



Universidad del Desarrollo

Facultad de Psicología

Centro de Investigación y Mejoramiento de la Educación

Transforming performance based tasks applying authentic assessment.

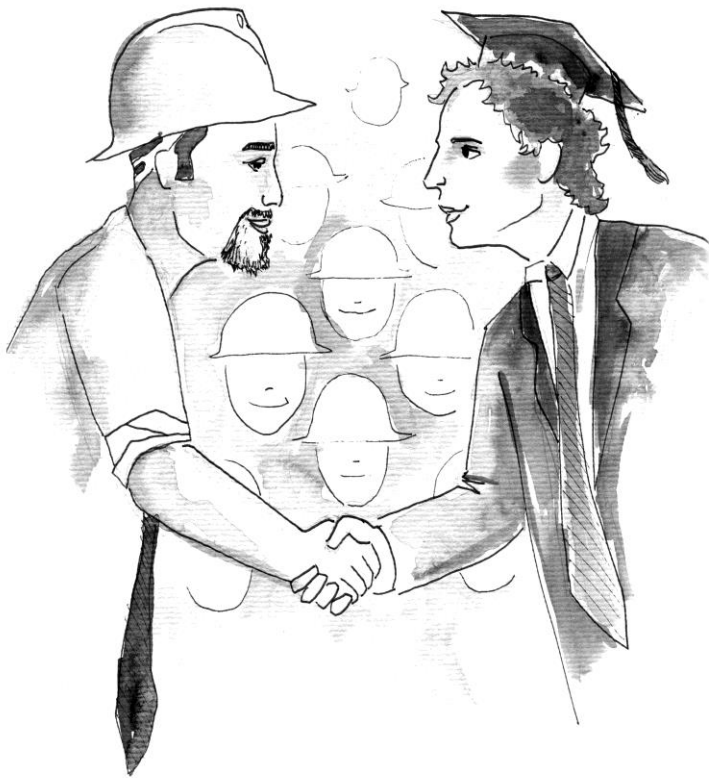
VERÓNICA VILLARROEL H., PHD.

VVILLARROEL@UDD.CL

CENTRO DE INVESTIGACIÓN Y MEJORAMIENTO DE LA EDUCACIÓN
(CIME)

