

How to meet the needs of HIA students: Cooperative Learning & Differentiated Teaching

PhD. Angeles Bueno Villaverde

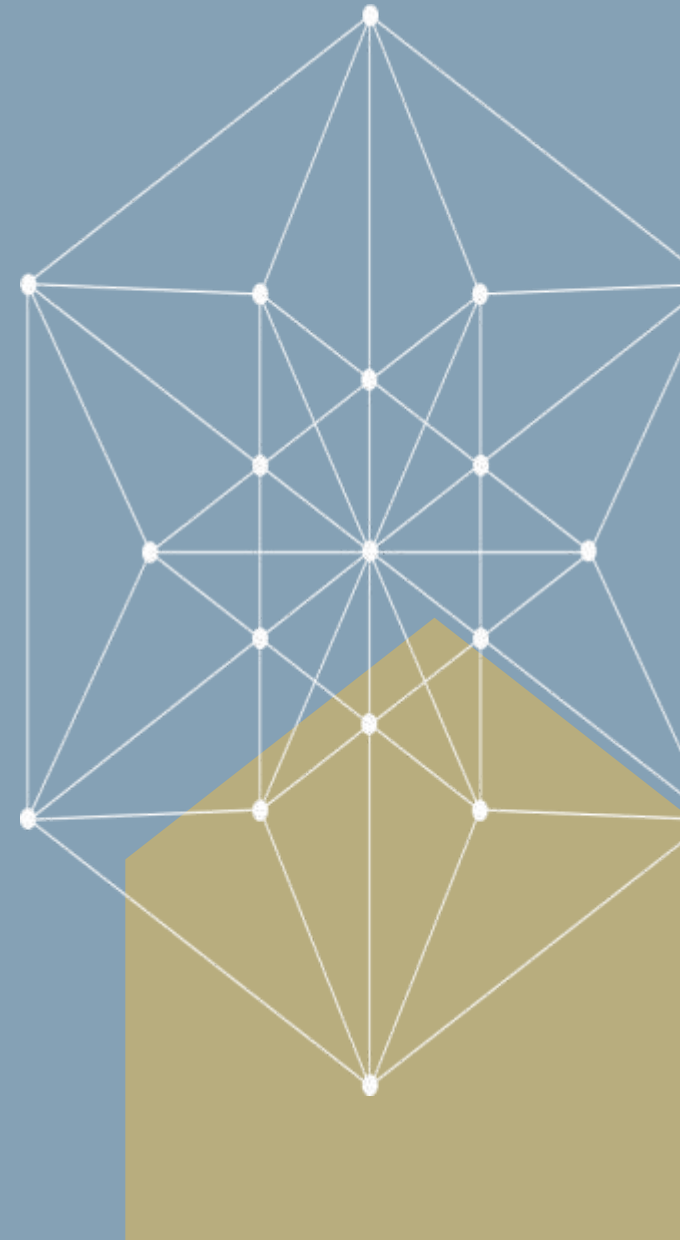




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Processing of information



Sequence to implement the learning network



How do we evaluate and how do they evaluate themselves?



Guidelines for School program for HIA...



Inclusive
Education



Cooperative
Learning



Diferentiated
Teaching



REFLEXIONEMOS...

COOPERATIVE TECHNIQUE: What I know
and what we know

What do we know about Cooperative
Learning?

What things have we applied in our
classrooms?



2. Lo que sé y lo que sabemos

Autor/es	Laboratorio de Innovación Educativa. Colegio Ártica. Cooperativa de Enseñanza José Ramón Otero.	Agrupamiento	Parejas
Objetivos	<ul style="list-style-type: none">• Activar conocimientos previos.• Orientar hacia los contenidos.• Desarrollar la creatividad.		
Desarrollo	Los pasos a seguir son:		
	1	El docente anuncia el tema que se va a tratar durante la sesión y solicita a los alumnos que escriban unas cuantas líneas sobre lo que les sugiere. Para ello, entrega una ficha de trabajo a cada alumno. La ficha consta de dos apartados: individual («lo que sé...») y cooperativo («lo que sabemos...»).	
	2	Los alumnos, de forma individual, escriben en el primer apartado lo que saben sobre el tema.	
	3	Una vez recogidas las ideas de ambos, los alumnos forman parejas con el compañero que tienen más cerca y construyen un texto que recoja las aportaciones de ambos. Ambos escriben el texto en el segundo apartado y firman ambas fichas. Entregan una al profesor y se quedan con la otra para la puesta en común.	
	4	Se realiza una puesta en común en gran grupo. Al finalizar, entregan la segunda ficha.	
Consejos	<ul style="list-style-type: none">• Establecer y controlar el tiempo de cada una de las fases.• Valorar la generación de respuestas por encima incluso de la corrección de las mismas.• Utilizar las aportaciones de los alumnos a la hora de desarrollar el tema.		
A.A.C.	<ul style="list-style-type: none">• Plantearle formas alternativas de presentar las ideas. Por ejemplo, un mapa conceptual.		

BASIC PROCEDURES

PERFORMANCE STANDARDS
WE SET UP THE "RULES OF THE GAME"

BEFORE STARTING TO WORK AS A TEAM ...

... establish a few **basic and specific rules**, which should be:

- Few
- Understandable
- Enunciated in positive (describing the expected behavior) and in the first person plural (us).
- Affordable

Señal de silencio



What is cooperative learning?

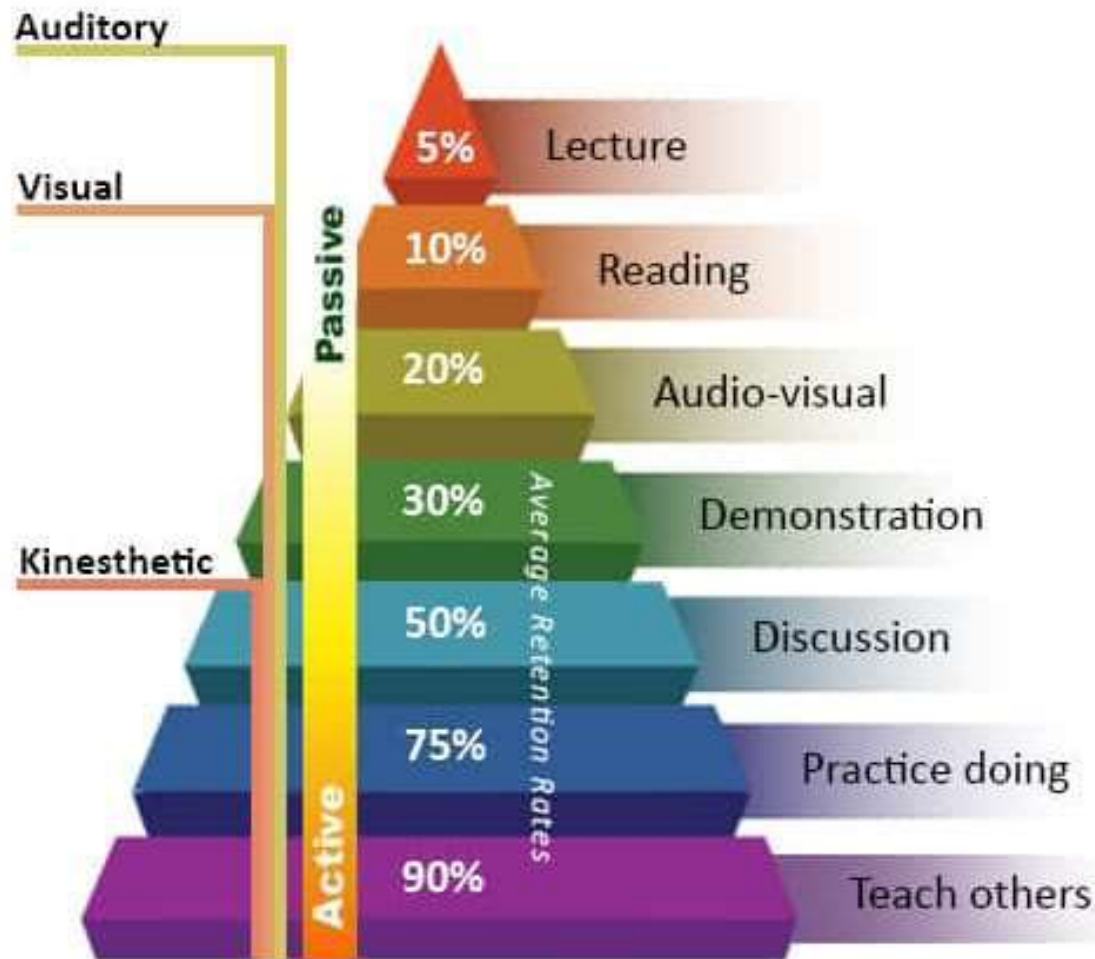
- It is NOT something new that has arisen now, nor a fashion.
- It is NOT a magic recipe to teach to solve all problems.
- It is NOT simply working in a group.
- It is a way to organize learning (students, activities, classroom, evaluation, etc.) to address the diversity that exists in the classroom.

