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English through the music: learning English by creating AI music in the Third Cycle of Primary Education

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ABSTRACT

This Final Degree Project examines the integration of contemporary pop music and Artificial Intelligence (AI) as innovative pedagogical instruments for teaching English as a Foreign Language (EFL) in the Third Cycle of Primary Education. The overarching objective is to design and theoretically validate a pedagogical proposal that employs AI-assisted song creation to augment language acquisition, motivation and digital competence among sixth-grade students. Adopting a comprehensive literature review methodology, this work synthesizes theoretical foundations from music pedagogy, language acquisition and educational technology through a practical proposal with the use of the PGRRF model (Prompt, Generate, Review, Regenerate, Finalize) alongside a guideline of six-session didactic proposal entitled *Our Classroom Anthem*. The main conclusion is that the strategic synergy of the music and AI, when guided by critical pedagogy and ethical considerations, can reshape the EFL classroom into a dynamic, student-centred space that simultaneously develops linguistic, intercultural and digital competences. The development of written skills promotes a significant learning and *learning by doing*.

KEYWORDS: AI in education, Music Pedagogy, English as a Foreign Language, Primary Education, digital literacy

RESUMEN

Este proyecto final de carrera examina la integración de la música pop contemporánea y la Inteligencia Artificial (IA) como instrumentos pedagógicos innovadores para la enseñanza del inglés como lengua extranjera (EFL) en el tercer ciclo de la educación primaria. El objetivo general es diseñar y validar teóricamente una propuesta pedagógica que emplee la creación de canciones asistida por IA para aumentar la adquisición del lenguaje, la motivación y la competencia digital entre los alumnos de sexto curso. Adoptando una metodología de revisión bibliográfica exhaustiva, este trabajo sintetiza los fundamentos teóricos de la pedagogía musical, la adquisición del lenguaje y la tecnología educativa a través de una propuesta práctica con el uso del modelo PGRRF (Prompt, Generate, Review, Regenerate, Finalize) junto con una guía de seis sesiones didácticas titulada *Our Classroom Anthem* (Nuestro himno del aula). La conclusión principal es que la sinergia estratégica de la

música y la IA, cuando se guía por una pedagogía crítica y consideraciones éticas, puede transformar el aula de inglés como lengua extranjera en un espacio dinámico y centrado en el alumno que desarrolla simultáneamente las competencias lingüísticas, interculturales y digitales. El desarrollo de las habilidades escritas promueve un aprendizaje significativo y el aprendizaje mediante la práctica.

PALABRAS CLAVE: IA en la educación, pedagogía musical, inglés como lengua extranjera, Educación Primaria, alfabetización digital

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1. Introduction

This Final Project addresses the use of contemporary pop songs as an educational resource for teaching English as a foreign language. This study emerges from the identified need to innovate in pedagogical practices and increase student motivation in primary education classrooms, moving beyond traditional foreign language methodologies. Additionally, it explores the innovative integration of Artificial Intelligence (AI) as a tool for creating customized songs tailored to specific linguistic objectives and student interests.

The academic justification for this study is grounded in the theoretical principles of using music in language learning. Research by Engh (2013) and Murphey (1992) demonstrates how songs can enhance phonetic awareness, vocabulary acquisition, and grammatical structures while creating a positive learning environment. This theoretical foundation is extended through the incorporation of AI, which allows for the creation of pedagogically tailored songs that target specific linguistic elements.

Moreover, the integration of musical resources aligns with the action-oriented approach advocated by the Common European Framework of Reference for Languages (Council of Europe, 2020), which emphasizes language as a vehicle for authentic communication rather than merely an academic subject. This approach is operationalized through student-centred activities where learners actively engage in creating their own songs, potentially using AI tools as facilitators, thereby promoting meaningful communicative competence.

From a legislative perspective, this proposal focuses on the current educational framework, specifically the LOMLOE, which promotes the development of key competences through innovative methodologies. It addresses competences related to linguistic communication, digital literacy, and cultural awareness, while fostering critical thinking and collaborative skills essential for contemporary education. The proposal targets the Third Cycle of Primary Education, specifically sixth grade, which corresponds to CEFR level A2, ensuring alignment with curricular objectives and established proficiency expectations.

The main objective of this work is to design a compendium of sequenced activities that integrates contemporary pop songs, including those potentially created with AI tools, as a central axis for teaching English in the Third Cycle of Primary Education, specifically sixth grade. The methodology is analytical, based on a comprehensive review of specialized

literature on music in foreign language teaching and AI in education, followed by the systematic design of a practical pedagogical proposal.

This dissertation is structured into several distinct chapters. Following this introduction, the Justification, the chapter 4, the Theoretical Framework, provides a comprehensive review of the literature on foreign language teaching methodologies, the pedagogical use of songs, and the emerging role of Artificial Intelligence in education. Subsequently, Chapter 5 synthesises these theoretical findings into a coherent discussion, introduces the PGRRF model, and presents the practical six-session didactic proposal, *Our Classroom Anthem*. Finally, the Conclusions chapter summarizes the main findings, acknowledges the study's limitations, and suggests future lines of research.

2. Justification

The aim of this final project is to address an important issue in contemporary education, focusing on the need for creative and inspiring teaching strategies in the teaching of English as a Foreign Language (EFL). Three reasons support the idea of incorporating modern pop songs into the classroom: social, academic and personal. Furthermore, the integration of AI for creating songs aligns with contemporary approaches to multimodal material design (Meyer, 2005), offering new possibilities for personalized language learning resources. This investigation is guided by pertinent research questions: What is the actual impact of using contemporary pop songs on learner motivation and linguistic acquisition? How can such a resource including AI-generated songs be systematically integrated to effectively meet the key competences and curricular objectives outlined by the LOMLOE?

From a personal perspective, this work starts from the common disengagement and demotivation shown among elementary education pupils towards traditional EFL methods, which may be viewed as the motivating drive gained from educational observation. These approaches, which are often centred on decontextualised terminology and repetitive grammar structures, frequently fall short of connecting with students' interests and realities. The real use of language is not just about using structures correctly; it is about knowing and understanding the true context and having the ability to use them correctly. In this sense, the present proposal leverages AI-generated songs to create tailored musical experiences that directly support this contextual understanding. In other words, songs create a tangible scenario where vocabulary and grammar serve a communicative purpose, bridging the gap between abstract rules and real-life application.

The belief that incorporating relevant and authentic resources into instructional practices, like music that students already enjoy and consume, can rekindle curiosity and turn the classroom into a dynamic place for learning is what motivates this effort. It is suggested that music's inherent appeal can be a potent tool for promoting a more organic, interesting, and successful language learning process.

Regarding its academic relevance, this project addresses identifiable gaps in EFL pedagogy for Primary Education. Key issues include the common disconnection between textbook content and student interests, the underutilization of authentic listening materials that reflect

real language use, and the challenge of holistically developing communicative competence. Additionally, the integration of AI for creating songs aligns with contemporary approaches to multimodal material design (Meyer, 2005), offering new possibilities for personalized language learning resources. This investigation is guided by pertinent research questions: What is the actual impact of using contemporary pop songs on learner motivation and linguistic acquisition? How can such a resource, including AI-generated music, be systematically integrated to effectively meet the key competences and curricular objectives outlined by the LOMLOE?

