



Universidad del Desarrollo

Facultad de Psicología

Centro de Investigación y Mejoramiento de la Educación

Authentic Assessment in Higher Education Dimension to Analysis

VERÓNICA VILLARROEL H.

VVILLARROEL@UDD.CL

CENTRO DE INVESTIGACIÓN Y MEJORAMIENTO DE LA EDUCACIÓN (CIME)
PSYCHOLOGY- UNIVERSIDAD DEL DESARROLLO

24TH OF NOVEMBER - 2020

Why Authentic Assessment?

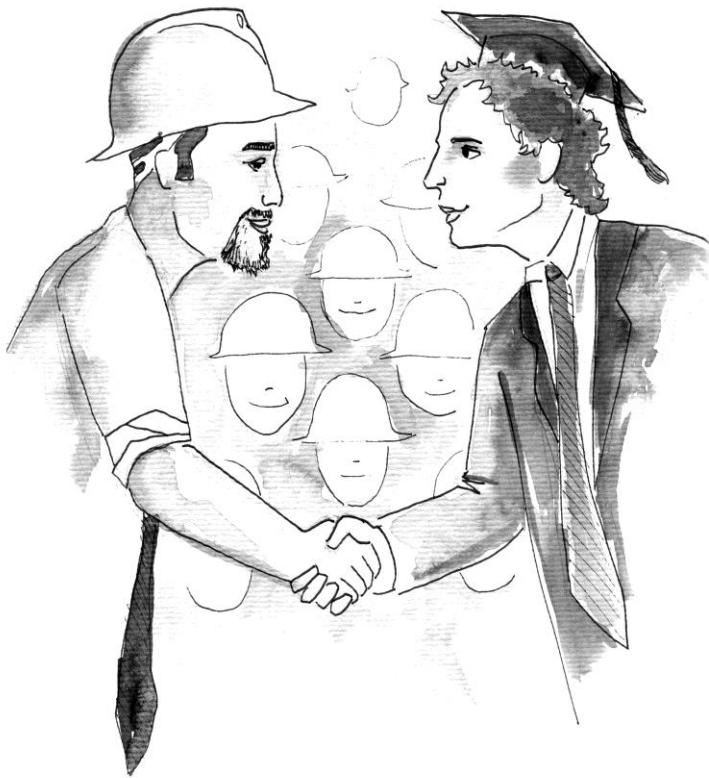


The Focus on Assessment

- ✓ The *Assessment for Learning (AFL)* movement: assessment as an instance of learning.
- ✓ Assessment-Teaching-Learning: a cycle that is permanently re-adjusted in the pedagogical process.
- ✓ Backwash Effect of the Assessment.
- ✓ Promotes adoption of a deep learning approach in students

Are we assessing what it really matters?

Authentic Assessment



- ✓ It seeks to bring what happens in the classroom with what happens in real life and work, replicating the tasks and performance standards that professionals typically face in the world of work (Wiggins, 2011).
- ✓ It takes charge of the split made between what is learned in college and what is required to know and do in work world (Raymond, Homer, Smith & Gray, 2012).

Authenticity

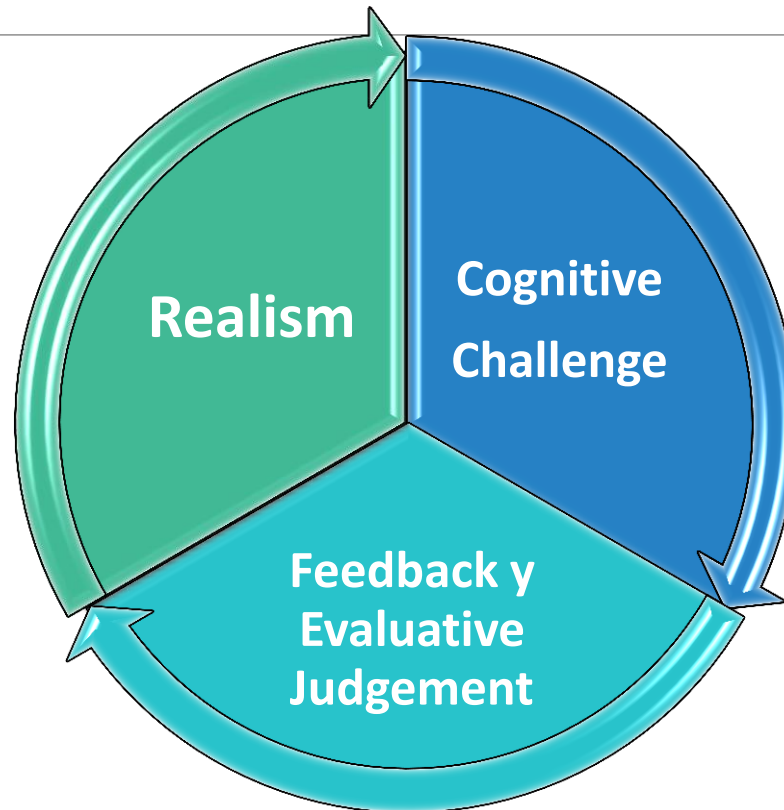
- ✓ **Realism** by linking knowledge with daily life and work.
- ✓ **Contextualization** by characterizing a situation where knowledge can be applied analytically and reflectively.
- ✓ **Problematization** in the way that what is learned can solve a problem or a need (Benner, Sutphen, Leonard & Day, 2009; Raymond, Homer, Smith & Gray, 2012).

