

**Graduado o Graduada en Maestro en Educación Primaria
(Programa Internacional)
*Lehen Hezkuntzako Irakaslean Graduatua***

**Final Degree Project
*Gradu Bukaerako Lana***

Methodological innovation to work on emotions together with the universal languages

Estudiante: Miriam Orduña Baquedano

Enlace vídeo: https://youtu.be/vA_XzhKfEkE

Tutor/Tutora: Olga Belletich Ruiz

Departamento/Saila: Ciencias Humanas Sociales y de la
Educación

Campo/Arloa: English

Mayo, 2021

Abstract (Required)

Music, English, and math are universal languages. You can speak in English, write musical notes or even write numbers and formulas in such a way that the majority of the population is able to understand what is being transmitted. The transmission of these messages, in any of these languages, is charged with emotions. Languages are the means of putting emotions into words and emotions are produced when we communicate with other people through these languages. This TFG seeks to answer a global question: How efficient can the learning of universal languages be: mathematics, English and music in relation to emotional development at school? To answer this question, two studies are faced. A previous study, which allows understanding the subject from four theories: the Theory of Universal Languages, the Didactic Engineering theory; UNESCO's Theory of Educational Innovation and; the Theory of Didactic Situations. And a practical study in a real classroom context, based on the implementation of a methodological innovation project designed, expressly, to guarantee that efficiency, and demonstrate the possibilities of generating progressive school changes.

Keywords: universal languages; innovation; Music; English; Mathematics; Emotional Education.

Resumen (Obligatorio)

Música, inglés y matemáticas son lenguajes universales. Se puede hablar en inglés, escribir notas musicales o incluso escribir números y fórmulas de tal manera que la mayoría de la población sea capaz de entender lo que se está trasmisitendo. La transmisión de estos mensajes, en cualquiera de estas lenguas, está cargada de emociones. Los lenguajes son los medios para poner en palabras las emociones y las emociones son producidas cuando nos comunicamos con otras personas a través de estos lenguajes. En este TFG se busca responder a una cuestión global: ¿Cómo de eficiente puede ser el aprendizaje de los lenguajes universales: matemáticas, inglés y música en relación con el desarrollo emocional en la escuela? Para responder, se afrontan dos estudios. Un estudio previo, que permite comprender el tema a partir de cuatro teorías: la Teoría de los Lenguajes universales, la teoría de Ingeniería Didáctica; la Teoría de la innovación Educativa de la UNESCO y; la Teoría de Situaciones Didácticas. Y un estudio práctico en contexto real de aula, basado en la implementación de un proyecto de innovación metodológica diseñado, ex profeso, para

garantizar esa eficiencia, y demostrar las posibilidades de generar cambios escolares progresivos.

Palabras clave: lenguajes universales; innovación; música; inglés; matemáticas; educación emocional.

INDEX

INTRODUCCIÓN	5
1. THEORETICAL FRAMEWORK: FOUNDATION AND IMPLICATIONS	7
1.1.Foundation	7
1.1.1. The problem and its antecedents	7
1.1.2. Justification	7
1.1.3. Questions and objectives	8
General objectives (GO)	8
Specific objectives	8
Questions	8
1.2.Implications in Primary Education	9
1.2.1. Epistemological implications of the theme	9
1.2.2. Implication according to different analysis dimension	21
1.2.3. Primary Education educational context implications	23
2.PRACTICAL FRAMEWORK	23
2.1. Didactical engineer for the design-based study	23
2.2. Objectives, questions and hypothesis	24
2.2.1. Hypothesis versus questions	24
2.3. Methods and materials	25
2.3.1. Nature of the Project	25
2.3.2. Origin and foundation	25
2.3.3. Objectives and goals of the project	26
2.3.4. Physical location	26
2.3.5. Human (project participants), material and financial resources.	27
2.3.6. Design and planning for the classwork	28
2.4. Experimentation	31
2.4.1. School experience description	31
2.4.2. Results	33
2.5. Results discussion	35
CONCLUSIONES Y CUESTIONES ABIERTAS	38
BIBLIOGRAPHIC REFERENCES	39
ANNEXES	40

INTRODUCCIÓN

En esta parte presentamos el tema elegido junto a sus antecedentes y principales objetivos, así como sus supuestos aportes y algunas teorías que lo sustentan.

El siguiente proyecto surge de antecedentes previos, no solo de las vivencias personales de la autora sino también de su observación en el período de prácticas escolares. La motivación para ello es muy concisa: brindar a los docentes y escuelas una propuesta pedagógica, como proyecto de innovación metodológica; trabajar los lenguajes universales al mismo tiempo que el desarrollo emocional, y una garantía de eficiencia y eficacia para el cambio y la mejora educativa en las escuelas de educación primaria.

En cuanto a las vivencias personales de la autora del proyecto, es necesario aclarar que practica música desde muy pequeña, nunca ha odiado las matemáticas, aunque se ha sentido frustrada con ellas en algún momento, le encanta hablar inglés y usarlo para hacer nuevos amigos en todo el mundo y en épocas anteriores ha tenido que lidiar con algunos problemas emocionales. Estas son algunas razones que pueden ayudar a este proyecto a cobrar más sentido.

La autora pensó que realizar un Trabajo Fin de Grado en el que se mezclaran todos sus gustos y problemas personales que ha podido resolver gracias al tiempo, sería la mejor idea. Y no podría ser una mejor idea, ya que los niños que la autora estaba observando durante el período de prácticas tenían problemas en todas esas áreas. Fueron ellos, por tanto, la segunda parte de los antecedentes de este proyecto.

En un contexto en el que los niños tenían problemas con las matemáticas y problemas emocionales y que disfrutaban de la música y las asignaturas de inglés fueron los principales indicadores para intervenir con un proyecto innovador como este.

Por tanto, el objetivo general del proyecto de innovación es la contribución al desarrollo de los Idiomas Universales en Educación Primaria mediante la identificación de un elemento unificador entre el inglés, las matemáticas, la música y las emociones, así como la preparación y puesta en práctica de una Situación Didáctica para evidenciar su funcionalidad.

Las aportaciones de este proyecto son, por lo tanto, la búsqueda de un elemento común entre estas cuatro áreas de desarrollo, la contribución a la creación de las Lenguas Universales como un nuevo espacio en la Educación Primaria y, la demostración de la utilidad de esta unificación de las lenguas en un contexto de clase real.

Este proyecto es el comienzo de una educación interdisciplinaria y transversal que acerca a los estudiantes a contextos y situaciones más reales. Después de la pandemia, todas las personas han cambiado, incluidos los estudiantes. Los niños necesitan motivación, manejar sus emociones y

disponer de algunos recursos para afrontar los retos venideros. De esta manera, queremos formar estudiantes hábiles e ingeniosos con salud emocional e ideas creativas e innovadoras.

Algunas de las teorías que sustentan el estudio y que se recogen en el siguiente marco teórico son la Teoría de las Lenguas Universales, la Teoría de la Innovación Educativa (UNESCO); la Teoría de las Situaciones Didácticas y la Teoría de la Ingeniería Didáctica basada en el diseño. Todas ellas son teorías imprescindibles para entender este proyecto.

La teoría de los lenguajes universales es utilizada para apoyar la idea de que las cuatro áreas principales que están involucradas en este proyecto y, que están directamente relacionadas con las competencias y las áreas de desarrollo, tienen una fuerte relación y, por lo tanto, pueden ser explicadas y estudiadas en conjunto.

La Teoría de las Situaciones Didácticas es fundamental para comprender la necesidad de tareas y situaciones contextualizadas y la creación de una conexión del proyecto con la vida real.

La Teoría de la Innovación Educativa, estructurada por la UNESCO, proporciona los elementos fundamentales que deben ser considerados a la hora de estructurar propuestas pedagógicas y didácticas orientadas a la innovación, el cambio y la mejora.

La docencia de la ingeniería didáctica ha permitido estructurar los estudios realizados en este proyecto, a partir de cuatro fases progresivas de análisis y, por ello, la sistematización de los resultados y su discusión.

Finalmente, especificamos la estructura del proyecto para que su lectura sea más clara y sencilla.

Debido a que el proyecto de innovación educativa se presenta como una Situación Didáctica en su conjunto, la fase número uno, fase del estudio *a priori*, está destinada a su marco teórico. En él, podemos encontrar los fundamentos y las principales implicaciones del proyecto en el ámbito de la Educación Primaria. Los fundamentos contienen los antecedentes y la justificación mientras que las implicaciones recopilan los principales términos epistemológicos que vamos a utilizar a lo largo del proyecto y en los que se basa el marco práctico.

La segunda, tercera y cuarta fases están destinadas al marco práctico y por ende a la producción y evaluación de los elementos prácticos. Más concretamente, la segunda fase tiene como objetivo establecer los principales objetivos, cuestiones, hipótesis y materiales y métodos, así como el estudio previo diseñado a realizar. Este estudio previamente diseñado se incluye en el apartado de métodos por ser una propuesta innovadora y, por tanto, sigue la estructura de Desarrollo de los Proyectos Educativos Innovadores según el modelo UNESCO. En la tercera fase, presentamos el examen y la evidencia del proyecto puesto en práctica. Finalmente, en la cuarta fase, presentamos el análisis y discusión de los resultados obtenidos.

Todo el proyecto termina con las conclusiones finales y las preguntas abiertas.

1. THEORETICAL FRAMEWORK: FOUNDATION AND IMPLICATIONS

1.1. Foundation

1.1.1. *The problem and its antecedents*

After having revised the bibliography and other studies related to methodologies, innovation and the treatment of Music, Mathematics, English and Emotions as universal languages, I can conclude that there are little researches done in this field.

It is true that there are a lot of studies focused on innovational projects such as the “Innovation and change in English language education” (K. Hyland & L.L.C. Wong), “A Curriculum Innovation Framework for Science, Technology and Mathematics Education” (R. Tytler, D. Symington, C. Smith), “The Implementation of Innovation in Primary Education at the Local Level” (M. Galton) and methodologies created for teaching English as a foreign language, Music or Mathematics. Nevertheless, there are no references about the connexion of all these languages as universal languages and so about the benefits that these connexions could have in the students learning process.

The main connexions and so benefits that I have found through the bibliography is the connexion between Music and English learning. English can not only be taught through music and so use the music as a resource for teaching English but also studying Music has been proved to be very beneficial for learning foreign languages.

This is a very good starting point since if the music, which is not another thing that mathematical abstract operations and emotions, can be very beneficial for the English intonation and prosody learning as well as for the discrimination of sounds, then the creation of an innovational methodology for its interdisciplinary learning will have a positive impact on the sustainable development goal related with the education.

1.1.2. *Justification*

The current devaluation of the Music subject in Education as well as the non-emotional education in the schools, and efficiency and effectiveness failures in the Mathematics and English teaching areas, are the main justifications of this final degree project.

With this paper, we want to raise the Music and Emotional education value at the same time we improve the Mathematics and English teaching efficacy and efficiency.

For that, we are going to create an innovational project in which the learning of all these subjects, all of them essential in the competencies and in the developmental areas of the children, will be transversal and so interdisciplinary.

This justification is based on the new Educational Law (Comunitat Valenciana, 2019) as well as in the new COVID situation and lack of emotional expressions and in personal experiences in the English and Mathematics learning process.

1.1.3. Questions and objectives

General objectives (GO)

GO.1. Contribute with a theoretical framework to the development of a universal language in Primary Education from innovative methodologies.

GO.2. Prepare a practical proposal based on a European Project for the teaching of Mathematics and Music and collect evidence on its functionality, based on real experimentation in class according to the development of one of the parts of the proposal.

GO.3. Identify, from the theoretical and practical foundations, the unifying common element between the four curricular areas: the universal language unification.

Specific objectives

SO.1.1. Research the similarities among the fourth areas through other possible projects and approaches in order to teach them in a funnier and more meaningful way for the students with a lack of interest in them.

SO.1.2. Research the *imaginario colectivo* as well as the possible music interests of the children through a survey in order to redirect the music teaching in the school and to relate it with the essential expression of emotions.

SO.2.1. Creation of a Didactical Situation for which the students need to come to the school to accomplish it. This Didactical Situation will have a final performance for which all the students will have to act as a group in order to involve all the class and create a good fellowship atmosphere.

SO.3.1. Case analysis of other authors who have researched on the unifying element of the universal languages in order to find out their common element.

Questions

Q1. Why do we go to school for such a long time?

Q2. Is there a unifying element or elements among the Music, English, Maths and emotions?

Q3. Why is Music studied in the school if the vast majority of students won't be musicians in their near future?

Q4. Are the Mathematics studied in the school useful for anything?

Q5. Why do we study mathematics if there are calculators?

Q6. How is it possible that we study English for such a long period of time and we don't get to imitate their intonation and accent?

Q7. Is it taught in the school to distinguish the emotions that we can feel and the techniques to deal with them?

1.2. Implications in Primary Education

After having explained the antecedents and the three main justification aspects of this project, we present its main implications in the Primary Education field. We consider that the unification of Music, English, Mathematics and Emotions is very beneficial not only to raise the importance of Music and Emotions in the educative process but also for a more real learning context creation. Children as well as the teachers, receive, in the real-life, all those contents mixed up. Due to that and, implication wise, the teaching process can be easier for the teachers and more motivational and engaging for the students. It is true that this unification will be very demanding for the teachers. Nevertheless, the results will be very heart-warming.

1.2.1. Epistemological implications of the theme

In order to clarify our positions towards basic and specific concepts of the educational process and their connexion with our project topic, we explain the main epistemological terms in the next part of the project.

1.2.1.1. Education

As the author Shor (1993) says, education can be described in many ways. Nevertheless, for us, education is the process of teaching and learning to develop global human capabilities, competencies. Both processes take place simultaneously.

When educating we are creating polite people, social people who live in a society with others. Education is done then both in the school by the teachers and at home by the parents. Nevertheless, and as I comment afterwards, both types of education are different and necessary. Education indeed depends on the powerful person who is in charge of it, the parents or the teachers in this case, and so, in the end, is nothing different than the continuation of those people previous education.

So, for us, the question at this point is, so then, where does education have its roots?

We would say that, although education has its roots in the development capacities of people as educable beings, however, in factual reality, its nearest roots are in the politicians and so in the power which imposes us the laws. This is the main reason why we believe that education is more than simply mathematics, language or any other specific subject learning.

Thence, education must be the learning of resources to deal with life and not to be cheated by the power or any other person. For us, teachers must form empowered students with willing to change the injustices, to achieve their personal but also collective goals and to fight with words again the things that they dislike. In other words, we support the idea reported by Carr, 2005 regarding “Empowering Education”.

The main task of education is to prepare young people for adult personal and social functioning: a little more precisely, to equip individuals with the knowledge, understanding

and skills apt for a personally satisfying, socially responsible and economically productive life. (Carr, 2005, p. end chapter 1).

Regarding the teaching part of the education process and as we were commenting above, teaching isn't just the transmission and learning of mathematics, languages or any other school subjects. For us, the teaching and learning process should consist of learning strategies and manners to learn to be, to know, to do and to live with others.

All in all, we need critical and curious students prepared to confront real-life problems and situations. For that, we will need also flexible teachers that create didactical teaching-learning situations that will make students learning more efficient and effective.

1.2.1.2. Efficacy of learning (Adj. Effective)

Both efficacy and efficiency are criteria of the education quality. Education will only have quality and so an impact on the students and later on, on the society, if both efficiency and effectiveness are taken into account. Somehow, that is the reason why, in our personal opinion, the teaching of English, Mathematics and recently Music and Emotions are failing. All those areas are being taught but, do we really know what the efficacy and efficiency terms involve?

After having read some articles, for us, the efficacy of something is the good impact that it has had on another thing. A project, an invention can be effective and produce improvements into a specific area or issue. In other words, we will say that something is effective when its implementation produces an improvement or an upgrade into something.

Something similar is reported by (Ferro García & Vives Montero, 2004, p.98) «La eficacia hace referencia a la capacidad que tiene un tratamiento de producir cambios psicológicos en la dirección esperada que sean claramente superiores a los de la no intervención(...)»

In this study, they also clarify the difference between efficiency and efficacy. While the efficacy implies the comparison of the intervention with the comparison of the fact without intervention, the efficiency doesn't. The efficacy focuses its attention on the changes produced (Ferro García & Vives Montero, 2004).

And now we give an educative example. For instance, the efficacy of a project would be measured by comparing a previous test or data collection of the children act doing a specific task with a final task after having applied the project. If the results in the task or the data collection show changes and so improvements, we will say that the project has been effective. In our case, we will measure the student's willingness on the areas before and after the project as well as the attitude changement towards the education.