By analysing the theoretical principles of using music in language learning (Engh, 2013; Murphey, 1992) and synthesizing a pedagogical framework for AI-enhanced song use, this work aims to contribute to the academic discourse on student-centred and innovative methodologies.

2.1. Degree key competences

These competences appear in the Guide to the final year Project (2010), from the University of Valladolid. Those are the main key competences[1]:

- Competence 2: Design, plan and evaluate teaching-learning processes, materialised in the design of the complete teaching sequence.
- Competence 4: Address learning situations in multilingual contexts by integrating music as a resource for teaching English.
- Competence 5: Design learning spaces in diverse contexts, creating an inclusive and motivating environment.
- Competence 8: Collaborate with different sectors of the educational community, reflected in the consideration of the social context of the students.
- Competence 11: Reflect on classroom practices to innovate, through critical analysis of the teaching proposal.

[1] Translated by *DeepL*

3. Objectives of the Final Project

General Objective

To design a compendium of sequenced activities that integrates contemporary pop songs and AI generated musical resources as central tools for enhancing English language acquisition in the Third Cycle of Primary Education (6th Grade).

Specific Objectives

1. To analyse the theoretical principles underlying the use of music and emerging AI technologies as pedagogical tools in foreign language teaching at the primary education level.
2. To establish criteria for selecting, adapting, and analyzing contemporary songs suitable for sixth-grade students, with particular attention to how AI tools can facilitate this process.
3. To develop a framework for assessing both the pedagogical potential of AI integrated musical material and their alignment with key competences.
4. To examine the pedagogical potential of contemporary pop songs and AI-generated musical content as authentic materials for teaching English in Primary Education, focusing on their impact on vocabulary acquisition, phonetic awareness, grammatical understanding, and student motivation.
5. To evaluate the feasibility and potential educational implications of integrating AI for song creation in Primary Education through a critical analysis of its opportunities and challenges.

4. Theoretical Framework

4.1. Foreign Language Teaching in Primary Education

4.1.1. The LOMLOE Framework and CEFR Proficiency Levels

The current educational landscape in Spain is shaped by Organic Law 3/2020 (LOMLOE) and its subsequent development in Royal Decree 157/2022, which establishes the Primary Education curriculum at the national level, implemented in the autonomous community of Castilla y León through corresponding regional decrees. This framework introduces a significant paradigm shift in the approach to foreign language teaching. Moving away from traditional methods focused predominantly on the domain of grammatical structures, this curriculum redefines the subject as a transversal element fundamental to the development of the student. This perspective aligns language learning with the broader development of Key Competences, placing special emphasis on the construction of Plurilingual Competence (Ministerio de Educación y Formación Profesional [MEFP] 2022).

This competence, central to the new approach, is defined and guided by the proficiency levels established by the Common European Framework of Reference for Languages (Council of Europe, 2020). The Spanish curriculum specifies the achievement of level A1 by the end of the second cycle (2nd grade) and level A2 by the end of the third cycle (6th grade) of Primary Education (Council of Europe, 2020; MEFP, 2022). These levels describe the communicative ability that students must progressively acquire.

The CEFR establishes that level A1 is characterized as a breakthrough stage. Learners can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. They can introduce themselves and others and can ask and answer questions about personal details such as where they live, people they know, and things they have. Interaction is simple and requires the other person to talk slowly, clearly, and be prepared to help (Council of Europe, 2020, p. 35).

On the other hand, level A2, targeted for the end of the Third Cycle (the focus of this didactic proposal), represents a progression to a waystage level. Students can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g., very basic personal and family information, shopping, local geography, employment). They can

communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Furthermore, they can describe in simple terms aspects of their background, immediate environment, and matters in areas of immediate need (Council of Europe, 2020, p. 36).

Therefore, the A2 descriptors and the five specific competences derived from the CEFR (MEFP, 2022), establish the fundamental parameters for this study. The parameters define the linguistic and communicative scope within which the suitability of contemporary pop songs and AI-generated music content for sixth grade Primary Education must be critically analysed. Consequently, any pedagogical consideration of songs or AI tools at this stage should align with these can-do statements, ensuring the language is comprehensible, relevant to students' immediate needs and conducive to developing basic mediation and communicative skills, as outlined in the following section.

4.1.2. Key Communicative Competencies for Primary EFL and Intercultural awareness.

Before focusing on the specific communicative competencies, it is essential to frame them within the eight Key Competences for Lifelong Learning established by the LOMLOE and RD 157/2022 of Castilla y León. These include: Linguistic Communication, Multilingual Competence, STEM Competence, Digital Competence, Personal, Social and Learning to Learn Competence, Citizenship Competence, Entrepreneurial Competence, and Cultural Awareness and Expression. The teaching of English plays a vital role in all of them, particularly Multilingual, Digital and Cultural Awareness competencies.

Therefore, the five specific competencies outlined in Annex II of RD 157/2022 (MEFP, 2022) directly operationalize the CEFR descriptors for level A2, providing a concrete application for the development of each language skill in the classroom. This A2 level is the target for the Sixth Grade, making it the essential framework for selecting and creating appropriate materials, such as songs. The competencies are:

- Firstly, regarding the ability to comprehend and interpret oral and multimodal texts*:* At the A2 level, this implies that students can understand short, clear, simple messages and announcements. They can identify the main point of short, clear, simple audio texts, especially if supported by images or visuals, and extract specific,

predictable information from simple, slow, and carefully articulated speech about everyday topics.

- Secondly, concerning oral expression, to express themselves and interact orally in a comprehensible and appropriate manner: This competence entails that learners, at level A2, can use a series of phrases and sentences to describe in simple terms their family, living conditions, educational background, and their immediate environment. They can handle short social exchanges, asking and answering questions about familiar topics, and can participate in a simple conversation about predictable everyday needs.
- Furthermore, in terms of reading, to read and interpret written and multimodal texts*:* This skill translates into the student's ability to read very short, simple texts. They can find specific, predictable information in simple everyday material such as advertisements, prospectuses, menus, and timetables, and understand short, simple personal letters and emails.
- Regarding written productions, to produce short and simple written texts*:* In writing, A2-level students can write short, simple notes and messages relating to matters in areas of immediate need. They can write a very simple personal letter, for example, thanking someone for something or apologizing, using basic linking words like *and*, *but*, and *because*.
- Finally, with respect to mediation, to mediate in communicative situations*:* Reflecting the update in the CEFR Companion Volume (Council of Europe, 2020), this competence is crucial. It involves the student's ability to act as a linguistic and cultural bridge. At this stage, it may involve explaining a simple cultural concept in their own words, relaying the essential information from a short text in one language to another person, or collaborating with peers to accomplish a task, thus facilitating mutual understanding.

Inextricably linked to these communicative competencies is the development of intercultural awareness. The curriculum emphasizes that learning a foreign language is a fundamental tool for developing intercultural competence, which is not merely about accumulating sociocultural knowledge but about fostering an ability to relate to other cultures from a

perspective of respect, empathy, and constructive criticism (MEFP, 2022). Contemporary pop songs serve as ideal authentic cultural artifacts for this purpose. They facilitate the exploration of diverse perspectives, help deconstruct stereotypes, and foster intercultural dialogue among primary students, thereby addressing both communicative and intercultural goals simultaneously within the A2 framework.