Analysis Method

- We analyzed 112 scientific articles from 1988 to 2015 (Scielo, Scopus and WOS). The keywords were: Authentic Assessment, Authentic Intellectual work, Authentic Instruction.
- 35.7% of the articles were oriented to Higher Education and 64.3% to other educational levels.
- The first review identified 11 core features, from which we generated 3 dimensions.

Dimensions

- Graduate Profile
- Requirements of the world of work
- Create problem-situation (context)



- Worthwhile assessment
- That requires application of high-order cognitive skills

- Development of evaluative judgment through practical activities
- Feedback to the student

REALISM

A.- How does this course contribute to the **graduation profile** of the discipline?

B.- How is this course linked to **professional skills required in the discipline's world of work?**

C.- What **typical problems in the real world** require a response through this discipline?

REALISM

- ✓ What you learn in mi subject, **Does it allow you to respond to the tasks or functions that are the most common in this profession?**
- ✓ When I design the evaluation activities in the subject, **do I ask for them in the format of the products that frequently must be delivered in the profession?**



The importance of CONTEXT



What does a CONTEXT mean?

- ✓ It is a realistic and / or professional situation
- ✓ There is a problem / conflict.
- ✓ The information you present is necessary to answer the question.
- ✓ More than one perspective of a phenomenon, is shown.
- ✓ Information sets limits or restrictions.
- ✓ You must analyze and make decisions.

47% of the 4401 items reviewed presented context.

73% of the contexts were not required to answer the question.

Realism

Real Context

- Problem-Situation
- It comes from real life and / or professional.
- It involves pertinent and relevant questions to answer.

Tarea "análoga" a lo que se hace en el mundo del trabajo

- Real representation of a job field performance.
- Deploy skills.
- Deliver a product.

Written
Tests



Tasks based
on performance



Pencil & Paper Tests

Items that build knowledge

- Brief development questions.
- Extensive development questions.
- Case analysis.
- Simple Problem Solving.
- Alternative questions with context.

Performance Tasks

- Oral presentation.
- Debate.
- Oral exam
- Observation
- Simulations
- Briefcase
- Problem Based Learning (PBL)
- Essays.
- Bibliographic works.
- Investigation work.
- Posters.
- Project-Based Learning (APP).
- Proposals
- Reports / Reports

Example...

Johnny, 8 years old, has attention difficulties at school and is referred to the psychologist for an intelligence evaluation. Johnny's mother does not know what this evaluation is about and does not know if it is appropriate to put the child to this stress. The teacher calls you, as an expert psychologist in intelligence evaluation, to clarify the mother's doubts.

In relation to the Wechsler Intelligence Scale, explain to the mother what the test is about, the areas it evaluates, the results it delivers and how it is applied.

Does it Changes?

Johnny, 8 years old, has attention difficulties in school and has been referred for an intellectual evaluation. The mother is unaware of the test, but has heard negative comments such as: “if the psychologist likes the child, he gives him all the points, but if he doesn't like it, it could harm him”; "The test is not adapted to the Chilean context, it only assesses memory and the children get bored when answering it." The mother also states that her son has expressed feeling stressed by this evaluation. Since his grades have dropped this year, he feels silly and says that he will go wrong with the psychologist. The mother is afraid that this will affect the child's performance on the test. Faced with these fears, the head teacher has asked you to talk with his mother and clarify her doubts.

