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# Over the Cuckoo's Nest: Raising Awareness of LGTBIQ+ Reality at School. A Longitudinal Study

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**Abstract**

LGTBIQ+ shows a social reality academic syllabus need tackle to raise awareness of the multi-faceted social reality of today. Often vague, often difficult to address, LGTBIQ+ stretches across curricular constraints which pose various demands when teachers and students attempt to respond to satisfactorily as for inclusive curriculum and behavior. Nonetheless, more complex pedagogical processes involving teachers, students, contents, methodologies, and skills are needed to bridge new social and academic grounds to transform students into competent and knowledgeable assets with a creative critical mind in pursue of inclusion and justice. Furthermore, civic education and gender equality-based awareness enhances students' critical thinking and assertive adaptation to equality and motivation to become active educators across different school fields of knowledge. The current paper is a longitudinal study of a cooperative interdisciplinary project based upon body percussion and literary production as an instrument to raise awareness of LGTBIQ+ at school and further social scenarios. Our findings conclude intrinsic motivation levels increase significantly when students' self-efficacy and meta-awareness is accomplished, students' inclusion in decision-making processes favors motivation and cooperation, blurs gender differences in favor of tolerance, and facilitates more complex cognitive strategies that lead to better performance, greater engagement, and higher marks.

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## Introduction

This study examines an interdisciplinary project revolving around the fields of Music, Language, and Literature. The project was designed to be an academic undertaking to respond to LGTBIQ+ reality at schools and to raise awareness on the gender-based violence currently surrounding students' academic and social life besides vindicating gender equality and school as a violence-free environment, following the assertions of the *Zero Discrimination Day* and established on March 1 by the UN in 2014 and to be globally celebrated as a vindication of the right to live with dignity regardless of age, gender, ethnicity, skin color, height, or weight, among others. On the other hand, it was also devised to be publicly performed on the *International Day Against Homophobia, Transphobia and Biphobia* on May 17. It also addressed the *International LGTB*(IQ+) *Pride Day* celebrated on June 28, but students had finished the course and were on summer vacation. Nevertheless, the project and the adjoined public act on May 17 tackled both days as awareness raise events.

The project was designed out of the cooperation of the Music and Language and Literature departments in order to make it interdisciplinary and cooperative. The most pedagogically fundamental starting point was to make the project involve the cooperation of students of different ages to help them overcome age and syllabus-based constraints. Hence, interdisciplinarity and a cooperative PBL approach were considered to be the most efficient interpersonal and academic environment. The second important axis was to help students empower and to make them active educators while simultaneously helping them raise awareness of such social and academic problem, especially as some students being harassed and bullied over their sexual or gender condition is a common reality.

Music and Language and Literature departments approached 16-17-year-old students of Music enrolled in the first course of Baccalaureate and 14-15-year-old students enrolled in the third course of CSE —*Compulsory Secondary Education*— as the former were experienced Music students familiar with projects of this nature and the latter were students of a teacher with experience in such project designs as well and who were highly proactive. In addition, the students of the third course of CSE were enrolled in a subject which dealt with creative and interdisciplinary and comparative approaches to Language, Linguistics, and Literature. The cooperation of both departments had already been long enough to design and carry out this type of projects with outstanding success. Therefore, the scenario lay itself to greater ease.

16–17-year-old students in the first grade of Baccalaureate studies were proposed the composition of a syllabus-based physical percussion performance based upon Dmitri Shostakovich's *Waltz 2* as it was a familiar piece already studied in musical language and analysis. This let the piece be the canvas upon which students may study syllabus-based contents while, simultaneously, embarking themselves in the composition of a performance of their own through the application of contents and being creative. Additionally, 14-15-year-old students in the third course of CSE enrolled in an advanced Comparative Language and Literature subject dealing with interdisciplinarity were proposed to elaborate a double task: on the one hand, a piece of literature which would be part of the musical performance and to be recorded as a videoclip to be aired, and, on the other hand, a paper and presentation regarding LGTBIQ+ and gender-based violence as well as women's most fundamental social, academic, scientific, economic, and

political accomplishments; which were to be presented at school, parents, and town as an additional but complementary piece of research.

The project was conceived within the framework of project-based and cooperative learning methodology. Besides the two objectives aforementioned, it also encompassed certain goals: on the one hand, it served the purpose of offering an insight into cooperative learning processes as well as musical, literary, and linguistic development of the students in an attempt to transcend the limitations of traditional pedagogy and traditional compulsory curriculum and instruction. On the other hand, we expected to obtain higher rates of self-sustained intrinsic motivation related to the increase in the awareness of the project's social and academic impact and the disappearance of gender and age bias or difficulties emanating from the difference in musical abilities, age, or interests of students. Finally, the utmost prominent feature of the project was its inception, for it was born out of the cooperation of one Music and one Language and Literature teachers and the students themselves, not out of academic syllabus.

The study also aimed at furthering students' inclusion in decision-making spheres as a means to raise students' and teachers' and parents' own awareness of their social and academic role and help efficiency related to the identification and tackling of gender- based violence phenomena at school, as students themselves become more intrinsically motivated. Bearing in mind the scant number of interdisciplinary studies regarding music, language, literature, and cooperative PBL contexts in the Basque Country —and Spain in general [1], we also want to provide data and scientific validity to the field as well as depict the production of such projects and the psychosocial and academic dynamics involved as a valid utensil for other future studies sharing the same focus.

The design metamorphosed the stages and processes involved within the scope of a student-centered teaching and learning environment while encouraging the teachers to adopt a differentiated perspective to successfully reach the common goals established. Considering this, as Slavin (1983) [2], Railsback (2002) [3], Perrenoud (1999, 2004, 2023) [4-6], and Gimeno Sacristán (2011, 2013) [7,6] claim, pedagogical processes need accomplish certain significant aspects: *i)* accessibility; *ii)* cultural difficulty; *iii)* task familiarity, *iv)* the teacher's role, and *v)* cognitive difficulty. These would embrace the development and heightening of the students' creative musical and literary abilities while, simultaneously, overcoming the technical difficulties related to LGTBIQ+ and gender-based violence and raising awareness of the need to prevent it at school.

We tackled project-based methodology meaning to further develop students' competential profile by designing a project involving a variety of skills to be used in a multiplicity of manners. As students would carry out such task in the settings of a Music classroom and they would elaborate a research and literary piece on a sensitive topic as LGTBIQ+ and gender-based violence in a differentiated Language and Literature classroom, it was important to contemplate their musical, linguistic, and literary competence as much as their creative impulse and drive while maintaining cooperation successfully as they were students of different ages and ascribed to their own school syllabus and timetables. This posed a great difficulty because of schedule constraints of the syllabus and potential

issues affecting communication channels, which were factors to be very carefully considered.

Very neatly related to these, other skills responding to analytical, creative, or communicative —intrapersonal and interpersonal— abilities were given due consideration due to the intrinsic role they had. This represents one of the aspects related to the significance of the study, as it describes PBL in multidisciplinary projects analyzing multi-competential design, which are scarce and deficient in our educational context in the Basque Educational System during recent years.

The project attested success and excelled initial expectations. The study displays students exhibited high levels of efficiency when composing and producing musical and literary production as well as at all decision-making phases. The significance of the study also emanates from the fact that, besides academic maturity, it is possible to produce greater social impact when incorporating students in decision-making spheres related to school syllabus and psychosocial and academic dynamics and everyday life at school. Doing so students' motivation increases as students' inclusion in decision-making spheres provides a space for students to interact with other academic agents, which feeds students' social and academic performance and strengthens feelings of belonging. We conclude this occurs since it facilitates students' active empowerment at school life. The results also show higher marks due to higher motivation rates.

Such positive outcomes indicate another aspect related to the substance of the study, as prior experiences also demonstrated: once students behold and partake of such studies and identify as active agents, it helps the generation of further projects both by the same students involved and, most importantly, by others' willingness to adjoin. This helped us to become a model for other neighboring schools to make our projects their own, develop their own projects and help schools form a net to generate symbiotic cooperation of students, teachers, and other public agents to address a social problem of this nature.

The paper shall initially provide the reader with the *literature review* that supports the method adopted. Once established, a following chapter shall describe the *objectives* and *research hypotheses* the project targeted to fulfill. A third chapter shall describe the *project* itself, including the settings, age and educational stage, and the different parts and activities involved. Subsequently, we shall deal with the *competences* on which the project attempts to focus and, hence, cultivate; *violence and LGTBIQ+ reality at schools*, and *motivation*. Finally, the *assessment* shall be followed by *results and discussion* in order to shed light upon the results obtained and their validity.

To close, we shall state the *conclusions* and the *limitations* encountered. Finally, we shall also provide *future lines of research*, *acknowledgements*, and *references*.

## Literature review

PBL —*project-based learning*— methodology may be an inspiring working scenario for musical, linguistic, and literary contents being capable of interacting symbiotically in projects that require musical and literary messages to be constructed in one or various languages. Music, as an art, may feed back and forth a variety of fields of knowledge and become the common ground on which to work in order to deliver any message. Hence, content-based instruction and project work may help

enhance meaningful engagement with musical and literary theory, composition, performance, and language and literature contents within the framework of interdisciplinary projects targeted at the theoretical, practical, and —most important of all— intertwined acquisition of creative and critical skills.