1.2.1.3. Efficiency of learning (Adj. Efficient)

In this case, Ferro García & Vives Montero (2004) say that efficiency is the relationship between the cost and benefit of the intervention. In other words, if the improvement someone has done and so the benefit has a good relationship with the price and so it is well-valued quality-price, then the action or intervention has been efficient.

Coming back to the educative example, if the project which has been done has produced changes and what is more, it has been cheap to carry out and not much time-consuming, then the project is efficient. And in this case, the project would be efficient and also effective. Since the project can be effective and not efficient but if it is efficient, it means that it is also effective. So, in our words, the efficacy has to do with the improvements and changes that have been done and the efficiency with the comparison of these changes with the money invested in them.

This is what we suppose to do with our unification of the subject's project. In our case, the unification of the subject is just a bureaucratic movement more than a financial one. In fact, we could debate the subjects' division in Primary Education. But, anyway, this is not the current topic. The thing is that joining the three different subjects could be more efficient since fewer teachers would be needed. This is not totally good but, if it ensures more efficient and also effective learning for the students, why not? In the end, this is what education quality means.

1.2.1.4. Teaching

As we have already commented, the teaching action can't be either described or understood without the learning one. The teaching action for us is the process to ensure effective learning about knowledge, procedures, values, ideas and thoughts as well as the teaching of rules and laws based on some specific contents and facts and teaching-learning experiences. Besides, and even more important when talking about teaching as an essential action in education, in our beliefs, teaching is the transmission of resources to manage and get to organize each one's life. This way, first you are taught by others but later you are able to teach yourself with the learnings that you have achieved and you can also teach others.

As Shor (1993) reports in his study, both students and teachers should teach and learn to be social human beings by developing «strong skills, academic knowledge, habits of inquiry, and critical curiosity about society, power, inequality and change» (Shor, 1993, p. 15). We need active and cooperative people who want to change inequalities and who want to grow both personally and socially.

McLaren (1989) then cited in (Shor, 1993, p. 16) describes this pedagogy as «the process through which students learn to critically appropriate knowledge existing outside their immediate

experience in order to broaden their understanding of themselves, the world, and the possibilities for transforming the taken-for-granted assumption about the way we live».

To sum up, teaching and learning is then a personal growth process that is influenced and produced in different ambiences and situations of this complex society.

1.2.1.5. Learning

As we have already commented in the teaching definition, the learning process is non-sense for us without the teaching one. As Shor (1993, p. 16) continue saying «the learning process is negotiated, requiring leadership by the teacher and mutual teacher-student authority. »

As commented before, learning is the synonym of personal growth and achievements. When we learn, what we didn't know before becomes now part of ourselves and so part of our life experiences. Those changes have later an impact both in our thoughts and in our actions as well as in our relationships with other people and the society in general. That is why teachers have a very important role. Teachers have the power to change society. Depending on the values and contents that teachers transmit to their students, they will act and think in different ways and so they will be more or less active human beings.

As Giroux cited in (Shor, 1993, p. 16) book says «educating students is educating them to fight for a quality of life in which all human beings benefit». And he also reports «Schools need to be defended, as an important public service that educates students to be critical citizens who can think, challenge, take risks, and believe that their actions will make a difference in the larger society» (214) Giroux (1988) cited in (Shor, 1993, p. 16)

1.2.1.6. Primary Education as an educative stage

Have you ever thought about the sense of going to school when you were six years old? We are sure that when you were that age you made this question to your parents almost all your school days. However, have you thought about it in your adult days?

From our perspective, Primary Education is a very important stage of education. In the Childhood stage, you start learning about rules, class behaviours, manners and basic social and communications skills to play with the other children. Nevertheless, not until you arrive at the Primary Stage you learn deeper social rules and so citizenship manners, to be autonomous and reflexive and other specific abilities needed for your everyday self personal life.

For us, Primary Education is the educative stage in which students learn the basics to live in society and as humans and citizens. We say so that the main goals of the Primary School are learning to be citizens, students and children; learning to live with others following the rules and the laws but also defending their own rights; learning to know which are their duties and rights in order to defend

them critically and to become the most autonomous people possible; and learn to do cognitive, socio-affective and psychomotor tasks in a competent way.

To sum up, in the Primary Education stage we can find most of the words that are being described in this epistemology: the universal developmental areas, the competencies, the empowering education needed and the importance of values and emotions teaching. We will go deeper into this topic in the following terms, however, we strongly believe that each teacher should previously think about the values that want to transmit to their students as well as the importance he or she is going to give them.

1.2.1.7. Educative Innovation

For us, educative innovation is directly related to educative enhancements and improvements and so with a more effective teaching and learning process.

And this is right, as (Ellis & Bond, 2016, p. 13) say «innovation and novelty come from the same Latin root. They both imply that something is new. » But as they also comment, the society has made us associate «new» with «improved» with any product.

And as (Crosscombe, n.d., p. 49) defines «the novelty of innovation only refers to subtle changes to the status quo as, the alteration of what is established by introducing new elements or forms». This means that we can only consider innovation if this implies changes.

Innovation means, for us, the change of something, either structural or procedural to achieve a specific goal and so to make the educative process more efficient and effective among other issues.

«A specific school program emerges when certain educational implications are in turn developed into a coherent set of teaching strategies, materials, learner activities, and classroom or school structural changes» (Ellis & Bond, 2016, p. 16).

And as it says in this book and also in the (Berman & McLaughlin, 1976), we will know if we have made an innovation since the teaching-learning process will be different and it will be very difficult to come back to the previous teaching-learning methodology.

Depending on the type of innovation, it could also be related to the efficiency of it as we have previously commented. But, anyway, being effective or efficient is not the main point of the innovations for us.

In our opinion, educative innovations are a current necessity in order to create more meaningful and long-lasting experiences for the students involved in this “Empowering Education”. Students are more and more exposed to higher stimuli and to a revolt society. A society that is not divided into subjects although it rates us by our marks. That is the reason why they need more and more resources to deal with all our problems and social ones. Therefore, and in our beliefs, education is the first social institution that needs enhancement and innovation.

But enhancing education is not a simple process. The educational innovations follow some steps and stages to carry them out. As reported in (Berman & McLaughlin, 1976) article, there are three stages: initiation, implementation and incorporation. We will broadly explain each of them.

The initiation stage implies «the presence of a good idea, the availability of federal funds, local needs and incentives of individual actors. » (Berman & McLaughlin, 1976, p. 9)

«The initiation process can be characterized into two ideal types: opportunism and problem-solving. » (Berman & McLaughlin, 1976, p. 9) As we have commented, the innovative project can be made specifically for a specific purpose or be done in a specific moment and so be useful for something.

Contrary to believe the implementation didn't involve the direct application of technology as it is reported in the (Berman & McLaughlin, 1976, p. 352) research of an innovational project: «Implementation was an organizational process that implied interactions between the project and its setting, thus, it was neither automatic nor certain».

Finally, we need to explain the incorporation stage. As the study mention «rather than simply a yes-no decision to continue a project on district funds, we found that a process of incorporation takes place in which portion of projects may become part of the ongoing activities of the schools and thus be maintained. » (Berman & McLaughlin, 1976, p. 354)

Coming back to our thoughts and the definition of innovation, we can conclude that innovation is needed in education although it is not such a simple process as popular belief.

1.2.1.8. Universal developmental areas and their relationship with competencies

In our point of view, the competencies and the universal developmental areas are the main contents of the Primary Education stage. Not only we need skilled students to do operations and write down texts but also we need active and healthy students with social abilities and skills. That is the reason why we believe that the main way of forming skilled students in the main developmental areas is changing the Education vision and concept. Society has changed and so people. The current society needs resourceful citizens and we, the teachers, are responsible for fulfilling its needs.

But, indeed, what are the universal developmental areas?

As (Trabajo de Titulación Macarena Cruz, 2020, p. 37) reports «They are more specific curricular spaces that are derived from the developmental and learnings axes that identify, sequence and organise the learning outcomes and the abilities in each of the under levels of the Initial Education».

As it is mentioned by (Campbell, 197, 2000; Despins, 1986; Poch, 1999; Shapiro, 1997; Goleman, 1996; Longueira y López, 2004) cited by (Touriñán López & Longueira Matos, 2011) there are three main developmental areas:

Cognitive area, the physical and psychomotor field and the socio-affective field. Each of these fields with each specific developmental issues.

But why are these areas considered developmental areas and not others?

As we have studied along all our teaching degree, each person is different intelligent wise to each other. But, what is more, each person is able to have different bits of intelligence him or her self. This is known as multiples intelligence, as Gardner once mentioned. As Gardner researched, each of those bits of intelligence is related to three of the main basic stimuli: the language, the people and the objects that surround us. From here we obtain the three main developmental areas of the children and the main dimensions for analysis of the human beings: the cognitive, the socio-affective and the physical and psychomotor area, each of them related to the main stimuli of life.

But at this point, we ask ourselves, what has this to do with the educational competencies?

And, to answer these questions, we need to mention first the definition of competencies as well as mentioning the current competencies.

«It is understood by competences the capacity to put in practice in an integrated way, in different situations and contexts, the pieces of knowledge, abilities and personal attitudes acquired» (Saramona, 2004, p.163) cited by (Touriñán López & Longueira Matos, 2011) and translated.

In this article (Touriñán López & Longueira Matos, 2011) they cited also (Touriñán, 2007) and specified that the competencies aren't just capacities since the capacities are just referred to mental organizations and the competencies are related to specific situations. So the competencies can be described as the capacities put in practice in specific situations. Those specific didactical situations integrate different curricular areas and subjects so competencies have also an interdisciplinary character.

As (Saramona, 2003) cited by (Touriñán López & Longueira Matos, 2011, p. 163) says competencies suppose a point of balance between quality and equity since they pretend to be, on one hand, the educative response to the current world and, by the other hand, the common base that all citizens have to acquire and over which foment the convivence.

As it is literally explained in the article done by (Touriñán López & Longueira Matos, 2011), the eight key competencies developed from the Organic Education Law 2/2006 of the 3rd of May are the following:

1. Competencia en comunicación lingüística.
2. Competencia matemática.
3. Competencia en el conocimiento y la interacción con el mundo físico.
4. Tratamiento de la información y competencia digital.
5. Competencia social y ciudadana.
6. Competencia cultural y artística.

7. Competencia para aprender a aprender.

8. Autonomía e iniciativa personal.

This eight competences has been taken from the article «La música como ámbito de educación. Educación «por» la música y educación «para» la música» (Touriñán López & Longueira Matos, 2011, p.163). And in this article they add a ninth one under the name «competence to think» included from the work of (Marina, 2010).

Once we have both the universal developmental areas definition and the competencies, we should come back to the relationship between these two division areas. For us, the competencies are the most similar approach to carry into the class the developmental areas of the humans' real life. As mentioned above, the competencies measure the capacity to interact and react in a specific situation, the one which is connected with one of the three main developmental areas: cognitive area, socio-affective area or physical and psychomotor area.

All in all, the main goal with all these areas organization is the creation and development of an integrated educative model that redirects more and more the education to the «learn to do » and « learn to be » high universals as it is mentioned by (Touriñán López & Longueira Matos, 2011) in their article.

1.2.1.9. Didactical situations and their theory

The term «didactical situation» can be ambiguous to define. As it is mentioned in the article «Teoría de las situaciones didácticas» of (Chavarría, 2006), a didactical situation can be described by the traditional side or by the side created by Brousseaus' theory.

In this case, we are going to focus on this last side since we all know the traditional didactical situations. Situations in which the student is a passive element in the process and the teacher is the knowledge source. The student just «swallow» and «vomit» this knowledge.

So talking about the didactical situations from the Brousseau side,(Arsac & Al, 1992) define them as «the set of inter-relations among three subjects: teacher-student- didactical mean» In this situation the teacher is the one who offers and prepare the student didactical means in which the student is going to construct his or her knowledge. The student will make a didactical contract with the teacher and so both of them will know what to expect from the other. The teacher main role apart from the didactical mean creation will be the didactical transposition and so the preparation and adaptation of the materials for the students.

The thing is, when is it produced a didactical situation?

A didactical situation can be produced in two different moments as is mentioned in the article done by (Chavarría, 2006). One didactical situation is produced when a teacher poses to the student a real-life problem and the student tries to solve it and give an answer to it without any teacher's help

or support. In this case, the didactical situation is named as an a-didactical situation since there is no knowledge support or didactical transposition made by the teacher.

But then, what will we consider a didactical situation?

We will consider a didactical situation when the teacher poses a problem or a situation to the student but gives him or her some clues or steps to solve it. In this case, the teacher will do a didactical transposition and the teacher-student-didactical mean will have a contract.

But, what effects does a didactical situation have?

As the preparation of a class, a didactical situation can function or not. Besides, on some occasions, the teacher can be misleading and can produce some impact on their student learning process and in their knowledge transmission.

Some of the effects mentioned in the (Chavarría, 2006) article and that they can produce are:

The Topaze effect produced when the teacher ends up giving the solution to the problem to the students due to their difficulties to solve it and the Jourdan effect, produced when the teacher accepts as valid a student's answer that is not correct.

Those effects are independent from the different types of Didactical Situations that can be put into practice. Some of those types are also specified into the «Teoría de las situaciones didácticas» of (Chavarría, 2006) report. In Brousseau's theory explained in Chavarria (2006) report, we find the next Didactical Situation types:

- "*Situación acción*". It consists in "el estudiante trabaje individualmente con un problema, aplique sus conocimientos previos y desarrolle un determinado saber. Es decir, el estudiante individualmente interactúa con el medio didáctico, para llegar a la resolución de problemas y a la adquisición de conocimientos."

- "*Situación de formulación*": it consists on "en un trabajo en grupo, donde se requiere la comunicación de los estudiantes, compartir experiencias en la construcción del conocimiento." In this situation all the members of the group are forced to participate and give their own ideas.

- "*Situación de validación*": it consists on the checking of the students' individual and grupal work done by the teacher. This way, the work done is validated.

A fourth one can be also included.

"*Institucionalización del saber*": "Es presentar los resultados, presentar todo en orden, y todo lo que estuvo detrás de la construcción de ese conocimiento (situaciones didácticas anteriores)."

All those situations can be found and implemented on a Didactical Situation or Didactical sequence. We can find them on the different parts of a Didactical Sequence. However, it is more frequent to find them on the production part. Preparation, production and evaluation are the main parts of a Didactical Situation. You will see them in the practical part of this project.

1.2.1.10. Methodologies

Methodology, for us, is the "how" part of all this teaching and learning process. How do you...learn to be, do, know and live with others? In this way, we understand the concept of methodology as the pedagogical strategies carried out in the didactical situations to teach and give access to the students to the knowledge that has been adapted and transposed by the teacher.

Therefore, this simple "how" has much more things to take into account. This "how" refers to the different paths, perspectives or steps that you can choose or follow when deciding ways to teach or, to carry out our school empirical study.

In our thoughts, those different choices are directly related to the task and so teachers and students' objectives or aims as well as with the teachers' previous ideas towards education, teaching or even values.

The term methodology has its roots in the term method. And as it is directly reported by (Sánchez,2009, p.61)

Método significa el camino para llegar a un resultado determinado. Así, el método que utilicemos nos facilitará el camino, nos pondrá más dificultades, o nos desviará definitivamente de nuestro destino inicial. El método es parte fundamental en cualquier trabajo que se precie de ser llamado científico, y asimismo de cualquier actividad educativa. Con una buena aplicación del método o métodos más correctos, se conseguirán resultados educativos serios, rigurosos y formales.

The teacher's role in the methodology choosing is then very time-consuming. Teachers have to prepare didactical situations and also think about all the strategies and interactions to be made both among students and among the students with themselves. The most modern methodologies should stimulate the exchange of ideas, values, social behaviours and concepts among students. This is one of the main goals of those methodologies. But this is not an easy process and achievement from our point of view.

There are a lot of different methodologies and, as we were commenting before, each one has its target in a different issue and so different aims and different steps to follow. As far as we are concerned, here we write down some of the most common methodologies: Cooperative Learning, Project-Based Learning, Problem Based Learning, Service Learning, Competence-Based Learning, Gamification, Thinking Based Learning, Flipped Classroom... among others.

1.2.1.11. Emotions and emotional education

As Francisco Mora reports on page 14 of his article (Punset, Eduard;Mora, Francisco; García Navarro, Esther;López Cassà, Èlia;Pérez-González, Juan Carlos; Lantieri, Linda; Nambiar, Madhavi; Aguilera, Pilar; Segovia, Nieves; Planells, Ocatavi; Bisquerra, 2554)

«La emoción es ese motor que todos llevamos dentro. Una energía codificada en ciertos circuitos neuronales localizados en zonas profundas de nuestro cerebro (en el sistema límbico) que nos mueve y nos empuja «a vivir», a querer estar vivos en interacción constante con el mundo y con nosotros mismos (...)»