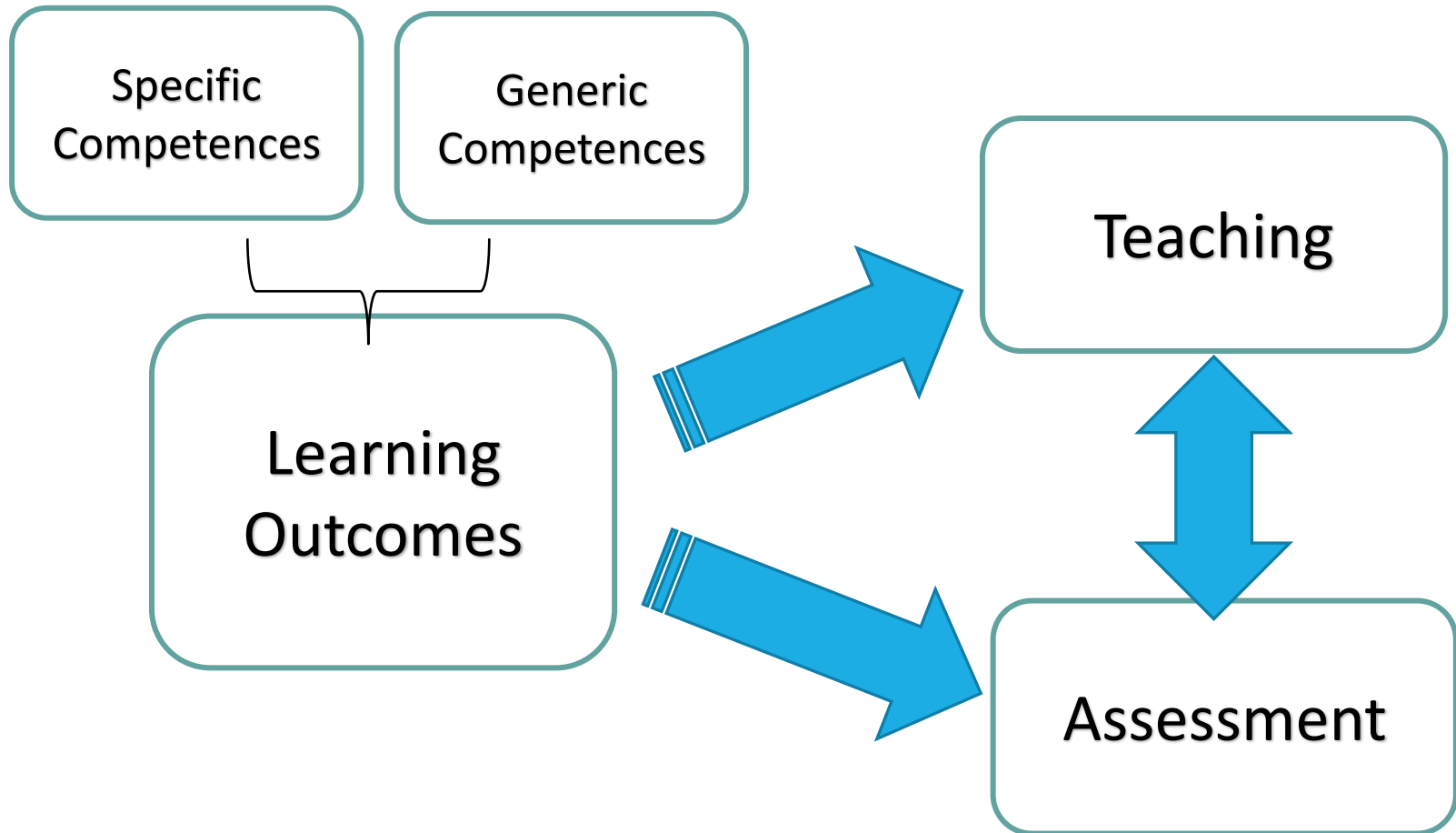
In relation to what was indicated by the mother, write 3 arguments that answer her doubts and reassure her regarding the application of the test.

Cognitive Challenge

- ✓ The assessment that requires the use of **higher order cognitive skills**, achieves greater depth in the understanding of the content (Jensen et al, 2014), and stability in the memory of what has been learned (Rawson et al, 2013).
- ✓ Students need to make use of knowledge transfer and application skills in solving real discipline and profession problems.
- ✓ Being able to reproduce knowledge in a decontextualized exam does not guarantee that the knowledge can be used in real life (Bloxham & Boyd, 2007).



Respond to Learning Outcomes of the Subject Program.



Learning Outcomes

Verifiable statements of what the student is expected to know, understand, be able to do, and demonstrate once the learning process is completed. The ones that are directly related to the student and her/his achievements.

Learning Outcomes

Action verb	Object or Content	Context
A VERB (in infinitive and action)	OBJECT or CONTENT	CONTEXT
Deduct	Learning theory	Pedagogical practice

At the end of this course, students will be able to:

"Deduce the theory of learning that is at the base of a given pedagogical practice."