This paper analyzes a PBL scenario born out of the thoughtfulness of interdisciplinarity and cooperative pedagogy defining teachers' and students' social, emotional, affective, and academic behavior. The nature of cooperativeness and interdisciplinarity offers new surroundings to further competential development and content acquisition as the students' metacognition and emotional, communicative, affective, and organizational skills develop along the way. They *i)* learn through their own work and the development and acceptance of peers by means of democratic relationships [9-11]; [12]; [13] *ii)* alongside reflective performance and attitude [14]; [15]; [4-6] summarized in *iii)* the learning to cooperate while cooperating to learn as *iv)* a means to create and sustain learning cooperation to obtain significative learning [2]; [14]; [15]; [12]; [16]. As this study shows, these would transcend and help overcome the current limitations of traditional pedagogy, which make students' active role shrink into mere repetition of drilling exercises and passive roles related to it [15]; [8].

Stoller (1997) [17] and Railsback (2002) [3] define project-based class instruction as the model in which students plan, implement, and evaluate projects which have applications in the real world beyond the scope of a classroom. Critical literature describes the following characteristics of PBL: *i)* it would focus on content learning rather than targeted specific tokens; *ii)* it is student-centered, while the role of teacher would be that of guidance and support, helping the growth of 'human capital' output (Fernández Enguita, 2015) [18], favored by *iii)* cooperative behavior rather than competitive [2]; [19]; [16]. *iv)* it would integrate skills and competence reflecting real-life tasks, which *v)* would derive in an end- product; and, *vi)* would develop through integral processes emanating from the increase in students' motivation as it is them who would be the active part of the decision-making affecting first-hand research, (inter)cultural sensitivity as well as observation of local needs, and final feedback from a variety of sources [20]; [21]; [22].

Project-based methodology with an interdisciplinary approach would conquer the notion of *competence*, which is the general pedagogic and academic trend nowadays [23]; [1]; [7,8,24] displays his concern regarding the appropriate definition of *competence* as a theoretical construct, for it responds to a multiplicity of forms, demands, and conceptions regarding the validity of practical approaches of contents in detriment of integral development of students in favor of a practical emphasis of the utilitarian conception of education, which would be formulated as a knowhow affecting any *i)* human behavioral — (inter)personal intelligence—; *ii)* intellectual —application of the necessary means to successfully interpret any given information—; or, *iii)* communicative act which may not necessarily be accomplished or promoted by educational institutions. To this respect, Feito Alonso (2011) [25] would demand *competence* to be effectively and efficiently established beyond ever-changing demands arising out of the social and

political constraints of any particular moment —The Lisbon Council and DeSeCo Report (OECD, 2002) [26] to guarantee the students' correct educational development [27]; [28].

As this project was designed based on *competence*, it needed to bridge musical, linguistic, literary, and social and emotional aspects related to social dynamics to foment students' cooperative behavior beyond personal goals or competitive idiosyncrasies related to final marks that may generate ill-feelings or social interactions and decrease in motivation levels. The ultimate goal had to be the bringing the reality of LGTBIQ+ and any violence related to it at school to the limelight, as the school —as many other schools do— suffers from violence related to sexual and gender condition of students. Sadly enough, it is a reality that any violence related to sex and gender has increased in the last years at schools [29]; [30]; [31]; [32]; [33]. Thus, the project was designed to make a critical review of this reality, claim the right for free and peaceful existence at school, and to make an artistic vindication which may bring the students' voice to the foreground. In such undertaking, the students and teachers would need to cooperate as equals under the students' counselling plan every school must have [33].

To this respect, focus on competence helped intertwine content and the process of acquiring meaningful knowledgel and- inherently-useful for the student in their future life [18], hence, favoring cooperative behavior. Furthermore, amidst the demand for students to be proficient in the usage of ICT, it would also respond to the students' inevitability to face information excess, for which the demand to effectively manage such information load is necessary [34]. Moreover, students must efficiently adapt to the dynamics of economic and social changes and the classroom must adopt the role of providing students with the necessary input and tools for generative thinking and greater students' autonomy beyond current poor reflective attitudes and fragile knowledge and skills [20]; [4,5]; [35]; [36]. This was key when addressing sex, gender, and LGTBIQ+ equality, least to say when it comes to the prevention of violence.

As Gimeno Sacristán (2011) [7] claimed, neither PBL nor competence-based instruction are a new trend, for project-based methodology is an evolution of content- based instruction from the eighties and nineties. However, Stoller (1997) [17] had previously accredited its value and development during the nineties, caused by the interest in the findings of cognitive psychology. Regarding PBL, Stoller (1997) [17] pointed out certain values of content-based instruction: *i)* Singer's (1990) postulation of thematically organized materials favoring easier learning; *ii)* Anderson's (1990) idea of coherent layout of meaningful information enhancing better processing; *iii)* establishment of the relationship between motivation and interest (Alexander et al.; 1994); and, *iv)* Bereiter & Scardamalia's (1993) defense of expertise development when students reinvest their knowledge in the acquisition of newer and more complex one. Interdisciplinary project- based instruction would include contents arranged through projects designed and developed through the effective management of intertwining cooperative learning processes emanating from elaborated tasks-based strategies.

This project attempted to surpass the boundaries established by the generally accepted definition of *competence* and practical notions of learning as a dichotomy which based learning upon mere development of learning processes and (meta)cognitive strategies merely through *applied* significance of the learning steps as a symbol of fulfillment of certain established goals. We do favor this conception and —as much of the critical literature describes— claim this is a corruption of learning processes in favor of ideologies and conceptions of students the define students as mere recipients to be *trained in skills* and *not instructed in knowledge* so as to *generate entrepreneurship at the hand of workers in detriment of intellectual freedom of critical citizens through the taming of the mind* [37]; [38]; [39]; [40]. Acknowledging there is a very strong trend to consider *competence* as an conception within Pedagogy which pursues practicality, training in emotions and skills to develop intrinsic forces of *self*-motivation and, ultimately, the students' —perceived as working professionals— ability to act beyond whatever learnt [26] as a means to respond to the demands of a *liquid* society and enterprise [41-43]; [40]; it was very important to develop both content learning as well as skill and competence learning as the general vehicle toward learning awareness to thwart students from believing the *illusion* of development and learning while, either conscious and/or unconsciously, driving them to what Michéa (2002) [44] and Fernández Liria et al. (2017) [40] label as *the school of ignorance*.

Therefore, as González Arroyo (2015) [45] states, curriculum has come to grant the significance of knowledge and its value as a core asset and competence of the student. Actually, curricular design redefines contents beyond humanistic approach to outdo mere acquisition of contents through drill methods to enable students' increase in the capacity as for *what* and *how* to learn and to think [15]; [4,5]; [46] aimed at proactive solidary attitudes to compensate the development of economic imbalances, to which Pérez Tapias (2015) [47] and Rodríguez Martínez (2015) [48] add the notion of *multicultural identity* and *feminist and LGTBIQ+ awareness*, respectively; which constitutes the framework in which our project is set.

To prevent this from happening, special prominence was put upon learning processes themselves and project design both from the students' and the teacher's standpoint. Consequently, it was natural to follow cooperative behaviors at all levels and stages in order to guarantee the development of knowledge and (meta)cognitive strategies whilst *i)* providing content teaching in order to *ii)* fulfill individual learning and accomplishment of goals as well as those of peers as *iii)* avoiding individual success and excluding competence as the vehicle toward *iv)* collective goals and *real and realistic integral and inclusive education* as a way to pursue the students' search for culture, critical and knowledgeable mind, and happiness [2]; [44]; [4,5]; [41]; [12]; [27]; [26]; [7,8,24]; [18]; [19]; [16] as conceived by the UNESCO (2005) [28].

We knew motivation was another key factor as well. It was substantial to maintain both intrinsic motivation levels as high as possible and ill-feelings to the minimum. Motivation is closely related to the identification of the general goals and the capacity of the students to self-determine as well as predicting their own self-efficacy [49]. Preventing feelings of motivational apathy was of utmost importance, as it would derive in the students' unwillingness and/or reluctance to invest energy and effort in learning processes that require such investment [50,51]; [52]

whilst observing any gender bias related to motivation that would render the learning process and different stages of the project dysfunctional [53]. Without sufficient motivation, even individuals with outstanding abilities may fail the accomplishment of long-term goals. Therefore, we considered it was important to carefully design the various stages of the project and the manner in which communication would take place in the social settings involved at school in order to favor the primary impetus to initiate learning [54].

## Objectives and research hypothesis

School and students' academic reality has to often cope with gender-based forms of violence. These forms of violence, as aforementioned, are increasing [29]; [30]; [31]; [32]; [33] and it is very difficult to respond to it to successfully prevent it from happening, as it has a multiplicity of components, and this behavior exceeds school. Nevertheless, it must be faced, and we considered the most important aspect involved is school population's sensitization and raising awareness so as to make full use of students' and teachers' social abilities and act as co-instructors and each other's caretakers. This approach supports interaction and helps counselling among peers [33].

Considering this, we set out to design a multi-competential interdisciplinary project to address a socially dramatic phenomenon-gender-based violence and LGTBIQ+ reality at school(s)- and to provide scientific evidence that corroborates PBL and cooperative design as a suggestive tool to address any social problem and academically work on it at school as it were a projection of society. Designs of this nature are rare in Spain and little evidence exists on longitudinal studies [33]. We believe that the limits of traditional syllabus may be exceeded when redefining and redesigning the contents of the syllabus in an efficient manner beyond mere isles of contents but as interconnected fields of knowledge that feed one another. In order to do so, we conceive students as the initial and final targets of all design and PBL and cooperative pedagogy may encounter to transform students beyond current passive and limited entities [55]; [16]. When students become endowed and active at all decision-making spheres, they develop a higher and more significant feeling of belonging and this leads to more active motivation and efficiency of action as they become more self-efficient [2], [49]. Bearing in mind there is a scarcity of this kind of designs in Spain, we would like to contribute to the field and provide scientifically and pedagogically valid evidence, showing our study as a model for others to discuss and/or implement, which would contribute to the development of more studies and data.

