



FEEDBACK PRACTICES DURING THE PANDEMIC IN HIGHER EDUCATION

Dr. Daniela Bruna J. dbrunaj@udd.cl

Centro de investigación y Mejoramiento de la Educación

Facultad de Psicología- Universidad del Desarrollo

Dr. Piedad Cabrera-Murcia pcabrerm@uahurtado.cl

Facultad de Educación – Universidad Alberto Hurtado

December 1, 2021 Virtual International Meeting on Teaching, Learnin and Evaluation in Higher Education

Why focus on learning feedback?

- Backwash effect of learning assessment and feedback
- Permanent feedback allows students to correct and improve their performance
- Promotes the development of critical judgment
- Understanding of the quality of performance transfer of competences to other contexts, especially work.
- It allows a more autonomous, conscious and metacognitive work, together with greater motivation and perception of selfefficacy.

Feedback that is the engine of learning

Enables to expertly judge what is a good performance on the task

- It is done before and after
- Exemplars are used
- It involves self and co-assessment processes.
- Expected performances are modeled.

It allows to determine how the current performance is related to the expected

- Use of formative, assessment process.
- There are opportunities to show that they have incorporated the feedback received.
- Inclusion of guidelines and rubrics, with co-constructed or negotiated criteria.

Feedback as an engine for learning

Drives action to bridge the gap between actual and ideal performance

- It focuses on highlighting strengths to help students set goals, select strategies, feel self-effective, and motivated.
- It also describes weaknesses, allowing students to specifically identify areas for improvement.
- It provides directive advice on what to do to improve, illuminating the way forward.

ck que es motor del rendizaje...

la brecha entre el desempeño real y el ideal s fortalezas para ayudar a los estudiantes a onar estrategias, sentirse autoeficaces y

Feedback, pandemic & higher education



ck que es motor del rendizaje...

Project

"National evaluation of the remote teaching and learning process, during the COVID-19 pandemic, in higher education." Analysis of the variables that facilitate and hinder the educational experience of teachers and students.

Characterize the remote educational process, during the pandemic, from the experience of university students

- ✓ 15 researchers
- ✓ 13 universities from 11 regions of the country
- √ 17 international advisers
- ✓ 2 measurements in teachers and students

Participantes



At the teacher level:

- N = 505 (57.2% women, 42.4% men)
- Age X = 45.1
- Previous remote education experience:

- From 31 universities of the whole country.

At students level:

- N= 2762 (53% women, 22.1% men)
- AGE X= 21.69
- Previous remote education experience:

Si= 30.6

From 21 universities of the whole country

Objectives

Describe how the learning feedback process has been during remote education, from the perspective of Chilean students and teachers.

Identify which variables influence students to benefit from this process and teachers use effective feedback practices to promote learning.

Understand how much progress has been made and what backtracks have been made with respect to feedback, using the results of a pre-pandemic study.

QUANTITATIVE RESULTS

Teachers

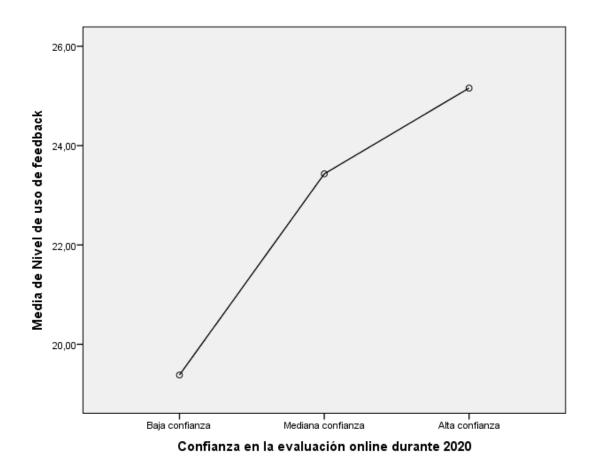
What feedback practices do teachers report the most?

Indicators	n	Mín.	Máx.	Ā	DE
I provide students with written feedback on the evaluations about the mistakes made.	319	1	5	4.13	1.14
I provide students with written comments on assessments about the good performances shown.	319	1	5	3.75	1.27
I leave a time of the class to show the course where the main errors of the students in general were.	317	1	5	3.91	1.22
When delivering the evaluations, I set aside time for the class to show the course where the main successes of the students in general were.	317	1	5	3.68	1.35
When handing in the assessments, I set aside time for the class to show the class how to improve on the worst performing topics.	319	1	5	3.61	1.20

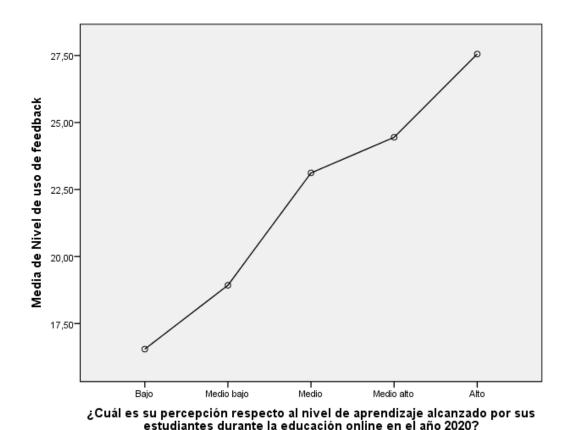
I provide students with written feedback on the evaluations about the mistakes made.