These five competencies, together with their intercultural dimension, collectively provide the foundation for the communicative activities in this study, where contemporary pop songs and AI-generated music serve as authentic multimodal texts that students comprehend, interpret, discuss, and creatively respond to, thereby developing their plurilingual and intercultural competence.

4.1.3. Integrating Digital Competence: The DigComp Framework

Building upon these linguistic and intercultural foundations, the current educational framework also recognizes the importance of digital competence. The Digital Competence Framework for Citizens (DigComp, 2022) serves as the foundational reference for understanding and developing digital literacy across the European Union and beyond. The updated DigComp 2.2 version introduces over 250 new examples of knowledge, skills, and attitudes, reflecting the evolving digital landscape and emerging technologies such as artificial intelligence (AI), remote work, and the Internet of Things (IoT). These additions address contemporary challenges including misinformation, data privacy, digital accessibility, and environmental sustainability, ensuring the framework remains relevant for education, employment, and civic participation (Vuorikari et al., 2022).

The revision process involved broad stakeholder engagement, including international organizations such as UNESCO and the OECD, as well as a dedicated Community of Practice comprising educators, policymakers, and researchers (Vuorikari et al., 2022, p. 6), which supports the framework's alignment with global digital literacy goals.

DigComp 2.2 also emphasizes the interconnectedness of digital competence with other key lifelong learning competences, such as citizenship, entrepreneurship, and personal and social learning (Vuorikari et al., 2022, p. 11). Furthermore, the framework is designed to be adaptable and accessible, offering tools for self-assessment, implementation guides, and translations to facilitate its application across diverse contexts (Vuorikari et al., 2022, pp. 51-

57). By integrating new themes and maintaining a structured yet flexible approach, DigComp 2.2 continues to provide a robust, evidence-based foundation for policy-making, curriculum development, and digital skill enhancement in an increasingly digitized society. In the context of this project, digital competence enables students to engage critically with AI-generated musical content and to use digital tools creatively for language learning.

4.1.4. Synthesis: Towards a Comprehensive Language Education

Considering the previous information of this theoretical section, the teaching and learning of a foreign language in Primary Education, as defined by the LOMLOE paradigm and meticulously aligned with the CEFR descriptors, is redefined as a comprehensive educational process. Its ultimate purpose is to equip students to act as effective communicators at the A2 level, laying the foundation for their plurilingual journey. Simultaneously, it aims to educate them to be respectful, critical, and active citizens in a multicultural society. The foreign language classroom is thus transformed into a privileged space not only for acquiring communicative skills but also for developing the values of coexistence and intercultural understanding essential in the 21st century. This comprehensive process is increasingly intertwined with the development of digital competence, as outlined by frameworks like DigComp 2.2. The effective integration of authentic digital resources, such as contemporary pop music accessed or analyzed through digital platforms, requires and fosters this key competence. Therefore, a modern language learning approach not only cultivates plurilingual and intercultural citizens but also empowers them as confident and critical users of digital technologies, preparing them to navigate, contribute to, and responsibly participate in an interconnected and digitized global society. This project specifically contributes to this vision by demonstrating how AI-generated songs can serve as a bridge between linguistic acquisition, intercultural awareness, and digital literacy development in primary EFL classrooms.

4.2. Motivation and Anxiety in English Language learning

The use of songs in the English as a Foreign Language (EFL) classroom is widely recognized for its dual affective impact: enhancing learner motivation and reducing language anxiety (Dolean, 2016; Kumar et al., 2022). While a student's motivation is a key driver for engagement and persistence (Murphey, 1992), the learning process is often hindered by the pervasive

presence of Foreign Language Anxiety (FLA), a specific type of apprehension associated with language learning contexts (Kumar et al., 2022). This section will explore this interplay, arguing that contemporary songs serve not only as a motivational tool but also as a strategic intervention to create a safer, more effective learning environment. The integration of AI tools for creating songs adds a new dimension to this dynamic, as it can further personalize the learning experience, though it requires careful implementation to ensure it remains a motivating rather than stressful tool. For instance, the teacher might scaffold the activity by providing a guided prompt template and allowing students to generate their first draft collectively, thereby reducing individual performance pressure before any public sharing or formal assessment.

The learning of a foreign language, especially at an early age, is a complex process influenced by a variety of cognitive, emotional, and social factors. In the context of primary education, where pupils begin their formal contact with English as a foreign language (EFL), understanding how two key dimensions, motivation and anxiety, shape language acquisition and learners' attitudes is crucial. Motivation acts as the engine of learning, driving participation, persistence, and openness to communication; however, when anxiety is intense or prolonged, it can significantly inhibit pupils' ability to process input, produce output, and feel secure in the classroom (He, 2018; Schauer, 2019). Songs, with their engaging and repetitive nature, can effectively boost motivation while providing a low-anxiety context for language practice, directly addressing these affective factors.

Language anxiety, understood as a state of unease, nervousness, or apprehension associated with using or learning a second language, is not a marginal phenomenon but a variable that can undermine young learners' confidence and limit their pragmatic and communicative development. As Schauer (2019) points out, communicative success depends not only on grammatical or lexical knowledge but also on the ability to use language appropriately in social contexts, which requires a learning environment that reduces threat and encourages experimentation. Therefore, creating a positive affective climate through meaningful activities and explicit support becomes a pedagogical priority for any primary EFL teacher. Music and songs, by their very nature, can lower anxiety levels and create a more relaxed atmosphere conducive to experimentation, making them valuable tools in this endeavor.

Nevertheless, reducing anxiety is not the only objective, the curriculum also demands rigorous competence development. Current approaches to foreign language teaching at this stage emphasize the development of communicative and intercultural competence, as reflected in official curricula. In this regard, songs serve as excellent input materials, offering authentic language use in a memorable and engaging format. This involves not only teaching structures and vocabulary but also preparing pupils to interact effectively and appropriately in the L2. To achieve this, it is essential that input materials offer realistic and varied pragmatic models, from the point of view of the cultural context, and that classroom dynamics promote active participation with minimal anxiety. Songs, as authentic cultural artifacts, provide such models within a low-anxiety framework that encourages participation without fear of negative evaluation (Schauer, 2019).

Anxiety in foreign language learning has been widely studied in different contexts, including in Asia (He, 2018). While specific manifestations may vary culturally, underlying causes, such as fear of negative evaluation, worry about making mistakes, or perceiving a gap between one's own ability and task demands, are common across many educational settings. In the primary classroom, such anxieties may translate into reluctance to speak, avoidance of oral activities, or low linguistic self-efficacy, which in turn reduce opportunities for the practice and exposure necessary for progress (He, 2018; Schauer, 2019). Therefore, it is essential for teachers to adopt pedagogical strategies that maintain high motivation while mitigating anxiety-inducing factors, for example through playful routines, cooperative work, linguistic scaffolding, and formative assessment that values effort and participation over absolute accuracy. Incorporating songs into the classroom is one such strategy, as it combines playful routines, cooperative singing, and scaffolded language practice, thereby reducing anxiety and boosting motivation.