PSICOLOGÍA- UNIVERSIDAD DEL DESARROLLO

Authentic Assessment

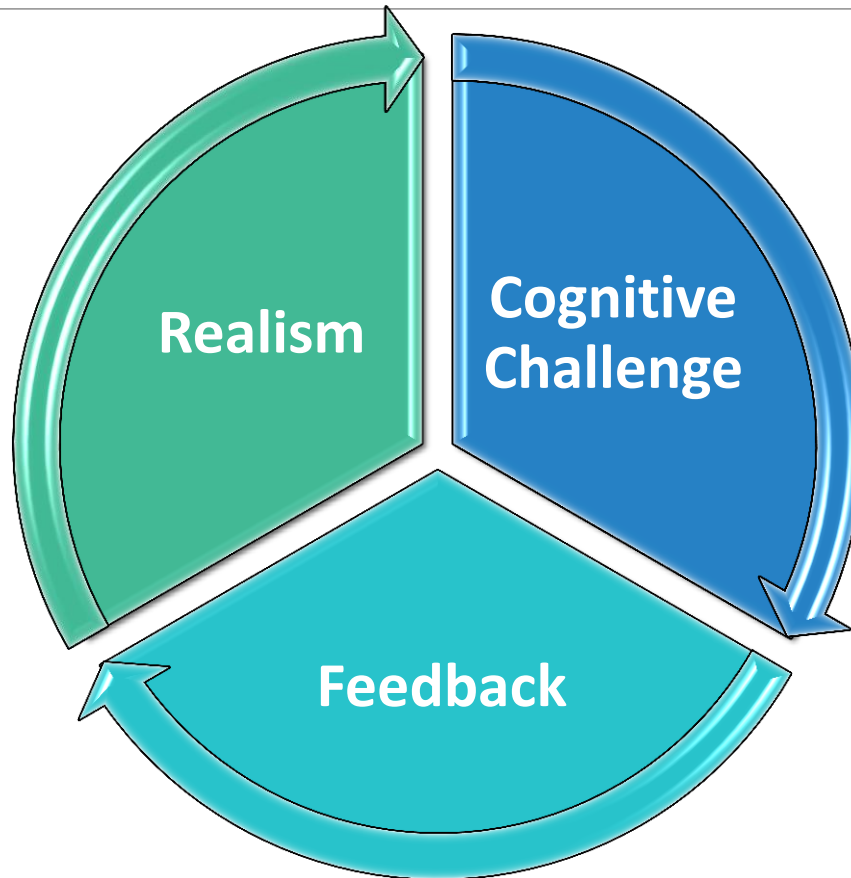


- ✓ It seeks to bring what happens in the classroom to what happens in real life and work, replicating the tasks and performance standards that professionals typically face in the world of work (Wiggins, 2011).
- ✓ It takes charge of the split between what is learned in college and what is required to know and do in the world of work (Raymond, Homer, Smith & Gray, 2016).

Authenticity

- ✓ **Realism** by linking knowledge with daily life and work.
- ✓ **Contextualization** when characterizing a situation where knowledge can be applied in an analytical and reflective way.
- ✓ **Problematization** to the extent that what has been learned can solve a problem or a need.

Dimensions



Performance-Based Tasks

Assessment activities for learning, in which the student must demonstrate their knowledge, skills and attitudes, by creating a response or product.



Requirements in this model

- ✓ It incorporates various evaluation modalities: self-assessment, co-assessment, self-assessment.
- ✓ Use guidelines and rubrics for assessment.
- ✓ It includes third parties in the evaluation for whom what the students develop is of interest.
- ✓ It simulates realistic conditions and typical products of the discipline.

Some Kinds of PBT

Assessment methods focused on student investigación	Techniques for presenting research results
<ul style="list-style-type: none">• Debate• Project Learning (PL)• Problem-based learning (PBL)• Design Thinking• Simulations (ECOIE)	<ul style="list-style-type: none">• Poster• Portfolio• 3 minute thesis• Elevator Pitch• Report• Graphic organisers

What do they have in common?

Imbalance

BEWILDERMENT

Investigation

Negotiation

Dialogue

INTERACTION

Restructuration

Discovery



COGNITIVE CONFLICT: Learning engine

Dimension 1: 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 **real world problems require a response** through this discipline?

D.- Do you learn it in my subject? Does it allow you to **respond to the tasks or functions that are the most common in this profession?**



The Importance of Context



What is a CONTEXT?

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



D E B A T E

Debate Protocol

Tiempo	Actividad
5 Min	Presentation of the position of group A
5 min	Presentation of the position of group B
1 min	Pause in which each team analyzes the intervention carried out and the one to come)
2 min	Counter-argumentation of Group A against what was raised by B.
2 min	Counter-argumentation of Group B against what was raised by A
2-3 min	1 question from the teacher/moderator
2-3 min	1 question from the jury
2 min	Closure of position of Group A
2 min	Closure of position of Group B
2 min	The public, the teacher and the discussion groups fill out the assessment rubric.
5-7 min	Final comments from the teacher and student participation.



Subject: Clinical Refraction

Career: Medical Technology

Institution: University of Concepción

Students read this case:

65-year-old patient from Florida, with a basic solidarity pension, in a situation of social risk, attends the UAPO where you work.

She consults for poor vision pl and pc, also accusing external tears and slight photophobia. She earnestly requests glasses to solve her problem, since she attends a mother's center every week where she makes crafts that help increase her income.

In the anamnesis, she reports decompensated DM, not controlling her blood glucose levels and generally maintaining levels > 250 mg / dl. In her medical history there is a "diabetic foot" with amputation of a toe, which is reflected in her slow walking and for which she attends accompanied by her.

Background

VOD : sc 5/50 cae 5/30p

TN OD : 18 mmHg

VOI : sc 4/50 cae 5/50?

OI : 19 mmHg

FdeO **OD** → Suggestive alterations to RD

OI → RD mild

BMC : Crystal opacities OI>OD

They Receive this Instructions

2 groups of 4 students will be formed who will be chosen at random..

- **Group 1: Will defend the PRESCRIPTION lenses.**
- **Group 2: Will defend the NON PRESCRIPTION of lenses.**

The groups will have **5 minutes** to present their arguments.