Besides the intrinsic value of musical, literary, technical, and social awareness and content integration, the interdisciplinary nature of the project demanded thorough design to ensure learning to its maximum. This process requires thorough reflection upon the different contents, skills, and processes involved, for these must adapt to the specific cognitive, emotional, and psychosocial qualities of the individual student to help analytical and creative development happen [55]. This responded to our first research hypothesis, which was that the multi-competential design of an interdisciplinary project was going to be cognitively, emotionally, motivationally, academically, and socially more efficient than traditional curricular design of the syllabus in two aspects: *i)* the production of a musical choreography featuring body percussion based on a classical composition with *ii)* a piece of literature and

subsequent research on women's and LGTBIQ+-related major social, scientific, academic, or political accomplishments. This would occur as it involved *i)* multiple areas from music, language and literature working together and obtaining continuous feedback from each other as well as *ii)* necessary decision-making abilities from the students, which *iii)* would derive from cooperation and the necessity to bridge gaps between students of different age, enrolled in different courses, and subject to different timetables.

All pedagogical process initiated with the conception of the student as the core element around whom the whole process would develop. The teacher's role would have to be that of a guide rather than the unidirectional source of a passive process involving delivery of certain content [2]; [19]; [16]. This implies the teachers' active role to monitor the development of the learning process among the diverse subtleties that could arise throughout the project. The teacher must ensure correct planning, healthy and cooperative behavioral patterns, interpersonal communication, or adequate musical, literary, and linguistic delivery to be able to identify ill-feelings and dysfunctionalities which may derive in failure and subsequent frustration, the prevention of which requires great and efficient pre-planning from the teacher [24]; [36] with special attention to the efficiency and difficulties involved as valid educational tools [56]; [57].

In relation with the first research hypothesis, a second hypothesis related to the social and interdisciplinary nature and topic of the project as the setting within which students would need to make the best use of their competence to further develop their knowledge and efficiency of performance as they would be able to critically assess the factors behind the project, it's possible outputs, the criteria of sustainability, ecology, efficiency, feasibility, or interpersonal justice and solidarity in order to pursue the highest degree of success and social and academic impact. What is more, the project wanted to emphasize the validity of the interdisciplinary design relying upon cooperation as a tool to boost students' awareness involving their own process of learning to favor self- autonomy and reflective knowledge [50,51]; [20]; [21]; [15]; [4-6]; [49]. Hence, our second research hypothesis may be stated as the increase and growth in complexity and efficiency of students' meta-awareness and metacognition strategies when comparing to those displayed by students of traditional instruction.

Finally, our third research hypothesis was that students would be more highly competent, intrinsically motivated, and more prominently proactive in decision-making spheres in and out of school, design of further projects, and in the plethora of facets related to cultural, sex, gender, LGTBIQ+ diversity, and social otherness —besides language, register, formality, social pragmatics, or empathy, among others—. This would mostly reflect upon the social impact they were to produce when compared to that of traditional syllabus. Moreover, it was only natural to design the project treating the students as musical and literary composers and performers, which attempted to boost the students' critical aptitude to make them proactive for future development of further projects emanating from this.

As a consequence, this task required students to carry out a work of analysis in depth. It was of uttermost importance to make students realize that music, literature, and awareness of gender-based violence and LGTBIQ+ reality were a means to access the variety of cultures existing at school and town and to consider

this as a tool to become more complete as individuals to become culturally proficient, proactive in social and interpersonal interaction, critical, and tolerant with regard to cultural and social otherness [58]; [59]; [60]; [61]; [62]; [21]. Thus, the project also considered the role of other students as citizens within every social sphere involving decision-making as a talent of paramount value within the paradigm of Tonucci's *Children's City*, to which many cities throughout the world have adjoined. Therefore, the role students may possess within the organization of the school and town and its various decision-making spheres was thought to be another purpose the project ought to possess. This would facilitate students' development as more just, tolerant, culturally proficient and cultivated people. In addition, it would help students proactively become creative and knowledgeable to improve as individuals and part of a more just, culturally healthy, and tolerant, sustainable society. This constituted our third research hypothesis and strengthened the significance of our study.

Closely related with the following fourth research hypothesis, we were fully aware that the pedagogical framework in which students' syllabus is set requires certain fields of knowledge, production, and performance regarding music and language and literature disciplines, spanning from theoretical knowledge regarding musical composition, harmony to literature trends or linguistic abilities regarding reading, writing, listening, and performance in due formal register and time constraints. Bearing this in mind, a fourth research hypothesis was related to the purely scientifical format of the final paper to be written, in other words, the research hypothesis was the consideration of the feasibility to develop highly demanding format and content beyond the scopes of Compulsory Education curriculum demands. Considering the students were 14-15 and 16-17 years old enrolled in the third course of Compulsory Secondary School and the first course of Baccalaureate, respectively, the writing of a scientific paper in due format with due content was beyond expectation. However, such proposal was accepted, and the result is the current paper.

Therefore, such task was to be tackled in two separate stages: on the one hand, besides literary and musical composition and analysis of gender-based violence and LGTBIQ+ reality at schools, students had to be able to pursue pragmatic adequacy in their own native language —Basque and Spanish— when needing to compose and, later, communicate with pertinent staff at school and Town Hall, which was to be held in Basque as a prerogative of the Town Hall linguistic policy. On the other hand, they also had to be able to cope with the formal requirements of the project and subsequent writing and presentation of their work and pedagogical background and support in the form of a scientific paper, which implied due form in English within the scientific formats internationally accepted. Thus, as the written format of the project followed APA formatting, all scientific criteria would have to be mastered alongside correct writing in English and efficient display in a digital form as a presentation.

### Project design. Justification and stages
The project started off out of the students' analysis about LGTBIQ+ reality at school and the situations of gender-based and/or sex-based cases of harassment. This is a problem that exists at schools and that is very difficult to face [29]; [31]; [32]; [33] but it certainly is playing havoc in the social and urban tissue. Students conceive they form the tissue itself and it was

only natural the project became their response to such scenario. It involved an initial analysis of the problem, its multiple facets and expressions, the design of the project out of two school subjects, and the outcome it was to have. Thus, an *initial stage* was to address all attitudinal, analytical, and descriptive components in order to offer themselves a valid framework within which they were to set their own project. This was carried out inductively in order to maximize students' analytical performance. Data was collected from a variety of sources and analyzed, after which hypotheses were postulated. Efficient management of human and material resources was considered in order to facilitate data analysis, planification, and workflow design.

A *second stage* consisted of the formation of a working team, workflow system, and timing. These included efficient working patterns, design of tasks, and due timing estimations. This stage pursued the development of students' criteria for based upon maturity, both cognitive as well as emotional and affective in the search of symbiotic rapport to favor sustainable motivation. Ultimately, this would let students' metacognitive strategies and meta-awareness regarding their own learning process enhance.

A *third stage* involved the analysis of the current situation of LGTBIQ+ reality at school and town, and the diverse forms of violence associated with it. The general arrangement of the project involved *i)* the composition of body percussion choreography and interpretation of Shostakovich's *Waltz 2*, a piece extracted from their syllabus and to be analyzed. This would be carried out by the Baccalaureate students. On the other hand, CSE students would elaborate a piece of literature to accompany the performance. In addition, they would carry out a research on LGTBIQ+ and women's major political, academic, social, scientific, or literary accomplishments to be presented to the general public in due scientific format and register; *ii)* recording means available so as to record and mix the choreography and vocal parts with professional quality in the form of a videoclip; *iii)* the development of greater quality and more intelligent spaces for intergenerational communication and co-inhabitance to carry out interdisciplinary tasks; *iv)* the necessary arrangement to broadcast the performance across the province in order to become a model for future initiatives; *v)* raise awareness regarding a sensitive social topic that affects everybody's lives; and *vi)* to write a scientific paper and find support and delivery through a scientific congress, which required putting the students and the teachers involved in the diverse decision-making spheres to provide due input and consideration when official decisions are made—following Tonucci's *Children's City* project.

Then, a *fourth stage* dealt with the data analysis in order to provide the project with due scientific support. It was carried out by comparing an experimental and a control group, the former related to this project while the latter related to everyday regular class instruction. A *fifth stage* involved writing and correctly formatting the project as a scientific paper. They also provided future lines of research and a presentation for other school courses in a public act and a second presentation in a public act at the Town Hall premises for all people in the town, which also included fund raising perspectives for further projects.

## Interdisciplinarity and cooperative learning
The way all human resources organized had to follow the purpose of cooperation. How to obtain the greatest efficiency and effectiveness possible was a key factor of vital consideration. Real cooperation would form a network of knowledge, joy, and freedom through proactive attitudes affecting (intra and inter)-personal communication, empathy, and ethical behavior, hence, improving their social environment [59]; [20]; [21]; [44]; [38]; [4,5]. Hence, *interdisciplinary* approach and *cooperative learning* were believed to be the ideal environment due to the possibility to have *i)* cooperation once everybody involved participated as an equal [37], *ii)* eradication of any form of competition leading to power structures *iii)* and subsequent negative interpersonal relations and ill-feelings emanating from these. These would, indeed, play a negative role in the project and affect motivation [37]; [40]; [63]; [16], [49].