For us, this is quite accurate and well explain the definition of emotions. However, we would add the social part. Emotions are produced due to our social interactions. We wouldn't have emotions if we weren't social human beings. Here it is mentioned that emotions create in us the willingness to interact with others. Nevertheless, and from our point of view, emotions are created with these interactions with other people and society in general.

As it is said by (Boler, 1999, p. 2) «emotions are inseparable from actions and relations, from lived experience». In this context, we decide that emotions are needed in this project. Not only the universal languages learning but all the teaching and learning processes are linked with emotions. And, in this project, this is very easy to be identified. The Didactical Situations imply both the students' own relationship with their environment and also the relationship among them and with the teachers. Those are the main reasons why the emotional part can't be ignored in our project.

The question at this point is; should emotions be taught and so educated? Or, by contrast, should they be appeared and treated in a natural and spontaneous way?

And this is when emotional education enters into action. It is true that not until I searched for some information have I noticed the important difference between emotional intelligence and emotional education.

In order to identify the main differences, we need a definition of each of them and to clarify what intelligence implies.

Slovery y Mayer (1990) and its later revision of Mayer and Saloverry (1997) cited in (Punset, Eduard; Mora, Francisco; García Navarro, Esther; López Cassà, Èlia; Pérez-González, Juan Carlos; Lantieri, Linda; Nambiar, Madhavi; Aguilera, Pilar; Segovia, Nieves; Planells, Ocatavi; Bisquerra, 2554, p. 24) define the emotional education as «la habilidad para manejar los sentimientos y emociones, discriminar entre ellos y utilizar estos conocimientos para dirigir los propios pensamientos y acciones.» Its model is structures in four blocks: emotional perception, knowledge emotional facilitation, emotional comprehension and emotional regulation.

For Daniel Goleman cited also in (Punset, Eduard; Mora, Francisco; García Navarro, Esther; López Cassà, Èlia; Pérez-González, Juan Carlos; Lantieri, Linda; Nambiar, Madhavi; Aguilera, Pilar; Segovia, Nieves; Planells, Ocatavi; Bisquerra, 2554, p. 24) the emotional intelligence consists on: «conocer las propias emociones, manejar las emociones, motivarse a sí mismo, reconocer las emociones de los demás y establecer relaciones positivas con otras personas.»

At this point, it is necessary then to define what intelligence is or what does it imply.

«La inteligencia, sea emocional o de cualquier otro tipo, o es social o no es inteligente. Hasta tal punto es esto cierto que el reconocimiento social o de lo que uno dice y hace es un buen indicador de la salud del individuo» (Punset, Eduard; Mora, Francisco; García Navarro, Esther; López Cassà, Èlia; Pérez-González, Juan Carlos; Lantieri, Linda; Nambiar, Madhavi; Aguilera, Pilar; Segovia, Nieves; Planells, Ocatavi; Bisquerra, 2554, p. 6).

Emotional education, by contrast, is something quite different. Emotional education is a permanent, continuous and educative process that enhances the development of emotional competencies as an essential element of human development, intending to give him or her capacities for life and with the final goal of increasing personal and social wellness. (Bisquerra, 200) cited in (Punset, Eduard; Mora, Francisco; García Navarro, Esther; López Cassà, Èlia; Pérez-González, Juan Carlos; Lantieri, Linda; Nambiar, Madhavi; Aguilera, Pilar; Segovia, Nieves; Planells, Ocatavi; Bisquerra, 2554)

This process enhances the human development in all the human aspect: emotional, physical, moral, social, intellectual...That is why this education is considered as an education for the life as it is reported in (Punset, Eduard; Mora, Francisco; García Navarro, Esther; López Cassà, Èlia; Pérez-González, Juan Carlos; Lantieri, Linda; Nambiar, Madhavi; Aguilera, Pilar; Segovia, Nieves; Planells, Ocatavi; Bisquerra, 2554).

1.2.1.12. Universal Languages Theory

Before explaining what it is for us the theory of the universal language, we believe it is necessary to comment first about what is the language for us.

From our concerns, the language is the group of abstract concepts linked with a group of terms formulated with a mixture of letters.

When it comes to terms of the social debate about whether the language or the thinking was first, we strongly believe it was first the thinking. Language is the way of telling and taking out what we are thinking about. So, as a personal conclusion, language is the words that have been linked with specific elements and so that have been consensed to refer to specific elements. This way, we can all refer to the same terms or elements when saying the word.

And, this same definition or personal thought could be used to explain universal languages. As far as we are concerned, a language is considered universal when a huge amount of people knows the concept-terms relations of that language and so can be used when talking to other people. We mean, a language is considered universal when you can use it to communicate with another person of whom you don't know his or her mother tongue language and you can communicate with them in some way. So language cannot be defined as a set of letters, because it includes other elements of expression such as gestures, sounds, attitudes, etc.

Therefore, the theory of the universal languages is formed to establish which languages can be used among others and so you will have a high possibility of others understanding you.

But, at this point, you may be asking yourself, then if the languages aren't just a set of letters and symbols together but they also include gestures, attitudes, sounds... How is it possible that there exists a Universal Language?

In fact, there exists a Universal Language, the thing is that it is assumed that the language is just the knowledge of words to express yourself, something that we have not commented on before. A person who studies a Universal Language: Mathematics, English, Music or the emotional expressions; not only has to know the symbols of that language but also the cultural issues around them. We mean, when you learn English you need to know their cultural symbols, myths, traditions... in order to understand their way of living the certain word they use. This is called the "imaginary collective" or group of myths and symbols that work in each moment as a social collective "mind".

This is the reason why the immersion in the country you are learning its language as well as the immersion in musical, mathematician or emotional experiences and atmospheres, is essential in order to learn what we consider the Universal Languages. The "collective imaginary" is then, for us, one of the unifying elements of those Universal Languages. Each language has its own "collective imaginary" but each one has one. This means you need to go further than simply studying the theories of those languages when it comes to the terms of their learning.

At this point, we want to raise the awareness that our project wants to highlight the importance of the experiences for the learning of those Languages. Due to that, we have designed the project as a Didactical Situation. As we were commenting, it is impossible for the students to study those languages without contextualization. Besides, the context contributes to share among them the idea of a globalized and unified world. More and more the classes are formed from more varied students who come from very different and distant backgrounds ones from the others. This is the case of the students we are implying this project on. So those students have more facilities to understand that we need Universal Languages to communicate and transmit and receive emotions from all the Universe citizens.

1.2.2. Implication according to different analysis dimension

In order to comprehend the topic and to elaborate on the practical experience, we need to consider the following dimensions.

1.2.2.1. Educative dimension

This work implies a change in the education vision from the perspective of a more efficient and effective as well as society related education. This implies the vision of education as the formation of future citizens and taking into account the new social demands. For that, we need an interdisciplinary education. An education which doesn't understand of subjects but of areas of development and

children necessities. An education that takes into consideration the needed competencies in order to learn to be, to know, to do and to live with others instead of concepts separated by subjects. New generation kids' need to be resourceful and skilful in order to survive in this overstimulated society. For that, they will need more real-life education contexts as well as moving experiences. And this is just obtained with an interrelated and unified education.

1.2.2.2. Curricular dimension

This work wants to highlight the importance of music for the student's development and so to raise awareness of its importance in the educational system.

Besides, we pretend to raise the competencies' importance in the educational process. Competences are present in most of the subjects, however, they are treated separately and differently. We pretend, with this inter curricular project, to raise their importance as well as to formulate a way to treat them also in a more interrelated and connected way.

1.2.2.3. Didactical dimension

The didactical project enhances the importance of real-life connected didactical situations. This work wants to promote meaningful, long-lasting experiences for the students. For that, we are using the Theory of Didactic Situations or the Didactic sequences, a methodology that emphasizes the learning more than the result. In other words, a theory that gives more importance to the change of the students' vision or knowledge than to the process or the physical result obtained. This methodology consists of three parts: preparation, production and evaluation, being the second one formed by three phases. The preparation consists basically of asking ourselves what we will do and what we will learn. The production consists of the activities. Those activities have an introduction (phase 1), a real production and activities (phase 2) and a final product obtention (phase 3). And finally, in the evaluation part, we ask ourselves what we have done and what we have learnt.

We believe this methodology is very useful in order to organise our own thinking ideas as project producers and to organise and programme the activities done for the practice part.

1.2.2.4. Cognitive dimension

This work wants to profit from the cognitive areas of the brain and their possible relationships among them. It is true that our brain has its functions shared among its differentiated parts. Nevertheless, some parts need from the others and so are interconnected, as the school subjects and competences. Therefore, this work implies the presence of the main areas and their functions.

1.2.2.5. Psychosocial dimension

This work implies the analysis of the children of those specific ages, which are their educative and personal necessities in relation to the emotional education as well as their likes towards the music, mathematics and English learning.

1.2.2.6. Emotional dimension

This work wants to promote emotional education in the Primary Education Stage as a fundamental issue to deal with from a very young age.

1.2.3. Primary Education educational context implications

We will explain what this project implies from our educative experience and more specifically from our internship period experience. Contrary to popular belief, during our internship period, we have seen that the students of the school, the fourth graders who are the ones we have been with, enjoyed quite a lot the music class. And we emphasize that this is contrary to popular belief since our last experience with a music class were at the High School, where most of our classmates hated the subject, whereas we considered it very interesting.

Anyways, coming back to the school experience, we have realized that students enjoy singing and dancing a lot. What is more, the language in which they sang or danced wasn't an inconvenience for them. Maybe this can be one reason why generally talking, those students enjoyed and liked a lot the Music and the English subject. Nevertheless, most of the students hated the Math subject and most of them were failing with very low marks. Besides, during our whole internship time, we have noticed that those children have quite a lot of problems related to emotions and social abilities. The different chats we have had with them and the problems we had to deal with during that time, were really good food for our mind.

From that time, we started thinking about a solution to that situation. Maths' marks weren't normal at that age and some of the student's emotional problems were rougher than we would have ever thought. So, why don't we mix all those subjects giving them a more meaningful as well as efficient approach?

Maths and English abilities share space in the left side of the brain, Music is all composed and made up of mathematics, students learn more and more English through songs and videos and the Music has a huge impact on our emotions as well as being a good resource to transmit them. So, what else do we need to improve student's motivation towards learning?

2. PRACTICAL FRAMEWORK

2.1. Didactical engineer for the design-based study

In this practical framework, we now introduce phases 2, 3 and 4 of the Didactical Sequence we are developing. The first phase has been presented through the theoretical framework which consists of the presentation of the epistemological terms, the ones that are going to be used along with this project.

In this second phase, we remember the main objectives and questions and we introduce the hypothesis, materials and methods as well as the previous designed study. This previous designed study is included in the method section inasmuch as it is an innovational proposal and so, it follows the Development structure of the Educative Innovational Projects according to the UNESCO model.

In the third phase of this practical framework, we are presenting the experimentation and evidence of the project put into practice. And last but not least, in the fourth phase, we present the analysis and discussion of the obtained results.

2.2. Objectives, questions and hypothesis

Both the general and specific objectives, as well as the questions, has been presented in the foundation part of this project. This section belongs to the Theoretical part.

In this section, then, we only present again the questions linked to each hypothesis.

2.2.1. Hypothesis versus questions

Q1. Why do we go to school for such a long time?

H1. School years could be reduced if the education were more efficient and effective from the very first years. It is true that during the Primary School years, children are still developing their developmental areas and so that all the years are needed. Nevertheless, high School years could be reduced if Primary Education were effective enough.

Q2. Is there a unifying element or elements among the Music, English, Maths and emotions?

H2. Among these “subjects” or areas there are more than one unifying element. Not only some of them are produced in the same brain area but also they need each other in order to be meaningful. Music wouldn’t have existed if Mathematics weren’t developed. Most of the time we learn English we use songs to do so. And emotions are totally present in all the moments and situations.

Q3. Why is Music studied in the school if the vast majority of students won’t be musicians in their near future?

H3. Music is more than just the learning and performance of an instrument. Music is part of our culture and it is present in almost all the celebrations and actions of our everyday lives. Due to that, we should have basic notions not only of their practice and language but mainly of their culture and history.

Q4. Are the Mathematics studied in the school useful for anything?

H4. Mathematics is essential for our everyday life. What happens is that in school they are not usually redirected to everyday life situations. This way, we believe that they are not useful at all and we end up hating them.

Q5. Why do we study mathematics if there are calculators?

H5. We need to be able to do quick mental operations in order to realise if someone is ripping us off or if they are giving us less money than the one they have to give us.

Q6. How is it possible that we study English for such a long period of time and we don't get to imitate their intonation and accent?

H6. It is totally true, but how many times have we done an imitation exercise? We always do listening activities but we have never done imitation of the different accents or listening that we heard.

Q7. Is it taught in the school to distinguish the emotions that we can feel and the techniques to deal with them?

H7. Emotional education is increasing with leaps and bounds, however, it is not part of the curriculum so it is not taken into account or valued by the Government. This way, schools have no physical time to do this education with their students.

2.3. Methods and materials

In order to elaborate the previous designed study of the innovational project, we follow the structure of the Educative Innovational Projects according to the UNESCO model (Belletich, 2021).

The main methods and materials used for this project can be seen in Annex 1, chart 1.

The structure consists of the following parts:

2.3.1. Nature of the Project

This project consists of the transversal and interdisciplinary learning of the Music, Mathematics and English subjects with the inclusion of the emotional field among them. This interdisciplinary learning can already be considered an innovation. Nevertheless, and coming back to what innovation is, the main innovation of this project is the impact it is going to have on the children education ideas. The project also intends to improve their efficacy and efficiency on the learning of those educational areas as well as the raise of their consciousness towards the importance of the three curricular areas and the fourth one included.

The method used to put this implementation in practice is the creation of Didactical Situations implying the three curricular areas and including the fourth one.

2.3.2. Origin and foundation

The project has raised from the educative necessities seen in a specific school. Those necessities can be explained taking into consideration both, the fourth dimensions on which the problem has an impact and with the explanation of the intention to solve these necessities.

The main problems found have been explained in the above “Primary Education educational context implications” as well as in section 1.1. which talks about the foundations of the project.

Due to that, in this section, we will just summarize the main previous ideas as an introduction to the project explanation.

Students behave very differently depending on the subject they are in. Students' attitudes in the Music and English classes are much better than in the Mathematics and emotional issues resolutions moments. Teachers agree with this reality and the necessity of a change on it.

In order to do so, here we present the project with which we pretend to change students' attitudes towards Mathematics and emotional conflicts. Besides, we want them to realize that the Music and English fields have no sense without Mathematics and emotions. How can we know Music without knowing Mathematics? How can we prepare an International concert in which people from different parts of the world meet and share their emotions if we don't know English to communicate with the rest of the participants? Those could be some of the questions and so transformations that we want to achieve with the project as such.

2.3.3. Objectives and goals of the project

In this section, we will specify the main objectives and goals of this project as well as the procedures to achieve them.

We will firstly present the objectives. The main objectives of this project are:

1. Raise students' awareness towards the connexion of all the subjects in real-life as well as the importance of education for their present and future lives.
2. Boost students' consciousness towards the special relation between Maths and Music.
3. Hike students' musical taste and their relation with the emotions that produce on us.
4. Increment students' motivation and participation in the Mathematics field in order to observe a change in their grades.
5. Make the students become conscious of the importance of English as an international language to communicate and participate in worldwide events.
6. Grasp students' attention towards the value of intonation and pronunciation in English.
7. Enhance students' recognition of their daily emotions and their importance to socialise with others.

In order to achieve all these goals, we have prepared an International Contest to which students have been invited. It would have been even better if the contest were real. Nonetheless, the current circumstances make this willing impossible to be fulfilled. Regardless of this inconvenience, we have tried to make it look as real as possible. Students will perform their song in groups and will present all the elements created along with the project on the final day of it.

2.3.4. Physical location

This project is going to be carried out in a Public School in Burlada.

The school is located at the very entrance of the village. More specifically it is located in the background of the main street. Buses stop near it and it is accessible by car too.

The village of Burlada is one of the most populated areas of Navarre, that is the reason why this School is not the unique school in town. The town has a wide offer of schools: public and state ones.

Regarding the quantity and variety of citizens in Burlada, there is both a wide variety and a wide quantity of inhabitants.

Talking about the inhabitants, Burlada counted 19.096 inhabitants in 2019: 9.223 males and 9.873 women as it is reported in its town hall webpage. It is situated in the fifth position of the most populated areas in Navarre after Pamplona, Tudela, Barañáin and Valle de Egüés.