Advantages of Cooperative Learning

It develops:

- Social Skills
- Peaceful resolution of conflicts
- Flexible and dynamic
- Fosters autonomy and self-regulation
- Increase information retention

Advantages of Cooperative Learning. Information retention percentage



Adapted from the NTL Institute of Applied Behavioral Science Learning Pyramid

Let's reflect...

COOPERATIVE TECHNIQUE: Puzzle I

**What are the characteristics of
Cooperative Learning?**

3. Rompecabezas II

Autor/es	Adaptación de Robert Slavin a partir de Aronson	Agrupamiento	Pequeño grupo
Objetivos	<ul style="list-style-type: none">• Presentar contenidos.• Desarrollar trabajos de investigación.• Fomentar el trabajo autónomo y la autorregulación.• Promover las exposiciones orales.• Buscar, organizar y elaborar la información.• Promover el apoyo y la ayuda mutua.		
Desarrollo	Los pasos a seguir son:		
1	Los alumnos se agrupan en equipos heterogéneos en función de sexo, rendimiento, capacidades, etnia, etc.		
2	A cada equipo se le asigna el mismo tema o conjunto de contenidos.		
3	El tema se divide en sus diferentes partes o aspectos. Estas partes se reparten al azar entre los integrantes de cada equipo, de modo que cada uno de ellos se convierte en «experto» en uno de dichos apartados, haciéndose responsable del desarrollo del mismo.		
4	Tras haber trabajado en su parte del tema, los expertos de todos los equipos en un aspecto concreto se reúnen para contrastar y poner en común su parte del tema.		
5	Los expertos vuelven a sus grupos y exponen a sus compañeros los contenidos que han trabajado.		
6	Cuando todos dominan el tema, el profesor realiza una prueba individual, que se evaluará igual que en el método TELI: comparando los resultados de la prueba con el puntaje base y extrayendo los puntos de superación individual.		
7	Se suman los puntos por superación individual de todos los integrantes del grupo y se promedian, dando como resultado la calificación grupal.		
8	Se reparten las recompensas de grupo.		

Characteristics of Cooperative Learning



Positive interdependence

- Positive interdependence is the basic element of cooperative situations, since it establishes the difference between group work and cooperative group work.

Positive interdependence



Positive interdependence

“all or none”

- The proposal should send a very clear message to the students:
 - you will only succeed if your companions succeed too.
- The students face a double responsibility:
 - Learn the proposed contents.
 - Make sure that all members of their group also learn.

Positive interdependence



"Face-to-face" interaction

- When students work together within a cooperative relationship framework, they promote and facilitate the progress of others through:
 - reciprocal help, mutual support and encouragement of the learning efforts of all the members of the group;
 - the exchange of opinions, resources and strategies;
 - the observations they make to each other to improve performance;
 - the effort that is required to achieve the objective

Individual Accountability

- The "stowaway effect" or piggybacking: a partner takes advantage of the work of others.
 - It usually occurs when the cooperative learning situation is not well designed and does not foresee measures to avoid it.
 - Measurements:
 - Small groups
 - Evaluate individually and the group
 - Randomly choose a student to represent the group
 - Individual and group self-evaluation
- Purpose of cooperative learning

"It is not learning to do things together, but learning together to do things alone"

Let's reflect...

COOPERATIVE TECHNIQUE: Puzzle

What aspects should we take into account to form groups?

What types of groupings can be made?

What should be the size of the groups?

Who distributes the groups?

How long should the same grouping last?