Each argument must be presented **by a student.**

They **will have 1 min.** to analyze the intervention carried out.

Each previously exposed argument must be countered by the **opposing group in 2 min.**

A student, at the choice of her group, must justify and persuade the jury why her **position is the most appropriate in 2 min.**

One student from each group must answer a question from the **jury in a maximum of 3 min.**

They **have 2 weeks** to prepare.



Career : LAW

Institution : Universidad del Desarrollo

PBT: Debate in Criminal Law II

Pedro enters a house from which he steals various species, for which he breaks a window. The house is located on the beach and serves as a second home for his owner, who comes to it for two weeks during the summer and sporadically on some weekends to rest with his family.

Pedro is being charged for the crime of robbery, and there is a discussion by the lawyers regarding his legal evaluation in relation to the type of home.

2 debating groups are formed:

Group 1: Argues that the summer house should be treated as a place intended for the room

Group 2: Holds the position that the summer house should be treated as an uninhabited place.

Instructions

- Two groups will defend opposing positions of legal interpretation.
- They must prepare in two weeks all the arguments, doctrine and jurisprudence that support their position.
- At the time of the debate, each group will have 5 minutes to present their arguments. These arguments will be presented by two of the group members.
- Next, each group must take charge of each argument raised to the contrary in 3 minutes, this presentation will be made by a member of the group different from the two who initially presented.
- Subsequently, a third group of 4 students will act as jury and evaluators who will formulate a previously prepared question to each group. This will be answered by the fourth member of the discussion group who has not yet spoken in 3 minutes.
- Cases will be delivered two weeks in advance.

Second Dimension: Cognitive Challenge

- ✓ The evaluation 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 when 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, 2015).

Learning Outcomes

Action verb	Object or content	Context
a VERB (in infinitive and of action)	OBJECT OR CONTENTE	CONTEXT
Deduct	Learning Theory	Pedagogical Practice

Upon completion of this course, students will be able to:
"Deduce the theory of learning that is at the base of a particular pedagogical practice."

**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.

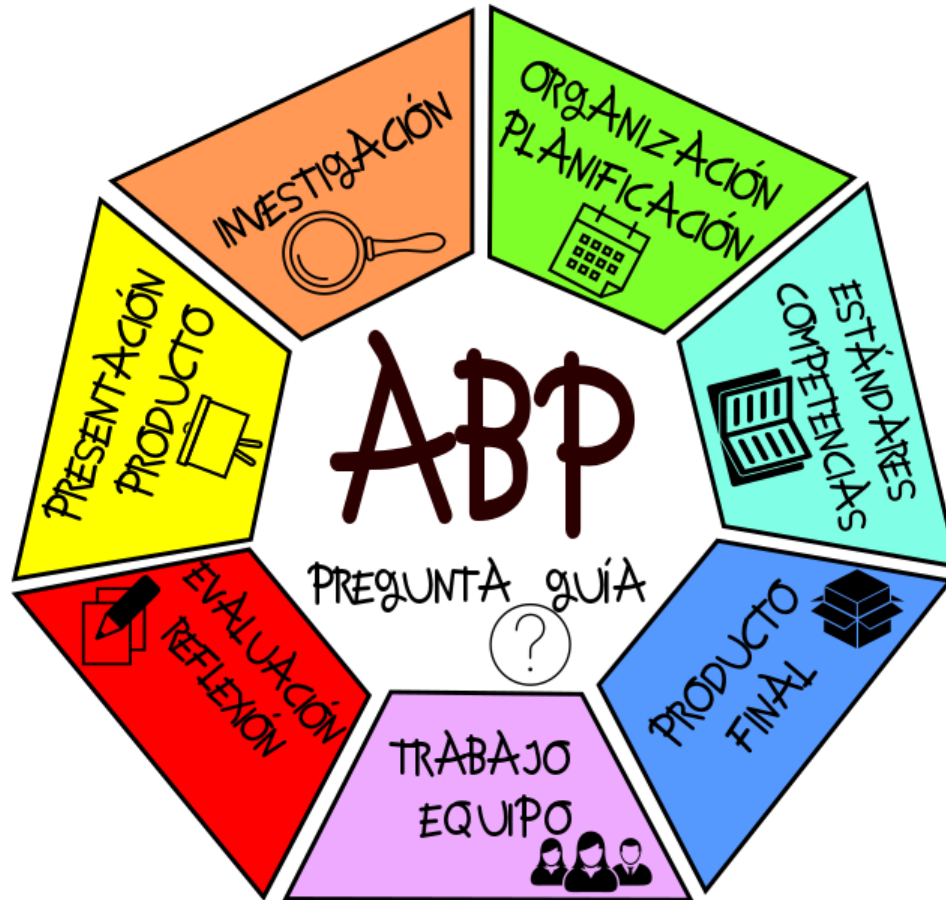
**Cognitive skills to "handle"
information
Level 2**