The integration of AI tools for song creation introduces a nuanced aspect to this affective landscape. When students use AI tools to create songs, they typically input prompts based on vocabulary and structures they have learned in class, which can reinforce their learning and give them a sense of ownership, thereby increasing motivation. On one hand, AI can be highly motivating, as it empowers students to co-create personalized content that aligns with their interests and linguistic level. The novelty and technological engagement can increase intrinsic motivation. On the other hand, if not properly scaffolded, the use of unfamiliar technology could potentially become a source of stress or anxiety for some learners, especially if they struggle

with formulating effective prompts or navigating the digital interface. Therefore, careful pedagogical design is essential to ensure that AI-supported song activities are presented as supportive, creative tools rather than as additional evaluative hurdles, thereby harnessing their motivational potential while minimizing any associated anxiety.

In short, teaching English as a foreign language in Primary Education should aim for a delicate balance: nurturing intrinsic motivation and interest in the language and its cultures, while building a safe environment where anxiety is managed explicitly and proactively. The strategic use of songs, and increasingly of AI-generated or AI-supported musical materials, represents a powerful method to achieve this balance. Only then can we foster the holistic development of communicative, pragmatic, and intercultural competence, enabling young learners to use English confidently both inside and outside the classroom.

4.3. Songs as a Pedagogical Tool: Theoretical and Methodological Foundations

Teaching a foreign language in Primary Education goes beyond learning grammatical structures and vocabulary, forming an integral process that seeks to develop students' communication skills. From the current methodological approach, an interdisciplinary perspective is promoted where language is used as a tool for real communication. Within this framework, the song is a fundamental pedagogical resource, as it "constitutes the most important musical activity in school and encompasses a series of aspects such as sensitivity, affectivity, rhythm and tonal education" (Ballesteros, 2009, p. 2)[2] This resource naturally integrates musical and linguistic elements, promoting truly meaningful learning.

Student motivation is a key element in the process of acquiring a second language. As Murphey (1992) and Engh (2013) demonstrate, choosing appropriate materials that spark interest is crucial for language acquisition. Songs, being playful and affective elements, can reduce what Krashen (1992) termed the "affective filter," thus facilitating a more natural and less stressful assimilation of the target language. This is explained by the fact that the

[2] Own translation

emotional aspect of music makes learning English an enjoyable activity for students (Engh, 2013).

From a methodological perspective, the use of songs in the classroom allows for the integrated teaching of the five basic language skills. Ballesteros (2009) describes how the process of teaching a song usually begins with "a first listening to the song as a whole, lyrics and music, so that the child begins to get used to hearing it" (p. 3) and then proceeds to a more fragmented listening that facilitates memorization. As follow-up activities, Ballesteros (2009, p. 3) suggests several options or techniques, such as: (a) "singing the song several times with contrasting nuances of dynamics and agogics"; (b) "performing the rhythm with some form of physical or instrumental accompaniment"; and (c) "carrying out movement activities".

Regarding written skills, several techniques can be employed to work with songs in the EFL classroom. These include the representative mode with the support of drawings and mime, exercises to fill in the gaps in the lyrics, reorganization of disordered verses, and dramatizations (Ballesteros, 2009). These activities target specific linguistic objectives such as introducing new grammatical structures, reinforcing previously learned content, increasing vocabulary, and improving pronunciation, phonetic awareness, and diction in English.

The selection of the musical repertoire is a pedagogical decision of great importance. Teachers should choose songs whose lyrics are "clear, short, with words that are easy to understand and pronounce; with real or imaginary literary content, but attractive, in relation to the interests of the child" (Ballesteros, 2009, p. 4). In higher grades, the incorporation of contemporary pop music takes on special relevance, given that "this repertoire, being closely connected to their daily lives, is very interesting to work with in the classroom" (Ballesteros, 2009, p. 5). This connection allows learning to transcend the walls of the classroom and be reinforced naturally in the student's everyday context. Murphey (1992) supports this approach by considering pop songs to be "an 'authentic' form of language," which makes them particularly valuable material for the language classroom.

Furthermore, the advent of Artificial Intelligence (AI) introduces new possibilities for enhancing song-based language learning. AI tools enable educators to create customized

songs that incorporate specific vocabulary, grammatical structures, and phonetic patterns aligned with curricular objectives. These technologies facilitate the development of personalized musical materials that can adapt to different learning styles and needs, thereby increasing student engagement and providing targeted practice in areas such as pronunciation, listening comprehension, and lexical acquisition. The integration of AI in song creation represents an innovative approach to material design that combines pedagogical effectiveness with technological innovation.

In conclusion, teaching a foreign language in primary school using songs involves creating an enriched, motivating, and meaningful learning environment. In this context, resources such as songs cease to be mere entertainment and become powerful tools that promote the comprehensive development of students' communicative and multilingual skills. Songs and music have long been recognised as effective pedagogical tools in the field of foreign language teaching. This efficacy stems from the intrinsic connection between language and music, both of which are innate human capacities. The view of Leng and Shaw (1991) suggests that music could be considered a "pre-language," with early musical training exercising brain capacities related to higher cognitive functions.

From a pedagogical perspective, songs serve as a dynamic resource that naturally integrates musical and linguistic elements, thereby promoting meaningful and engaging language acquisition. The theory of multiple intelligences proposed by Gardner (2003) underscores the relevance of musical intelligence (defined as the ability to appreciate, transform, discriminate and express musical forms) in the educational context. This intelligence interacts synergistically with linguistic intelligence, facilitating a more holistic learning process.

In the specific context of teaching English as a foreign language in Primary Education, songs offer a multifaceted tool. They enable the acquisition of vocabulary, pronunciation, rhythmic patterns, and listening skills from early stages of development (Juan Rubio & García Conesa, 2016). Moreover, songs are a source of authentic language and cultural content, which can increase student motivation and provide a relaxed, low-anxiety learning environment, aspects highlighted in music-based language pedagogy (Murphey, 1992).

Songs can be exploited to teach and reinforce various linguistic elements. They often contain repetitive structures and conversational language, making them ideal for introducing and

practising grammar, syntax, and common expressions (Juan Rubio & García Conesa, 2016). Furthermore, the rhythmic and melodic nature of songs aids memory retention, helping learners internalise vocabulary and phonological patterns more effectively than through traditional rote learning, a benefit noted in cognitive approaches to language acquisition (Krashen, 1983).

Another significant advantage is the cultural dimension that songs bring to the classroom. Through songs, students are exposed to aspects of the target culture, including traditions, values, and everyday contexts, thereby fostering intercultural awareness and competence (Juan Rubio & García Conesa, 2016), for instance, songs allow students to explore traditions like Halloween or Christmas carols, fostering understanding of Anglophone festivities. This aligns with the educational goal of developing not only linguistic but also sociocultural skills in young learners.

In the contemporary digital era, the integration of AI tools expands the pedagogical potential of songs in EFL teaching. AI-powered platforms can generate customized songs, tools such as *Suno AI* or *Udio* illustrate this potential, allowing the creation of bespoke melodies, that incorporate specific vocabulary, grammatical structures, and phonetic patterns tailored to student's proficiency levels and interests. This technological innovation allows educators to create personalized musical materials that address specific learning objectives while maintaining the motivational and affective benefits traditionally associated with song-based learning.