Heterogeneous groups

Factors

Types and
duration

Personal

Social

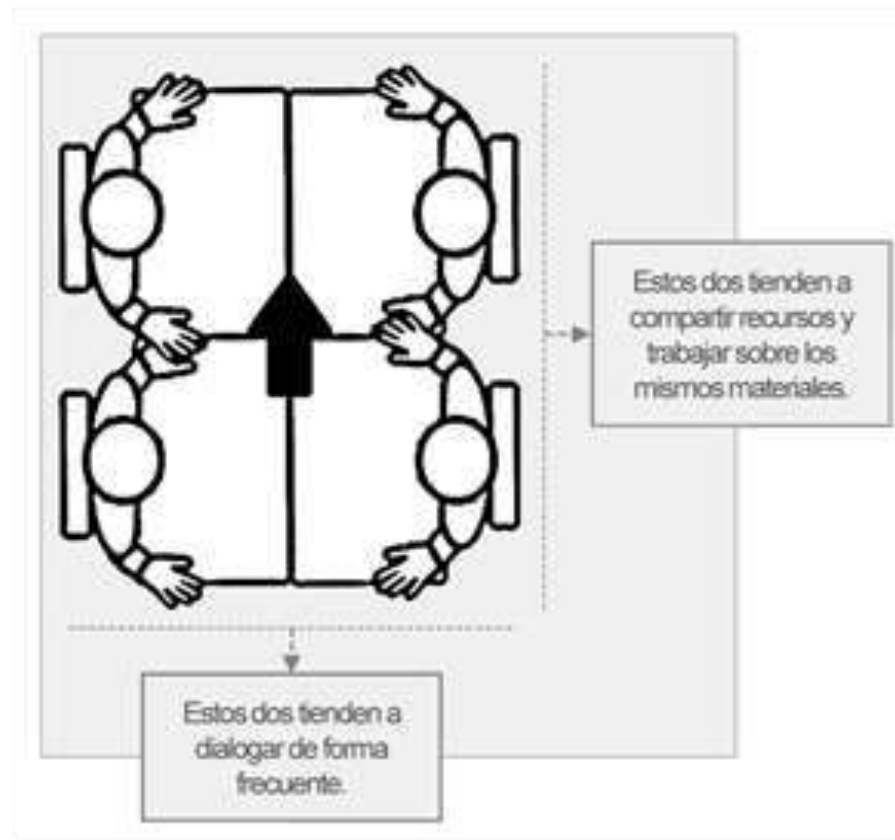
performance
factors

Base team

Sporadic
groups

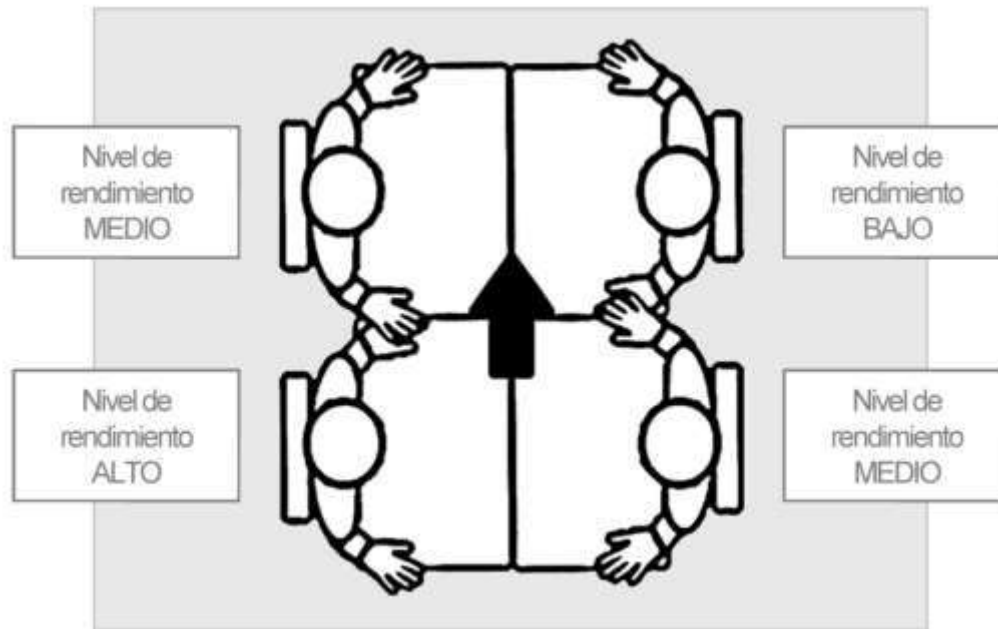
Grouping

- Grouping size: Peers and groups of 4 members

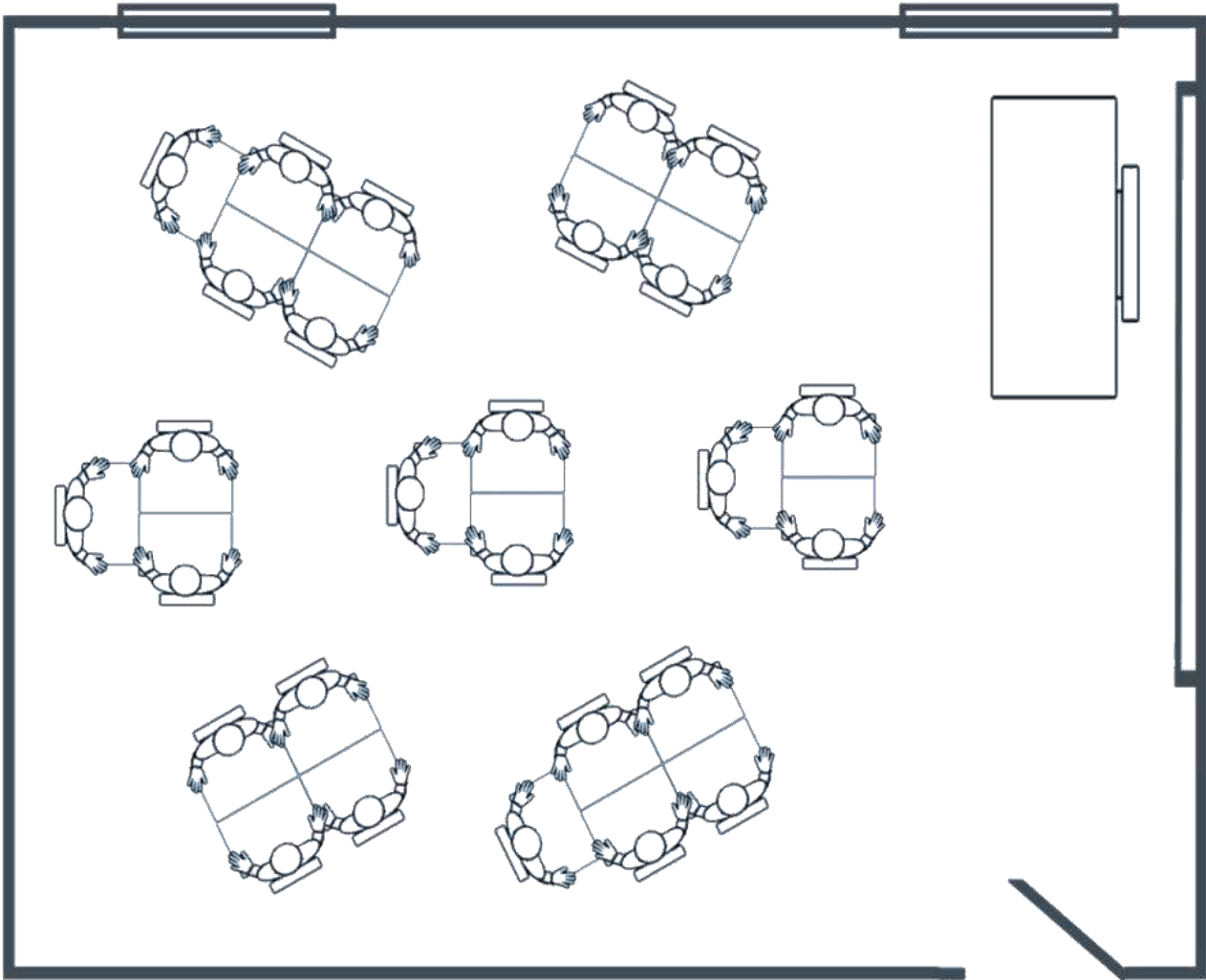


Gouping

- Disposition of the students in the groups



A cooperative classroom



Moments

1. Previous knowledge activation and task orientation.

10 minutes

2. Presentation of the contents.

Máx. 20 minutes

3. Information Processing.

20 minutes.

4. Recapitulation.

10 minutes.

Techniques

1-2-4

Rotating sheet

Mural phrase

Reading in pairs.

Mini puzzle.

Stop three minutes.

Pencils in the center.

Thinking twins.

Cooperative peers taking notes.

Inventory what was learned

Empty conceptual map.

Videos

- **Cooperative structures**
- https://www.youtube.com/watch?v=S0s_qxJDuas
- <https://www.youtube.com/watch?v=iliENACsEwo>