Variety wise, it has a very varied population. Families come from very different places. This enriches Burlada with a wide variety of cultural backgrounds, which is also reflected in the varied backgrounds and families of the students who attend the different schools.

2.3.5. Human (project participants), material and financial resources.

2.3.5.1. Human resources

The school counts with 384 students in total: 94 students from Early Childhood Education and 290 in Primary Education. The students in Early Childhood Education are divided into 6 groups, two lines or courses per year. Primary Education is divided into 12 groups, two courses per year also. Since there are 2 levels for each grade in Primary Education, we have a total of 12 groups.

Regarding the teaching staff, the centre has a total of 44 teachers. Among them, we can find the tutors per course (the English tutor and the Spanish tutor), the specialist teachers and the support teachers.

The project we put into practice involves the students from the fourth course as well as the 4th-course teachers and some specialists. The participants of the project are the students of the two fourth course classes, the English and the Spanish subjects' teacher and the Music teacher. The student's parents are implied indirectly. Students will have to do some work at home for which they may need their families help. Nevertheless, the parents' help is not essential. We know that the students' backgrounds are very varied and in some cases difficult. We could see this in the study of Burlada that the centre offered us. This study was done by Lasherás Ruiz; Andueza Iñirizaldu and Jabat Torres proved that 25.1% of students have a foreign nationality and that 18.2% of those students didn't have Spanish as their mother tongue.

This way, the participants of the project come from very varied places. Their main nationalities are Ecuador, Colombia, Romania, Peru, Bulgaria, the Dominican Republic, Bolivia, Morocco, Portugal, Senegal, China, Algeria or Moldova.

Regarding the students' profiles, we have to take into account that we have a student with autism and intellectual deficiency diagnose, a high capacities student and a disruptive behavioural disorder student.

2.3.5.2. Material and financial resources

The centre offers G-PAI and A-PAI models, both in Early Childhood and Primary Education.

Talking about the bilingual offer and quality elements, this centre is a Cambridge exams examination centre and all the English teachers of the school have an Advanced or Proficiency certificate in the corresponding foreign language.

Early Childhood Education and Primary Education students attend up to 13 weekly sessions in English. If the PAI-A model is chosen, these students would take 4 weekly sessions in Basque and so 9 in English. They would just miss four workshops that are done in English.

Besides, different language immersion activities in English are carried out. The school not only offers some after school activities in English but also participates in different programs in which English is the main language of communication.

Also, the centre offers 6th-grade students the possibility of taking the Cambridge exams.

Talking about the school structure and facilities, the centre has 2 floors. On the first floor, we find the Early Childhood Education courses, as well as 1st and 2nd Primary Education, while on the second floor, there are the 3rd, 4th, 5th and 6th grades. On this first floor, we can also find the canteen. Regarding the specific subjects, there is a music room, two computer rooms and language classes among others. Talking about Physical Education, the 1st year of Primary Education students have a door that gives direct access to the playground, which is an advantage for the teacher, since not so much time is invested in going from the class to the Sports pavilion.

2.3.6. Design and planning for the classwork

2.3.6.1. Generating nuclei of knowledge (related to the learning that is sought to be generated)

The main generating nuclei of knowledge in the different areas have been the next ones.

In the Mathematics area, the nuclei of knowledge have been the Diagnostic tests that students are going to do soon in addition to the bad results obtained by the vast majority of the students. The Mathematical problems have been created following the structure of the test and so including a context in which those problems could appear.

Regarding Music and English, the main generating nuclei of knowledge has been their motivation when learning through a music app "Lyrics Training".

Emotions wise, the continuous problems the students were having both in the playground and in the class have been taken into consideration. Not only we want them to work in groups but also to control their emotions in order to deal with difficult and conflictive situations.

2.3.6.2. Key competencies to stimulate in students

Before commenting and specifying the key competencies to stimulate the students we have to refresh what competence means.

«It is understood by competences the capacity to put in practice in an integrated way, in different situations and contexts, the pieces of knowledge, abilities and personal attitudes acquired» (Saramona, 2004, p.163) cited by (Touriñán López & Longueira Matos, 2011) and translated.

In this context, the main competencies we want the students to learn and put into practice with this project are mathematical competence, cultural and artistic competence and linguistic communication competence. We want the students to be competent to transmit their ideas as well as their emotions, to implement and learn about the “imaginario colectivo” of the Spanish and more specifically Navarra area and to be competent to solve daily mathematical problems in order not to be ripped off.

Besides, and coming back to the specified competencies that we included in our theoretical framework, we also want our students to gain competence in the digital field and interacting with the new society, in addition, to become more autonomous and develop their personal and group initiative.

2.3.6.3. Educational objectives

The main educational objectives of this project are:

- Achieve the students learning to solve real-life problems.
- Enlarge the students' abilities to solve basic operations to solve problems: additions, subtractions, divisions and multiplications.
- Revise and reinforce the students' musical concepts knowledge.
- Increment students' vocabulary and writing abilities.
- Boost students' creativity.
- Initiate students into the emotional education field.

2.3.6.4. Curricular areas and contents involved

Four curricular areas are defined in this project. Three of those areas are specific curricular areas: Music, Mathematics and English. The fourth one appears in the curriculum under the title “Valores sociales y cívicos”. Emotional education has not a specific curricular area. Although it is a transversal concept that can be found not only in the Natural Science curricular area but also in the Spanish Language, Music and Art or Physical Education one, it is just specified as emotional education as part of the values curricular area which is not a compulsory subject.

2.3.6.5. Conceptual, procedural and attitudinal knowledge

The knowledge acquired through this project can be classified into conceptual, procedural and attitudinal knowledge.

Conceptual knowledge

Regarding the concepts that this project is going to deal with, we can find, music concepts (the value of the notes and the time in the music), English concepts (vocabulary and grammar aspects to writing), Mathematics concepts (additions, subtraction, divisions and multiplications) and emotional concepts (name of the emotions both in English and Spanish).

Procedural knowledge

Procedure wise, we want the students to acquire the steps of the problem-solving process as well as the procedure to read a music sheet and to understand an English song. The procedure to identify each one's own emotions is also going to be essential.

As transversal procedural learning, students will learn to work in groups and to have different responsibilities inside the group.

Attitudinal knowledge

Students need to have an active and participative attitude in all areas. We need students' attention during the explanation and respect towards the teacher and the other classmates. What is more, we want the students to develop collaborative and teamwork attitudes.

2.3.6.6. Design of the didactic situations

The design of the Didactical situation can be read in chart 2 of Annex 2.

The more specific description of the previous study designed following the structure of a Didactical Situation can be seen in Annex 3, charts 3,4 and 5. The specific materials designed for each task can be seen in Annex 4.

2.3.6.7. Activity schedule

The schedule of this previous designed study can be seen in Annex 5, chart 6.

2.3.7. System of implementation and evaluation of the results obtained in the project

2.3.7.1. Project implementation procedures

In order to implement the results obtained, we would change the following aspects.

First of all, the temporalization should be longer. One week is not enough to appreciate significant changes in the students' behaviours towards the subjects involved.

Besides, if the students were used to work in groups, we would have reduced the time explaining how to work in groups and we would have got the most of the time on most of the occasions.

Talking about the data collection, in our case, we believe that some of the questions that we have included in the final project survey and that weren't included in the initial survey should be included. We thought they could be used both to raise students' awareness about their learnings through the project and to observe their ideas' changes. Nevertheless, we totally believe that the

ideas' changes would have been seen better if the questions had been asked at the beginning of the project too.

2.3.7.2. Data collection procedure on the results obtained with the project

The procedure to collect the data obtained with the project can be classified into two types: the data collected along the process and the data collected before and after the project.

The data collected along the process has been collected not only with the productions done by the students but also with their reactions and comments in situ. All their productions are stored up in the Drive. Their final production can be seen in Padlet (Annex 6). This final production compiles all the productions done along with the project.

Their final continuous evaluation chart all completed can also be found in their Drive (see Annex 7).

The data obtained before and after the project has been collected through a Google Docs survey. See Annex 8.

2.3.7.3. Instruments for data collection

In order to collect data, we have created different instruments. Here we explain all of them and their design process.

As far as the main tasks of the project are concerned, we have used the Drive facility to collect all the students' ideas. All the materials have been shared through different drive folders. Students have completed those materials with the Chromebooks and they have to share them with us.

One of the tasks were done on paper and in order to collect them we have taken pictures of them. Then, we have included those pictures in their different group folders. Those pictures can also be seen in the final Padlet (see Annex 6).

Regarding the students' continuous evaluation data, we created a shared chart also and the students were in charge of filling their own chart each day (see Annex 7).

Finally, to collect the student ideas' Changement data we created two surveys: one to be done before doing the project and a second one to be done after doing it (see Annex 8).

2.4. Experimentation

In this part, we explain the third phase of the didactic engineering. In this phase, we write down the application process and present the obtained results.

2.4.1. School experience description

In this section, we are going to explain what has been the reality of the Project put into practice. For that, we will clarify which has been the real physical location as well as the human, material and financial resources with whom we have counted.

Regarding the physical location, the project has been held in the same place for which it had been planned. Therefore, the context has been a Public School located in Burlada.

More specifically, the project has been carried out in the fourth-course classes of Primary Education. The participants have been the two classes of the fourth course, fourth A and fourth B class. Therefore, the students have been children on their tens with a wide variety of nationalities.

Talking about the time and temporalization, we have followed the established calendar just having a slight variation in the last two days. The dates haven't changed, the project started on the 14th of April and ended on the 28th of this same month.

Now, we introduce in the discourse the description of the whole project process as evidence of its implementation in order to present the following results.

The project has been ninety per cent carried out. Students have accomplished all the tasks that were planned. Nevertheless, we have helped the students a lot and we have speed up when explaining some things that require more time. Due to that, on some occasions, we have finished some of their activities or we have modified something through the drive share option.

Nonetheless, students have had the opportunity of following all the steps and carry out the project from the beginning until the end. Here we explain the procedure.

To begin with, the contextualization phase was exactly as it had been planned. Each student received the message in their Chromebook and all of them filled up the survey. The very same day we did the second phase task. We didn't have enough time to explain them properly the evaluation chart but the students were able to have a look at it.

The second day of the project was dedicated to the first workshop of phase 3. This workshop suffered a slight modification from one class to the other. In the 4th A class, I spend more time creating the "Emojinary" and then we had less time to do the songs' chart. In contrast, in the 4th B class, we just have a look at the "Emojinary" created by the other class and we spend more time doing the song chart.

Phases 2, 3 and 4 were done in different orders in order to tally them with the students' timetable. Anyways, phase 2 was done in a Music class, the third one in a reading and writing class and the fourth class during a Mathematical session.

The Music class (phase 2) was more difficult and time-consuming than what had been planned. Even though the children knew the names of the musical figures, they knew them in Spanish and they have difficulties in knowing their beats and durations. In this class, we explained to them the music relationship with mathematics and we solve the time problem by looking at the music sheet. For that, we sent each group the song enigma document. In this document, each group had their link to their music sheet and their song lyrics. Under it, they have the chart with the questions to solve the tempo enigma.

In the third workshop of the third phase, we did a flyer and explain the homework. In this workshop, students created their flyer and at home, they wrote their video clips. For this last task, students have to listen to the song and try to imagine and write a story in English that represented that story for them. That was going to be their video clip.

The fourth workshop was the mathematic problems. Students worked in groups while we were supervising and helping them with their problems and doubts.

In the workshop fifth the students were very motivated with the fact of giving likes to the others. Maybe this was so motivating that they missed the main goal of the activity. Anyways, each group voted for their group video clip on this workshop. We were also supposed to start rehearsing the song but we were running out of time so this was a task they had to do on their own. In fact, one of the students told us that he had already started to do it.

The phases fourth and fifth have been the final phases of the process and so the phases compile all the materials and think about the learnings obtained thanks to the participation in the project. In the fourth phase, students have created their final presentation to be shown the day of the concert on a Padlet wall (you can see it in the data collection Annex 6).

Phase number five has been the last day of the project. This day students have performed their songs and show their results on their Padlets. We have been watching the performances and at the end of the class, students have fulfilled the final survey.

2.4.2. Results

In this section, we will present the results obtained giving an answer to the previously planned questions. In order to do so, we will present the answers and next to each one, we will present the results that answer that certain question. In this section we are summing them up, nevertheless, you can find the surveys' results in Annex 8.

Q1. Why do we go to school for such a long time?

In response to this question, students answer it before doing the project and after doing it. In both cases, their answers were “to learn”, “to have a better future”, “to learn and make friends” or other similar to those ones. See Annex 9.

Q2. Is there a unifying element or elements among the Music, English, Maths and emotions?

Above all, we believe that the students have got the idea that subjects can be related and interconnected. Students were more aware that there are a lot of songs in English and that songs transmit different emotions. However, students have neither thought about their reactions towards the different types of music nor to the relationship between Mathematics and Music. The day we explain to them the multiples and divisors terms and their relationship with the music they were shocked. Besides, they were really happy when they got to calculate the duration of their songs with

mathematical operations. They realized they knew more mathematics than they thought and that mathematics were useful for everything.

In this case, students answer several questions on both surveys. But, the main answer that shows a change in their thoughts after the project is the question "Do you think that Music has any relation with Mathematics, English or emotions? "(Annex 10).

Q3. Why is Music studied in the school if the vast majority of students won't be musicians in their near future?

This question was not directly asked the students. However, students answered other questions that you can see in Annex 11. The main conclusions extracted from there are that the majority of the students listen to music every day and that they like the Music subject. In the final survey results to the question of the likelihood of the Music subject, there was one more vote to the unlikelihood of the Music subject. Nevertheless, the likes far outweigh the unlikes.

Besides, students are quite fond of Music and they usually listen to Music in English.

Q4. Are the Mathematics studied in the school useful for anything? (Annex 12) Q5. Why do we study mathematics if there are calculators? (Annex 13).

Questions four and five can be answered simultaneously. The main results obtained regarding the Mathematics subject are the incrementation of their motivation and group organization towards the task the tasks to be done and the decrease in one voter to their dislike towards the Mathematics. Besides, the number of students that completed and did their maths' homework comparing it with other homework they had been sent to do, increased. This means that fewer students did not do their homework.

Q6. How is it possible that we study English for such a long period of time and we don't get to imitate their intonation and accent?

For this question, students answered several questions as well. Most of them thought that intonation is important. All of them thought English is essential to travel abroad and some of them said that they used to watch TV and videos in English. This can be seen in Annex 14.

Q7. Is it taught in the school to distinguish the emotions that we can feel and the techniques to deal with them?

Students answered several questions related to this one. In general, the majority believe that is important to know how they feel at any moment since this can have an impact when working in groups. Besides, most of them would like to receive and be educated in emotions. Students had good knowledge of the emotional field. See Annex 15.

Besides, they are very concerned about it since they usually have fought among them. On this concern, it is necessary to comment that one of the days we were doing the project the students

commented to us that it had been the very first time in the playground that they had played without fighting. This was a positive point.

A more detailed explanation of the final results obtained, with images, tables and figures, can be seen in Annex 16.

2.5. Results discussion

In this section, we report the result discussions. This last part belongs to the fourth phase of the didactic engineering. In this phase, we analyse and discuss the obtained results contrasting them with our previous questions and project hypothesis.

We will comment on the previously written results as well as their reasons and the questions that create on us. Besides, we will remember our previous hypothesis link to each question and our acceptance or denial. For that, we will follow the same procedure as in the previous section.

Q1. Why do we go to school for such a long time?

In response to this question, students answer it before doing the project and after doing it. In both cases, their answers were “to learn”, “to have a better future”, “to learn and make friends” or other similar to those. The obtained results in this question are quite surprising since there is a huge quantity of students with low motivation to learn. However, this answer makes us think that maybe students have willing to learn but we are not offering them the way they want to do it. Nowadays, most of the students if not all, are hooked on social networks, youtube channels and other trends like “TikTok”. This means that students are overstimulated at any time. So, in school, they are expecting to learn passively as they do watch the social networks at home. Nonetheless, this can not be possible all the time. Therefore, those could be the answer to that contradictory answers to that question next to the fact that the question could be implemented.

In this case, the H1 referring to the fact that school years could be reduced if education were more efficient and effective since the early years, is accepted.

Q2. Is there a unifying element or elements among the Music, English, Maths and emotions?

Talking about the results obtained in connexion with this second question, we can say that students have got the idea that there is a unifying element among all those areas. What is more, students have been shocked about it, mainly with the connexion between Mathematics and Music. Maybe they have never thought about it due to the way they have been taught Music. Also, it could be connected with their family background. There was a huge difference between the students that attended Music classes out of the school and the ones who did not. This can be something personal but it is usually related to the families’ interests towards the Music or their economical status. In this case, and as we commented in the contextualization of the centre, this last reason could be the key point.