In conclusion, songs constitute a powerful, flexible, and motivating resource for teaching English in Primary Education. Their ability to integrate linguistic, cognitive, affective, and cultural components makes them an invaluable tool in the communicative language classroom. When selected and implemented appropriately, and when enhanced with modern technologies like AI, songs can significantly enhance the language learning experience, contributing to the development of both communicative competence and a positive attitude towards the target language and culture.

4.4. Characteristics of suitable songs for Primary Education

The pedagogical selection of songs for the primary foreign language classroom is a deliberate and nuanced process, as not all musical materials are equally effective in supporting language

acquisition. An effective song for teaching English to young learners should align with their developmental stage, linguistic level, and cultural context, while also motivating engagement and facilitating authentic communication, as shown by De Vries, 2010; Juan Rubio & García Conesa, 2016. This research highlights several interconnected characteristics that define suitable songs for this purpose. These characteristics are presented below:

First, relevance and contemporary appeal are crucial for capturing student interest. Learners in upper primary education consistently express a preference for contemporary popular music, which they perceive as meaningful and connected to their identities outside school (De Vries, 2010). As Ballesteros (2009) comments, this connection is pedagogically valuable: when students encounter familiar and enjoyed musical styles in the classroom, their intrinsic motivation and willingness to participate increase significantly. The use of such material can help bridge the often-noted gap between formal school instruction and the informal, authentic language experiences students value. This motivational aspect is key to sustaining engagement and reducing anxiety, as students feel more comfortable and interested in material that resonates with their personal experiences.

Regarding linguistic appropriateness, this represents another fundamental consideration. Songs chosen should feature clear, comprehensible lyrics that correspond to the learner's proficiency level, typically A1 to A2 on the CEFR scale. This involves selecting lyrics with high-frequency vocabulary, repetitive syntactic structures, and a manageable pace of delivery. Such clarity aids in decoding meaning, reinforces grammatical patterns, and supports the development of listening comprehension without overwhelming the learner (Kumar et al., 2022). Furthermore, the repetitive and memorable structure inherent in many songs (such as recurring choruses and strong rhythmic patterns) serves as a powerful mnemonic device, aiding the retention of vocabulary and phraseology (Juan Rubio & García Conesa, 2016).

Third, beyond linguistic features, songs function as authentic cultural artifacts, as it was previously mentioned. They offer a window into the social practices, values, and everyday life of English-speaking communities, thereby fostering the intercultural awareness that is a cornerstone of modern language curricula (MEFP, 2022). This cultural dimension transforms language learning from a purely academic exercise into an engagement with living culture.

Music can serve as a direct and powerful tool for developing intercultural competence, allowing students to explore and appreciate cultural diversity through a familiar and engaging medium (Pérez-Aldeguer, 2014).

Fourth, the affective power of music must also be harnessed. Songs can create a positive, low-anxiety learning environment, which is essential for language acquisition. The enjoyment derived from music can lower what Krashen (1983) termed the "affective filter", (a concept previously addressed in the motivation and anxiety section), reducing learner anxiety and increasing receptivity to input. This is particularly important in a primary classroom, where emotional security directly impacts cognitive engagement (Kumar et al., 2022).

Moreover, in today's digital world, the technological dimension of music is inseparable from its pedagogical use. Students predominantly access and engage with music through digital platforms like YouTube, streaming services, and smartphones (De Vries, 2010). Therefore, songs that are readily available through these media can be leveraged to create rich, multimodal learning experiences that integrate audio, video, and interactive tasks, simultaneously developing learners' digital competence, particularly in the areas of the information and data literacy and digital content creation as outlined by the DigComp 2.2 framework (Vuorikari et al., 2022). This digital accessibility aligns with the potential use of AI-generated songs, which can be tailored for specific platforms and interactive formats, further enhancing their suitability for contemporary classrooms by allowing customization to student interests and linguistic needs.

Finally, effective songs for the classroom are pedagogically flexible. They should lend themselves to a variety of activities that integrate all language skills (listening, speaking, reading, writing and mediation). This might include lyrics gap-fills, dramatizations, discussions on song themes, or creative projects like writing new verses. This versatility allows teachers to design sequential and scaffolded lessons that move from comprehension to production.

In practice, a balanced repertoire might include contemporary pop songs for their motivational value, traditional children's rhymes for their clear rhythm and phonemic patterns, and purpose-composed educational songs that target specific lexical or grammatical fields. Crucially, allowing student choice in the selection process can further enhance

ownership and engagement, making the language-learning experience more personal and effective (De Vries, 2010). Ultimately, the most suitable songs are those which successfully intertwine linguistic accessibility, cultural authenticity, emotional resonance, and pedagogical utility, creating a dynamic and supportive soundscape for language learning (De Vries, 2010; Juan Rubio & García Conesa, 2016; Kumar et al., 2022)

In conclusion, selecting songs for the primary EFL classroom is a strategic pedagogical decision that must balance multiple criteria. The ideal song acts as a bridge between the student's world and the target language, leveraging contemporary appeal and emotional resonance to foster motivation and lower anxiety (De Vries, 2010; Krashen, 1983). Simultaneously, it must be linguistically accessible (A1-A2 CEFR level) and culturally authentic to serve as a valid tool for communication and intercultural learning (MEFP, 2022; Pérez-Aldeguer, 2014). Furthermore, its pedagogical flexibility allows for the integrated development of all language skills, while its digital nature aligns to the development of key competences for the 21st century. Therefore, a consciously curated musical repertoire is not merely a supplementary activity but a central pillar for creating a dynamic, effective, and comprehensive language learning environment.

4.5. The use of AI for creating songs for teaching English

The integration of Artificial Intelligence (AI) into education represents a transformative force, reshaping pedagogical resources and methodologies (Liu et al., 2025). Within the specific context of teaching English as a Foreign Language (EFL) in Primary Education, AI-powered tools for generating musical content offer a novel pathway to align with contemporary curricular demands. This approach constitutes a strategic response to the legislative mandate of the LOMLOE and its implementing Royal Decree 157/2022, which explicitly establishes the development of students' Digital Competence as a key educational objective (Ministerio de Educación y Formación Profesional [MEFP], 2022).

Consequently, creating didactic songs using AI serves as a practical and innovative vehicle for developing this key competence as defined by the DigComp 2.2 Framework (Vuorikari et al., 2022). Specifically, this activity engages students in core areas of digital literacy: "Developing digital content" (competence area 3) through the co-creation of artistic

materials, and "Problem solving" (competence area 5) by using digital tools to achieve a specific linguistic and creative goal. When educators employ AI to generate or tailor songs, they simultaneously model and scaffold "Information and data literacy" (competence area 1), guiding students to interact critically and purposefully with AI outputs. This application moves digital competence beyond passive consumption to active, creative, and critical production, thereby fulfilling a central aim of the current educational legislation.

From a pedagogical standpoint, AI song-generation tools enable an unprecedented degree of personalization and contextualization. Educators can input specific lexical fields, grammatical structures, phonetic patterns (e.g., minimal pairs, specific vowel sounds), or thematic units to generate unique musical content that precisely matches the learning objectives of a lesson or the interests of a specific class. This aligns with innovative methodologies like the Flipped Classroom, where teachers can create customized preparatory materials, thereby optimizing in-class time for interactive and practical language application (Loizou, 2022). The use of such enriched, multimodal tools has been shown to enhance student motivation, engagement, and understanding (Alzubi, 2023). Empirical support for this pedagogical potential comes from applied research. A study by Prassetyo and Putri (2025) with upper-primary students within a Media-Assisted Language Learning (MALL) context found that Primary students using ChatGPT for lyric generation and SunoAI for music composition perceived these tools as user-friendly, efficient, and valuable for fostering creativity and collaboration in creating educational nursery songs. The students reported that this AI integration positively impacted their project quality and enhanced their overall learning experience, directly illustrating the tools' utility in creative, language-focused tasks.