Moreover, as Echeita (1995) [64] and Torrego and Negro (2012) claim, cooperative learning was to satisfy *i)* the need for positive interdependent personal and working dynamics; *ii)* ethical efficiency; *iii)* inclusive behavior and role of education in favor of *iv)* democratic attitudes and values emanating from the respect to the self and the others.

## The role of the teacher
The greatest challenge of cooperative learning involved breaking away from the traditional classroom ideology and instruction and its limitations [19]; [16]. This, indeed, brings the Chomskyan notion of 'taming of the mind' to the foreground, conceived and performed via the generally accepted idea of the teacher possessing the knowledge and the students as the empty vessels with contents and behavior patterns to be poured into [37]. This difference in roles and positions radiated a power structure consciously to be avoided. Thus, it was paramount to implement working and learning dynamics based upon interdependent relations via students treating and teaching themselves as equals with balanced duties and spheres to act and decide upon.

As a consequence, the teacher's new role was to facilitate scenarios where decisions regarding the structure of the activity, nature and structure of authority, reward, and goal became accessible [15]; [19]. This required the careful planification of the diverse stages of the project in favor of efficient working dynamics and workload, circumvention of internal tensions, spheres of decision-making and autonomy of action, and, finally, positive interdependent behavior with proactive cooperation and self-sustained motivation.

## Competences
The notion of *competence* is subject to multiple definitions responding to different educational trends influenced by social, political, and economic forces. Therefore, the Council of Europe decided to create the *Common European Framework of Reference for Languages* —CEFR— initiated in 2000, and basic competences were defined in 2005. The latest version after due review processes displayed the most recent definition of *competence* and its descriptors in 2017 and 2023. The Council of Lisbon (2002) defined *competence* as the 'new basic skills of learning process throughout life' as stated in the *Basic Competences in the Basque Educational System* (2017) elaborated by the Basque Government. The Council of Lisbon initially defined 8 different competences aimed at the 'more competitive and dynamic economy of world knowledge, sustainable, accompanied by employment of greater quality and quantity towards greater social cohesion (7). These 8 competences included *i)* communication in native language; *ii)* communication in foreign languages; *iii)* ICT; *iv)* calculus and mathematical competence;

*v)* entrepreneurship; *vi)* civic and interpersonal competences; *vii)* learning to learn; and *viii)* general cultural background and cultural and artistic expression.

Successive revisions led to the final version published in 2023[1], which included these competences but redefined through a focus on *i) communicative competences in verbal, non-verbal and digital format*, which include plurilingual and pluricultural aspects. These may revolve around 'strategic competence; linguistic competence; pragmatic competence-comprising both discourse and functional/actional competence-and socio-cultural competence-including socio-linguistic-competence' (129); *ii) learning to learn and think*, *iii) coexistence*; *iv) entrepreneurship*; and *v) self-awareness*.

Regarding *communicative* competences, linguistic, sociolinguistic, and pragmatic descriptors are provided. These parameters articulate the communicative need for an adequate design of whatever didactic unit. Linguistic descriptors include *i)* general linguistic range; *ii)* vocabulary range; *iii)* grammatical accuracy; *iv)* vocabulary control; *v)* phonological control; and *vi)* orthographic control. On the other hand, *sociolinguistic* descriptors would describe sociolinguistic adequacy; and, finally, *pragmatic* descriptors would focus on *i)* pragmatic flexibility; *ii)* turn-taking when communicating; *iii)* thematic development; *iv)* coherence; *v)* propositional precision; and *vi)* spoken fluency. With regard to plurilingual and pluricultural approaches, 'CEFR gives value to cultural and linguistic diversity at the level of the individual. It promotes the need for learners as 'social agents' to draw upon all of their linguistic and cultural resources and experiences in order to fully participate in social and educational contexts, achieving mutual understanding, gaining access to knowledge and in turn further developing their linguistic and cultural repertoire (143).

It must be said that when in foreign language settings, CEFR does not establish plurilingual mastery as the isolated establishment of the 'ideal native speaker' as the ultimate model per se, but 'the development of a linguistic repertoire in which all linguistic abilities have a place' (143). In the development of such notions, the following ideas are described: *i)* languages are interrelated and interconnected at the level of the individual; *ii)* languages and cultures are not kept in separate mental compartments; *iii)* all language experience and knowledge build up communicative competence; *iv)* the ability to modulate language according to social adequacy is the aim; *v)* linguistic barriers can be overcome when attempting successful communication; *vi)* the intrinsic value of 'otherness'; *vii)* proactive ability and use of languages known to learn new ones to *viii)* act as cultural mediators.

As the current study was based upon a project in the classroom setting of 14-15 CSE and 16-17-year-old baccalaureates, we focused our project on the second stage of CSE within the B1 level of proficiency in English with actual bridging to B2 level and C1 in the case of Baccalaureate, hence not breaching any educational policy.

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[1]https://www.coe.int/t/dg4/linguistic/source/framework_en.pdf (5-4-24)

## The reality of LGTBIQ+ at school

Granero Andújar (2019) [65] claims school has become the arena for a diversity of sexual orientations, a scenario amidst which heteronormativity has been threatened by those who are not defined by the criteria of binary sexuality in the manner in which they form their identity or behavioral pattern. On the other hand, the 'relative' inclusion, perhaps better dubbed as 'visualization'; has also caused forms of violence to emerge. Literature defines homo- and transfobic violence as that based upon sex and/or gender, deliberate and systematic against one or various individuals perceived as unable to defend themselves among a group of peers [32]; [66,67]; [68]; [69]; [70].

Aróstegui Plaza & Martínez Rodríguez (2005) [29] and Devís-Devís et al. (2016) [71] claim there is a correlation between the growth in students' enrollment and the cases of violence in class settings: harassment cases are the 59.9% with daily harassment cases of 12.6%, verbal attacks with a percentage of 59%, occurring in public (49.1%) and in educational contexts (46.2%). This increase affects short, medium, and long-term academic life both to the aggressor and also to the victim. Nevertheless, the study of this phenomenon mostly revolves around the study of those elements that may be quantifiable through questionnaires or observation of the behavior patterns considered as 'risky'. Following such trend, Charach et al. (1995) [72] found that the victim's profile was that of the perceived as 'nerd', 'weak', 'most likely to not defend themselves', or the gender-based 'other'. The aggressor perceives the exertion of violence against the gender or sexual other as a game established by cultural patterns that help males reassert themselves as the mainstream dominant alphas (Aróstegui Plaza & Martínez Rodríguez, 2005 [29]; Castro Santander, 2006) [30]. All in all, studies conclude little is talked about in class settings and these situations get dealt with at Principal's Office as discipline issues, mostly with males outnumbering females. However, Spain lacks large scale studies regarding violence at schools [31].

In response to this situation, Galaz et al. (2018) [73] claim that the LGTBIQ+ community is given no respond to their needs and demands at school scenarios, mostly due to the absence of well-planned paradigms of detection, intervention, and management of violence at schools. Galaz et al. claim that sex or gender-based violence occurs because school-as society does in a macrocosmic level as a projection of the school- legitimates affective and romantic relationships between males and females as a legit binary paradigm vanquishing any other type of desire or interest, especially in the sexual sphere, due to the attempt to reproduce the heterosexual binary form of relationship in an alien one. As Sánchez Sánchez & Etopa Bitata (2021) [74] and Eusko Jaurlaritza (2024) [33] defend, sensitization and awareness raise must be an integral part of the syllabus, counselling at school, and all pedagogic practice. We believe our project helps the purpose.

## Motivation

Dörnyei (1998) [54] stated that motivation is one of the key factors that influence the rate and success in learning processes as it makes students aware of their self-efficacy and may make up for deficiencies in their behavior and attitude by providing

drive and direction. Furthermore, Gutiérrez de Rozas et al. (2022) [75] claimed that motivation is the variable which most directly influences final results and marks, even beyond social and economic factors, boredom, depression, or performance.

Research shows that when pursuing students' active and autonomous attitude and performance, self-regulation ability needs to develop in order to generate complex cognitive and metacognitive strategies which shall determine the quality of the organization and elaboration of the tasks carried out by the students. Metacognition generates personal information about critical thinking and favors learning in a self-motivated and autonomous way [76]; [77]; [78]; [79]; [80]; [81]; [82-84]. To this respect, the impact of inclusion, be that may relate to students of different origins, backgrounds, age, or learning difficulties; becomes less of a problem as cooperative attitudes and motivation become the interface for self-sustained and self-regulated motivational boost and this enables cohesive patterns whilst shaping academic goals as those of the group rather than the individual's and promoting the leveling of the complexities the tasks may have, which positively enhances students' self-perception and regulation [49]; [85]; [86]; [87].

### Assessment
As Johnson & Johnson (2004) [14] and Álvarez Méndez (2011) [88] claim, competence- based discourse has altered the didactic focus from knowledge related to *what to know* to knowledge related to *knowhow*. In other words, education has changed from *what* to do to *how* to do it. This widens the scope of education and assessment, for students must be assessed on a dual focus: *i)* the use of competence to be autonomous and proactive in analysis, setting of goals, and assessment of results; whilst *ii)* the teacher(s) must also evaluate these and the validity of the methods themselves as a means to obtain certain outcome considering the students' insight regarding their legitimacy as well as an objective reflection of the learning process itself.