In this respect, the H2 referring to the fact that the four areas involved in the project have much more things in common than we thought, is accepted.

Q3. Why is Music studied in the school if the vast majority of students won't be musicians in their near future?

The majority of the students like the Music subject as well as listen to Music at home every day. This can be connected with the results obtained. Besides, all these results can be connected with the common frequency with which students learn English with videos and songs.

Regarding the H3 concerning the music as a cultural element from which we need to have basic notions since it is present in almost all celebrations and events, is accepted.

Q4. Are the Mathematics studied in the school useful for anything? Q5. Why do we study mathematics if there are calculators?

Talking about the Mathematics' results and so about the increase of motivation and homework done, they can be attributed to various facts.

Firstly, the increase of motivation could be related to the fact that all those elements were destined for their final group presentation of the song. Students were very motivated about that final task so they had to do it very well the problems. In the context of the problems it was clearly stated, one minimum mistake could ruin their performance.

And secondly, the fact of being part of a group and have a task to fulfil. As we explained students have different roles in the group. The tasks were not distributed randomly. We have previously planned and thought which were, for instance, the students who did not use to do the homework. To those, we gave them the role of the secretary. Those students have the pressure then of collecting the homework and have a photo taken of their homework. So, students felt the pressure of doing it not only because they have to fulfil their tasks but also not to deceive their group.

In this case, the H4 and the H5 are accepted. The H4 concerning the essence of the Mathematics in our daily life activities is accepted. Regarding the H5 related to the speed of operations' solving, it is also accepted although it has not been appreciated and valued in the project.

Q6. How is it possible that we study English for such a long period of time and we don't get to imitate their intonation and accent?

In order to answer this question, we would have needed more time. The ideal thing would have been that students have worked more with the song, the lyrics and their intonation. Besides, it would have been perfect that they had tried to imitate their accent and transcribed the song. This has not been possible. Nevertheless, students are aware that intonation can be learned through songs and that they improve a lot their English. They were used to that since when they have some time left they use to practice this with a program on the computer so that is the main reason why they were aware of that.

In this respect, the H6 referring to the fact that imitation is essential to achieve and conceive a more real intonation when learning another language is accepted although could be implemented in the near future of this project.

Q7. Is it taught in the school to distinguish the emotions that we can feel and the techniques to deal with them?

Students have been working on different values in their “values” classes. That is the reason why some of the students were so concerned about the importance of emotional education and its impact on their relationships.

Regarding H7 that concerns about the lack of emotional education and physical time to be done in the schools as an extra activity, is accepted.

CONCLUSIONES Y CUESTIONES ABIERTAS

Las conclusiones que presentamos a continuación están unidas a los objetivos generales y específicos planteados para este proyecto, así como a las preguntas que nos planteamos al inicio del mismo.

En primer lugar, podemos decir que este proyecto ha contribuido con un marco teórico al desarrollo de una propuesta integradora que engloba a los lenguajes universales en el ámbito de la Educación Primaria desde una Metodología Innovadora. Además, ha sido posible encontrar las similitudes entre esos lenguajes en tanto áreas de enseñanza, lo cual ha contribuido a la creación de un proyecto transversal y significativo para los estudiantes. Asimismo, se ha constatado las bases teóricas sobre el beneficio de una unificación de estos lenguajes universales, pues acerca más las propuestas didácticas a los intereses de los niños y se crea mejor ambiente de trabajo, asociado a la regulación de las emociones y la mejorar de la motivación.

En segundo lugar, ha sido posible la elaboración y puesta en práctica total de la propuesta pedagógica de innovación basada en la estructura de la UNESCO y la TSD, y se presenta como pertinente para asegurar la efectividad y eficiencia en los aprendizajes. Estas propuestas son viables y su grado de experimentalidad es aceptable.

En tercer lugar, los resultados de la experiencia práctica han demostrado la posibilidad efectiva de trabajar de manera articulada los lenguajes universales, así como en relación con la educación emocional. Como desarrollos eficientes de los niños y niñas, se confirma que los estudiantes pueden aumentar su compromiso de asistencia a la escuela, mejorar su percepción de sentido y significado, mejorar su motivación personal y, asumir su papel más protagónico y responsable con sus aprendizajes dentro de sus grupos de trabajo.

En cuarto lugar, la experiencia teórico- práctica refiere también que los análisis más exhaustivos, por parte de los docentes, en cuanto a los elementos unificadores que existen entre los lenguajes universales, podrían ser beneficiosos para diseñar y aplicar situaciones didácticas más eficientes y pertinentes (lo cuales son indicadores de calidad), que permitieran a los niños alcanzar la percepción de la transversalidad y de los lenguajes universales unificados.

Finalmente, una cuestión abierta en cuanto a la implementación del proyecto, es poder llegar a establecer cómo conseguir un balance entre los tiempos de diseño del proyecto y los tiempos de su implementación, habida cuenta de la lentitud en los procesos de consenso de las propuestas pedagógicas entre los participantes, máxime cuando se tienen que llevar a cabo a la par con el desarrollo regular de los procesos de enseñanza-aprendizaje.

BIBLIOGRAPHIC REFERENCES

- Arsac, G., & Al, E. T. (1992). *Teacher'S Role and and Reproductability of Didactic Situation*. 5–29.
- Belletich, O. (2021). *Estructura de desarrollo de proyectos de innovación educativa según el modelo UNESCO* (Apuntes de curso). Curso realización del TFE en la UPNA. https://drive.google.com/file/d/1VKwmQ7QXA9Jz17HLN8Ofcee5UbV_iAzg/view?usp=sharing
- Berman, P., & McLaughlin, M. I. (1976). Implementation of educational innovation. *Educational Forum*, 40(3), 345–370. <https://doi.org/10.1080/00131727609336469>
- Boler, M. (1999). *Feeling power : emotions and education / Megan Boler*. http://encore.unco.edu/iii/encore/record/C__Rb1476760?lang=eng
- Carr, D. (2005). Making Sense of Education: An Introduction to the Philosophy and Theory of Education and Teaching. In *Making Sense of Education: An Introduction to the Philosophy and Theory of Education and Teaching* (pp. 1–294). <https://doi.org/10.4324/9780203994702>
- Chavarría, J. (2006). Teoría de las situaciones didácticas. *Cuadernos*, 2, 1–10.
- Comunitat Valenciana. (2019). Boletón Oficial del Estado. *Boletín Oficial Del Estado*, 2014(51, 28 de febrero), 18987–19106. <https://www.boe.es/eli/es-vc/l/2019/02/05/1>
- Crosscombe, N. (n.d.). *Innovation*. 27(2), 48–52.
- Cruz Quilca, M. (2020). *Creciendo con la música, recursos musicales para trabajar los ámbitos de desarrollo y aprendizaje en el nivel inicial* (Trabajo de fin de grado). Pontificia Universidad Católica del Ecuador.
- Ellis, A. K., & Bond, J. B. (2016). Research on Educational Innovations. In *Research on Educational Innovations*. <https://doi.org/10.4324/9781315617145>
- Ferro García, R., & Vives Montero, M. (2004). Un análisis de los conceptos de efectividad, eficacia y eficiencia en psicología. *Panace@: Revista de Medicina, Lenguaje y Traducción*, 5(16), 97–99.
- Punset, Eduard;Mora, Francisco; García Navarro, Esther; López Cassà, Èlia; Pérez-González, Juan Carlos; Lantieri, Linda; Nambiar, Madhavi; Aguilera, Pilar; Segovia, Nieves; Planells, Ocatavi; Bisquerra, R. (2554). *¿Cómo educar las emociones? La inteligencia emocional en la infancia y la adolescencia*. <http://library1.nida.ac.th/termpaper6/sd/2554/19755.pdf>
- Shor, I. (1993). Empowering education: critical teaching for social change. In *Choice Reviews Online* (Vol. 30, Issue 08, pp. 30-4530-30–4530). <https://doi.org/10.5860/choice.30-4530>
- Touriñán López, J. M., & Longueira Matos, S. (2011). La música como ámbito de educación. Educación «por» la música y educación «para» la música. *Teoría de La Educación. Revista Interuniversitaria*, 22(2), 151–181. <https://doi.org/10.14201/8300>

ANNEXES

Annex 1.

Chart 1.

Specific objectives and their methods

Specific Objective (SO)	Method	Materials
SO.1.1.	Theoretical Research	Other projects
SO.1.2.	Research (Scientific Method)	Surveys
SO.2.1.	Didactical Situation	Didactical sequence structure
SO.3.1.	Analysis data collection	Analysis chart

Nota: Elaboración propia

Annex 2.

Chart 2.

SO.2.1. Didactical Situation

Preparation	Production	Evaluation
<ul style="list-style-type: none"> Students are informed about the Project which is going to take place. The Project consists of the preparation and realization of an international concert. 	<ul style="list-style-type: none"> In order to change the students' ideas analysed with the previous session survey, we designed a Didactical Sequence. 	<ul style="list-style-type: none"> The evaluation phase was done along with all the project. We not only evaluate the final performance but also the whole teamwork process.
<ul style="list-style-type: none"> Students are informed about the method which is going to be used to hold the project: the Didactical Sequence. 	<ul style="list-style-type: none"> In first part of the Sequence, students were divided into groups of 6. Those groups were going to be their "Music Band group". Each of the group members received a role. This 	<ul style="list-style-type: none"> After the Project implementation, each group have to answer those questions: <i>What have we done?</i> <i>What have we learnt?</i>

way all the members of the group felt their importance in the group and received a responsibility to be considered.

- After that, students have to accomplish different tasks to prepare their final product: their performance. Those tasks were varied, from the mathematical operations to organize the chairs of the public to the English song analysis both musically and emotionally.
 - Students are informed about the main goal of the project: the visualization and consciousness of Mathematics, English, Music and Emotions in the organization of a concert.
 - In all the tasks each student had to put into practice their role. This way, students felt their teamwork. Besides, their self-esteem was raised. Each one felt that they were essential in the team and they were given responsibilities. All the students have to attend class in order to keep on working on the project.
 - In order to get to know the previous ideas of the students and contrast them with their ideas after the Project implementation, we gave the students a survey to be filled in.
 - For the final product, students have to perform their chosen song which was associated with a moral dilemma and so an emotion. Students have to choose an English song, present a flyer of its analysis both
-

musically and
emotionally and
perform it singing and
with any other
instrument as
accompaniment.

Nota: Elaboración propia

Annex 3.

Chart 3.

SO.2.1. Didactical Sequence-Phases 1 and 2

Phases	Task and activities		Strategies and materials (*)
Phase 1 Contextualization of the Project. Type of Didactic situation: "Situación acción"	Task 1: Invitation to the contest. Teacher activities: <ol style="list-style-type: none"> The teacher sends a message for the students to invite them to participate in an International Concert contest. Then the teacher sends the survey to the students and they fill it. Students' activities: <ol style="list-style-type: none"> Students receive a message from an International Company which asks them to prepare a concert. They fill a survey as the sign up in the concert. 		<ol style="list-style-type: none"> Message for the students. Survey to be filled in.
Phase 2 Project initiation. Type of Didactic situation: "Situación de formulación"	Task 1: Group formation. Teacher activities: <ol style="list-style-type: none"> The teacher divides the class into four groups of six students in each group. The teacher explains the different roles that need to be in the group and give one role to each participant. The teacher shares with them a chart that they will fill in each day. This will be a continuous evaluation of the group in the process. In this chart, they will have Students' activities: <ol style="list-style-type: none"> Students join the group. Each one has to know very well which is his role. Learning of what they have to do with the continuous evaluation chart. 		<ol style="list-style-type: none"> Roles in the group explanation. Group continuous evaluation chart.

	<p>to check each group member participation and fulfilment of their role. Besides, each one will share their personal emotion of the day and they will put an emoji on each square.</p>		
--	---	--	--

Nota: Elaboración propia

(*) All the activities mentioned in the chart can be found in this next annex 4.

Chart 4

SO.2.1. Didactical Sequence-Phase 3

Phases	Task and activities		Strategies and materials (*)
Phase 3 Type of Didactic situation: "Situación de formulación"	Task: Workshop 1: Emotions and songs. Teacher activities: 1. Presentation of the emotions and the emoji emotions. Do you know which emotion does each emoji represent? 2. Students will then receive the list of songs and the "emojinary". Each of this song has been extracted from a study and is said to be linked with one different emotion each. Students will have to listen to all of them and associate them with one emoji. Students' activities: 1. Students explain orally what each emoji represents for them. 2. Listen to each song and relate it with an emoji.		1. Emotions and emojis. "Emojinary" dictionary. 2. List of songs and songs' chart.

Type of Didactic situation: "Situación de formulación" and "Situación de validación"	Task: Workshop 2: Music sheet analysis		
	Teacher activities: 1. The teacher gives each group a song music sheet (randomly) and a song chart to complete with the main aspects of the song. 2. Explanation of the multiples and divisors relationship with the notes equivalence. 3. Explanation of the tempo. 4. Enigma guidance to obtain the song duration.	Students' activities: 1. Open the music sheet and the chart to complete in the Drive folder. 2. Watch the video and pay attention to the explanation of the teacher. 3. Listen to the tempo explanation. 4. Follow the steps and questions of the chart to solve the enigma.	
	Task: Workshop 3: International concert preparation.		
Type of Didactic situation: "Situación de formulación" and "Situación acción" (Homework)	Teacher activities: 1. Explanation of the video clip story homework. 2. Explanation of the flyer creation and its requisites. A reminder of the steps to enter into the Canva page.	Students' activities: 1. Pay attention to the homework explanation. 2. Creation of the concert flyer.	 1. Template with questions to guide their writing. 2. Flyer example and requisites to add on their flyer.
	Task: Workshop 4: Oh-oh, we have some problems to solve.		
Type of Didactic situation: "Situación de formulación"	Teacher activities: 1. The teacher gives three problems to each group. Students have to use the strategy they consider appropriate in order to solve the	Students' activities: 1. Problem-solving in groups.	 1. Problems headings to be solved

	problems as fast as possible.		
	Task: Workshop 5: Final day in the backstage.		
Type of Didactic situation: “Situación acción” and “Situación de formulación”	Teacher activities: <ol style="list-style-type: none"> 1. Guide the students to enter into the Paddlet link. 2. Explain the students their task: read all the group video clips and choose one giving a like to it. 3. Explain to the students where they can find their songs' lyrics in order to start learning them on their own. 	Students' activities: <ol style="list-style-type: none"> 1. Enter into the Paddlet. 2. Read and vote for their group videoclip. 3. Lyrics learning homework. 	<ol style="list-style-type: none"> 1. Paddlet walls divided into groups. 2. Final results included on their folders. 3. Lyrics of the songs.

Nota: Elaboración propia

(*) All the activities mentioned in the chart can be found in this next annex 4.

Chart 5

SO.2.1. Didactical Sequence-Phase 4

Phases	Tasks and activities		Strategies and materials (*)
Phase 4 Final rehearsal Type of Didactic situation: “Situación de formulación” and “Situacion de validación”	Task: Concert presentation preparation. Teacher activities: <ol style="list-style-type: none"> 1. Teacher supervises the work done by each group. 2. Explanation of the Padlet final presentation and compilation of all the elements created along with the project. Students' activities: <ol style="list-style-type: none"> 1. Preparation of the materials. 2. Creation of the Padlet presentation for their concert performance. 		1. Paddlet final presentation model.

Phase 5 Final production Type of Didactic situation: <i>"Institucionalización del saber"</i>	Task: Microphones, camera, action!		2.Performances 3. Final survey.
	Teacher activities: 1. Take notes of the students' participation and collaboration looking at the performance and the group continuous evaluation chart. 2. Send the students the final survey.	Students' activities: 1. Presentation of their song on their Padlet wall. 2. Students perform their song. The rest of the students need to guess the emotion that they are treating to demonstrate. 3. Survey filling.	

Nota: Elaboración propia

(*) All the activities mentioned in the chart can be found in this next annex 4.

Annex 4.

Phase 1. Task 1. Activity 1. Message for the students.

Dear class,

We are the coordinators of the International Music song contest for children and we are writing to you to invite you to participate in this year's contest.

We know that your course from the "xxxxxxxx school" is very creative and has good skills in Music, Mathematics and English, as well as dealing with emotions. Due to that, we have thought you are very appropriate to join this contest.

But at this point, you must be asking yourself, but what do we have to do?

Well, the final task is to perform a song in a concert. However, to prepare the song and the concert you will have to solve some tasks and problems. From now on you will become artists and you will have to solve all artist's problems.

Do you want to join and learn with this new experience?

We are looking forward to your answer.

Yours sincerely,

The International Music song contest coordinators.