However, the integration of generative AI in Primary Education necessitates careful ethical and pedagogical consideration, as emphasized in the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2023) *Guidance for generative AI in education and research*. This foundational document advocates for a human-centred approach, stressing that AI should augment, not replace, human creativity and critical thinking. This caution is echoed in broader research; a systematic review by Liu et al. (2025) highlights the dual nature of AI tools in EFL contexts, noting that while they offer significant benefits, risks such as student overreliance, which can lead to passive thinking and diminished analytical depth, are also present. The study by Prassetyo and Putri (2025) provides concrete examples of these

challenges within song-creation: while students valued the efficiency of ChatGPT, some noted that generated lyrics could be generic or repetitive, lacking the desired originality. This underscores a critical limitation and a key pedagogical point: effective use requires skilled prompt design, iterative refinement, and, most importantly, the teacher's guiding role in helping students evaluate, adapt, and build upon AI-generated material.

Therefore, the implementation of AI for creating teaching songs must be guided by principles that protect educational integrity:

- Ensuring Pedagogical Appropriateness and Human Agency: AI-generated songs should function as a stimulus or tool within a broader, teacher-led didactic sequence. The educator's role in curating, adapting, and critically discussing the content with students is paramount to prevent passive consumption and foster active, critical engagement (Liu et al., 2025; Prassetyo & Putri, 2025; UNESCO, 2023).
- Addressing Bias and Ensuring Cultural Relevance: AI models can perpetuate biases present in their training data. Teachers must critically evaluate generated lyrics for cultural appropriateness, stereotyping, and linguistic accuracy, transforming this process into a teachable moment for critical digital literacy (UNESCO, 2023).
- Adhering to Age Limits and Data Privacy: UNESCO advises stringent age restrictions and data protection measures. In primary classrooms, AI use must be teacher-mediated, employing institutional accounts that safeguard students' personal data and prioritizing age-appropriate platforms.

In conclusion, the use of AI for creating English teaching songs sit at a strategic crossroads: it is a direct application of the LOMLOE's mandate for innovative, digitally-enhanced methodologies (MEFP, 2022); a practical means to develop the Key Competence of Digital Literacy as framed by DigComp 2.2 (Vuorikari et al., 2022); and a domain requiring the thoughtful, ethical guidance outlined by UNESCO (2023). As evidenced by both systematic reviews (Liu et al., 2025) and applied case studies (Prassetyo & Putri, 2025), its success depends on a balanced approach. Educators must act as discerning facilitators who leverage AI's potential for personalization, motivation, and creative collaboration while simultaneously nurturing the independent critical thinking and deep intellectual engagement essential for comprehensive language education in the digital age.

4.6. Opportunities and challenges of integrating AI to create songs in Primary Education

The integration of generative artificial intelligence (GenAI) into the musical study programme of the third cycle of primary education enables a shift from traditional, teacher-centred instruction toward a model of human-ai collaborative composition (Cheng, 2025). This development requires a vital evaluation of the technical, ethical, and pedagogical consequences inherent in these emerging technologies, particularly when applied to the dual goal of musical and linguistic development.

4.6.1. Pedagogical Opportunities: Enhanced Creativity, Self-Efficacy, and STREAM

The main opportunity of GenAI resides in the democratization of musical production. Traditional composition frequently requires comprehensive theoretical and technical mastery, which can act as a substantial barrier for young students. Nevertheless, as evidenced by Yunoki et al. (2023) and Mycka and Mańdziuk (2025), sophisticated deep learning frameworks, precisely transformers and generative adversarial networks (GANs), have facilitated the generation of high-quality musical content through user-friendly interfaces. This "low-threshold" access empowers students to move past technical constraints, shifting the pedagogical focus from "music production" to "music thinking" and conceptualization (Cheng, 2025).

Moreover, the use of AI tools considerably strengthens creative self-efficacy. Following Ben et al. (2025), musical creativity is a multifaceted construct largely influenced by cognitive factors and social capital. AI acts as a scaffolding process that offset varying levels of musical background among students, cultivating a more equitable and diverse environment. In the EFL context, this collaborative structure allows learners to focus on the pragmatic and phonetic aspects of English lyrics. By diminishing the technical anxiety linked with composition, AI tools help lower the "affective filter," promoting a more natural and inspired engagement with the target language (Mygdanis, 2025; Yee-King et al., 2023). In addition, the inclusion of ai within stream models encourages interdisciplinary collaboration, where song creation becomes a medium for developing digital literacy and critical thinking at the same time (Mygdanis, 2025).

4.6.2. Critical Challenges: Authenticity, Bias, and the Necessity of AI Literacy

Notwithstanding the advantages, the "effortless" nature of AI-mediated generation presents substantial obstacles that must be handled by the educator. Cheng (2025) highlights that an over-reliance on automated tools may undermine the perceived value of human persistence and the development of essential musical skills. It is consequently essential that AI acts as a supportive supplement instead of a total substitute for original artistic ideation, maintaining human agency at the core of the creative process.

Ethical and structural issues also remain a focal point in current research:

- Intellectual property and the "black box" problem: The unclear legal status of AI-generated outputs and the lack of clarity in how deep neural networks process training data present major challenges (Mycka & Mańdziuk, 2025; UNESCO, 2023). For students in the third cycle, this provides an essential pedagogical moment to discuss digital ethics, authorship, and the ethical use of copyrighted materials.
- Algorithmic bias and cultural diversity: AI models often mirror the biases of their training datasets, which are often Western-centric. UNESCO (2023) cautions that this can lead to a homogenisation of musical taste and the omission of minority musical traditions. In the efl classroom, teachers must guarantee that ai tools are used to examine a pluralistic range of cultural expressions, avoiding the software from limiting the students' intercultural awareness.
- The literacy gap and professional development: Effective integration is dependent upon the development of extensive ai literacy for both teachers and students (Mygdanis, 2025; Yee-King et al., 2023). It is insufficient to merely provide access to technology; learners must be instructed to interact with ai as critical co-creators who comprehend the underlying processes, limitations, and socio-ethical impacts of the tools they utilize.

Ultimately, while GenAI offers a potent catalyst for personalization and motivation in primary education, its effective implementation depends on a stable pedagogical approach that harmonizes technological innovation with ethical responsibility and human-centred artistic development.

In conclusion, the integration of GenAI into Primary music and language education presents a paradigm with both promise and peril. On one hand, its capacity to democratize composition and serve as a motivational scaffold offers significant pedagogical benefits. On

the other hand, challenges such as homogenisation, passive consumption and the black box problem require a critical and informed response. Therefore, the successful implementation of AI song creation in the Primary EFL classroom depends on not merely the availability of technology, but on the cultivation of critical digital competence among both students and educators. As UNESCO (2023) advocates, technology must remain a tool in service of human creativity and ethical reflection, not its substitute. This project adopts this human-centred perspective, integrating AI not as an end in itself, but as a catalyst for linguistic expression, intercultural dialogue and empowered digital citizenship.