Such outcome is dual for the project. Following the criteria of the syllabus established by the Basque Government and the CEFR, when addressing objectives and their evaluation, students shall be assessed considering both the process and final outcome and the competences attached to them, that is, the proficient use of the adequate linguistic devices to be acquired, the pragmatic and sociolinguistic adequacy of everything produced, and the acquisition of strategies to handle personal and interpersonal communication with oral and written correctness, vocabulary appropriateness, and valid social competences used; besides due musical and literary competence and performance. With regard to the various components of the project and the tasks involved, assessment is to be carried out considering the efficiency and effectivity the students exhibit when organizing teams and structuring and managing tasks with due competence to be able to reach the goals established according to their validity and feasibility [15]. It also reflected upon the analytical capacity the students display and its evolution from an initial state to a final one both qualitatively and as well as quantitatively. As students were to do different tasks, how they articulate these, and the quality and quantity of cooperative communication was also assessed as well.

Assessment addressed the evaluation of the students' capacity to articulate the learning objectives established. Especial attention was to be dedicated to possible pitfalls they may encounter, i.e., time constraints, capacity to drift and lose focus, or manage resources efficiently, handle perceived difficulty, motivation, among others, and the quality of their strategic management. As Perrenoud (1999, 2004, 2023) [4-6], Gimeno Sacristán (2011, 2013) [7,8] and Sanmartí (2007, 2019) [89,90] correctly analyze, assessment needs to be formative, that is, able to make the student self-regulate and modulate the necessary performances to reach the goals and obtain significative learning. This was vital at all stages, as it was the students who were to design and perform the project. If successful, motivation would self-sustain as engagement and a feeling of belonging would arise. As results show, the project was successful at all formative stages. Moreover, grading assessment met the expectations and peaked compared to that of the traditional instruction as well, as performance was self-motivated and emanated from intrinsic motivation and self-sustained regulated functioning and learning out of the students.

Since current criteria at public education in Spain responds to grading from a 0 to 10 with a 5 as the minimum grade for passing, different components of the project were to be graded accordingly to obtain a final grade as a mathematical equation responding to a dual nature: *i)* the students were to be graded upon their own individual performance and evolution from their initial state to the final one, *ii)* collective grading as students were instructed to grade their own performance as individuals, members of a team, and collectively with due regard to final product they accomplished. Finally, *iii)* the teacher's assessment was also included to guarantee the students' assessment to be equally fair with respect to that of that given by the students to themselves and their peers.

### Data collection and analysis
The study was conducted between the months of September 2023 and May 2024 spanning across 37 weeks. It included four main parts: *i)* presentation of the project and formation of working dynamics; *ii)* composition, production, recording, and airing of musical and literary performance while simultaneously analyzing LGTBIQ+ and gender- based violence as social phenomena at school; *iii)* elaboration of a research task on women's and LGTBIQ+ community's major accomplishments in various areas and the public presentation of its results, and *iv)* data collection, analysis, and elaboration of a scientific paper. Students were divided into an *experimental group* formed by 26 students (N=26), who were to carry out the project; and a *control group* formed by 26 students as well (N=26), who were to follow regular instruction.

Students are enrolled in two different courses*: i)* 14-15-year-old CSE students enrolled in a Comparative Language, Linguistics, and Literature class, and *ii)* 16-17-year- old students in the first course of Baccalaureate and enrolled in Music class. The former undertook literary and research tasks and the latter musical and research tasks. The *experimental group* was formed by 19 students of Music (N=19) and 7 students of Comparative Language, Linguistics, and Literature class (N=7). The *control group* had equal numbers. According to sex, the *experimental*

group had 6 males (N=6; *Music* (N=4) and *Comparative Language, Linguistics, and Literature* (N=2)) and 20 females (N=20; *Music* (N=15) and *Comparative Language, Linguistics, and Literature* (N=5)); and the *control group* had 3 males (N=3; *Music* (N=1) and *Comparative Language, Linguistics, and Literature* (N=2)) and 23 females (N=23; *Music* (N=18) and *Comparative Language, Linguistics, and Literature* (N=5)).

As the curriculum establishes [1], students do not have Music or Comparative Language, Linguistics, and Literature as compulsory subjects in the CSE or Baccalaureate, but optative. Therefore, students do not belong to a canonical class where they would all be students of the same subjects. Instead, students enrolled in optative subjects are grouped and assigned a class and a teacher. Consequently, different optative subjects possess a variable number of students who belong to different natural classes and are treated as a class of their own, regardless of their natural class. A specialist becomes the teacher of each class and different subjects are appointed a different teacher, each being a specialist in the field of knowledge. In terms of academical value regarding the final marks, all subjects possess equal value, regardless of its compulsory or optative nature.

In this case, all Baccalaureate students who selected Music were assigned two classes with two different teachers. One per class with 19 students each. Therefore, the selection of students might pose a problem if unbalances occurred. The profiles of the students were analyzed and there were no significant imbalances. As their class timetables did coincide but class took place in different rooms, it was possible to carry out the project. On the other hand, CSE students of Comparative Language, Linguistics, and Literature formed one sole class with one teacher. The students were divided into two working groups and work accordingly in cooperation with each group of Music students. As in Music, profiles were analyzed. No student was left out in any group or course.

The variables analyzed when selecting the groups were *i) sex* in order to measure gender-based differences and the potential influence in ideology or performance; *ii) musical level or ability* to see the difference in musical skills students have and how it may influence in decision-making moments as high musical ability may influence those with lower ability; and *iii) age* so as to see if age differences may interact with levels of confidence. As student distribution is not something we —as teachers and conductors of the experiment— have control upon as it is a process performed by the School Board, these three variables became the first ones analyzed when initially approaching the selection of students. According to these, no student was excluded.

On a second level of analysis, it was important to select *iv)* what *teacher* was to be assigned the management of the *experimental* or the *control group*. The different teachers involved —two Music teachers and one Language and Literature teacher— decided that, as the Music teachers were not allowed to perform outside the classroom and students get assigned by the School Board, the students selected would also include their Music teacher. On the other hand, the teacher of the Comparative Language, Linguistics, and Literature subject would participate

in the *experimental* and *control* groups but with a divided class activity, as students in the *control group* would follow regular traditional instruction and syllabus. Whilst students in both groups included students with a variety of musical abilities and were of similar age in each educational stage, there was no potential imbalance.

However, *sex* did include a much higher level of females rather than males. This may have been an issue but considering *musical ability*, we considered the latter to be more relevant, especially as musical abilities might display greater potential variety. Hence, we considered *musical ability* as the key initial variable for selection and selected the one which included the lowest rate of *initial levelled* students (*experimental group* N=0 vs. *control group* N=5), as we considered their low or lacking level may interfere with the performance in the project and affect their perception and motivation. Later measurements of *perceived difficulty* did conform our hypothesis. The *teacher* to be in charge for the *experimental* group, therefore, was also appointed. Regarding their musical abilities, the *control group* displayed five students with *initial level* (N=5), seven with *average level* (N=7), four with *medium level* (N=4), and three with *high level* (N=3). On the other hand, *experimental group* displayed zero students with *initial level* (N=0), ten with *average level* (N=10), five with *medium level* (N=5), and four with *high level* (N=4). It was very important to see the way those with *medium* and *high* abilities was to interact and affect those with *average* and *initial* levels, as we expected those with *initial level* would be positively affected by motivation and perform in a manner in which their level and motivation improved regardless of sex or gender differences. Later tests proved our hypothesis was correct. No student was excluded. Comparative Language, Linguistics, and Literature students' musical level was not considered.

At an initial stage, students of both groups were given some questionnaires to measure their initial levels of motivation, ideology, knowledge regarding gender equality and gender-based violence, and personal information regarding their age, musical proficiency, etc. After setting out the general goals of the projects, data was collected on October 20th, November 24th, January 26th, March 8th, and May 3rd. After that final collection of data, statistical analysis was conducted to analyze the significance of results with SPSS performing parametric — *regression* and *ANOVA* analyses alongside *T-tests* for various variables— and non-parametric tests —a *related-samples Friedman's 2-way analysis of variance by ranks* and an *independent-samples Mann-Whitney test*— to obtain further assurance as for the results obtained through parametric tests, after which a paper was written and formatted according to APA format. Correlations were also studied.

## Results and discussion

As explained before, the project was elaborated by an *experimental group* comprised of 26 students (N=26). As a contrast, a *control group* performed everyday curricular instruction with equal 26 students (N=26). All of them are at the third course of CSE and the first course of Baccalaureate. The *experimental group* also followed regular curricular instruction as the *control group* did. However, it was the *experimental*

*group* students who carried out the project as it originated there. Therefore, it was very important to make the project successful as much as curriculum fulfilled, for their curriculum is established by the Educational Board and must not be interfered with.