<http://www.injuve.es/gl/convocatorias/premios/7o-concurso-internacional-de-comolucion-musica-jove>

Phase 1. Task 1. Activity 2. Introduction Survey for the students.

Google Docs document.

https://docs.google.com/forms/d/1gT_STLqNgxtKzKvdK8SjgX-9Xol44mOYvG3X1CCHQAM/edit?usp=sharing

Phase 2. Task 1. Activity 2. Roles in the group explanation.

ROLES IN THE GROUP:

1. Spokesman/woman. It is the person in charge of transmitting the doubts but also the group progress both to the teacher but also to their partners and other groups.

2. The timer. It is the person in charge of controlling not only the class time but also the deadlines of the tasks. This person has to organise each session time in order to get the most of each class doing productive things. Besides, it has to control and remind their group each tasks deadline and deliver each task on time.

3. The technologist. It is the group member in charge of the group Chromebook. Most of the time the group will have one chromebook per group. So the person who is the technologist will be the unique one who can touch it and control it. Other times, they may need one Chromebook each. In this case, the technologist will also be responsible of taking them and then giving them back on time and clean.

4. The secretary. It is the person in charge of compiling all the information and ideas created in the group and written them down. It is the person who stores up all the group decisions.

5. The coordinator. It is the person in charge of sharing the work and organizing the group. This person distributes the tasks to do and coordinates the group making sure all people have something to do.

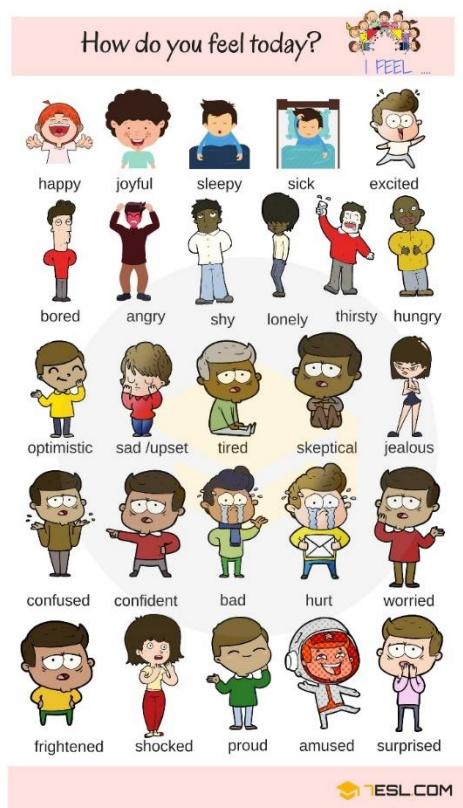
6. The problem solver. It is the person who has to solve all types of problems among the group. Not only if there is a fight but also if someone has any other type of personal problem. The problem solver tries to solve it first in the group. If the problem is excessive, the speaker person will transmit it to the teacher. The problem solver, he or she also has to maintain the order in the group and keep a working ambience.

<https://docs.google.com/document/d/1DmGP0ZSNq6cdRuHAnhnDqGLzvsPpkDFOwHdb8WnDHo/edit?usp=sharing>

Phase 2. Task 1. Activity 3. Continuous evaluation chart.

<https://docs.google.com/document/d/1DmGP0ZSNq6cdRuHAnhnDqGLzvsPpkDFOwHdb8WnDHo/edit?usp=sharing>

Phase 3. Task. Workshop 1. Emojinary. Activity 1. Emotions and emojis.



Phase 3. Task. Workshop 1. Emojinary. Activity 2. Emojinary.

<https://www.storyjumper.com/book/read/104403616/6075b6456ab7a>

Phase 3. Task. Workshop 1. Emojinary. Activity 3. Songs list and chart.

<https://open.spotify.com/playlist/6aNLQnHHEAF9aC2WhyFM9v?si=VrNc7gUCRMWxwuiduTW7cA>

<https://docs.google.com/document/d/1TtnK72LwsQfv1CciwFgrA3sVCztoagHzbHwMr8FuAss/edit?usp=sharing>

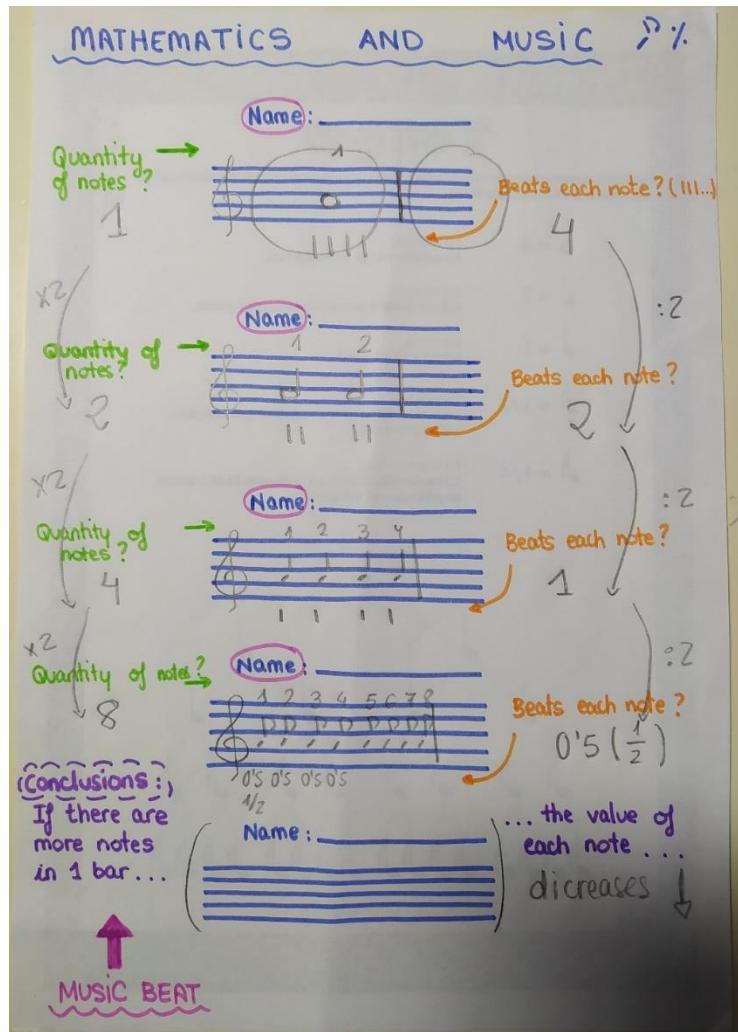
Phase 3. Task. Workshop 2. Music sheet analysis. Activity 1. Music sheets and enigma chart.

<https://docs.google.com/document/d/1ukQzyn2WNb4dWo1d8CoXQ54gEWWNrj6ulxHTZ49r5wQ/edit?usp=sharing>

<https://www.musicnotes.com/sheetmusic/mtd.asp?ppn=MN0128825>

Phase 3. Task. Workshop 2. Music sheet analysis. Activity 2. Multiples and divisors and the notes.

Video https://www.youtube.com/watch?v=kJE2X0gMWfY&ab_channel=ArchimedesTube



Explanation:

With this mind map, I will explain the multiples and divisor of one number. The multiples can be related to the number of notes that we can obtain from the previous one. This way we will obtain the number 2 multiples (see image above). Nevertheless, in order to explain the beats that each note occupy, we will explain the divisors. For instance: if we divide a whole note (4 beats), we obtain that a half note measures the half of it. In English is very clear since the name of the notes is related to their measure. Nevertheless, in Spanish, the names have no relation with it.

Vocabulary:

Whole note – Redonda

Half note – Blanca (1/2 de la redonda)

Quarter note – Negra (1/4 de la redonda)

Eight note – Corchea (1/8 de la redonda)

Sixteenth note – Semicorchea (1/16 de la redonda)

Thirty-second note – Fusa (1/32 de la redonda)

https://quizlet.com/_8xwxkv?x=1jqt&i=2v8hma

Phase 3. Task. Workshop 2. Music sheet analysis. Activity 3. Time in music.

<https://docs.google.com/presentation/d/14E4x0puRU4pWRdRaqxvjehCFfyG3bh0miWzwMu3lAc/edit?usp=sharing>

Phase 3. Task. Workshop 3. International concert preparation. Activity 1. Template for writing.

<https://docs.google.com/document/d/1igWs0hFVu8iU5foADW67TkXYdgPhZ27Kma7mof908sl/edit?usp=sharing>

Phase 3. Task. Workshop 3. International concert preparation. Activity 2. Flyer example and requisites.

<https://drive.google.com/file/d/1DZYGr1Z1EgotVo0kw6kcfTcUC4z3ApYI/view?usp=sharing>

<https://drive.google.com/file/d/12WWBByMEeeg-aLHwrErHvOj-cDlw16G7x/view?usp=sharing>

Phase 3. Task. Workshop 4. Oh oh, we have some problems to solve. Activity 1. Problem headings.

<https://docs.google.com/document/d/1RLQf3JZtxNDXkRBf7plChygpVrr9LtIHrk0NoxBccVU/edit?usp=sharing>

Phase 3. Task. Workshop 5. Final day on the backstage. Activity 1. Padlet videoclip votes.

Group 1 (A and B classes). <https://padlet.com/miriambaquedano/keorpvaibc84siwt>

Story ideas GROUP (4B)

Story ideas GROUP (4A)

Story ideas GROUP (4B)

Story ideas GROUP (4A)

Group 2 (A and B classes). <https://padlet.com/miriambaquedano/ixb88ysg1exv63xw>

padlet

miriambaquedano • 3d

Videoclip stories GROUP 2

Hecho con asombro

4A

4A

4B

4B

Group 3 (A and B classes). <https://padlet.com/miriambaquedano/4mhu0woxjwndsgo9>

Group 4 (A and B classes). <https://padlet.com/miriambaquedano/5fdxosat4n26y2wm>

padlet

miriambaquezano • 3d
Videoclip stories GROUP 4
Hecho con ausencia total de remordimientos

4A

4A

4A

4A

4B

4B

4B

4B

4B

4B

Phase 3. Task. Workshop 5. Final day on the backsatage. Activity 3.

<https://www.cifraclub.com/american-authors/best-day-of-my-life/>

Phase 4. Task. Activity 2. Paddlet final presentation model.

<https://padlet.com/miriambaquedano/pjxra02v9e8ev2w>

padlet

miriambaquedano • 3d

CONCERT PRESENTATION

Hecho con ❤

MUSIC LYRICS

Best Day Of My Life - American Authors... Aprende a tocar el cifrado de Best Da... cifra club

MUSIC SHEET

BEST DAY OF MY LIFE

Words and Music by ZACHARY BARNETT, JAMES ADAM SHELLEY, SHEP GOODMAN and AARON ACCETA

SONG PRESENTATION

- Name of the song:
- Singer:
- Genre (Pop, rock, techno...):
- Emotion that transmits:
- Duration (Result of your enigma):

PROBLEMS SOLVED

FLYER

HILARIÓN ESLAVA SCHOOL
POP MUSIC CONCERT

Copia de Copia de Copia de Copia de... PDF document padlet drive

VIDEOCLIP

TITLE OF THE STORY: THE BEST FRIENDS

G.1. Listening to this song, we imagine...
Two girls playing dominoes all the time you do in the house with a friend. One takes one of the girls house to go to another town, so they have very bad. A week later the girl that stay in the town went to see other town and they were together again.

EMOJINARY

"EMOJINARY"
by Daniel Mematas, Miriam Orduña storyjumper

Phase 5. Task. Activity 2. Performances.

<https://drive.google.com/file/d/10Uad6Tv6brAdzEah2jtxsRLk2vQyjB6P/view?usp=sharing>

Phase 5. Task. Activity 3. Final Survey.

<https://forms.gle/hVUccfhasv8JpAUi7>

Annex 5.

Chart 6
Activity schedule

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
		14 9:45- 10:30 (hora de chromebooks 4ºB) 13:15 - 14:00 (hora de chromebooks 4ºA) PHASE 1 AND 2 (Project)	15 9:45- 10:30 Valores 4ºA P.3. WORKSHOP 1	16 12:30- 13:15 Valores 4ºB P.3. WORKSHOP 1
19 9:45 - 10:30 Mate 4ºA P.3. WORKSHOP 4 11:45- 12:30 Reading 4ºB 13:15-14:00 Reading 4ºA P.3. WORKSHOP 3	20 9:45- 10:30 Música 4ºB P.3. WORKSHOP 2 11:45- 12:30 Música 4ºA P.3. WORKSHOP 2	21 9:45- 10:30 (hora de chromebooks 4ºB) 13:15 - 14:00 (hora de chromebooks 4ºA) P.3. WORKSHOP 5	22 9:45- 10:30 Valores 4ºA PHASE 4	23 12:30- 13:15 Valores 4ºB PHASE 4
26	27	28		

11:45- 12:30 Reading 4ºB 13:15-14:00 Reading 4ºA PHASE 5		9:45- 10:30 (hora de chromebooks 4ºB) 13:15 - 14:00 (hora de chromebooks 4ºA) SURVEY		
---	--	--	--	--

Annex 6.

Data collection. Final Padlet presentation of each group.

4th A class.

Group 1. <https://padlet.com/iduenasmyk/n61cfg724lq0nb7i>

Group 2. <https://padlet.com/acompat/sajbybmk5yr0pakx>

Group 3. <https://padlet.com/mndiaye41/mxezogsq52m6g8zg>

Group 4. <https://padlet.com/nmedinario/kkmnnewl9ratz097>

4th B class.

Group 1. <https://padlet.com/gnesarosar/29plxs432onq72k7>

Group 2. <https://padlet.com/mallauccan/Bookmarks>

Group 3. <https://padlet.com/icasaliato1/ei1y76uy66raw9fg>

Group 4. <https://padlet.com/casanso/vioudepkebl7hie5>

Annex 7.

Data collection. Final continuous evaluation rubrics.

Enter into each group> Group continuous evaluation chart> Role's evaluation chart.

4th A class.

<https://drive.google.com/drive/folders/1ToDbvR8uZa7RD6N-p6NpWualCOEYAua0?usp=sharing>

4th B class.

https://drive.google.com/drive/folders/1isFF25JibU360_MbALZGXwLv0idYGgKu?usp=sharing

Annex 8.

Data collection. Survey results: before and after.

Before results.

Why do you think we go to school for such a long time?

50 respuestas

To have a good work.

we need to learn so we have to go to school

Para aprender y estar con mis amigos y amigas

para aprender; tener una educación buena

Para aprender y estar con los amigos

porque tenemos que aprender

por que tenemos que aprender

para estudiar y hacer actividades guais

para hacer educación física

Why do you think we go to school for such a long time?

50 respuestas

para aprender.

Venimos a la escuela mucho tiempo para aprender mucho mas sobre las cosas que no sabemos.

Para aprender muchas cosas.

porque tenemos que aprender mucho

Because we need to know lot of things for live

Yo creo que vamos mucho tiempo a la escuela para que cuando seamos mayores tengamos una buena vida

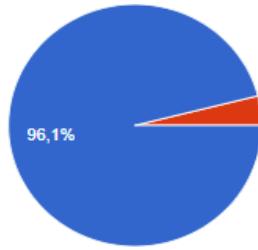
Si, para aprender todo tipo de cosas.

para aprender; tener una educación buena

para aprender nuevas cosas y divertirnos .

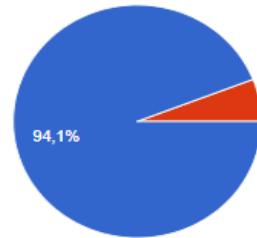
Do you like Mathematics?

51 respuestas



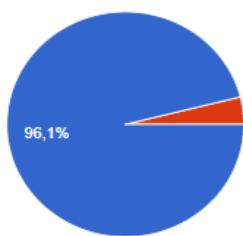
Do you like the Music subject?

51 respuestas



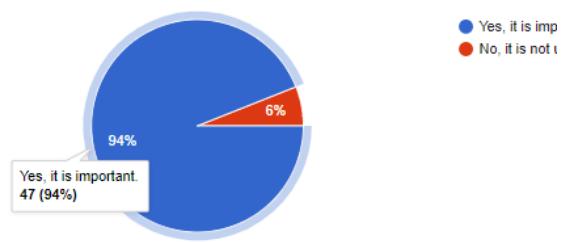
Do you like English?

51 respuestas



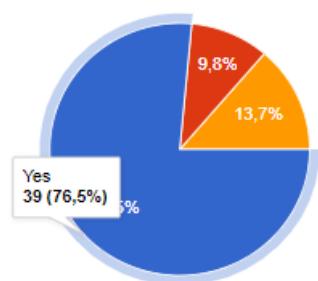
Do you think it is important to know how are you feeling at any moment?