5. Theoretical Synthesis and discussion: Towards an Integrated Framework for using AI in English Teaching through music

The current review of literature indicates that the integration of GenAI, music education and English as a Foreign Language (EFL) pedagogy offers a significant opportunity for innovation in the Third Cycle of Primary Education.

This section synthesizes the findings explored in the previous chapter to establish a unified framework for AI assisted song creation.

5.1 Critical review of theoretical findings

The theoretical landscape analysed suggest that the traditional barriers to musical composition, such as technical skill and theoretical complexity, are being redefined by deep learning architectures. As stated by Yunoki et al.(2023) and Mycka and Mańdziuk (2025), the shift from symbolic music generation to direct audio synthesis provides students with rapid , high quality results. This is not merely a technical advancement because it serves as a pedagogical catalyst that facilitates music thinking over music production (Cheng, 2025).

By removing the frustration often associated with technical failure, students can focus their energy on the conceptual and creative dimensions of the task. One of the most crucial findings is the correlation between AI support and creative self efficacy. The investigation by Ben et al. (2025) underscores that when students perceive themselves as capable creators, their engagement with the English language intensifies. By providing a musical scaffolding, AI enables learners to focus their cognitive resources on the pragmatic and phonetic challenges in EFL. This synergy directly addresses the issues of language anxiety and the affective filter, turning the classroom into a low risk environment where linguistic experimentation is encouraged. This approach is firmly aligned with the LOMLOE's competence-based approach, the CEFR A2 descriptors for the target group and the digital content creation pillars of DigComp 2.2. This alignment is evident because the PGRRF model requires students to produce simple written texts at an A2 level, while simultaneously generating original multimedia content, directly addressing DigComp Area 3. Furthermore,

the collaborative and reflective nature of the Project develops the key competence of "Learning to Learn" and encourages the civic and ethical dimensions of the digital literacy advocated by the LOMLOE. This implementation allows students to develop written skills indirectly and improve them for their life-long learning because they learn by doing (Dewey, 1920) and that is a significant learning (Ausubel, 1983).

5.2 AI as a catalyst for personalization and motivation in Language Learning

The implementation of generative AI in the EFL classroom represents a powerful driver for student interest and an effective tool for tackling the psychological barriers of anxiety. According to the research of Murphey (1992) and Engh (2013), music functions as a playful and affective element that can decrease the "affective filter". This concept, established by Krashen (1983; 1992), suggests that a low-anxiety atmosphere is crucial for allowing natural language assimilation.

Furthermore, the recent study by Ben et al. (2025) emphasizes that providing students with sophisticated musical scaffolding strengthens their creative self-efficacy. AI compensates for varying levels of musical background, enabling every student to focus their cognitive resources on the linguistic aspects of the English lyrics. This human-AI collaborative environment corresponds to Vygotsky's Zone of Proximal Development (ZPD), as analyzed by Shabani et al. (2010). In this scenario, the AI acts as a form of scaffolding, a cognitive tool that extends the student's creative and linguistic capabilities. Recent research in AI-mediated learning (e.g., Kucirkova, 2023; Luckin et al., 2016) suggests that intelligent systems can serve as a "more knowledgeable other" when they provide adaptive feedback that guide learners through tasks they could not complete independently. By generating musical prototypes that students can then evaluate and refine, the AI scaffolds tasks at the edge of their ZPD, bridging the gap between their current A2 abilities and the target creative outcome.

From a pragmatic perspective, AI-supported songwriting requires students to "notice" how language operates in social contexts. As pointed out by Schauer (2019), communicative success depends on the ability to use language effectively in real situations. By personalizing songs to their own realities, students learn formulaic language and rhythmic patterns more

deeply than through traditional learning methods (Murphey, 1992; Schauer, 2019). As Schauer (2019) notes, the meaningful repetition of pragmatic routines in familiar contexts facilitates their retention. Thus, AI acts as a unique catalyst: it leverages the intrinsic motivational and anxiety reducing properties of music, provides scaffolding within the ZPD to boost self-efficacy and creates a context for pragmatic noticing, resulting in highly personalized and effective language learning experience.

5.3 Prompt Engineering: The art of communicating with GenAI in the Classroom

The integration of Generative Artificial Intelligence (GenAI) into the educational landscape demands a paradigm shift in how students and teachers interact with technology. It is no longer enough to merely consume digital content; the educational focus must pivot towards co-creation. In the context of this project (learning English through the creation of AI-generated music) the ability to craft effective instructions, known as Prompt Engineering, becomes a fundamental linguistic and digital competence.

This section analyses the theoretical underpinnings of prompt engineering and suggests a practical framework for its application in the Third Cycle of Primary Education. It addresses how the specific syntax, vocabulary, and structural constraints required to generate music (via tools such as Suno or Udio) can act as a powerful scaffold for English as a Foreign Language (EFL) acquisition.

5.3.1 Conceptualisation of Prompt Engineering as a 21st Century Competence

Prompt engineering is often misunderstood as a purely technical skill. However, within an educational context, it represents a complex cognitive process that requires clarity of thought, linguistic precision, and contextual understanding. Federiakin et al. (2024) argues that prompt engineering should be acknowledged as a "new 21st-century skill," essential for digital literacy. They posit that the ability to formulate precise inputs for Large Language Models (LLMs) and generative audio models is not merely about operating software, but about developing a "conversational pedagogy" where the learner participates in a dialectic process with the AI.

For Primary Education students, this interaction transforms the passive learning of vocabulary into an active, functional necessity. To create a song that sounds "sad" or "upbeat," the student must understand and correctly apply specific adjectives and genre-related terminology. As Bozkurt and Sharma (2023) poetically describe, prompt engineering is "the art of whispering to let the genie out of the algorithmic world" (p. 1). In the context of this Project, the "genie" is the musical composition, and the "whisper" is the English language input provided by the student. If the linguistic input is poor, the musical output will be incoherent, providing immediate, non-punitive feedback to the learner.

5.3.2. Pedagogical Frameworks for Prompt Design

To effectively implement prompt engineering in the classroom, it is crucial to transcend trial and error and establish a structured framework. Lee and Palmer (2025) conducted a systematic review of prompt engineering in higher education, identifying that structured frameworks (such as CO-STAR or PREP) significantly improve the quality of GenAI outputs. While these frameworks are designed for university levels, their core principles (context, role and explicit instruction) are highly adaptable to Primary Education.

Applying the findings of Lee and Palmer (2025) to the music classroom, we can establish a simplified "Music Generation Framework" for EFL students. This framework ensures that students do not simply type make a song, but rather build complex sentences that practice grammar and vocabulary.

The framework consists of four key linguistic components:

- Genre (Style): Requires vocabulary related to musical cultures (e.g., Jazz, Pop, Rock, Electronic).
- Mood (Adjectives): Requires emotional vocabulary (e.g., melancholic, energetic, hopeful, spooky).
- Topic (Context): The narrative or lyrical theme (e.g., a song about recycling, a story about a lost cat).
- Structure (Syntax/Format): Technical instructions (e.g., fast tempo, female vocals, rhyming lyrics).