The project analyzed the following variables: *i) group; ii) sex; iii) musical level;*

*iv) pre-perceived difficulty; v) post-perceived difficulty; vi) pre-motivation; vii) post- motivation; viii) perceived impact;* and *ix) final mark.*

**Motivation and Impact significantly Outwit Sex, Musical Level and Difficulty**

The model shows a *R* value of .978, which is acceptable. Table 1 shows a regression analysis with *group* as the dependent variable and *sex, musical level, pre- perceived difficulty, post-perceived difficulty, pre-motivation, post-motivation, perceived impact,* and *final mark* as predictors. With a *p* value of .000, results show that *experimental group* obtained better and higher performance results due to *i) perceived difficulty (p* value of .008 for *Pre-Perceived Difficulty* and *p* value of .000 for *Post-Perceived Difficulty), ii) motivation (p* value of .002 for *Pre-Motivation* and *p* value of .000 for *Post-Motivation),* and *iii) perceived impact (p* values of .008, .000, and .001, respectively) and, therefore, *final marks (p* value of .028), which shows students' perception, performance, and feeling of belonging regarding the project was endowed with significance and helped obtain outstanding results and final marks in the form of academic grades. As analyzed by Citadella et al. (2020) [49], Deci & Ryan (1985, 2008) [50,51], Dörnyei (1998) [54], Gimeno Sacristán (2011, 2013) [8,9], Perrenoud (1999, 2004, 2023) [4-6], and Sanmartí (2007, 2019) [89,90], students' self-regulatory modulations focused them to maintain high levels of motivation and performance being aware of their own subsequent self- efficacy.

On the other hand, *sex* (*p* value of .124) and *musical level* (p value of .117) played no significant role, which shows there was no significant difference between males and females, though females outnumbered males. This displays real cooperative work and no dominance of one sex over the other, as predicted due to self-regulations perceived and its power to drive action [89,90]. The perception of difficulty was believed to be another key factor when shaping students' approach to the project. Perceptions of high complexity and difficulty may possibly take over and act in detriment of the performance due to students' perception of low self-efficacy [54]. However, *pre-perceived difficulty* (*p* value of .008) played no negative role in the project, which resulted in students facing the project and everyday class tasks regardless of the difficulty it may pose. Equally, once finished, *post-perceived difficulty* (*p* value of .000) shows no negative effect of difficulty and task complexity either, which means students did develop and currently have an awareness of difficulty being of no key importance when addressing a project with clear objectives and focus. Ultimately, difficulty not being a key factor helped sustain motivation and visions of the social and academic impact the project was to have. This was very important as it enabled feasibility and realization of the project and the tasks involved whilst *i)* sustaining motivation and focus, *ii)* retaining cooperative workflows, and *iii)* keeping ill-feelings low or non-existent [49]; [50,51]; [54]; [16]; [3]; [89,90].

*Final mark* did not play a negative role either (*p* value of .028). We interpret this on two intertwined levels: on the one hand — and most importantly—, as motivation not depending upon the obtention of a certain grade, but upon the students' awareness of the real significance and objective of the project, that is, raising awareness of LGTBIQ+ reality in their immediate social environment and their role as active educators through their project. On the other hand, as final marks being the *natural result* of high-level performance, *not the primary goal*. Hence, 95% confidence interval values of -.117 and -1.307 show that *final marks* favored those students in the *experimental group*. This was expected as self-regulation of students plays a key role [89,90].

**Table 1:** *ANOVA analysis*

| Model | Sig. | 95,0% Confidence Interval for B | |
|---|---|---|---|
| | | Lower Bound | Upper Bound |
| | .000 | | |
| *Sex*: 1-Male; 2-Female; 3-Other | .124 | -.067 | 1,583 |
| *Musical Level*: 1-Low; 2-Average; 3-Medium; 4-Advanced | .117 | -.086 | 1,614 |
| *Pre-Perceived Difficulty* | .008 | -.009 | .185 |
| *Post-Perceived Difficulty* | .000 | -.207 | -1.998 |
| *Pre-Motivation* | .002 | -.026 | -.399 |
| *Post-Motivation* | .000 | -.664 | -2.113 |
| *Perceived Impact* | .001 | -.158 | -1.672 |
| *Final Mark* | .028 | -.117 | -1.307 |

***Role of Perceived Difficulty and Impact***

Tables 2 and 3 display T-tests to see if there were statistically significant differences regarding *perceived difficulty* in *pre-* and *post-* stages and mean values. As regression initially confirmed,

*p* value of .008 for *pre-perceived difficulty* and *p* value of .000 for *post-perceived difficulty* show the perception of difficulty and complexity played no negative role. It is closely related to motivation, as shown before. *Experimental group* shows a mean

value of 7.3684 as the *perceived difficulty*, whereas *control group* students perceived higher mean value, i.e., 7.5789. While close in mean values and quite high perception of difficulty, such values displayed potential threat.

As the project grew and finalized, students' perception did alter. *Experimental group* students show lower mean values of difficulty with a dramatic decrease from initial 7.3684 to 5.4737. *Control group* students also appreciated the project to be accessible and feasible for them, as the mean values decrease from initial 7.5789 to 6.3684. With a *p* value of .000 and 95% confidence interval values of -.32323 and -1.46712, statistically significant difference favors the *experimental group* due to their direct implication in the inception, development, and direct

knowledge and role in the project, which permitted greater engagement and self-regulation strategies, as our predictions established and previous research shows [52]; [49]; [50,51]; [54]; [7]; [3]; [87]; [89,90]; [91].

This confirms our first and second research hypotheses, i.e., multi-competential demand generating higher cognitive, emotional, motivational, academic, and social performance; and increase in meta-awareness and metacognition. Logically, therefore, our third research hypothesis was consequently validated, as students proved to be more proactive in their drive and decision-making regardless of the difficulties that might arise.

**Table 2:** *Mean values for perceived difficulty*

| | 1-Experimental; 2-Control | N | Mean | Std. Deviation |
|---|---|---|---|---|
| *Pre-Perceived Difficulty* | 1.00 | 26 | 7.3684 | .89508 |
| | 2.00 | 26 | 7.5789 | .90159 |
| *Post-Perceived Difficulty* | 1.00 | 26 | 5.4737 | .77233 |
| | 2.00 | 26 | 6.3684 | .95513 |

**Table 3:** *T-test for perceived difficulty*

| | Sig. (2-tailed) | 95% Confidence Interval of the Difference | |
|---|---|---|---|
| | | Lower | Upper |
| *Pre-Perceived Difficulty* | .008 | -.38058 | -,80164 |
| *Post-Perceived Difficulty* | .000 | -.32323 | -1.46712 |

Tables 4 and 5 provide T-tests to analyze statistically significant differences regarding *perceived impact* of the project. With a *p* value of .000, *perceived impact* played a significant role, as we predicted due to the students of the *experimental group* being the designers of the project and in control. They show high mean values of 8.7368, whereas those in the *control group* display a mean value of 5.7895. This two-point difference is highly significative since it shows the importance of the focus towards goals sustaining motivation. Additionally, we also interpret this difference lies upon communication between different teachers

potentially manifesting weaknesses and, as a consequence, blurring the perspective of impact in *control group* but not in the *experimental*. Therefore, we consider it is very important to communicate efficiently and clearly the nature of the tasks in order to prevent conditioning students' perception.

As before, 95% confidence interval values of -2.47133 and -3. 42340 favor the *experimental group*, which is also very closely related to motivation, validating our predictions in our hypotheses.

**Table 4:** *Mean values for perceived impact*

| | 1-Experimental; 2-Control | N | Mean | Std. Deviation |
|---|---|---|---|---|
| *Perceived Impact* | 1.00 | 26 | 8.7368 | .80568 |
| | 2.00 | 26 | 5.7895 | .63060 |

**Table 5:** *T-test for perceived impact*

| | Sig. (2-tailed) | 95% Confidence Interval of the Difference | |
|---|---|---|---|
| | | Lower | Upper |
| *Perceived Impact* | .000 | -2.47133 | -3.42340 |

As a project regarding gender equality, LGTBIQ+ diversity and gender-based violence related to it, it was vital to analyze whether among and/or within groups there were significant differentiations regarding *sex*, either among students themselves and, of utmost importance, provoked by the dynamics of school, class, or teachers' and students' interactions and perceptions. There was a thorough analysis in the initial stages and design of the project of this variable, especially as there were imbalances between the number of males and females, as stated before.

However, Table 6 shows a T-test with a *p* value of .124 displaying *sex* did not play a significant role. As previously analyzed, we interpret this as a conscious act of designing workflows that are cooperative and free of gender-bias to support bidirectional cooperation and inclusion among students and teachers. As previously said, self-regulation was expected from students and greater cognitive approach related to self-regulation, self-efficacy, and behavior modulation towards cooperative attitudes [52]; [49]; [50,51]; [54]; [7]; [3]; [87]; [89,90]; [91]. This confirmed our first and second hypotheses, as greater metacognition and awareness derived in greater efficiency in performance.

**Table 6:** *T-test for sex*

| | Sig. (2-tailed) | 95% Confidence Interval of the Difference | |
| --- | --- | --- | --- |
| | | Lower | Upper |
| *Sex: 1-Male; 2-Female; 3-Other* | .124 | -.07452 | .35124 |

Equally, we wanted to analyze if musical abilities would also shape the project considering students do possess different level. This may act in three negative manners:
*i)* generating power structures with those with highest level of abilities dominating those with inferior skills, *ii)* affecting self-esteem and motivation of those with lower and/lowest level, and *iii)* generate ill-feelings of low self-efficacy perception and worthlessness.

However, *p* value of .176 proves there was no statistically significant role of *musical level*. 95% confidence interval values of -.19727 and 1.03938 sown no group was affected by this variable. We interpret this occurred because students were able to focus efficiently on cooperative and inclusive patterns when designing and performing, although we consider it is a variable that if incorrectly handled, it may play havoc.