50 respuestas



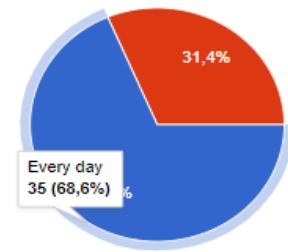
Do you think you know to control your emotions?

51 respuestas



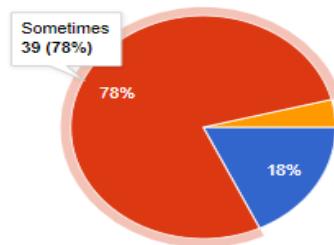
Do you usually listen to music?

51 respuestas



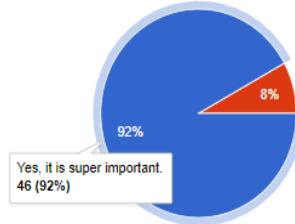
Do you watch TV and videos in English?

50 respuestas



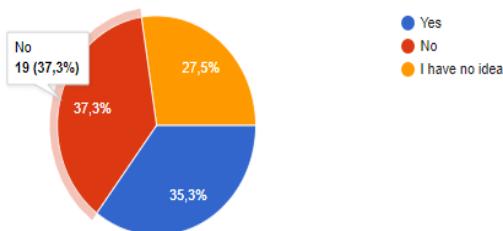
Do you think it is important to know Mathematics even existing the calculators?

50 respuestas



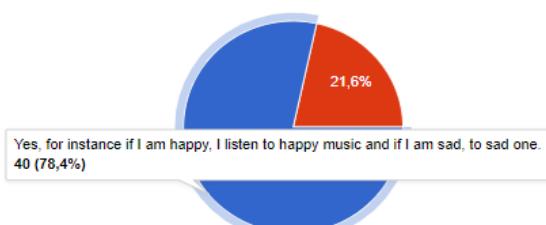
Do you think that Music has any relation with Mathematics, English or the emotions?

51 respuestas



Do you listen to music depending on how are you feeling?

51 respuestas

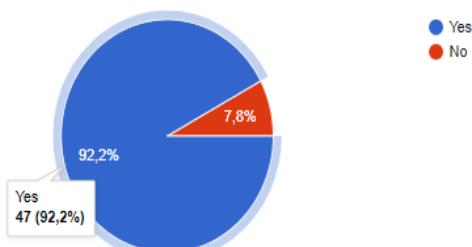


Methodological innovation to work on emotions together with the universal languages

After results.

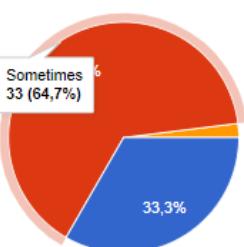
Do you think that listening to music in English helps you to improve your pronunciation?

51 respuestas



Do you listen to music in English?

51 respuestas



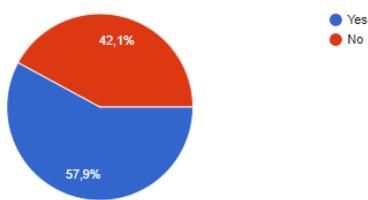
Why do you think we go to school for such a long time?

38 respuestas

- para estudiar mas
- para aprender, divertirnos y aprender nuevas cosas.
- Yo creo que si, porque aprendes mucho y te diviertes aprendiendo.
- for study
- Para aprender.
- because we have to learn
- I think we go for such a long time to learn
- Porque quiero aprender cosas nuevas cada dia.
- to learned

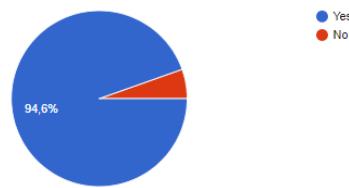
Before doing this project, had you said you would like to learn Music and Maths together?

38 respuestas



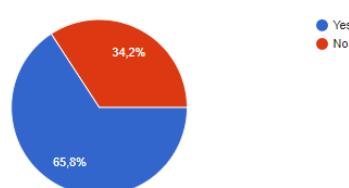
Do you like English?

37 respuestas



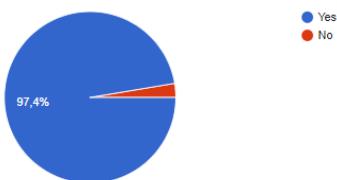
Before doing this project, had you said you would like to learn Music and English together?

38 respuestas



Do you like Mathematics?

38 respuestas



Do you like the Music subject?

38 respuestas



And now, after doing it, would you like to learn Music and Maths together? Yes or no and why?

38 respuestas

- Si porque a mi me gusta mates y musica
- Si porque me gusta estudiar los dos subject
- yes because i like a lot maths and music
- Si porque estaria guai
- Si, porque aprendo dos cosas ala vez
- Si porque esas asignaturas son muy interesantes
- I don't now because I love maths but music no.
- no porque me parece que es mas dificil
- Yes, this project was very funny. This combination is very good. I like maths and Music so i would like to learn music and maths together

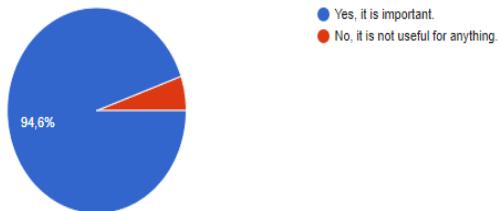
And now, after doing it, would you like to learn Music and English together? Yes or no and why?

38 respuestas

- si porque me gusta musica e ingles
- Yes, because y love
- yes because i like a lot of music and english
- si porque me gusta la musica e ingles
- si porque me gusta mucho la musica y tambien el ingles
- SI porque esas asignaturas son muy interesantes
- I don't now because I don't like music.
- si porque las notas en ingles son mas faciles
- Like maths and music, i would like to learn English and Music together(i learn the double). This was my favourite.

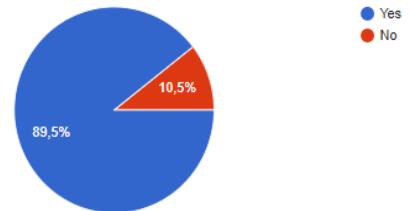
Do you think it is important to know how are you feeling at any moment?

37 respuestas



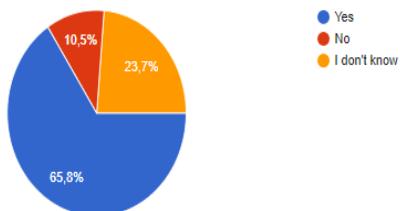
Would you like to have emotional education?

38 respuestas



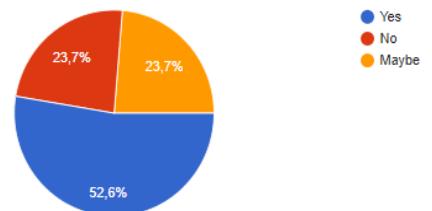
Do you think you know to control your emotions?

38 respuestas



Do you think you personal emotions can affect your participation in a group?

38 respuestas



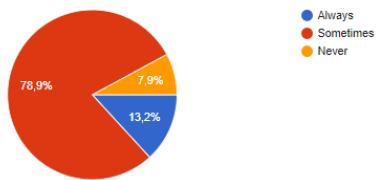
Do you think knowing English is important? Yes or no and what for?

38 respuestas

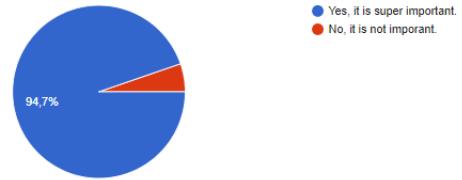
- yes because in a lot of countries
- si porque el ingles se ultiliza para muchas cosas
- si porque el ingles se utiliza para todo
- Si porque hay cosas interesantes
- Yes, because we need it for going to other countries.
- yes becouse is important
- Yes, knowing English is important because if you meet a english person or you have to go to a country that speak english you have to know english.
- Si porque si vas a un sitio que hablen ingles y porque es divertido el ingles
- si para ir a otros payases

Methodological innovation to work on emotions together with the universal languages

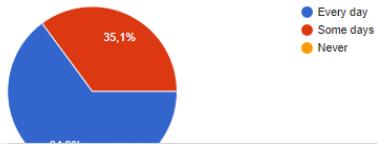
Do you watch TV and videos in English?
38 respuestas



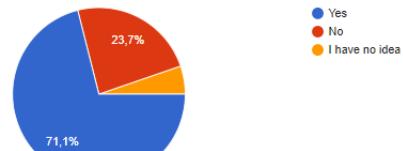
Do you think it is important to know Mathematics even existing the calculators?
38 respuestas



Do you usually listen to music?
37 respuestas



Do you think that Music has any relation with Mathematics, English or the emotions?
38 respuestas



Do you think the intonation and the accent are one of the most important aspects when learning English? Yes or no and why?
34 respuestas

res

yes is important because when you go in other countries their ar gonna laugh

no

si porque hay emociones buenas o malas

inglés es importante porque tiene cosas interesantes

No, because we can learn english with different accent.

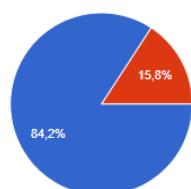
si porque si no casi no se entiende

Yes, are the most important because they will understand more you.

Y don't now

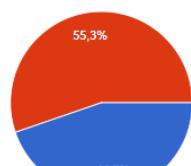
I dont now

Do you listen to music depending on how are you feeling?
38 respuestas



- Yes, for instance if I am happy, I listen to happy music and if I am sad, to sad one.
- No, for instance sometimes when I am happy, I listen to sad music and when I am sad to happy one.

Do you listen to music in English?
38 respuestas



- Always
- Sometimes
- Never

What have you learnt?

37 respuestas

hemos aprendido a no pelearnos.

English and Scince and lengua

a lot of things like to no be embarrass

ingles

e aprendido musica nueva y problemas

Que los proyectos nos son aburridos

I learn that maths and music are related.

i lernt that is important to be in group

I have learned about music, maths, collaboration and emotions.

the most to listen to the song the least to sing it

y like the most the problems and i don't like the music because we have music sad

Me ha gustado mas la canción y lo de menos lo de los grupos

I like the most that we sang a lot and the least that most of the group was playing and doing silly things.

sing in public when we are in group

I like the most the performance of the song and i like the least when they see my mathematics problems.

when we sing

me gusta matemáticas y no me gusta música

la canción y no me gusta los problemas

What have we done in this project?

37 respuestas

Hemos aprendido hacer una canción

We have participated in a concert, we did maths, English and music.

we sing a song in group

We have learned about emotions, music notes and music sheets, we have learned to use canvas, and we laugh a lot.

practise to sing the living on a prayer.

trabajar en equipo

aprender música

A concert

Mathematics, science, etc.

What have you learnt?

37 respuestas

a usar el crombuc

music

Yes

I leard very much.

mates y etc

Sing in public.

De que las mates y musica tienen la misma relacion

I have learned that the music is math.

Ingles and mathematics

What have you learnt?

37 respuestas

i learnt that the music can collaborate and mathematic

science,ingles,lengua,matematicas,y por ultimo la educacion

that we cant work in group

maths

Aprendi a no estar nervioso

E aprendido a colavorar.

Music matematics

a lot of things

mates,lengua etc

Annex 9. Question 1 results.

Before.

Why do you think we go to school for such a long time?	Why do you think we go to school for such a long time?
50 respuestas	50 respuestas
To have a good work.	para aprender.
we need to learn so we have to go to school	Venimos a la escuela mucho tiempo para aprender mucho mas sobre las cosas que no sabemos.
Para aprender y estar con mis amigos y amigas	Para aprender muchas cosas.
para aprender; tener una educación buena	porque tenemos que aprender mucho
Para aprender y estar con los amigos	Because we need to know lot of things for live
porque tenemos que aprender	Yo creo que vamos mucho tiempo a la escuela para que cuando seamos mayores tengamos una buena vida
por que tenemos que aprender	Si, para aprender todo tipo de cosas.
para estudiar y hacer actividades guais	para aprender; tener una educación buena
para hacer educación física	para aprender nuevas cosas y divertirnos .

After.

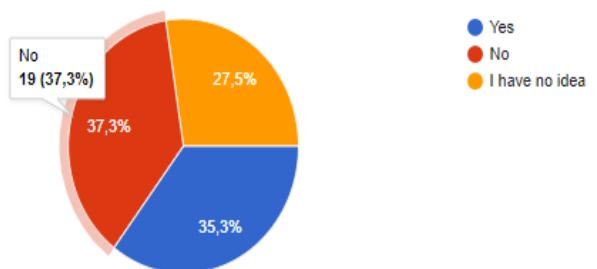
Why do you think we go to school for such a long time?
38 respuestas
para estudiar mas
para aprender, divertirnos y aprender nuevas cosas.
Yo creo que sí, porque aprendes mucho y te diviertes aprendiendo.
for study
Para aprender.
because we have to learn
I think we go for such a long time to learn
Porque quiero aprender cosas nuevas cada dia.
to learned

Annex 10. Question 2 results.

Before.

Do you think that Music has any relation with Mathematics, English or the emotions?

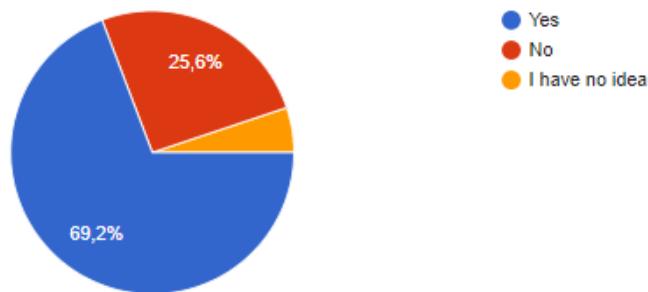
51 respuestas



After.

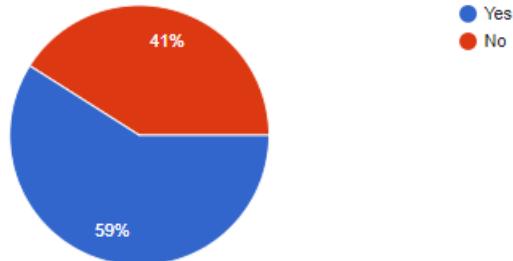
Do you think that Music has any relation with Mathematics, English or the emotions?

39 respuestas



Before doing this project, had you said you would like to learn Music and Maths together?

39 respuestas



And now, after doing it, would you like to learn Music and Maths together? Yes or no and why?

38 respuestas

Si porque a mi me gusta mates y musica

Si porque me gusta estudiar los dos subject

yes because i like a lot maths and music

Si porque estaria guai

Si, porque aprendo dos cosas ala vez

Si porque esas asignaturas son muy interesantes

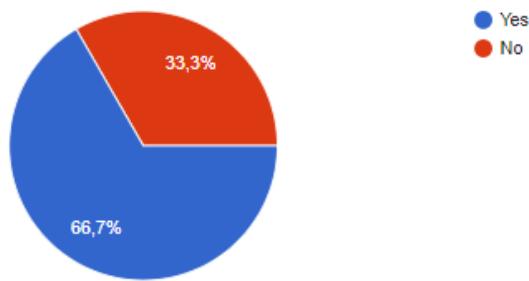
I don't now because I love maths but music no.

no porque me parece que es mas dificil

Yes, this project was very funny. This combination is very good. I like maths and Music so i would like to learn music and maths together.

Before doing this project, had you said you would like to learn Music and English together?

39 respuestas



And now, after doing it, would you like to learn Music and English together? Yes or no and why?

38 respuestas

si porque me gusta musica e ingles

Yes, because y love

yes because i like a lot of music and english

si porque me gusta la musica e ingles

si porque me gusta mucho la musica y tambien el ingles

Si porque esas asignaturas son muy interesantes

I don't now because I don't like music.

si porque las notas en ingles son mas faciles

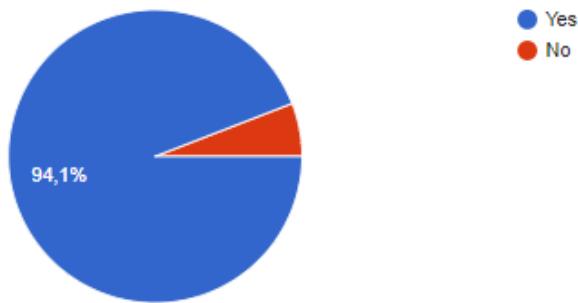
Like maths and music, i would like to learn English and Music together(i learn the double). This was my favourite.

Annex 11. Question 3 results.

Before.

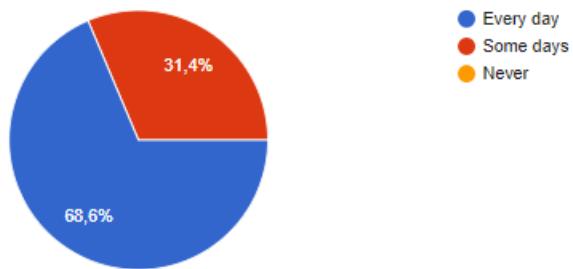
Do you like the Music subject?