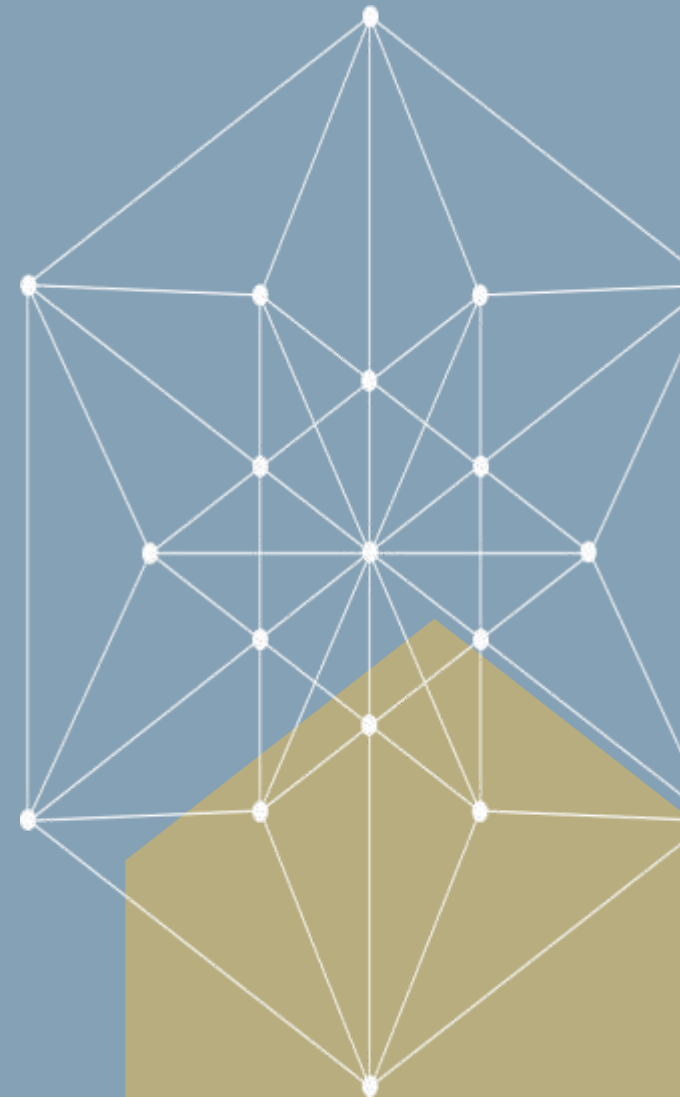


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Differentiated Teaching

PhD. Angeles Bueno Villaverde

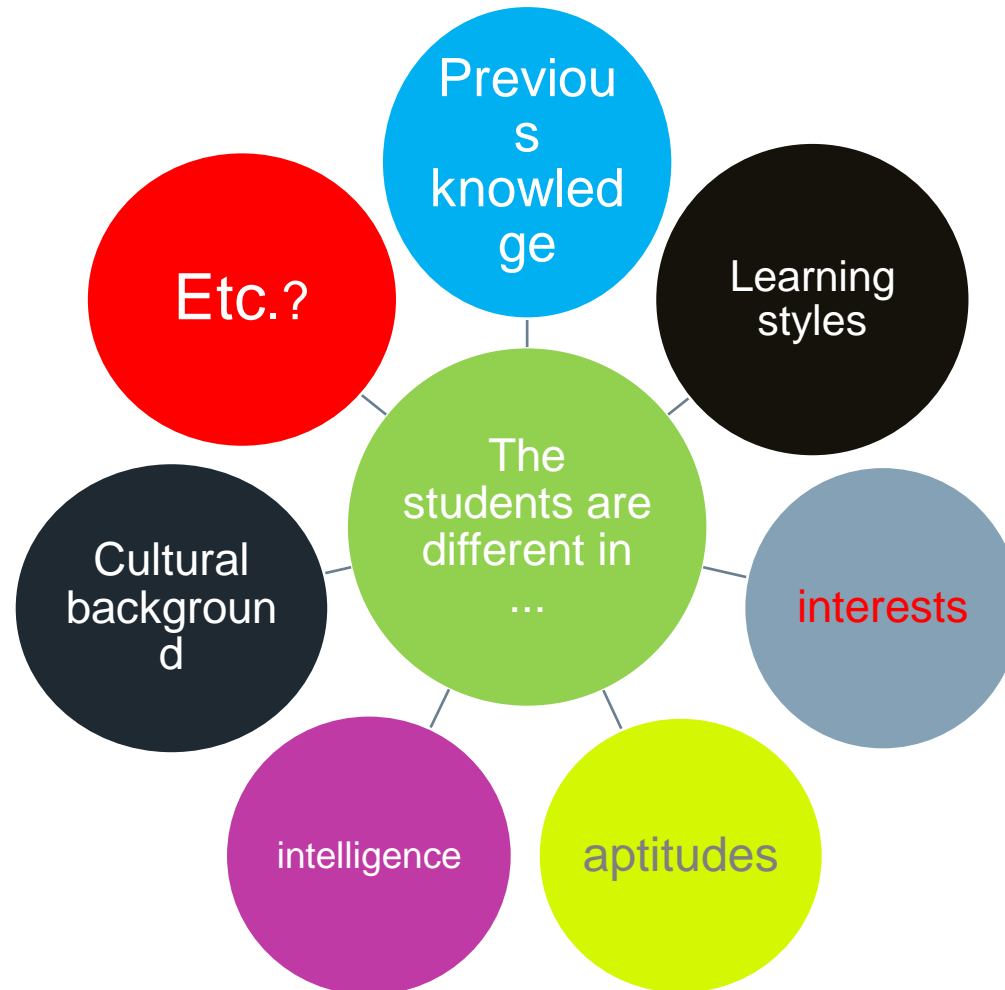


What do our students know before starting the Didactic Unit?

- ▶ The following list of ideas can be useful for the construction of previous evaluations of the didactic unit:
 - conceptual maps
 - flowcharts
 - Venn diagrams
 - draw a diagram, image
 - written answer
 - join images
 - label a diagram
 - Multiple choice answers test
 - Essay
 - Short answers
 - Problem solving
 - answers based on hypothesis
 - Cloze texts
 - Make a model
 - Practical activities
 - Questions based on Bloom's taxonomy (one from each level)

- A result equal to or greater than 85% shows a level of competence that requires the realization of curricular extensions.

Educational Inclusion



What is curriculum differentiation?



**Differentiated
Teaching**



**To GIVE EVERYONE
WHAT THEY NEED**

**A DIFFERENTIATED CLASSROOM
IS THAT IN WHICH ...**

"... the teacher plans proactively and carries out various approaches to the **content, process and product** of teaching, anticipating and responding to differences in **aptitude, interest and learning needs** of students."

CAROL ANN TOMLINSON (2005)

Let's reflect on...

Basic reflections before starting a new Didactic unit:

Do I know (as a teacher) the students' special abilities?

What are their interests?

Do I know the preferred learning style of each of our students?

How do I find out?

Let's reflect on...

1. Parejas de discusión enfocada introductoria

1. Parejas de discusión enfocada introductoria			
Autor/es	Adaptado de David y Roger Johnson	Agrupamiento	Parejas
Objetivos	<ul style="list-style-type: none">• Activar conocimientos previos.• Generar diversas respuestas.• Fomentar el diálogo, la controversia y el consenso.		
Desarrollo	Los pasos a seguir son:		
	1	El profesor plantea una serie de preguntas que se responderán a lo largo de la sesión.	
	2	Los alumnos se agrupan en parejas.	
	3	Las parejas discuten sobre las preguntas y buscan una solución.	
	4	El profesor pide al azar algunas de las respuestas de las parejas.	
Consejos	<ul style="list-style-type: none">• Las preguntas podrían anotarse en la pizarra, de cara a que los alumnos las tengan siempre presentes.• Para promover la implicación de todos los alumnos en la actividad, se puede pedir a las parejas que escriban sus conclusiones en un papel y las entreguen al profesor.		
A.A.C.	<ul style="list-style-type: none">• Asegurar que, en ocasiones, tenga la oportunidad de desarrollar esta técnica con compañeros de nivel alto.• Plantear preguntas diferenciadas en función del nivel.		

¿Cómo diferencio las actividades?

APTITUDE

Adequate degree of complexity according to the level of understanding and skillfulness

INTEREST

Choose a topic (increases motivation)

- Action guides. - Help them discover their interests - Sporadic groupings ...

LEARNING PROFILE

Recognition of diversity.

Offer different ways

Theory Multiple Intelligences.

Carol Ann Tomlinson



Differentiated Teaching

	Aptitude	Interets	Learning profile
Contents			
Process			
Product			

Bloom's Taxonomy

HIGHER
order thinking



create

Produce new or original work

Design, assemble, construct, conjecture, develop, formulate, author, investigate

evaluate

Justify a stand or decision

appraise, argue, defend, judge, select, support, value, critique, weigh

analyze

Draw connections among ideas

differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test

apply

Use information in new situations

execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch

understand

Explain ideas or concepts

classify, describe, discuss, explain, identify, locate, recognize, report, select, translate

remember

Recall facts and basic concepts

define, duplicate, list, memorize, repeat, state

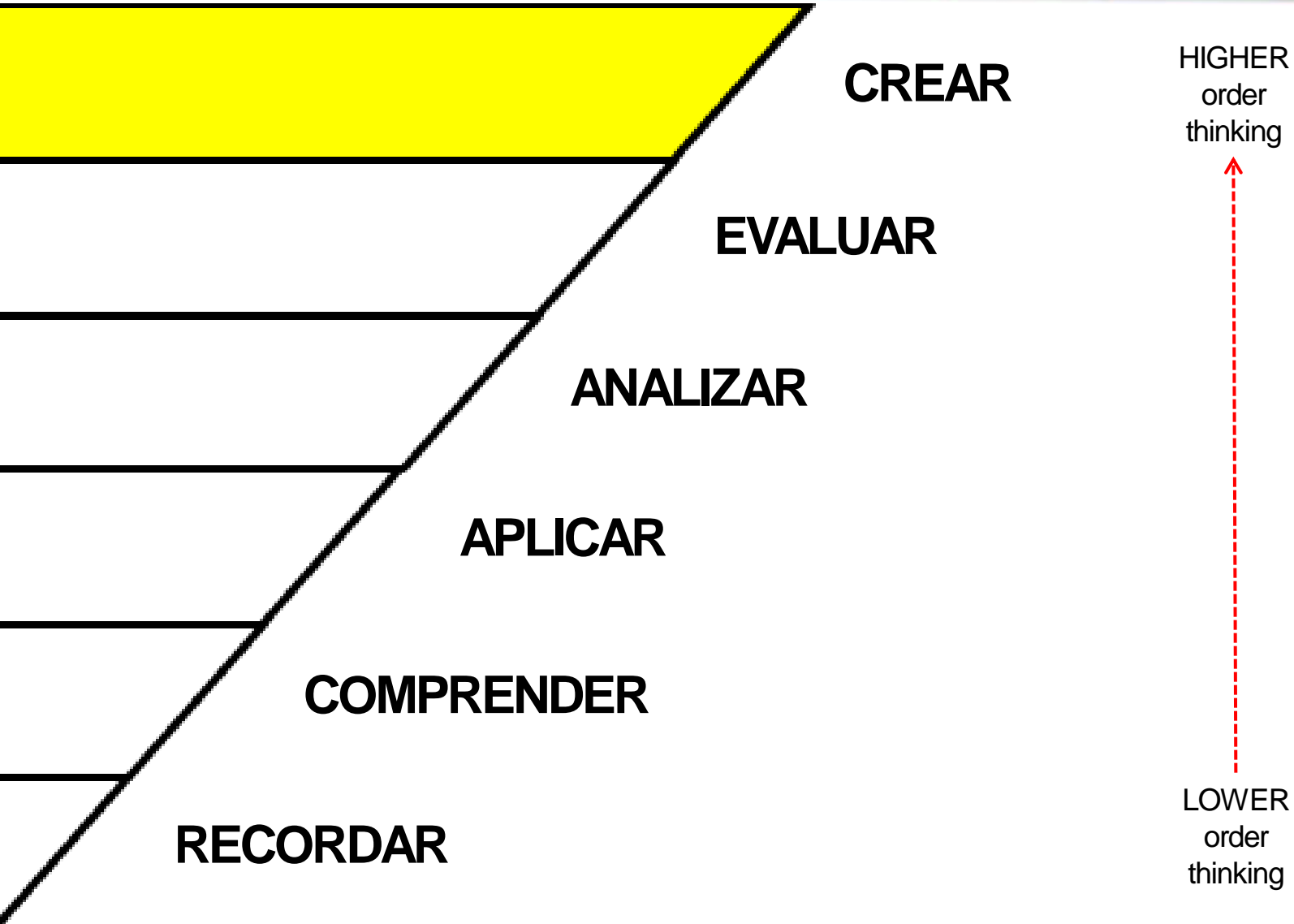
LOWER
order thinking



Vanderbilt University Center for Teaching

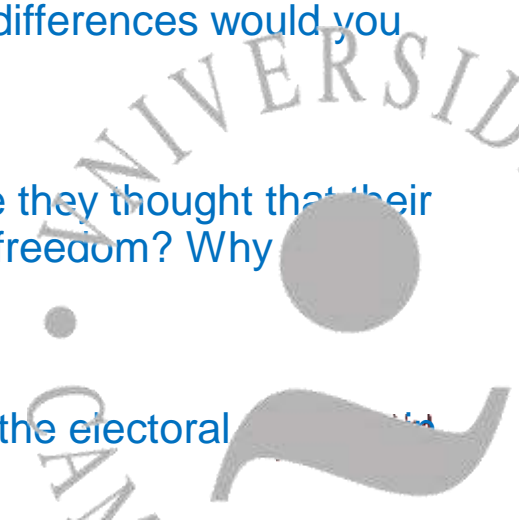
Adapted taxonomy for HIA students

(Davis y Rimm, 2004)