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



**WHAT DO YOU
LEARN FOR?**

Problem Based Learning(PBL)





Subject : Biochemistry

Carrier : Bioengineering

Institution : Universidad de Concepción

Miners resisted with bites of tuna and a glass of milk every two days.

In this way they managed to survive without assistance for 18 days.

The 33 miners trapped 18 days ago inside a mine in northern Chile survived with "two tablespoons of tuna and half a glass of milk every 48 hours," according to the senator for the Atacama region, where the deposit is located.

"I had the opportunity to see the reception of the second 'dove' - capsule that is sent to the bottom of the mine through drilling - with the medical records of each one. (...) It was exciting to see how a great roll arrived sent by each of them," said Isabel Allende.

The medical teams contacted the miners trapped at a depth of 700 meters on Monday, and were able to verify that they are in good health, as confirmed by Dr. Paula Newmann, in charge of the rescue's medical care. The miners received on Monday a 5% glucose solution and a tablet of omeprazole, a medicine to line the stomach to avoid possible stress ulcers due to the lack of food all these days. For now, they should wait at least one more day before receiving solid foods.

Activity Description

Description:

Session 1: Identification of the problem and assignment of tasks.

Session 2: Report findings, identification of new questions and assignment of tasks.

Session 3: Problem solving.

Session 4: Presentation of results to the course and evaluation.

It is considered 4 hours per week of those allocated to the course for independent study.

Characteristics:

Groups of 6-8 members, compulsory attendance.

Define a leader, a moderator and a secretary, roles that must be reassigned at the beginning of each session.

A tutor will accompany them in the discussion in each session.

When presenting, not limited to the conclusion, but rather focused on the process and the rationale behind the conclusions, explaining the metabolic pathways involved in the problem.

Tutor Labour

Theme: Relationship between nutrition and health, starved metabolism

Question: How does the body nourish itself and survive for long periods without food? Energy sources in hypoglycemia and prolonged fasting

Macromolecule degradation
Synthesis of ketone bodies
Food and health

Students are expected to compare energy sources in hypoglycemia and prolonged fasting (starvation) and identify amino acid breakdown as the main difference.

They should describe the starved metabolism, indicating that the brain and heart are nourished by ketone bodies from fats and proteins, so that an immediate feeding of large amounts of carbohydrates requires a lot of energy due to inactivation / activation of metabolic pathways, which can be fatal, so feeding should be a gradual process. They are expected to discuss the possible consequences of high protein degradation.