Indicators	n	Mín.	Máx.	x
When handing in the evaluations, I set aside time for the class to meet individually with all the students and explain the mistakes made.	318	1	5	2.47
When handing in the evaluations, I set aside time for the class to meet individually with all the students and explain the strengths of their test or work.	318	1	5	2.72
When handing in the assessments, I set aside time in class to meet individually with only the lowest performing students to discuss their results.	3 ¹ 7	1	5	2.60

Relationship between confidence in the assessment and use of feedback



Relationship between learning and use of feedback



Use of feedback according to type of assessment

	<u> </u>			
Type of assessment	t	р	Does use it	Does not use it
Multiple options questions	4.644	≤.001	n= 145	n= 167
Wordpie options questions	x= 21.56 (DE= 5.		x= 21.56 (DE= 5.69)	x= 24.70 (DE= 6.23)
Completation questions	2.012	- 002	n= 57	n= 255
Completation questions	tions 3.013 =.003		x= 21.02 (DE= 6.19)	x= 23.74 (DE= 6.07)
Eccave	2 111	- 026	n= 105	n= 207
Essays	-2.111	=.036	x= 24.27 (DE= 6.05)	x= 22.72 (DE= 6.19)
Debates	, 260	< 001	n= 54	n= 258
Debates	-4.269	≤.001	x= 26.13 (DE= 5.30)	x= 22.64 (DE= 6.19)
Project based learning (PBL)	-3.808	≤.001	n= 74	n= 238
Project based learning (PBL)	-3.000	≥.001	x= 25.57 (DE= 5.99)	x= 22.52 (DE= 6.07)
Diblicara bis vesserab persus		4 004	n= 131	n= 181
Bibliographic research papers	-4.123	≤.001	x= 24.86 (DE= 5.44)	x= 22.08 (DE= 6.43)

Predictive Model about Feedback use

Modelo		andarized peficients	Standarized coeficients		
	В	S.E.	β	t	sr ²
(Constant)	16.063	.996		16.128	
Tutorials	1.185	.186	.399	7.615	.16

Assessment and feedback do matter. Predicts promotion of self-regulation

Model	Not stan coefic		Standarized coeficients			Collinearity	statistics
	В	E.E.	β	t	Sr ²	Tolerancia	FIV
(Constant) Attitudes and perceptions	-14.618	4.162		-3.512			
when constructing and applying evaluations	.220	.064	.213	3.432	.02	.489	2.046
Use of Feedback	.312	.072	.235	4.323	.04	.636	1.573
Student-centered approach and learning	.315	.083	.202	3.773	.03	.659	1.518
Perception o teachers' self- efficacy	.188	.052	.186	3.599	.02	.709	1.410
Diversification o teaching practices	.358	.170	.096	2.098	.01	.902	1.109

QUALITATIVE RESULTS

Students & Teacher

Feedback: gaze of students and teachers in remote teaching.

FEEDBACK WITH A FUNCTIONALITY TO REGULATE LEARNING.

From Students:

... deliveries of work evaluated by stages

But I think the most important thing is the possibility of re-correcting the test and that a rubric is available to understand why my answers were good or bad (few teachers did this)

From Teachers:

... generate more instances to check effective learning

Greater monitoring of the progress of each student.....

we get together to reinforce the contents with Kahoot ...

FEEDBACK AS PART OF THE CURRICULUM DESIGN.

From students:

... Development questions, in which we had to formulate our own hypothesis and raise it appropriately to the context in which we were being asked and evaluated ...Blogs!

I adore them, especially when they are courses with a more formative focus... I think they allow us to challenge and develop our commitment to the lines of business, as well as helping to further establish the content studied.

From teachers:

... I have been improving (according to me) the quality of the feedback not only with written comments but also with audio.....

I have been able to develop and apply cases as a team, with immediate feedback

• • •



... Feedback is a bit more difficult...

FEEDBACK POWER YOUR LEARNING (SENSE OF COMPETITION).

From students:

... Process evaluations rather than completion of a topic, formative evaluations before the final delivery of a work.

From Teacher:

... I have had to evaluate learning products more often.

Qualitative Results

1. Students signal effective feedback when they receive feedback that they can use to progress their learning.

"... Assessment as learning, that is to say, carrying out academic activities, rehearsals, etc., but always with spaces for feedback."