Bloom's Taxonomy Reviewed Anderson y Krathwohl (2001)

Learning Level	Cognitive Skill	Related Verbs	
6	Create	Create a new product	Build, design, invent, innovate.
5	Evaluate	Justify one position	Criticize, defend, judge, justify, decide, suggest, diagnos
4	Analyse	Distinguish the parts and its components	Compare, deduce, infer, relate, differentiate, organize, integrate.
3	Applicate	Applicate information on a new way	Calculate, interpret, solve, use, employ.
2	Understand	Explain concepts and ideas	Associate, classify, distinguish, select, explain.
1	Remember	Recognize basic information	Define, describe, list, identify.

3

2

1

2

1

Proposal

Level 1

Memory Skills:

Recordar y
Comprender

Level 2

Analytic Skills:

Analizar y
Aplicar

Level 3

Transfer Skill:

Crear y
Evaluar

Cognitive skills to *"remember"* data.

Level 1

Define, describe, name, identify, enumerate, list, select, distinguish, indicate, classify, categorize, differentiate, explain.

Cognitive skills to *"display"* a performance.

Level 3

Build, create, design, plan, invent, modify, propose, conclude, decide, evaluate, criticize, solve, solve, judge, justify, suggest, innovate, diagnose.

Cognitive skills to *"handle"* information

Level 2

Calculate, compare, apply, employ, analyze, relate, examine, organize, use, argue, debate, infer, deduce, investigate, integrate, synthesize, summarize, interpret, defend.



What is learning for?

Initial Diagnose

Type of item	Experimental Group				
	N	%	Quality of the Construction		
			% Level 1	% Level 2	% Level 3
Case Analysis	764	17.3	17.9	54.5	27.6
Simple Problem-Solving	78	1.8	53.9	37	9.1
Short Development	747	16.9	51.8	44.3	3.9
Long Development	68	1.5	10.8	33.9	55.3
Open Response	1657	37.5	33.6	42.4	24
Alternatives	1971	44.7	93.3	5.9	0.8
Completion	208	4.8	94.7	4.8	0.5
True or False	565	13	96.1	3.3	0.6
Close Answer	2744	62.5	94.7	4.7	0.6
Total	4401	100	64.2	23.6	12.2

Is It Different?

Level 1	Level 2	Level 3
<p>Guillermo was in a car accident. Its dorsolateral prefrontal cortex and ventral hypothalamus were destroyed.</p> <p>Draw and label the sagittal section of the brain, labeling at least 10 damaged structures.</p>	<p>Guillermo has a car accident. Structures of the cerebral cortex have been damaged. The mother hears the doctor say: "It is necessary to administer, externally, substances such as: insulin, dopamine, leptin, peptides ... to regulate it"</p> <p>Infer which areas of the cerebral cortex have been damaged from the medical indications.</p>	<p>Guillermo was in a car accident. Its dorsolateral prefrontal cortex and ventral hypothalamus were destroyed.</p> <p>Evaluate the severity of Guillermo, explaining three possible consequences according to the damaged structures. In addition, as a psychologist, suggest 1 strategy to improve your quality of life after, compensating for the effects of the accident.</p>

Cognitive Skills	Bachelor (1st y 2nd year)	Graduate (3rd & 4th year)	Degree (5th year)
<p>Skills that allow identifying information. Level 1: Remember.</p> <p><i>Define, describe, name, identify, enumerate, list, select, distinguish, indicate, classify, categorize, differentiate, explain.</i></p>	40%	10%	-
<p>Skills that allow handling information. Level 2: Analyse.</p> <p><i>Calculate, compare, apply, employ, analyze, relate, examine, organize, use, argue, debate, infer, deduce, investigate, integrate, synthesize, summarize, interpret, defend.</i></p>	50%	60%	30%
<p>Skills that allow to make a performance. Level 3: Transfer.</p> <p><i>Construct, create, design, plan, invent, modify, propose, conclude, decide, evaluate, criticize, solve, solve, judge, justify, suggest, innovate, diagnose</i></p>	10%	30%	70%

Make pedagogical decisions based on learning outcomes.

A.- What **teaching** techniques and methods are the most relevant to achieve the desired learning results, **in a realistic way and with the required cognitive complexity?**

B.- What **assessment** methods and instruments allow me to measure these learning results, **realistically and with the required cognitive complexity?**

Feedback

- ✓ Information about the student's learning performance status: what was expected, how it performed, and how it can be improved.
- ✓ Feedback before, during and after the evaluation activity.
- ✓ Information must be provided that helps the student to evaluate himself in relation to his own goals, as well as to external criteria, determined mainly by the teacher (Nicol, Thomson & Breslin, 2014).
- ✓ Permanent feedback allows students to correct and improve their performance (Panadero, Brown and Strijbos, 2016).

