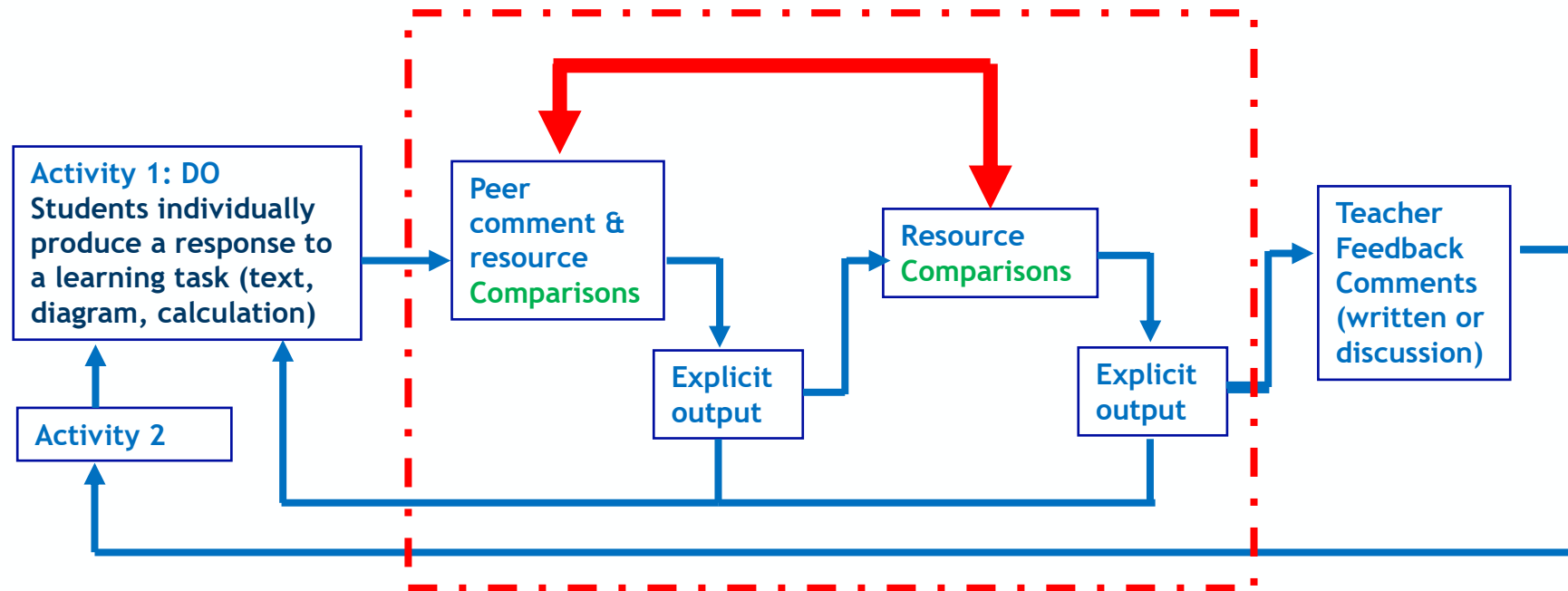
Cycli van peervergelijkingen



HIGH student feedback agency ←————→ LOW student feedback agency

Low teacher workload ←————→ High teacher workload

Geen vaste volgorde: belangrijkste is om commentaren van leraar naar achter te brengen.