Feedback

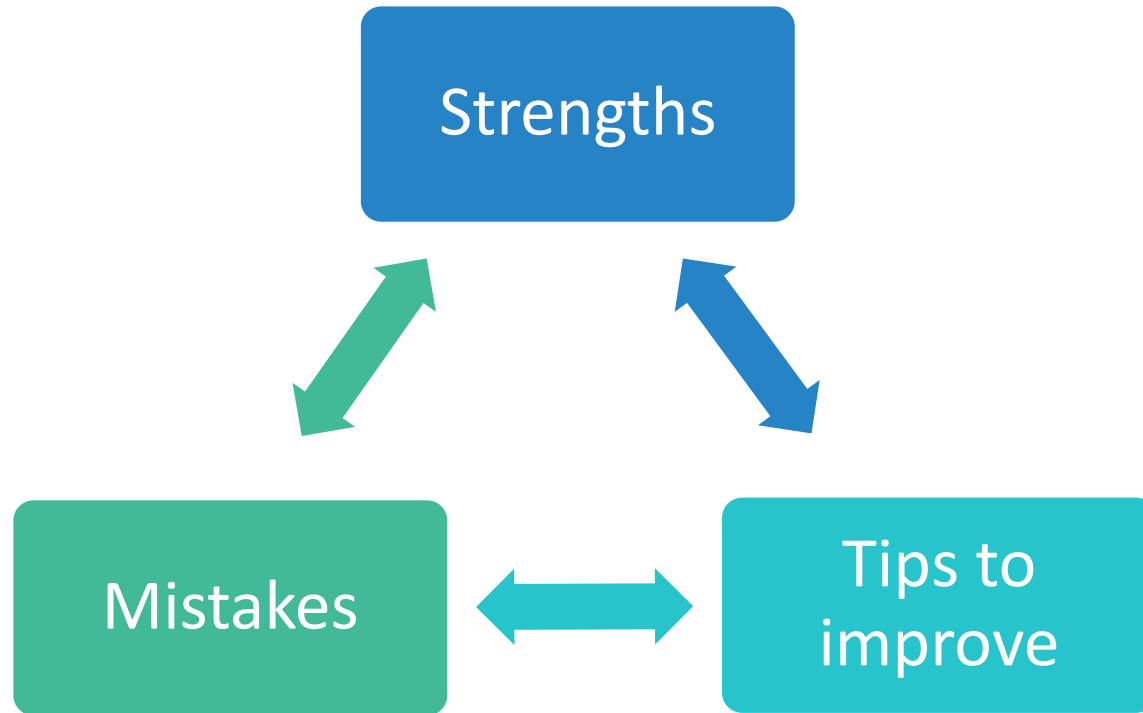


Third Dimension: Feedback

- ✓ Useful information about student learning and performance.
- ✓ Dialogue between the teacher and the students where it is sought to understand what the teacher expects the students to achieve and the teacher seeks
- ✓ It is carried out at different times (before, during and after) of the evaluation process, achieving positive effects on the students' learning process
- ✓ Feedback should allow students to correct and improve their performance (Panadero, Brown & Strijbos, 2016).



Three pillars of a feedback process



Types of Feedback



Types of Feedback

A.- Corrective feedback: a) positive or b) negative

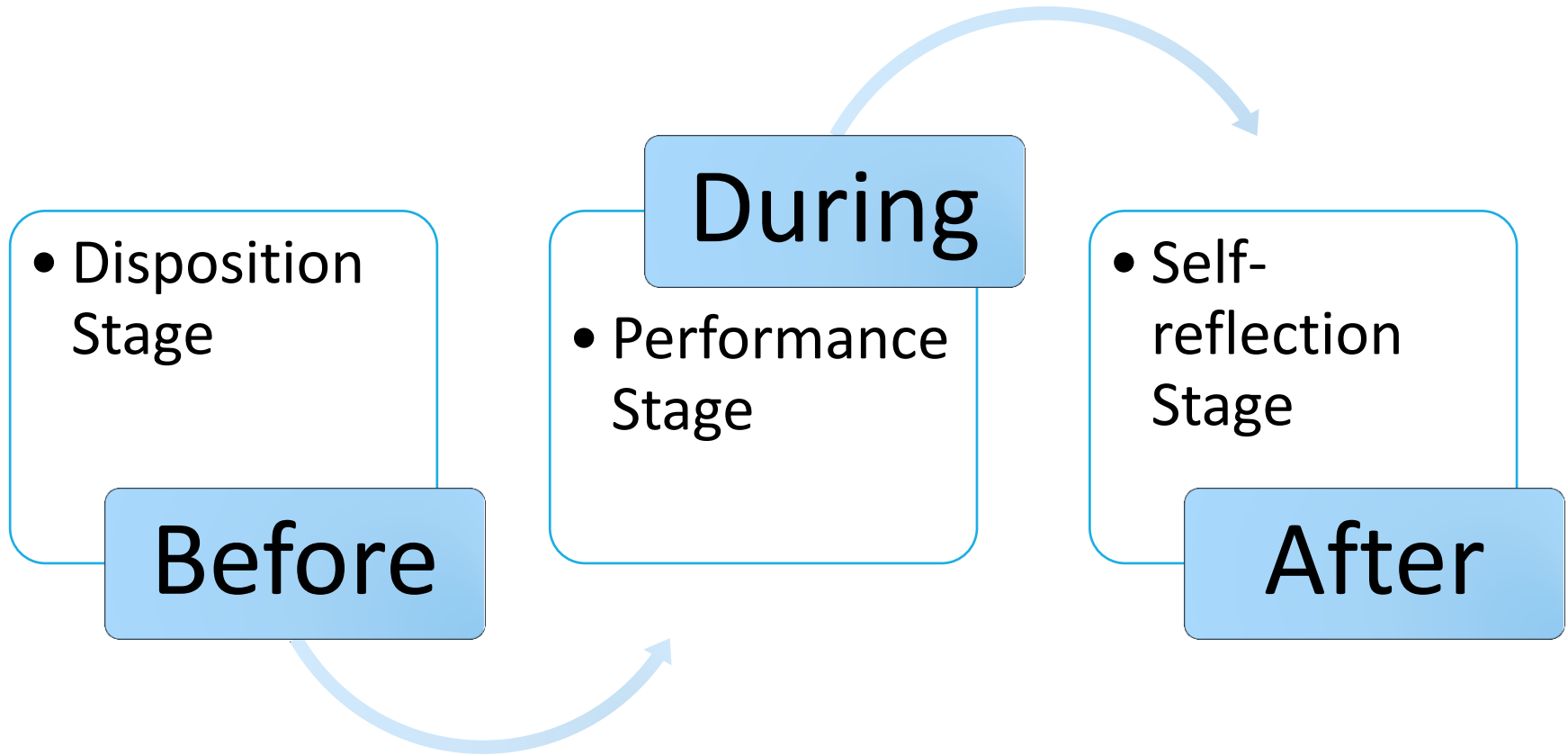
B.- Retroalimentación descriptiva orientada a la mejora:
a) final o b) procesual