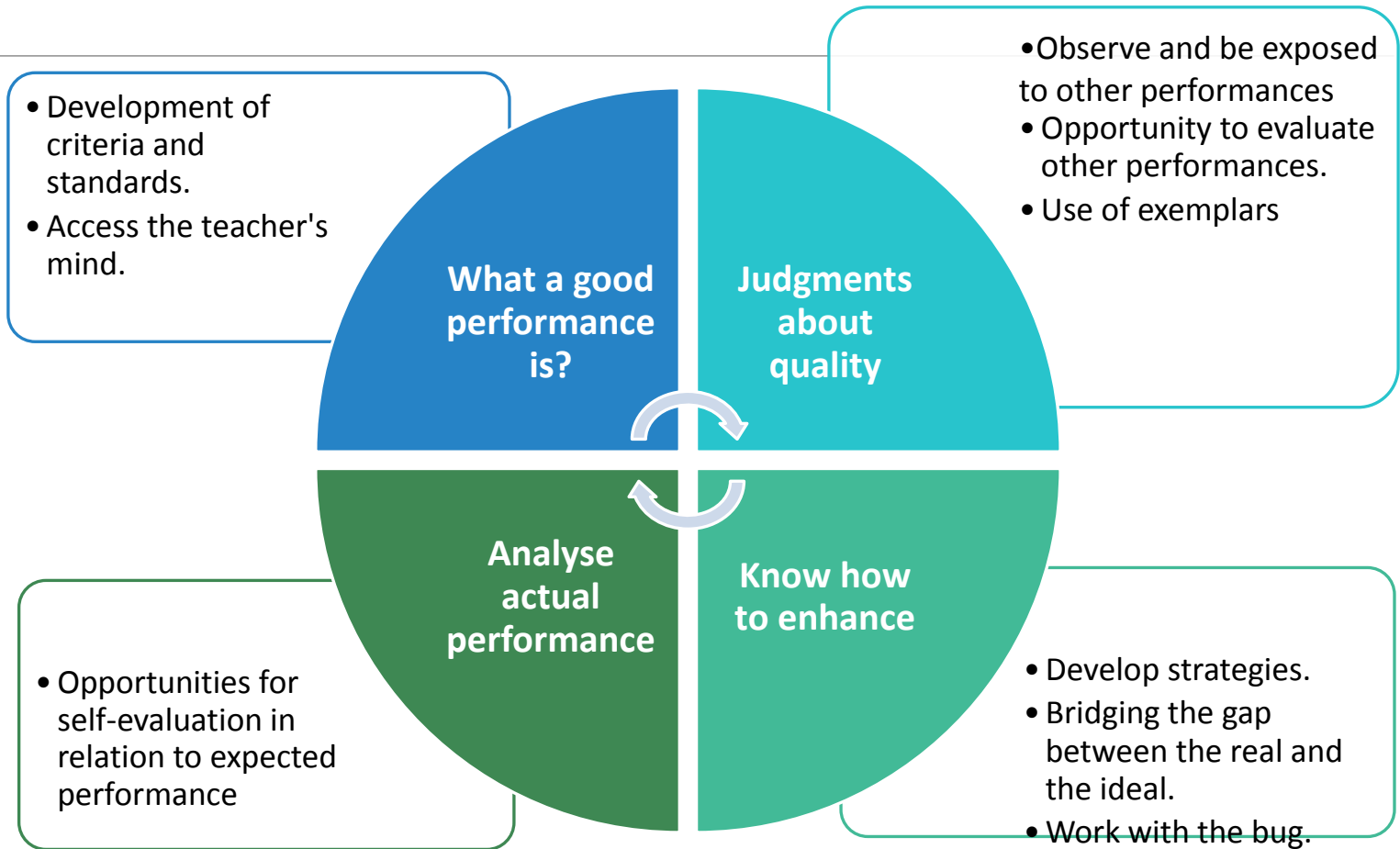


Universidad del Desarrollo

Facultad de Psicología

Centro de Investigación y Mejoramiento de la Educación

Feedback



Discussion

- Assessment is the Achilles heel.
- Less evaluation but more meaningful and authentic.
- Evaluate knowledge in context.
- Prepare for real life.
- Development of quality criteria.
- Time for feedback.

FACULTAD DE
PSICOLOGIA



**Centro de Investigación y
Mejoramiento de la
Educación (CIME)**

Universidad del Desarrollo