HIGH student feedback agency



LOW student feedback agency

Low teacher workload

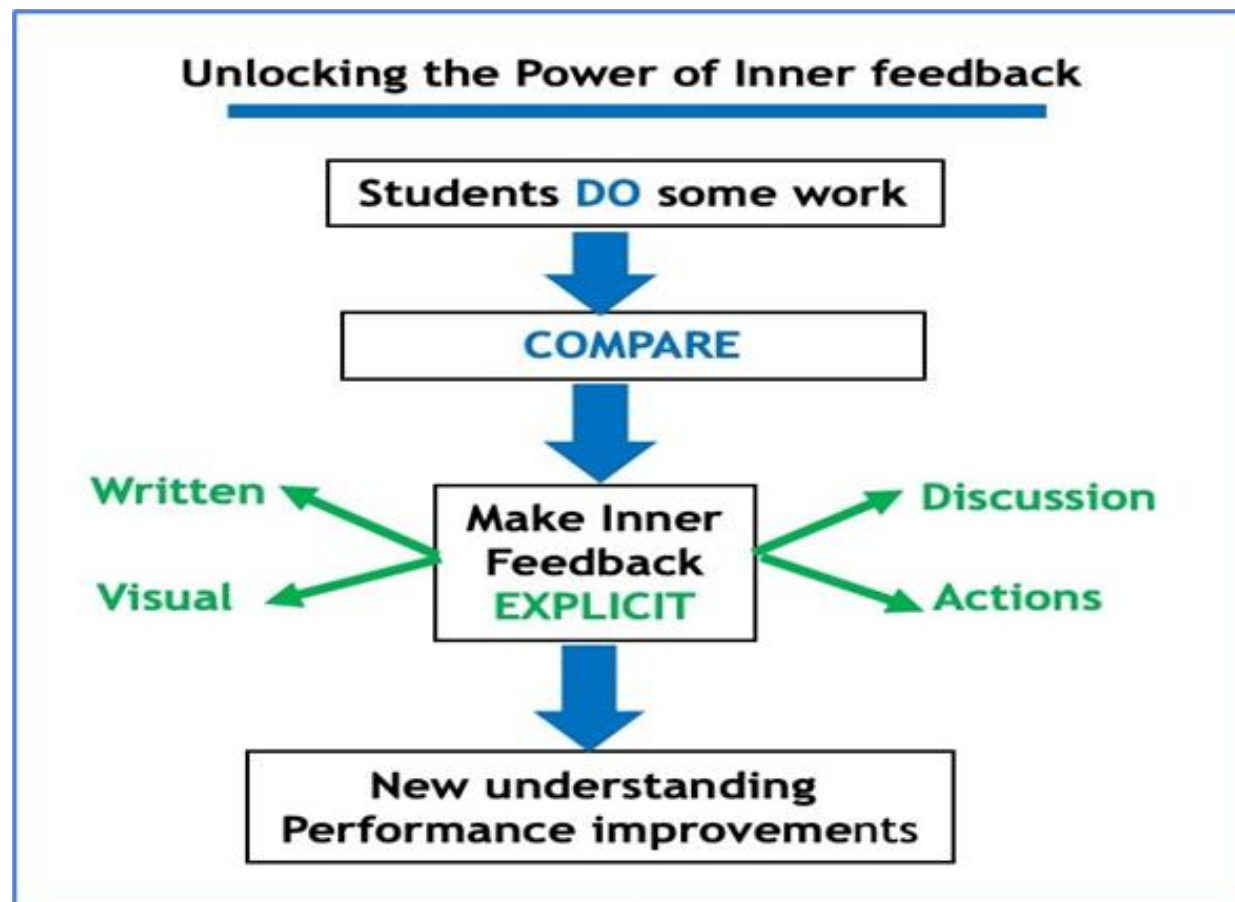


High teacher workload

Rol leerlingen

Concreet

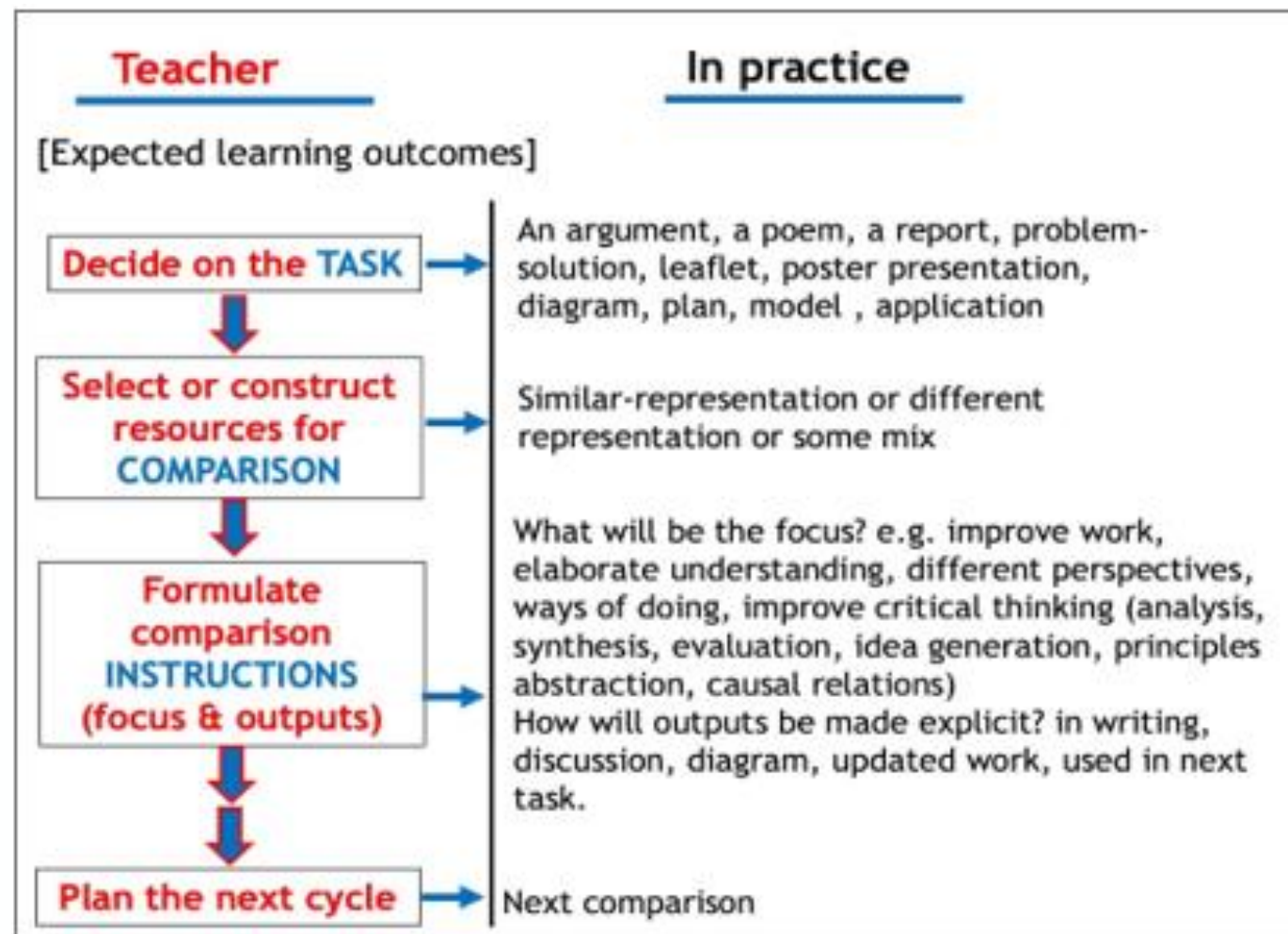
Leerlingen **produceren** iets. Ze **vergelijken** dat werk met informatie uit één of meerdere bronnen. Ze **maken** de uitkomsten uit die vergelijking **expliciet**.