Bloom's Model

1. Imagine that you have been chosen as the president of Spain. Write a poem or song describing how you will be a positive influence for Spain.
2. Make a list of the important information you know about:
democracy anarchy monarchy dictatorship
government elections freedom Greece Classical
3. To what extent are democracy and monarchy similar? What is the difference between them?
4. Imagine that you traveled from Classical Greece to Spain. What differences would you find between life in democratic Spain and Classical Greece?
5. Many people emigrated to the United States or Australia because they thought that their democracy would bring them freedom. Does democracy ensure freedom? Why not?
6. Make a flow diagram of the important steps that you know about the electoral Spain.



Bloom's Model

1. Imagine that you have been chosen as the president of Spain. Write a poem or song describing how you will be a positive influence for Spain.

CREATE

2. Make a list of the important information you know about:
democracy anarchy monarchy dictatorship
government elections freedom Greece Classical

REMEMBER

3. To what extent are democracy and monarchy similar? What is the difference between them?

ANALYZE

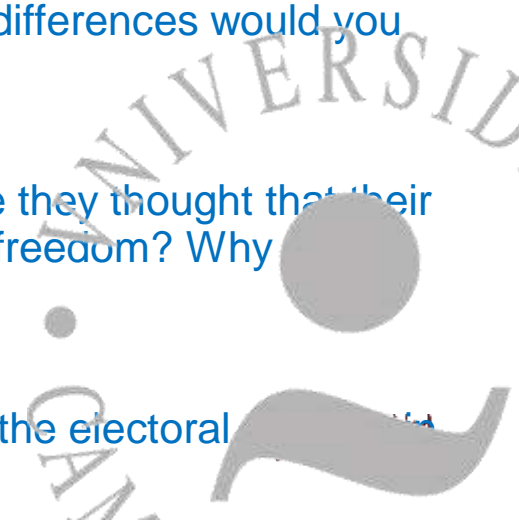
4. Imagine that you traveled from Classical Greece to Spain. What differences would you find between life in democratic Spain and Classical Greece?

APPLY

5. Many people emigrated to the United States or Australia because they thought that their democracy would bring them freedom. Does democracy ensure freedom? Why not?

EVALUATE

6. Make a flow diagram of the important steps that you know about the electoral Spain.



Bloom's strategy and definition	Examples of question stems
<p>Knowledge (Remember): Mastery of facts, terminologies, conventions, trends, classifications, categories, methodologies, principles, generalisations, theories and structures. Retrieval of knowledge from long-term memory.</p>	<p>What did the _____ say about _____? Who invented _____? When did _____ discover _____? Which _____ decided _____?</p>
<p>Comprehension (Understand): Translation, interpretation and extrapolation of knowledge. Construction of meaning from oral, written and graphical communication.</p>	<p>Who do you think _____? What was the main idea _____? Can you briefly outline _____? What does _____ show us?</p>
<p>Application (Apply): Application of previously encountered rules or concepts to new situations and the transfer of understanding to other concrete, real-life and hypothetical situations.</p>	<p>How could you illustrate _____? What questions would you ask _____? How could you model _____? Which factors would you change?</p>
<p>Analysis (Analyse): Deconstruction of knowledge to be able to infer assumptions and points of view; distinguish fact from opinion and relative importance of details; identify underlying motives, frameworks of ideas, problems, tone and mood; recognise fallacies, bias and purpose; relate cause and effect.</p>	<p>How is _____ similar to _____? What must you know for _____ to be true? What was the underlying theme of _____? How did _____ compare with _____?</p>
<p>Evaluation (Evaluate): Ability to make judgements, choices or decisions based on predetermined standards or criteria from internal and/or external evidence.</p>	<p>How effective is _____? Do you believe _____? Why or why not? What do you think about _____? Justify your position. What changes to _____ would you recommend?</p>
<p>Synthesis (Create): Creation of new and unique products by combining elements of understanding; recognition of elements in new patterns or structures. Product may result from hypothesising, designing and constructing unique communications, plans, abstract relationships.</p>	<p>What would happen if _____? Can you design a _____ to _____? How many ways can you _____? Can you see a possible solution to _____?</p>

Ecualizador de Tomlinson



Organizing a differentiated classroom according to aptitude

“Equalizing teaching”

Fundamental	Innovative
Concrete	Abstract.
Simple	Complex.
Unique facet	Multiple facets
Small advances	Big steps.
More structured	More open.
Dependence.	Independence.
Slow	Quick.

FUNDAMENTAL

INNOVADOR

INFORMACIÓN – CONCEPTOS – MATERIALES - APLICACIONES

FOR EXAMPLE

To make a classification of animals according to the skin cover.

FOR EXAMPLE

To infer how environmental changes affect the skin cover of different animals.

THE COVER OF ANIMALS SKIN

INTERESTS

Multiple Intelligences



To develop awareness about your own multiple intelligences



To guide them in their holistic learning and in the modification of skills.



Fair evaluation

Search for multiple intelligences in the classroom

1. S/he can hum the Beethoven's fifth symphony.
2. S/he can do a dance step.
3. S/he can recite four lines of a poem.
4. S/he can explain why the sky is blue.
5. S/he can tell you the dream he had yesterday.
6. S/he can draw a horse.
7. S/he can confess that you interact in a relaxed way doing this exercise.
8. S/he can mention five different kinds of trees.

Other Strategies to differentiate teaching

- A variety of strategies may be used to implement curriculum differentiation in the classrooms:
- **Pre-testing**
- **Compacting**
- **Developing tiered instruction** - the teacher develops a series of activities based on the same area of study but hierarchical in nature and complexity. Students begin activities at a level appropriate to their ability.
- **Negotiating contracts** - an agreement between the student, teacher and sometimes parent that results in the student working independently with varying levels of guidance.
- **Designing independent study or research projects** - a research project where students learn how to develop the skills for independent learning. The degree of help and structure will vary between students and depend on their ability to manage ideas, time and productivity.
- **Utilising paired and small group work** - expectations that the students work together in the collection, analysis and organisation of information but that each student prepares an individual product to demonstrate that learning has taken place.

Fair Assessment



How do we evaluate and how are they evaluated?

On the part of the teacher ...

- **Assess progress.**
- **Variable evaluation criteria, depending on the objectives that we have set for the student with AACCC.**



On the part of HIA students

- Compliance with the group and individual work plan.
Provision and quality of the help...
- Valuation of the final products.
- Teamwork. Newsletters

Rubrics

How do we assess? Authentic Assessment

Technique	Instrument
Systematic observation.	Check list. Anecdotal record. Class diaries. Photographs. Video recordings
Oral situations	Exposition, Dialogue, Debate, Rubrics
Written tests.	Diary of the student, Portfolio, samples of works, Thematic development Exam, Objective tests, Murals
Graphic tests	Personal graphics
Sociometric tests	Sociograms

Final products

Diseñar una página web.	Armar una colección.	Realizar una presentación multimedia.
Escribir un libro.	Diseñar un juego.	Escribir una carta.
Presentar pantomimas.	Organizar un espectáculo teatral.	Diseñar y crear una labor de costura.
Moderar un simposio.	Construir un planetario.	Realizar entrevistas.
Desarrollar una solución a un problema de la comunidad.	Presentar artículos a una revista o periódico.	Elaborar gráficos o diagramas para explicar ideas.
Diseñar una estructura.	Diseñar y realizar un experimento.	Recoger y analizar muestras.
Compilar y comentar una serie de recursos de internet.	Realizar un grabado o una talla de madera.	Mandar cartas de lector a una publicación.
Hacer un cómic o viñeta.	Formular y fundamentar una teoría.	Dirigir una sesión de entrenamiento.
Hacer una demostración,	Presentar un resumen de noticias.	Redactar una ley nueva.
Implementar centros de aprendizaje.	Crear recetas originales.	Preparar una coreografía.