C.- Dialogic Feedback: a) Focused on the construction of Learning or b) Focused on the development of Self-regulation capacity.

Feedback Moments



In Which moment delivery Feedback?





Subject : Quantitative Research

Career : Psychology

Institution : Universidad del Desarrollo

Based in Project Learning



Learning Based in Projects

- ✓ It is a teaching and assessment strategy in which students, as a team, design a project to satisfy a need, designed a product or a service.
- ✓ The project can include the design stage as well as the specific product or service.
- ✓ Students discuss ideas, make predictions, design experiments, collect and analyze data, draw conclusions, and communicate results.

Context

The assessment of school climate involves the relationship with the teacher-student relationship within the classroom. The literature suggests that the bond between the student and her teacher becomes a second opportunity to establish extra-parental attachment and trust relationships for students. A positive relationship between teachers and students influences: a) the improvement of students' academic results (especially in language and mathematics), b) the reduction of behavioral disorders, c) an increase in social and emotional competences, d) greater commitment and motivation towards learning, and e) improvement in class attendance.

In 2015, the Ministry of Education in Chile wishes to commission an investigation to deepen this variable, requesting a diagnostic study and the evaluation of a pilot intervention in a sample of 6 public schools in Region V.

Project Steps

1. Proposal of the diagnosis:

- Determination of type of diagnosis
- Selection of instruments.
- Selection of the sampling procedure and participants.
- Proposal of instrument application protocol, considering ethical aspects.
- Data analysis plan- Temporary and budgetary planning.

Project Steps

- 2.- Proposal for assessing the impact of the pilot intervention.
- Determination of the type of effectiveness or impact assessment
 - Selection of instruments.
 - Selection of the sampling procedure and participants.
 - Proposal of instrument application protocol, considering ethical aspects.
 - Data analysis plan- Temporary and budgetary planning.

How to Decide?





- 1.- Learning result that you want to achieve.
- 2.- Content to assess
- 3.- Time available
- 4.- Different TBDs can be combined
- 5.- TBD can be addressed individually or in a group
- 6.- Formative evaluation of the process and permanent feedback.



Universidad del Desarrollo
Facultad de Psicología
Centro de Investigación y Mejoramiento de la Educación

<http://psicologia.udd.cl/cime/>

<http://evaluacionautentica.udd.cl/>