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.



Maak een feedback genererend ontwerp en gebruik de volgende kopjes [sjabloon]

Leerdoelen	Produceer (leerlingen...)	Vergelijk (tegen)	Instructies (om gegenereerde feedback expliciet te maken)	Versterk de gegenereerde feedback

- LEERDOELEN:** Wat probeer je te bereiken?
 - PRODUCEER:** wat produceren de leerlingen [poster, oplossing voor een probleem, essay, rapport, verklaring, presentatie etc]?
 - VERGELIJKERS:** Welke bronnen geef je waartegen de leerlingen hun werk vergelijken om interne feedback te genereren op basis van wat geproduceerd is?
 - INSTRUCTIES:** Welke doelgerichte instructies geef je aan de leerlingen voor de vergelijking (bv. om kritisch denken te activeren) en om de resultaten expliciet te maken [schrijven zij hun eigen feedback commentaren en verbeteren zij hun werk?]
-
- VERSTERKEN:** Als je tijd over hebt bedenk dan manieren waarop je de gegenereerde feedback kunt versterken door commentaren van peer en leraar. [Hier speelt vergelijken ook een rol].

Opdracht (werkblad)

Inner feedback ontwerpen

Leerdoelen	Produceer (leerlingen...)	Vergelijk (tegen)	Instructies (om gegenereerde feedback expliciet te maken)	Versterk de gegenereerde feedback

- Wat wil je dat je leerlingen leren?
- Bedenk iets wat je leerlingen moeten produceren.
- Bedenk waartegen je dat product wilt laten vergelijken.
- Bedenk welke doelgerichte instructie je geeft aan de leerlingen om de uitkomsten van die vergelijking expliciet te maken.
- Bedenk wat je doet om de zelf gegenereerde feedback uit die vergelijkingen te versterken.

Vergelijken tegen informatie uit bronnen

Vergelijk
jouw
ontwerp
(per kolom)
met de
volgende
informatie
uit de tien
voorbeelden

Hoe verschillen jouw ideeën van de
ideeën uit de voorbeelden?

Wat leer je daarvan?

Hoe zou jij je eigen idee verbeteren op
basis van die vergelijking en waarom?

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
[6] Write a 500-word essay ** Suzanne McCallum [Accounting & Finance]	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.
[7] Write application or produce case study of economics model	Published account of theoretical model relevant to application or case. OR Published account of different model	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.
[8] Individually write 300-word evaluation of international poverty index ** Geetha Selvaretnam [Economics]	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.
[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. ** Nick Quinn [Management]	Published article from management journal on how to establish credibility. Video of a doctor interviewing a patient presenting with heart condition.	Use this theoretical article to identify improvements you could make to your meeting plan. [theory-practice comparison] 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.	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.
[10] Write the literature review for their economics dissertation ** Lovleen Kushwah [Economics]	Two published reviews on different topics and different from student's own topic from high-quality economics journals.	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]. Compare your own review with this rationale and propose improvements to your literature review. Identify any further feedback you would like from your supervisor.	Students submit own review and answers to comparison questions to supervisor. Supervisor comments as necessary. Students update own literature review.



Reflectie

Reflectie op de ontwerpen.

Volgende stap? Feedback geven of nog een andere vergelijking laten maken?

Reacties?

Publications:

- Ajjawi, R., Tai, J. & Dawson, P. (2023). [Feedback for learning](#). In R. Tierny, F. Rivizi & K. Ercikan (Eds). *International Encyclopaedia of Education 4th edition*, pp. 41-49. Amsterdam: Elsevier.
- 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. & Kushwah, L. (2023). [Shifting feedback agency to students by having them write their own feedback comments](#). *Assessment & Evaluation in Higher Education*.
- 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.
- 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>
- Nicol, D. (2022, November 16). Turning Active Learning into Active feedback: An inner feedback perspective. [Webinar]. The Centre for Research and Improvement in Education (CIME) of the Universidad del Desarrollo, Chile.

Website: <https://davidnicol.net>