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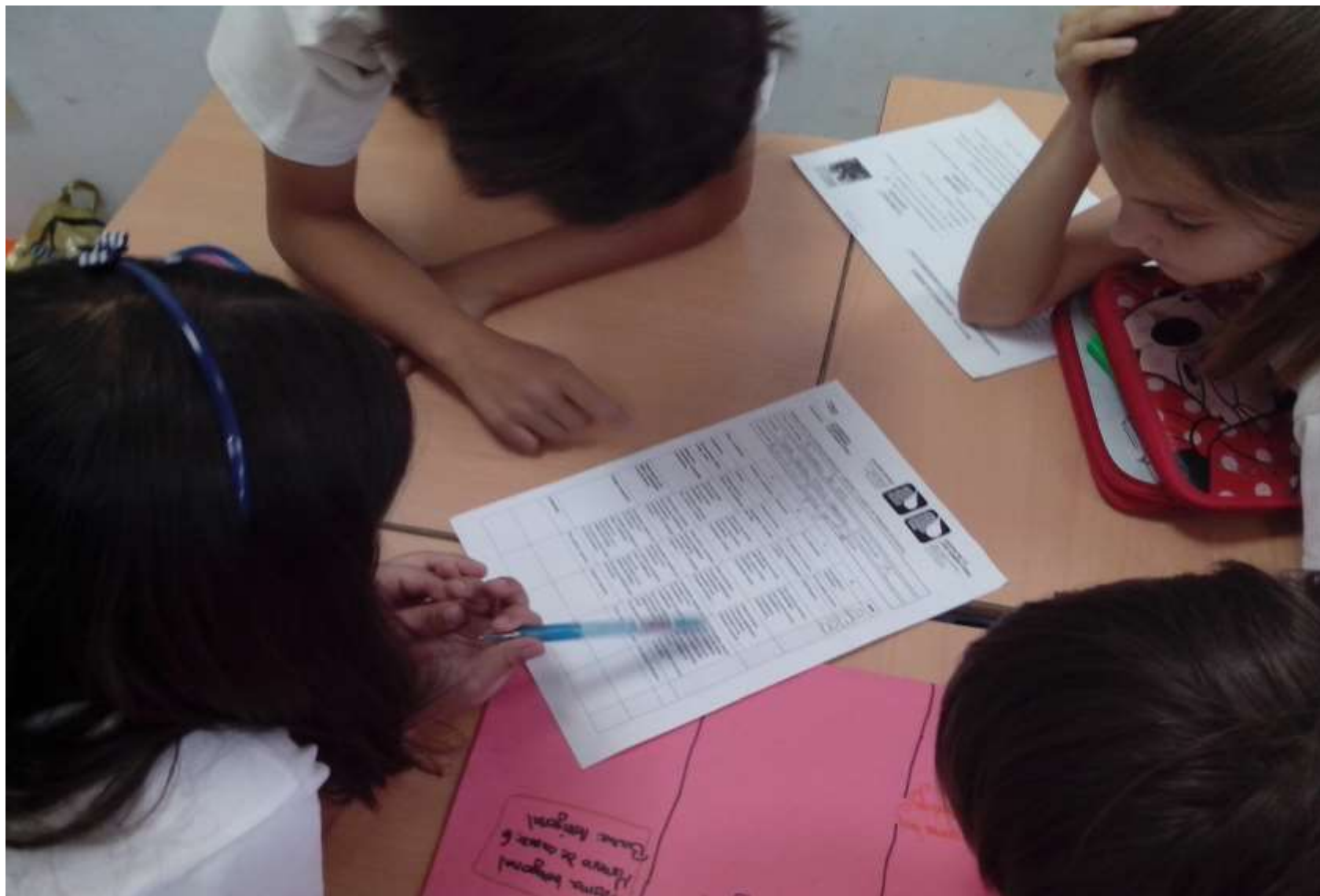
RUBRICA DE EVALUACIÓN DE MURALES - TERCERO Y CUARTO DE PRIMARIA (DOCENTE)

TÍTULO DEL MURAL

NOMBRE: Andrés Martínez Delgado EVALUADOR 5 los vientos

ASIGNATURA: Música (Carpeta guantada) FECHA: 14/7/2013

	A	B	C	D	Nota
Título y subtítulo	Perfectos y expeditos	Adecuados	Poco adecuados	incompletos e impresos	B
Contenidos	Perfecto	Adecuado al tema	Se ignora poco el tema	No se ignora el tema	B
Composición letra, orden, color...	Fácilmente mucho le lecturas. Muy estilizada	Organizada. Se puede leer bien.	Un poco desorganizadas y confusas	DM lectura	A
Redacción: Gramática, ortografía, vocabulario...	No hay errores gramaticales. No hay errores ortográficos. Vocabulario adecuado, rico, preciso y correcto.	Casi no hay errores gramaticales. Casi no hay errores ortográficos. Vocabulario correcto.	Hay algunos errores gramaticales. Hay varios errores ortográficos. Vocabulario pobre.	Hay muchos errores gramaticales. Hay muchos errores ortográficos. Vocabulario pobre.	A
Presentación oral: ideas y habilidades comunicativas	Idées claras y precisas. Muy buenas habilidades comunicativas (expresión oral, lenguaje corporal...).	Buenas ideas y conexiones. Buenas habilidades comunicativas (expresión oral, lenguaje corporal...).	Malas impresiones. Escasas habilidades comunicativas (expresión oral, lenguaje corporal...).	Mala escritura. Pocos vocabularios comunicativos. Expresión oral engorrosa (expresión...).	
	Demuestran respeto por las ideas de los demás. Los trabajos se realizan en silencio.	Demuestran respeto por las ideas de los compañeros. La discusión es constructiva y respetuosa.	Demuestran respeto por las ideas de los compañeros. La discusión es poco fluida y no se escuchan las ideas de los demás.	No demuestran respeto por las ideas de los compañeros. La discusión no es constructiva. No se escuchan las ideas de los demás.	
	Se relacionan con la realidad por lo que se relacionan con el trabajo que se realiza. Se relacionan con la vida cotidiana.	Original y atractivo.	Poco original y atractivo.	Muy original y atractivo.	



Let's reflect on...

COOPERATIVE TECHNIQUE: Hereby I resolve ...

What have we learned so far?

How can you apply what you have learned in your classes?



Let's reflect on...

1. Por este medio resuelvo...	
Autor/es	Mel Silberman
	Agrupamiento
	Parejas
Objetivos	<ul style="list-style-type: none"> • Promover la transferencia y aplicación de lo aprendido a nuevas situaciones. • Conectar el aprendizaje con la vida.
Desarrollo	Los pasos a seguir son:
	1 Formamos parejas de alumnos.
	2 Pedimos a las parejas que piensen en algo que hayan aprendido en clase y en la forma que pueden aplicarlo en el futuro.
	3 El alumno A explica a B lo que ha aprendido y cómo va a aplicarlo. B redacta un breve recordatorio con las ideas de su compañero.
	4 Se invierten los roles.
	5 Finalmente, cada alumno se lleva el recordatorio con sus ideas.
Consejos	<ul style="list-style-type: none"> • Puede realizarse una puesta en común en gran grupo. • Los alumnos pueden comprometerse a mandarle por correo a su compañero el recordatorio en el que han recogido sus ideas.
A.A.C.	<ul style="list-style-type: none"> • Ponerlo en contacto con adultos que utilizan los contenidos aprendidos para desarrollar su actividad profesional. • Utilizar estas propuestas para construir planes de trabajo personalizados para el alumno, basados en proyectos de producción, centros de interés, actividades de anclaje, etc.