51 respuestas



Do you usually listen to music?

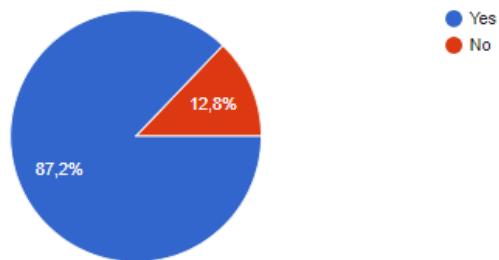
51 respuestas



After.

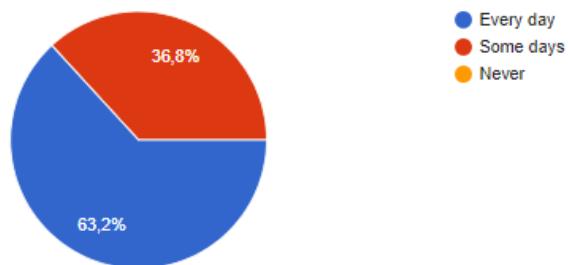
Do you like the Music subject?

39 respuestas



Do you usually listen to music?

38 respuestas

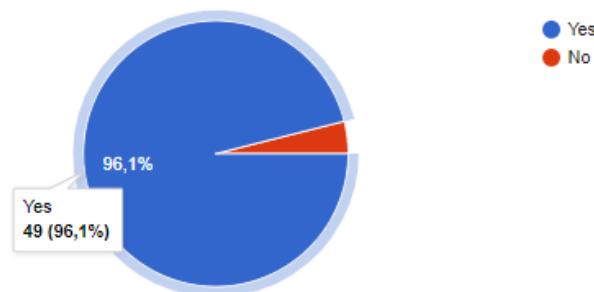


Annex 12. Question 4 results.

Before.

Do you like Mathematics?

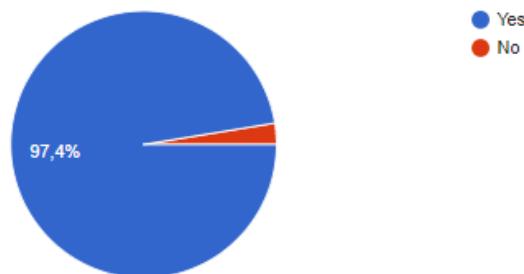
51 respuestas



After.

Do you like Mathematics?

39 respuestas

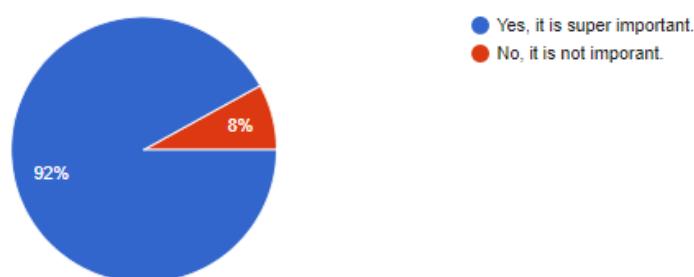


Annex 13. Question 5 results.

Before.

Do you think it is important to know Mathematics even existing the calculators?

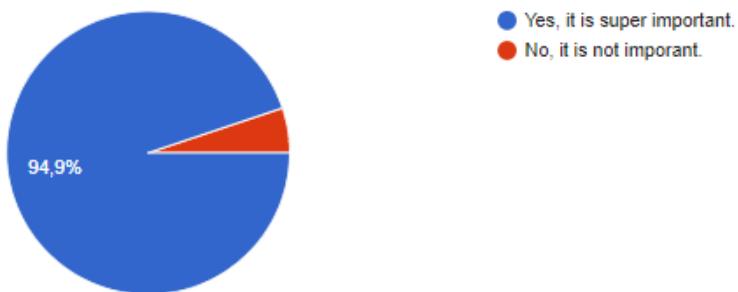
50 respuestas



After.

Do you think it is important to know Mathematics even existing the calculators?

39 respuestas

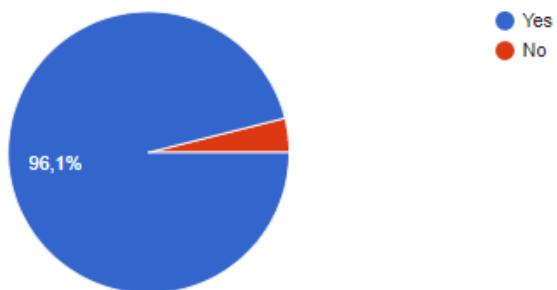


Annex 14. Question 6 results.

Before.

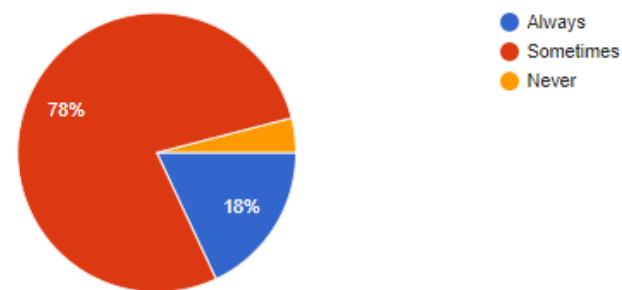
Do you like English?

51 respuestas



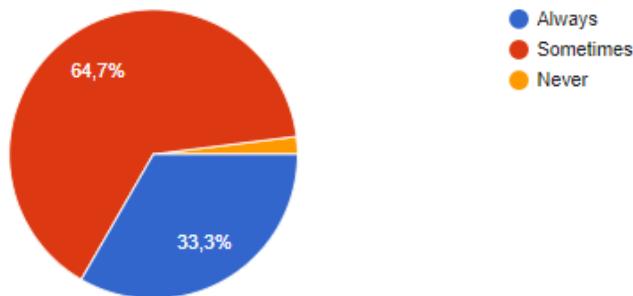
Do you watch TV and videos in English?

50 respuestas



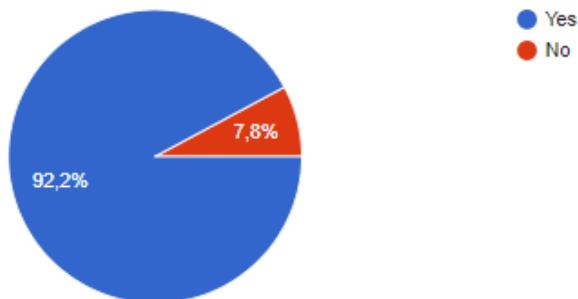
Do you listen to music in English?

51 respuestas



Do you think that listening to music in English helps you to improve your pronunciation?

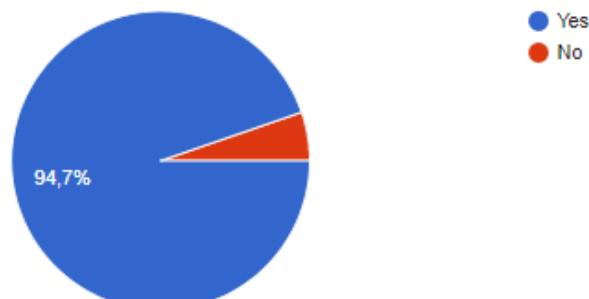
51 respuestas



After.

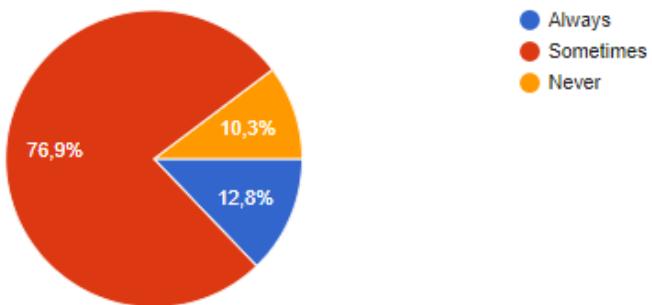
Do you like English?

38 respuestas



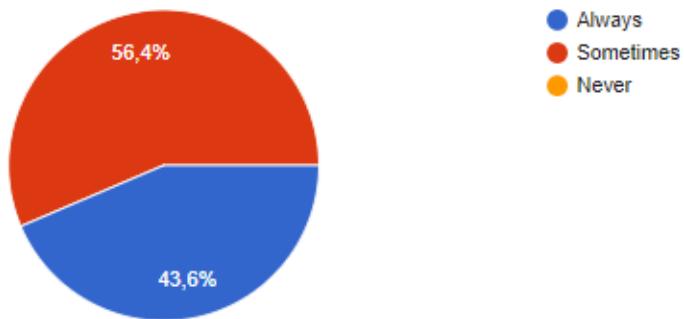
Do you watch TV and videos in English?

39 respuestas



Do you listen to music in English?

39 respuestas



Do you think the intonation and the accent are one of the most important aspects when learning English? Yes or no and why?

34 respuestas

No.Because I don't speak English properly.

Si porque sino no se entenderia nada.

si porque el acento es lo que importa porque si no , no se puede pronunciar una palabra

No, porque creo que es más importante el vocabulario etc.

i don't now

no because the acent no aspect

yes

no porque no siempre tienes que ablar en un solo idioma sabiendo que sabes mas

si porque si no no se entenderia a la persona

Do you think knowing English is important? Yes or no and what for?

38 respuestas

Yes it is.Because all the world can speak in English.

Si porque casi en todos los sitios del mundo hablan ingles y es necesario.

si porque te enseña un idioma.

Si porque el ingles es el lenguaje internacional que se usa en todo el mundo.

Yes, because for going to others continent and for study in the universitie.

si porque cuando vas a algún país y no sabes esta idioma en que hablan pos English te ayuda

si, porque aprendemos muchas cosas y nuestras profesoras nos ayudan a sacar buena nota y es importante tambien porque habeceses si no entiendes algo esta bien saber ingles

yes because we have to learn englis

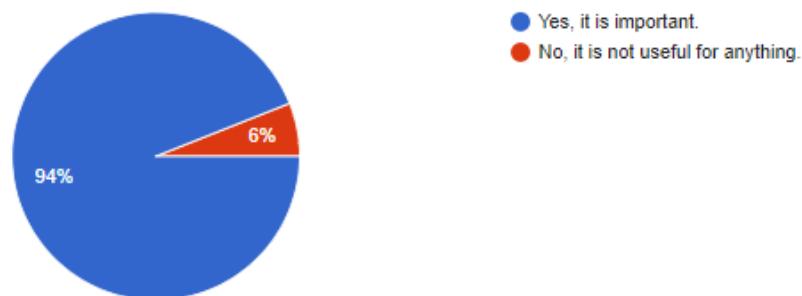
s si es importante para ir a diferenres pais

Annex 15. Question 7 results.

Before.

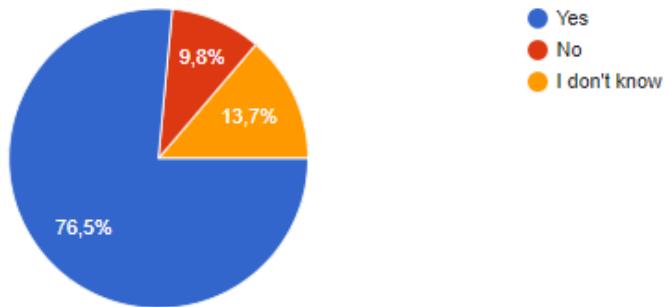
Do you think it is important to know how are you feeling at any moment?

50 respuestas



Do you think you know to control your emotions?

51 respuestas



Do you listen to music depending on how are you feeling?

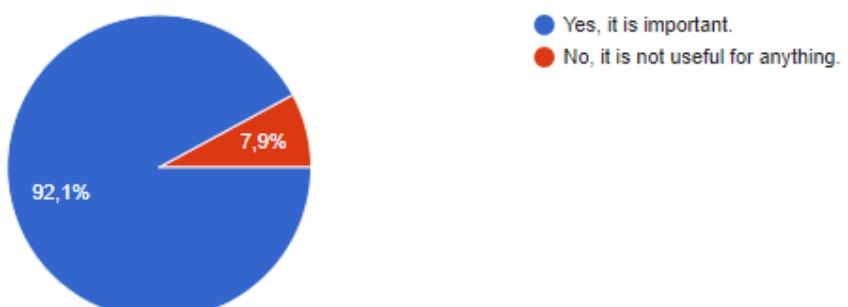
51 respuestas



After.

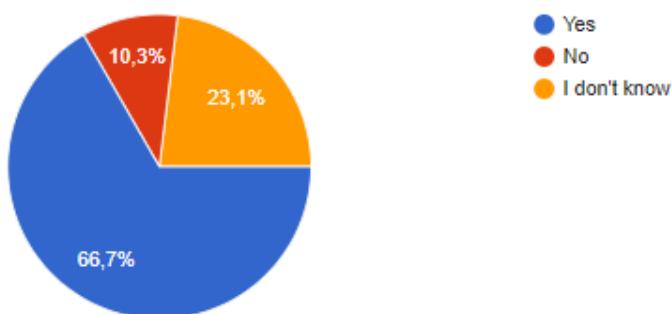
Do you think it is important to know how are you feeling at any moment?

38 respuestas



Do you think you know to control your emotions?

39 respuestas



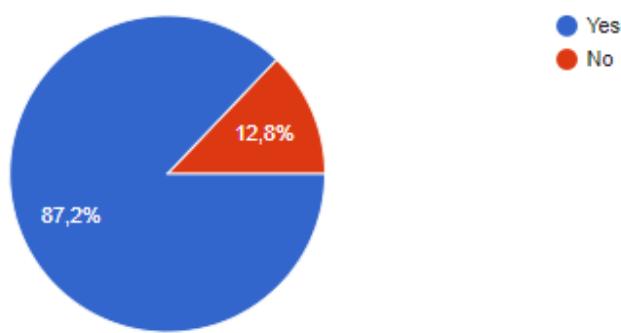
Do you listen to music depending on how are you feeling?

39 respuestas



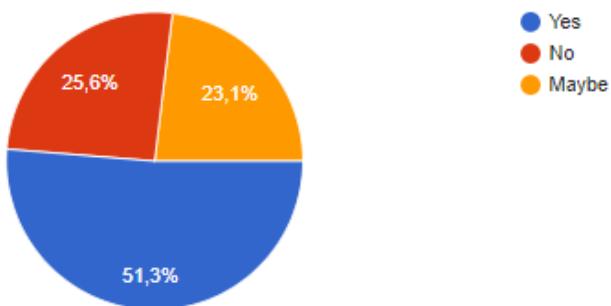
Would you like to have emotional education?

39 respuestas



Do you think your personal emotions can affect your participation in a group?

39 respuestas



Annex 16. Final results of the project.

What have we done in this project?

37 respuestas

Hemos hecho grupos y hemos aprendidos cosas nuevas

English , Scince

sing and study a song

emos echo muchas cosas y problemas

hemos escuchado musica ,resuelto problemas, y hemos cantado

Hemos aprendido hacer una canción

We have participate in a concert , we did maths, english and music.

we sing a song in grop

We have learn about emotions, music notes and music sheets, we have learn to use canva, and we laugh a lot.

What have you liked the most? And the least?

37 respuestas

Los titulos

The most to dance and sing the songs of the other groups. The less when all my group was doing silly things.

The matematics.

lo que mas me gusta es la musica y lo que menos los problemas.

I like the most the songs in english

Me a gustado un monton lo de cantar.

to sing

i liked to learn of countrys

i like most the music and the least nothing

What have you liked the most? And the least?

37 respuestas

me a gustado todo

me gusta mas ingles y no me gusta lengua.

Scince

the most to listen to the song the least to sing it

y like the most the problems and i don't like the music because we have music sad

Me ha gustado mas la cancion y lo de menos lo de los grupos

I like the most that we sang a lot and the least that most of the group was playing and doing silly things.

sing in public when we are in grup

I like the most the performance of the song and i like the least when they see my mathematics problems.

What have you learnt?

37 respuestas

hemos aprendido a no pelearnos.

English and Scince and lengua

a lot of things like to no be embarrass

ingles

e aprendido musica nueva y problemas

Que los proyectos nos son aburridos

I learn that maths and music are releted.

i lernt that is important to be in grop

I have learn about music, maths, colaboration and emotions.

What have you learnt?

37 respuestas

mates y etc

Sing in public.

De que las mates y música tienen la misma relacion

I have learned that the music is math.

Ingles and matematics

musica en english

i learnt to control my emotions whiht music.

mas o menos nada

que la musica esta relacionada con las mates