"... Allow the student to review the test on the assigned platform after finishing it, since this way one knows where he was wrong, this favors learning since we know the subject that we must reinforce ..."

"... Assessment progress is a very good strategy when it can be done, above all giving space for them to present and explain their progress, their intentions and what they have achieved ..."

"... process assessments rather than completion of a topic, formative evaluations before the final delivery of a work."

2. The student body emphasizes participation in ways of assessing that favor feedback processes between peers and self-assessment.

"The group evaluations favored my learning, enriched and strengthened my learning ..."

"... the work, whether individual or group, since, although it can become difficult, I believe that it is the best way to learn and self-assess also the contents that we know or that we must reinforce ..."

"... Group work, since learning could be discussed around."

"... Self-assessment, since one realizes what he did learn and what he lacked to reinforce within the subject."

3. The student body values implemented ways of evaluating that, in their design, considered authentic feedback: process of building a product - feedback - take back comments to reelaborate and improve their performance.

"... In general, investigations, ethnographies, projects, essays, etc. are carried out. For what deliveries and advances are made that are corrected and serve as feedback ... "

"... the feedback of tests or works were important points to be able to carry out in a positive way the teaching-learning of online modality."

4. The student body reports a majority use of evaluations that involves the construction of products (research reports to infographics, for example), in real contexts, with reviews for their improvement before their final delivery.

"... Delivery of process work per week and final work at the end."

"The application of matter, since now I understand the subject better and I do not forget it, on the other hand, in person I learned everything by heart, but after a while I forgot everything."

"... Without a doubt that the tasks, works, projects, etc, since the contents were evaluated in a way applied to cases more brought to reality."

"... I think the practical application in research reports or in the creation of projects, for example, is always positive (compared to normal tests with questions and alternatives)"

5. Recognition by the student body of their active role in the feedback process.

... The reading of real cases and their subsequent discussion via synchronicity, etc

.... Self-assessment, since one realizes what he did learn and what he lacked to reinforce within the subject"

... they allowed us to learn from our mistakes during the feedback of these formative evaluations ..."

¿AND BEFORE PANDEMIC?

Previous results

How do you explain a perception of useful feedback?

Predictors	Coef.	SE
Gender (Ref: Men)	-0.009	0.308
Age (Ref: 17-19)		
20-24	-0.591	0.469
>= 25	-0.784	0.522
Level (Ref: Bachelor)		
Bachelor	0.181	0.333
Title	0.458	0.383
Discipline (Ref: Health)		
Education	-0.297	0.380
Social Sciences	0.219	0.364
Bachelor	-0.036	0.424
Información entregada (Ref: Only comments)		
Just Grade	1.051	0.540
Grade and comments	1.358*	0.381
Comprehension Level (Ref: No)	2.584*	0.290
Int.	-0.633	0.571
*: p < 0.001		

Model obtained by Ordinal Regression

DV: usefulness of feedback

Feedback is perceived as useful when, in addition to delivering the grade, it is accompanied by oral and written comments, and these are deeply understood, independent of the other variables

How do you explain a perception of motivating feedback?

Predictors	Coef.	SE
Gender (Ref: Women)	-0.017	0.232
Age (Ref: 17-19)		
20-24	-0.293	0.356
>= 25	0.088	0.402
Level (Ref: Bachelor)		
Bachelor	0.165	0.262
Title	-0.282	0.275
Discipline (Ref: Health)		
Education	-0.165	0.292
Social Sciences	-0.718*	0.273
Engineering	-0.341	0.335
Comfortable dialogue (Ref:	1.140**	0.300
No)		
Quality of the relationship	0.069	0.306
(Ref: No)		
Intercept	0.495	0.419
*: p < 0.01; **: p < 0.00	1	

Model obtained by Ordinal Regression
DV: feedback utility

Feedback motivates less students of careers belonging to Social Sciences. Feedback motivates when students feel comfortable talking with their teachers.

Discusion

Challenge 1

- Innovate in group feedback and increase instances of individual feedback.
- Promote tutoring.

Challenge 2

• How to achieve greater confidence in the assessment that impacts the use of feedback?

Challenge 3

• Policies that promote feedback to generate a greater perception of learning.

Discusion

Challenge 4

- Promote the use of meaningful evaluations.
- Discourage the use of closed-response item tests and promote the use of TBD.

Challenge 5

• Moving from a feedback only from the teacher-student binomial to feedback processes between students.

Challenge 6

• Prioritize work on evaluation and feedback practices, beyond technology.

Discusión

Challenge 7

• Generate learning environments in which literacy is mobilized in the feedback processes between teachers and students.

Challenge 8

• Improve technological resources in universities from the inclusion of platforms or software that accompany feedback processes.

Challenge 9

• Advance in feedback designs between students in which they are accompanied in the construction of the evaluative judgment that they make of the productions of their peers and that contribute to the progression in their learning.

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