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Programs and Practices for Identifying and Nurturing High Intellectual Abilities in Spain

PhD. Angeles Bueno Villaverde

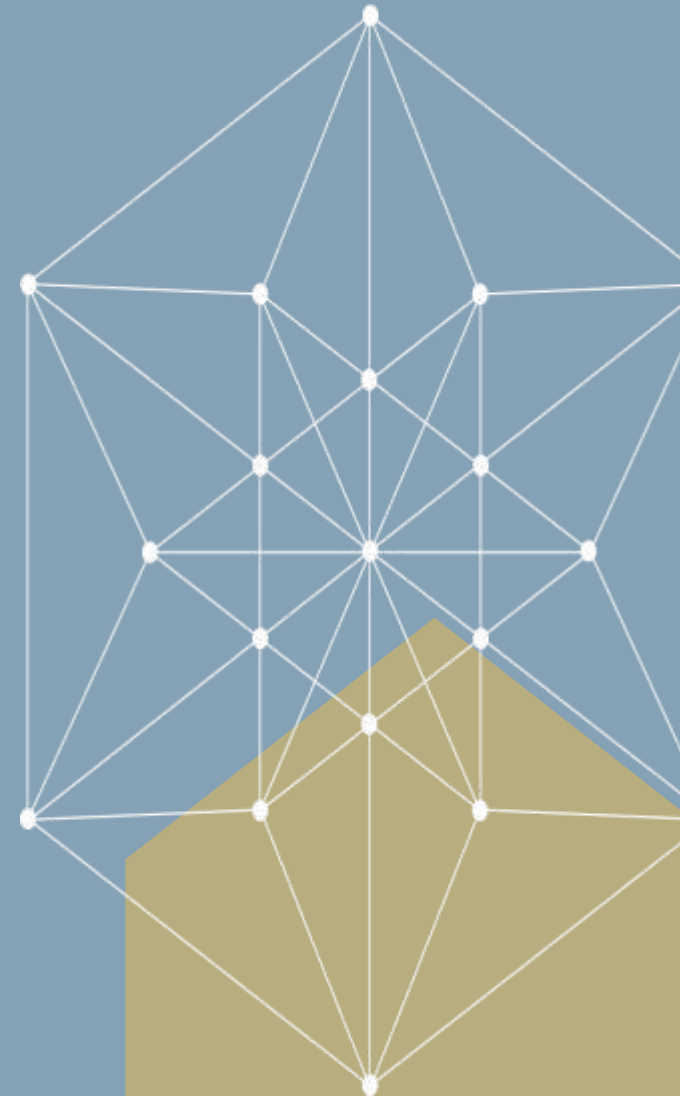




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TO REFLECT...

COOPERATIVE TECHNIQUE: What I know
and what we know

What do we know about High Ability
students?

What programs or activities have we
implemented in our classes?





Identification of HIA

The intelligence quotient still prevails in the professional and psychopedagogical orientation fields, which, despite its recognized disadvantages, is an easy and widespread indicator. Without determining the suitability of the construct and the false positives or negatives it generates, some authors propose that the intelligence quotient in Spain is simply insufficient for estimating the top 2% of the population because of the stability, validity, and reliability of intelligence measures (Sastre-Riba & Castelló, 2017)..





HIGH INTELLECTUAL ABILITIES IN SPAIN

The most widely used model of identification is the one by Castelló and Batlle (1998), who postulates the multidimensionality and different forms of HIA:

- complex (giftedness) and
- specific (the various forms of talent).

On one hand, **giftedness** is identified as a multidimensional complex profile in which any of the (representational) logical-deductive and creative intellectual abilities are located above the **75th percentile**, allowing maximum interaction between them, as well as maximum complexity in the resulting cognitive functions.

On the other hand, the different forms of **talent** represent a very high score (**90th percentile or more**) in one or several of these intellectual spheres, such as linguistic or mathematical, but not in all.





TOTAL AND PERCENTAGE OF IDENTIFIED STUDENTS WITH HIA IN SPAIN

Table 1

Total and percentage of identified students with HIA in Spain during 2014-15 school-year in the different stages.

	TOTAL	%	Second Cycle Infant Ed.	%	Primary Ed.	%	Secondary Ed.	%	Baccalaureate	%	Basic Vocational Training (FP-B)	%	Middle Vocational Training (FP-GM)	%	Higher Vocational Training (FP-GS)	%
TOTAL	19187	0,270	137	0,010	10264	0,353	7264	0,395	1456	0,228	6	0,015	20	0,006	40	0,013
ANDALUCÍA	7703	0,542	20	0,007	4405	0,759	2745	0,732	479	0,364	5	0,058	15	0,024	34	0,066
ARAGÓN	98	0,052	0	0,000	37	0,048	53	0,110	8	0,048	0	0,000	0	0,000	0	0,000
ASTURIAS (Principado)	600	0,493	6	0,026	339	0,703	200	0,634	53	0,442	0	0,000	0	0,000	2	0,028
BALEARS (Illes)	527	0,324	6	0,018	255	0,370	200	0,471	61	0,517	0	0,000	2	0,031	3	0,074
CANARIAS	1778	0,567	2	0,004	1063	0,838	578	0,653	133	0,448	1	0,044	1	0,007	0	0,000
CANTABRIA	119	0,147	0	0,000	58	0,176	48	0,236	13	0,183	0	0,000	0	0,000	0	0,000
CASTILLA Y LEÓN	573	0,179	6	0,010	292	0,233	227	0,268	48	0,144	0	0,000	0	0,000	0	0,000
CASTILLA-LA MANCHA	294	0,090	7	0,011	181	0,137	94	0,109	12	0,039	0	0,000	0	0,000	0	0,000
CATALUÑA	194	0,017	4	0,002	109	0,023	62	0,021	19	0,021	0	0,000	0	0,000	0	0,000
COMUNITAT VALENCIANA	94	0,012	0	0,000	10	0,003	54	0,028	30	0,048	0	0,000	0	0,000	0	0,000
EXTREMADURA	201	0,122	13	0,043	102	0,157	61	0,134	22	0,133	0	0,000	2	0,026	1	0,014
GALICIA	1392	0,405	47	0,072	854	0,630	415	0,468	76	0,229	0	0,000	0	0,000	0	0,000
MADRID (Comunidad)	1741	0,175	9	0,004	1057	0,258	585	0,233	90	0,093	0	0,000	0	0,000	0	0,000
MURCIA (Región)	3140	1,206	6	0,012	1082	1,008	1694	2,496	358	1,535	0	0,000	0	0,000	0	0,000
NAVARRA (Comunidad)	282	0,287	3	0,015	160	0,395	93	0,364	26	0,298	0	0,000	0	0,000	0	0,000
PAÍS VASCO	300	0,097	6	0,009	167	0,131	113	0,146	14	0,048	0	0,000	0	0,000	0	0,000
RIOJA (La)	140	0,297	2	0,021	84	0,434	40	0,334	14	0,353	0	0,000	0	0,000	0	0,000
CEUTA	3	0,017	0	0,000	2	0,027	1	0,023	0	0,000	0	0,000	0	0,000	0	0,000
MELILLA	8	0,045	0	0,000	7	0,096	1	0,023	0	0,000	0	0,000	0	0,000	0	0,000

Fuente: MEC (2016). *Estadística de las Enseñanzas no universitarias. Subdirección General de Estadística y Estudios del Ministerio Educación, Cultura y Deporte. Curso 2014-15.*



HIGH INTELLECTUAL ABILITIES IN SPAIN

The results of PISA Report 2015 (OECD, 2016) indicate that Spain is in the average range of academic performance when compared with other countries of the OECD, as its students obtain average scores of 496 (OECD 493) in reading, 486 (OECD 492) in mathematics, and 493 (OECD 493) in science.

However, within the country, there are important variations among its local communities. As the OECD (2016) mentions,

socio-economic status continues to have an impact on students' opportunities to benefit from education and develop their skills. That is why equity in education—ensuring that education outcomes are the result of students' abilities, will and effort, and not the result of their personal circumstances—lies at the heart of advancing social justice and inclusion. (p. 39)





HIGH INTELLECTUAL ABILITIES IN SPAIN

All the indicators show that the socioeconomic and cultural differences between the autonomous communities of the north and those of the south of Spain enlarge the differences in science, reading, and mathematics competences of the PISA 2015 and TIMSS 2015 reports.

However, many communities in the south of the country make economic efforts through action plans to alleviate the situation and detect their HIA students. However, in northern communities, where better results are obtained, there is also much to do to enhance excellence. As a result, the potential of the students is not fully developed.





Definition and Education Legislation

According to the Spanish Ministry of Education (Ministerio de Educación y Ciencia [MEC]), **students with HIA are considered** by the Organic Law of Education 2/2006 (LOE) **as students with specific needs for educational support and whose needs will be met as soon as their high abilities are identified following the principles of normalization and inclusion.**





HIGH INTELLECTUAL ABILITIES IN SPAIN

The most widespread practice is **acceleration** within the stages along the educational system, not so much **curriculum compacting**, but reducing the duration of each stage, regardless of the age of the students.

When the ordinary measures taken in the educational center to attend to student development have already been met and become insufficient, then schooling may be initiated earlier or its duration is reduced with parent approval.





Legislation Criteria (LOE):

1. Acceleration of a school year may be adopted a maximum of 3 times in basic education and only once in postcompulsory education

Acceleration also incorporates measures and programs of specific support and the parents' agreement to take them





HIGH INTELLECTUAL ABILITIES IN SPAIN

The preamble of the LOMCE shows the importance of developing the **talents of citizens** in the Knowledge Society of the 21st Century. But the intentions reflected in the article are not articulated in the same way in all the autonomous communities as each one has developed its own legislation to extend what is indicated in the state regulations.