**Table 7.** *T-test for musical level*

| | Sig. (2-tailed) | 95% Confidence Interval of the Difference | |
| --- | --- | --- | --- |
| | | Lower | Upper |
| *Musical level: 1-Low; 2-Average; 3-Medium; 4-Advanced* | .176 | -.19727 | 1.03938 |

### *The Encouraging Effect on Final Mark and Motivation Increase*

Tables 8 and 9 provide T-tests to see if there were statistically significant differences regarding *final mark*(s) students would obtain and the mean values. A *p* value of .028 and mean values of 9.1053 regarding the *experimental group* and 7.4211 regarding the *control group* show there is a significant difference between groups, the *experimental* displaying a notably higher value. As interpreted before, musical level played no role, but motivation and meta-awareness did. High

motivation, greater hands- on knowledge, more complex metacognition and meta-awareness regarding self-efficacy molded performance, higher *final marks* being the natural outcome.

This differentiation in final performance with a mean difference of almost 1.6 points is taken as a serious indicator of the value of the interdisciplinary project and its various personal and academic dynamics. 95% confidence interval values of -1.00444 and -2.36398 favor the *experimental group*, which draws us to positively support our conclusions.

**Table 8:** *Mean values for final mark.*

| | 1-Experimental; 2-Control | N | Mean | Std. Deviation |
| --- | --- | --- | --- | --- |
| *Final Mark* | 1.00 | 26 | 9.1053 | .99413 |
| | 2.00 | 26 | 7.4211 | 1.07061 |

**Table 9:** *T-test for final mark*

| | Sig. (2-tailed) | 95% Confidence Interval of the Difference | |
| --- | --- | --- | --- |
| | | Lower | Upper |
| *Final Mark* | .028 | -1.00444 | -2.36398 |

As previous analysis indicated, *motivation* was to be of topmost importance for it would enhance performance and students' drive throughout the project or bring about failure. Thus, it needed to be treated with caution. It was vital to help communication open and to maintain ill-feelings low while retaining illusion and clear final goals, above all, students', and teachers' emotional and affective facets.

As shown in Tables 10 and 11 with mean values of *motivation* in *pre-* (*p* value of .000) and *post-* stages (*p* value of .000), it does display a key role. *Pre-motivation* mean values of 8.1579 and 6.8947 for the *experimental* and *control group*, respectively, show that *experimental group* did have higher motivation with a difference of about 1.3 points, which we consider to be discomforting. Nevertheless, a crucial turning point occurred at post-motivation stage once the project was finished. While the

*post-motivation* of the *experimental group* peaked to a 9.8421 mean value, *control group* mean value decreased from initial 6.8947 to final 6.7895. Besides decrease, the final difference in means between groups reached at a 3-point value. This was very discomforting —regarding the results of *control group*—as it indicated motivation had a significant difference and that was due to the teacher's role shaping students' perception and subsequent performance.

This is interpreted as the comparatively logical effect of a project being perceived as attractive, motivational, and with a clear social impact. Whereas *experimental group* carried out the project whilst also committing to their everyday curricular syllabus, *control group* students did see the final outcome and, comparatively, affected their motivation as they may want to

take part in it. With regard to this, other students in the *control group* and other courses have embarked such creative tasks in different projects as well, which shows the role of motivation is key and such projects perceived as attractive and desirable.

Furthermore, the role of those teachers involved in this current project is also perceived as important, for it is them who have traditionally carried out such projects in the history of the school. Thus, students' perception of teachers' commitment to students

and projects is also a key value. This is key when validating our 3 research hypotheses, as multi-competential design necessarily involves activities that empower the student to perform academically and socially so as to cause students' greater meta-awareness and metacognition strategies develop. These are to generate greater engagement and self-sustained motivation, which is what derives in greater performance and real significative learning [52]; [49]; [50,51]; [54]; [7,8]; [4-6]; [3]; [87]; [89,90]; [2]; [91].

**Table 10:** Mean values for pre- and post- motivation.

|  | 1-Experimental; 2-Control | N | Mean | Std. Deviation |
|---|---|---|---|---|
| *Pre-Motivation* | 1.00 | 26 | 8.1579 | .76472 |
|  | 2.00 | 26 | 6.8947 | .73747 |
| *Post-Motivation* | 1.00 | 26 | 9.8421 | .50146 |
|  | 2.00 | 26 | 6.7895 | .63030 |

**Table 11:** T-test for pre- and post- motivation.

|  | Sig. (2-tailed) | 95% Confidence Interval of the Difference | |
|---|---|---|---|
|  |  | Lower | Upper |
| *Pre-Motivation* | .000 | -.76886 | -1.75746 |
| *Post-Motivation* | .000 | -2.67777 | -3.42750 |

Table 12 shows correlation values and significance showing that correlations are significant at .01 level between *post-perceived difficulty* (.468 and *p* value of .003), *pre- motivation* (.-.654 and *p* value of .000), *post-motivation* (-.940 and *p* value of .000), *perceived impact* (-.902 and *p* value of .000), *final marks* (-.642 and *p* value of .000) and *groups,* favoring *experimental*. As analyzed before, we see the *experimental* displayed greater motivation, self-awareness, and greater cognitive strategies and metacognition, which resulted in higher impact perception and marks.

On the other hand, musical level did play no significant role but displays correlation a .01 level with pre-motivation (.509 and *p* value of .001). We hold on to the prior analysis, that is, the potential negative role musical abilities may have in shaping power structures and emotional and self-image and self-efficiency perceptions. However, post-motivation shows no correlation, which explains there was no negative role of musical abilities due to students' ability to act cooperatively, as we predicted and confirms our hypotheses.

As analyzed as well, *perceived difficulty* played no significant role, showing that students' perception was the general goal was attainable regardless of the difficulty. Therefore, there is no correlation between pre-perceived difficulty and other factors. However, *post-perceived difficulty* shows correlation with *groups* at .05 level (.468 and *p* value of .003) favoring *experimental group*. As explained before, this is interpreted as *control group* students considered the feasibility and desirability of the project and their willingness to participate shaped their perception. It also shows correlation at .01 level with *pre-perceived difficulty* (.357 and *p* value of .028) and *perceived impact* (-.391 and *p* value of .015). The analysis is the previous one, i.e., the perception of difficulty at the end of the project made the students on the *control group* was transformed as they comprehended the initial difficulty was not as high as they

thought it would be and they became aware of the impact, consequently altering the perception of *post-difficulty*.

Considering motivation, *pre-motivation* shows correlation at .05 level *groups* (-.654 and *p* value of .000) favoring the *experimental group*, *musical level* (.509 and *p* value of .001), *post-motivation* (.666 and *p* value of .000), *perceived impact* (.872 and *p* value of .000), and *final marks* (.571 and *p* value of .000). When considering *post-motivation* correlation at .05 value, we may observe correlations with *groups* (-.940 and *p* value of .000) favoring the *experimental*, *post-perceived difficulty* (-.306 and *p* value of .015), *pre- motivation* (.666 and *p* value of .000), *perceived impact* (.872 and *p* value of .000) and *final marks* (.591 and *p* value of .000). Correlations show motivation increases along the project due to the perception of feasibility and the legitimacy of the goals it had, which facilitated cooperation and made students of the *experimental group* be aware of the impact they were to generate, cooperation needed, and the ability to make difficulties or pitfalls be kept to the minimum. Hence motivation increases, perception of difficulty decreases, and final marks become higher.

*Perceived impact* displays correlations at .05 level with *groups* (-.902 and *p* value of .000) favoring *experimental*, *pre-motivation* (.646 and *p* value of .000) and *post- motivation* (.872 and *p* value of .000), and *final marks* (.570 and *p* value of .000). This shows the perception of impact affected motivation when considering the feasibility of the project and was key to focus the goals of the project at all times, which helped considering final marks would be positively affected.

Finally, *final mark* shows correlations at .05 level with *groups* (-.642 and *p* value of .000) favoring experimental, *pre-motivation* (.410 and *p* value of .010), *post- motivation* (.591 and *p* value of .000), and *perceived impact* (.570 and *p* value of .000). This can be explained along the previous lines, i.e., final marks were

not the primary motivation of the students, but the logical consequence of motivated students with clear focus and aware of the impact and the significance of the tasks they were performing.