Identification and Intervention Measures

The educational attention to HIA in Spain varies according to each autonomous administration and their differential models and resources provided for education.





HIGH INTELLECTUAL ABILITIES IN SPAIN

Differences in the criteria to identify students with HIA are found when analyzing the regional legislation. Autonomous communities focus on IQ as a selection criterion, while others, following the model by Castelló (Castelló & Batlle, 1998), differentiate between simple talent, complex talent, and gifted, adopting other essential indicators for diagnosis such as creativity, high performance, rhythm, and style of learning, or other abilities, such as memory, attention, and concentration or cognitive flexibility





BASIC CRITERIA OF THE AUTONOMIC LEGISLATION FOR THE IDENTIFICATION OF STUDENTS ABILITIES *WITH HIGH*



Tabla 2.
Basic criteria of the autonomic legislation for the identification of students with high abilities

Autonomous communities	HIA	IQ higher to 130	Superior Capacidad. Pc 75	<u>Creativity</u>	High performance	Simple Pc 95/ Complex Pc 90	Talents	Differentiated learning rhythm and style	<u>Other capacities</u>	Precocious (Age younger than 12/13 years)
Andalucía			x	x			x			
Aragón			x	x			x			x
Asturias	x			x	x					
Islas Baleares	x									
Canarias			x				x			x
Cantabria	x			x	x					
Castilla León	x							x		
Castilla la Mancha	x							x		
Cataluña	x			x	x		x		x	x
<u>Comunidad Valenciana</u>	x									
Extremadura	x			x	x					
Galicia	x			x	x					
Madrid		x		x	x					
Murcia	x			x	x					
Navarra	x							x		
País Vasco			x				x		x	x
La Rioja	x									



Teacher Training

Elices-Simón and Palazuelo-Martínez (2006) reported that the capacity of teachers as identifiers of students with HIA was related to the amount of training they received, and Tourón and Reyero (2002) found significant differences in attitudes toward HIA between teachers who had received specific training in this subject and those who had not. It is clear from these studies that specialized training improves teachers' beliefs, attitudes, and identification of HIA students.





School Context: Curricular Intervention Models

Although the first legislative documents mentioned the need for the **specialization of the centers** for students with HIA, these lists of schools were never published.

At present, LOMCE (2013) establishes that **schools should design a strategic plan**. The **educational project** will involve the **specialization of the schools**, in some of the areas addressed, such as aiming at excellence and meeting the students' specific educational support needs, where students with HIA are included.





The educational measures established on a regular basis are:

- (a) curriculum enrichment in mainstreaming, which implies a horizontal extension of the curriculum, and
- (b) acceleration.

- There are also Out-of-School Context: Enrichment Programs: they provide a different learning experience from the classroom and cover subjects and activities that ordinary education cannot address. Ex: (Programa Estrella) at Camilo José Cela University (SEK Institution) or the Autonomous Community of Madrid, which have developed an extracurricular intervention program (PEAC)

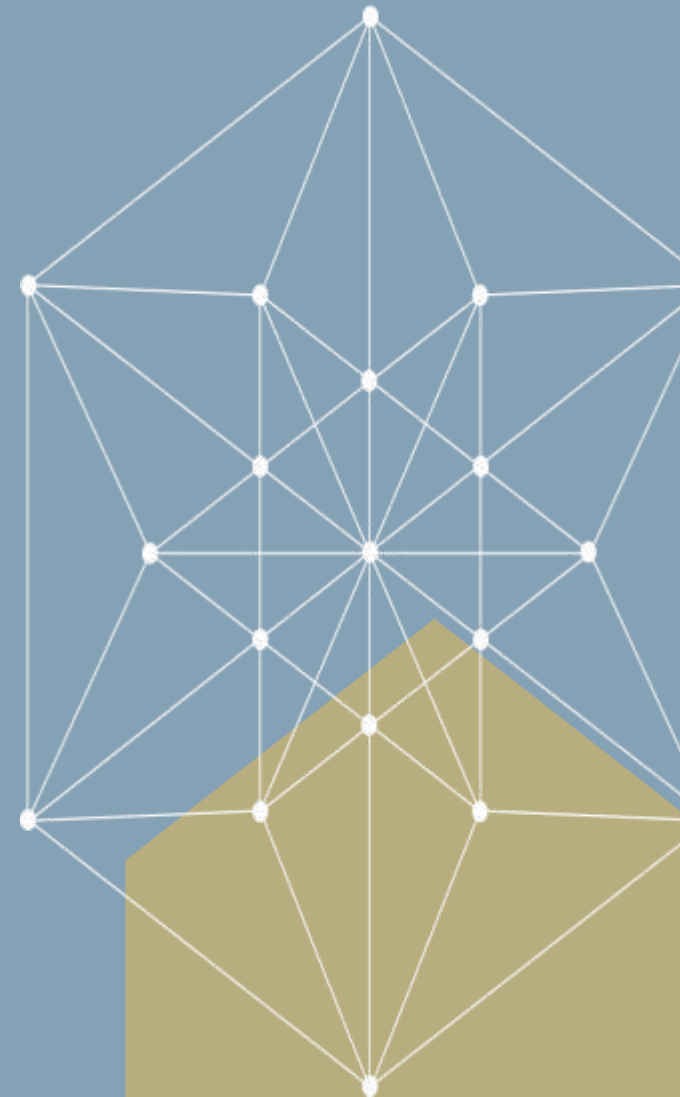




High Ability students.

Different models

Dra D^a Angeles Bueno Villaverde



Let's reflect on...

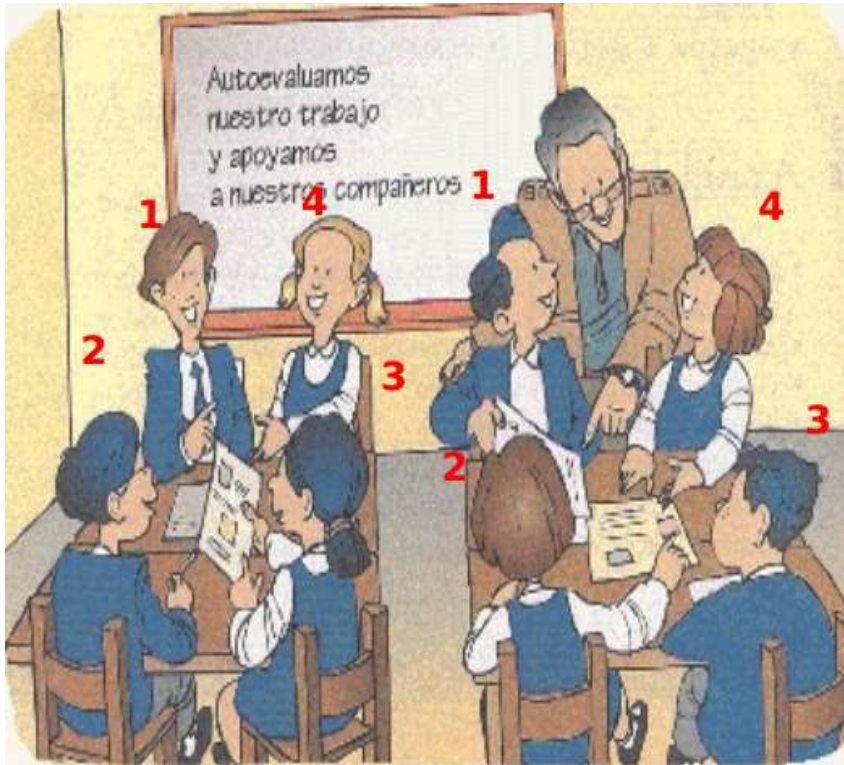
What are the main points regarding identification of HIA and intervention in the article that all of you have read?

Share with your mates what you have understood about the article you have read and make a diagram that could explain all the information.



Let's reflect on...

COOPERATIVE TECHNIQUE: Numbered joint heads



- We team up and this time each team member will have their own number.
- An exercise is proposed and everyone should do it in a while. After the same, the teacher will say the number that indicates who collects the exercise in each team. This is used for the team note.

Roles for the formation and operation of the team.

They are those that help the formation of the group and that the work dynamics be effective.

- 1. Moderator:** directs the activities, controls the time, facilitates turn taking...
- 2. Secretary-spokesperson:** writes down decisions and agreements, fills in forms, communicates with other groups and the teacher...
- 3. Supervisor of order:** controls voice volume, avoids dispersion, encourages participation...
- 4. Coordinator of tasks:** deals with the material, controls that the work plan is complied with, reviews the duties...
- 5. Observer:** records the frequency with which the group members adopt behaviors or attitudes appropriate to the role they exercise, controls the rotation of roles...

... and Thanks a million...



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