**Table 12:** *Correlations*

| | | Group | Sex | ML | PrePD | PostPD | PreM | PostM | PI | FM |
|---|---|---|---|---|---|---|---|---|---|---|
| *Group* | Pearson | | | | | | | | | |
| *1-Experimental* | Correlation | 1 | .234 | -.224 | .120 | .468** | -.654** | -.940** | -.902** | -.642** |
| *2-Control* | Sig. (2-tailed) | | .158 | .176 | .475 | .003 | .000 | .000 | .000 | .000 |
| | N | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| *Sex* | Pearson | | | | | | | | | |
| *1-Male; 2-* | Correlation | .234 | 1 | -.218 | .121 | -.032 | -.271 | -.164 | -.223 | -.159 |
| *Female; 3-Other* | Sig. (2-tailed) | .158 | | .188 | .469 | .848 | .099 | .325 | .178 | .339 |
| | N | 52 | 2 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| *Musical Level* | Pearson | | | | | | | | | |
| *1-Low;* | Correlation | -.224 | -.218 | 1 | -.240 | .100 | .509** | .144 | .228 | .241 |
| *2-Average; 3-* | Sig. (2-tailed) | .176 | .188 | | .147 | .549 | .001 | .390 | .169 | .145 |
| *Medium; 4-* *Advanced* | N | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| *Pre-Perceived* | Pearson | | | | | | | | | |
| *Difficulty* | Correlation | .120 | .121 | -.240 | 1 | .357 | -.046 | -.031 | .023 | -.085 |
| | Sig. (2-tailed) | .475 | .469 | .147 | | .028 | .786 | .853 | .890 | .611 |
| | N | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| *Post-Perceived* | Pearson | | | | | | | | | |
| *Difficulty* | Correlation | .468** | -.032 | .100 | .357* | 1 | -.126 | -.306 | -.391* | -.109 |
| | Sig. (2-tailed) | .003 | .848 | .549 | .028 | | .451 | .062 | .015 | .514 |
| | N | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| *Pre-Motivation* | Pearson | | | | | | | | | |
| | Correlation | -.654** | -.271 | .509** | -.046 | -.126 | 1 | .666** | .646** | .410* |
| | Sig. (2-tailed) | .000 | .099 | .001 | .786 | .451 | | .000 | .000 | .011 |
| | N | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| *Post-Motivation* | Pearson | | | | | | | | | |
| | Correlation | -.940** | -.164 | .144 | -.031 | -.306* | .666** | 1 | .872** | .591** |
| | Sig. (2-tailed) | .000 | .325 | .390 | .853 | .015 | .000 | | .000 | .000 |
| | N | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| *Perceived Impact* | Pearson | | | | | | | | | |
| | Correlation | -.902** | -.223 | .228 | .023 | -.391 | .646** | .872** | 1 | .570** |
| | Sig. (2-tailed) | .000 | .178 | .169 | .890 | .015 | .000 | .000 | | .000 |
| | N | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| *Final Mark* | Pearson | | | | | | | | | |
| | Correlation | -642** | -.159 | .241 | -.085 | -.109 | .410* | .591** | .570** | 1 |
| | Sig. (2-tailed) | .000 | .339 | .145 | .611 | .514 | .011 | .000 | .000 | |
| | N | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

### Additional Analysis and Validation

Additional non-parametric tests were carried out to further validate of the results obtained. Mann-Whitney tests as *related samples* and *non-related samples* were performed. A *related sample* test with a *p* value of .000, led us to reject the null hypothesis and confirmed the validity of previous analysis, hence conforming our working hypotheses. A *non-related sample* test with *p* values of .009 for *post-perceived difficulty*, .000 for *pre-motivation, post-motivation*, *perceived impact*, and *final mark* show our hypotheses to be validated, whilst a *p* value of .506 for *pre-perceived difficulty* may show no potential role, it leads us to consider initial perception of *difficulty* as a factor to be considered with caution, due to its role in shaping the initial cognitive framework of the students and affecting motivation.

## Hypothesis Test Summary

| | Null Hypothesis | Test | Sig. | Decision |
|---|---|---|---|---|
| 1 | The distributions of PrePerceivedDifficulty, PostMPerceivedDifficulty, PreMotivation, PostMotivation, PerceivedImpact and FinalMark are the same. | Related–Samples Friedman's Two–Way Analysis of Variance by Ranks | ,000 | Reject the null hypothesis. |

Asymptotic significances are displayed. The significance level is ,05.

## Hypothesis Test Summary

| | Null Hypothesis | Test | Sig. | Decision |
|---|---|---|---|---|
| 1 | The distribution of PrePerceivedDifficulty is the same across categories of 1–Experimental; 2–Control. | Independent–Samples Mann–Whitney U Test | ,506[1] | Retain the null hypothesis. |
| 2 | The distribution of PostMPerceivedDifficulty is the same across categories of 1–Experimental; 2–Control. | Independent–Samples Mann–Whitney U Test | ,009[1] | Reject the null hypothesis. |
| 3 | The distribution of PreMotivation is the same across categories of 1–Experimental; 2–Control. | Independent–Samples Mann–Whitney U Test | ,000[1] | Reject the null hypothesis. |
| 4 | The distribution of PostMotivation is the same across categories of 1–Experimental; 2–Control. | Independent–Samples Mann–Whitney U Test | ,000[1] | Reject the null hypothesis. |
| 5 | The distribution of PerceivedImpact is the same across categories of 1–Experimental; 2–Control. | Independent–Samples Mann–Whitney U Test | ,000[1] | Reject the null hypothesis. |
| 6 | The distribution of FinalMark is the same across categories of 1–Experimental; 2–Control. | Independent–Samples Mann–Whitney U Test | ,000[1] | Reject the null hypothesis. |

Asymptotic significances are displayed. The significance level is ,05.

[1] Exact significance is displayed for this test.

## Conclusions

Students managed the diverse processes involved in the development of the project with high levels of efficacy when defining goals, working dynamics and scenarios, and in full use of human and material resources. They excelled at decision-making processes and in the effective management of social dynamics. Finally, the students were able to cope with the limitations they had and encountered in the development of the project, while they were able to assess and overcome them correctly. They produced a final version of the project, which focused on the digital competences. In addition, they were able to focus on the learning processes involved and intercultural aspects intertwined in the project with due proactivity and awareness.

Considering initial predictions, our research hypotheses were validated, and students' performance was seen to have been determined by cooperative attitudes that prevented power structures and gender bias from happening, thus, eradicating ill-feelings and frustration. Motivation increased and self-regulation of the students was enhanced, self-sustained and self-motivated, confirming our predictions [52]; [49]; [50,51]; [54]; [7,8]; [4-6]; [3]; [87]; [89,90]; [2]; [91].

Our first research hypothesis claimed that multi-competential design would favor greater cognitive, emotional, motivational, academical, and social performance of the students. This was confirmed as results and performance verified design provoked students to become active when decision-making, cooperative and not competitive, and focused on the project regardless of the mark they were to finally be given and driven by the significance of their performance and the impact they were to generate at school and in town. This, consequently, fed back and forth the third hypothesis, related to the predicted increase in motivation and proactivity. Closely related to this, as motivation and engagement increased, students' self-regulation did occur, and they were able to obtain greater meta-awareness and metacognition as their reinvested knowledge did help perform with greater complexity. This validated our second hypothesis.

Finally, as for the fourth hypothesis, related to the APA and the knowhow of scientific procedures and statistical analysis, students also managed very well, which fed back previous hypothesis in a circular manner. This is what led to significant learning.

We consider that results prove cooperative teacher-student and student-student behavior favors greater involvement and engagement of students, which reinforces students' feelings of belonging. On the contrary, traditional instruction turns students

into passive recipients of contents and success is measures merely by performance on exams. This affects students' motivation, especially intrinsic motivation, as they only act upon academic demand to perform well at exams but does not facilitate decision-making and involvement at social dynamics when any problem arises. Furthermore, a-motivation becomes the primary deficiency students and teachers are condemned to suffer from when the case is so. This derives into a more profound level of impoverishment of social dynamics as students' involvement decreases to the point of full detachment and as there is no feeling of belonging, students merely act on their immediate needs, hence neglecting any cooperation at transcendental levels to face and overcome dysfunctionalities that generate LGTBIQ+ or gender-based violence.

Interdisciplinary PBL contexts and cooperative behaviors facilitate valid scenarios for students' curricular development as well as stimulating students' feelings of belonging. This turns them into social educators and active and equal agents in decision-making spheres. This occurs as students are treated as equals and they drive school dynamics alongside teachers and other school agents. This does not mean traditional instruction has to be abandoned. On the contrary, interlapping dynamics may favor the best of both worlds.

Finally, considering the scarcity of this type of students in Basque and Spanish Educational curriculum, we believe our study may help other scholars and schools attempting to design such projects to obtain valid data to consider when designing their own projects. In our case, when designing further projects, we will do so.

## Limitations and further lines of research

We encountered various pitfalls along the way. On the one hand, the establishment of correct cooperative behaviors and working patterns was, certainly, a problem. As students are enrolled in CSE and Baccalaureate, they did have to follow regular class instruction while, concurrently, carrying out the project. Nevertheless, such difficulties were successfully dealt with, which often required redefining timing issues to make ends meet. Equally, the same issues occurred when recording and editing the videoclip. On the other hand, technical difficulties were also an issue to rise up against. It had to do with lack of knowledge, which was due to not having been previously instructed on recording techniques and more advanced content regarding this subject. Additionally, students' very limited knowledge of statistics was potentially a problem, for it might lead to wrong readings and misinterpretations of data. This was easily solved as adapted explanations of key statistical analysis were given and this posed a minor problem with the cooperation and work of the teachers involved as well.

Considering the findings of the current study, future lines of projects are related to the analysis of social topics that are a concern for students, such as sexuality, ecology, intergeneration and links between older generations and younger students, or feminism, among others. Such projects are also interdisciplinary and attempt *i)* the incorporation of more fields of knowledge in such interdisciplinary projects; *ii)* greater depth in technical aspects regarding musical and literary production; *iii)* the design of interdisciplinary projects with cooperative approaches regarding other fields of gender studies and/or literary and musical creation in other formats and ages with further public staging and performances for other schools and people of other

ages at and outside the school premises to make the general public be part of these projects and obtain greater public exposure.

Finally, and in connection with the third hypothesis, i.e., students' greater proactivity and motivation related to decision-making spheres at school and in town, another line of research would deal with the necessary steps to be taken in order to enhance and make the role of children and teenagers greater, more involved, and successful in the decision-making spheres involved at all levels of life in the town. In order to do that, students' participation in whatever social and academic dynamic organized is being promoted by ensuring their participation in core organs of school and Town Hall organizational schemes related to the design of initiatives and/or their implementation.

In the light of this, a board of students has been designed at school with the participation of students between the ages of 14-18 as co-tutors of other students or caretakers of other students' psychological and emotional states by cooperatively providing help to the teacher and psychologist at charge and promoting active well-being at school.

## Acknowledgements

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