By following such a framework, the act of prompting becomes a "scaffolded learning experience" where the AI acts as a co-pilot rather than a replacement for human creativity (Federiakin et al., 2024).

5.3.3. Teacher Guidelines: designing the 'Meta-Prompt'

Before students can interact with the AI, the teacher must assume the role of the 'architect' of the learning environment. Choi and Chang (2025) highlight that one of the significant challenges in AI education is the "vague or insufficient" nature of initial prompts. Therefore, the teacher's role is to guide students in understanding the logic of the machine.

Teachers must model the process of "Iterative Refinement." According to Choi and Chang (2025), students often expect the AI to function perfectly on the first attempt. The teacher must demonstrate that prompting is a recursive process: draft, generate, analyse, and refine. For instance, the teacher might show a vague prompt:

> "A song about summer."

And compare it with an engineered prompt:

> "An energetic pop song with a fast tempo about a sunny day at the beach, featuring acoustic guitars and happy female vocals."

This comparison allows the teacher to emphasise the grammatical structures (adjective order, prepositions) and specific vocabulary that led to the superior result. Bozkurt and Sharma (2023) stress that this strategic approach (defining role, tone, and context) is crucial for "unleashing capabilities in generating authentic content" (p. 1). The teacher does not just teach English, they teach how to communicate intent through English.

5.3.4. Student Guide: How to Prompt for Music in EFL

Based on the theoretical analysis above, this section outlines a practical guide for students. This guide is designed to be displayed or projected in the classroom to facilitate the "English through Music" project.

The PROMPT Formula for Music Creation

To help students recall the necessary elements of a good prompt, we can use the acronym M.U.S.I.C. (adapted from the structural recommendations in Lee & Palmer, 2025):

1. M - Mood (How does it feel?):

Vocabulary focus: Adjectives of emotion.

Examples: Cheerful, gloomy, energetic, calm, aggressive, mysterious.

Prompt fragment: *"Create a cheerful and uplifting melody..."*

2. U - Universe (Where is it aimed? / Genre):

Vocabulary focus: Musical genres and cultural nouns.

Examples: K-Pop, 80s Rock, Country, Lo-fi Hip Hop, Classical.

Prompt fragment: *"...in the style of 80s Rock..."*

3. S - Subject (What is it about?):

Vocabulary focus: The thematic vocabulary of the unit (e.g., Environment, Daily Routines).

Examples: Climate change, irregular verbs, my holidays, friendship.

Prompt fragment: "...about saving the planet and recycling plastic..."

4. I - Instruments (What sounds do we hear?):

Vocabulary focus: Musical instruments and sound qualities.

Examples: Electric guitar, piano, synthesizer, heavy drums, robotic voice.

Prompt fragment: *"...featuring electric guitars and strong drums..."*

5. C - Characteristics (Extra details):

Vocabulary focus: Adverbs and technical terms.

Examples: Fast tempo, slow rhythm, catchy chorus, male singer.

Prompt fragment: *"...with a fast tempo and a catchy chorus sung by a male voice."*

Example of a Full Student Prompt:

> *"Create an energetic pop song about daily routines. It should feature a synthesizer and drums. The mood is happy and the tempo is fast."*

5.3.5. Challenges, Ethics, and Critical Digital Literacy

While prompt engineering offers immense potential for language learning, it is not without challenges. Choi and Chang (2025) warn of "hallucinations" (where the AI generates nonsense or ignores instructions) and the risk of dependence on the tool. In the context of music generation, the AI might disregard the "educational" constraint (e.g., producing complex lyrics instead of simple ones suitable for primary students).

This presents a unique pedagogical opportunity identified by Federiakin et al. (2024): Critical Evaluation. Students must be taught to evaluate the output critically. Did the AI follow the instructions? Is the English in the lyrics correct? Furthermore, Bozkurt and Sharma (2023) discuss the ethical dimension of "co-creation." Teachers must address that while the AI generates the audio, the creative spark and the linguistic structure come from the student. This empowers the learner, reducing the anxiety often associated with language production, as the AI handles the "performance" aspect while the student focuses on the "direction."

In conclusion, incorporating prompt engineering into the EFL curriculum via music generation serves a dual purpose. Firstly, it develops the digital competence required by the DigComp framework, specifically in interacting with AI systems (Federiakin et al., 2024). Secondly, and perhaps more importantly for this degree project, it functions as a compelling communicative drill.

Unlike abstract grammar exercises, a prompt has a practical purpose. If a student misspells "rhythm" or uses the wrong adjective for a genre, the musical result will not correspond to their expectation. This feedback loop drives the student to refine their language usage autonomously. By mastering the "art of whispering" to the generative AI (Bozkurt & Sharma, 2023), students effectively acquire the vocabulary and structure of the English language, fulfilling the ultimate objective of this project.

5.4. Comprehensive pedagogical framework for AI-Assisted Songwriting: The PGRRF Model

The implementation of Generative Artificial Intelligence (GenAI) into the English as a Foreign Language (EFL) classroom constitutes a transformative shift in how students engage with creative writing. This proposal is grounded in the Student-AI Iterative Model, specifically the *PGRRF* (Prompt, Generate, Review, Regenerate, Finalize) workflow (Choi & Chang, 2025), which ensures that technology acts as a catalyst for linguistic development rather than a mere replacement.

- **Phase 1: Prompt (Preparation and Input) – The Linguistic Foundation**

This preliminary stage represents the most linguistically demanding part of the process, requiring careful scaffolding given the students' age (11-12 years) and A2 proficiency level. As noted by Choi and Chang (2025), “the AI is only as good as the input”, which indicates that learners, supported by structured guidance and collaborative work, must aim for clarity and specificity in their English prompts to obtain the intended musical results.

In this phase, guided by the teacher who selects linguistically and thematically appropriate model songs at A2 level, we apply the *Reading-to-Writing (R2W)* methodology proposed by Chattuchai and Sappapan (2024). Before interacting with tools like *Suno AI*, students analyze these teacher-curated contemporary songs, allowing them to recognize essential vocabulary, repetitive structures and common grammatical patterns relevant to their proficiency level. By drafting prompts in collaborative groups, students practice using descriptive adjectives, imperative verbs and simple sentence structures. This process encourages foundational AI Literacy, as students begin to understand that effective communication with digital tools requires intentional and precise language choices (Chattuchai & Sappapan, 2024; Nezhyva et al., 2024).

- **Phase 2: Generate – Multimodal Synthesis and Self-Efficacy**

The Generate phase represents the moment where textual input transforms into audible output. According to Fitria (2025), this process facilitates music creation, empowering young learners to act as composers regardless of their technical musical skills. From a psychological standpoint, this immediate and tangible output significantly improves student self-efficacy. As shown by Wang and Li (2024), there is a strong positive correlation between AI readiness and student achievement in creative tasks.

When learners hear their own simple English lyrics performed by a professional-sounding AI, their engagement increases, reducing what Krashen (1983) termed the “affective filter”and creating a personal, motivating connection to the learning material (Fitria, 2025).

- **Phase 3: Review, Analysis and Evaluative Literacy**

The Review stage guards against passive consumption of technology by developing critical evaluative skills. Following the guidelines of Choi and Chang (2025), students must analytically evaluate the AI's output. This requires an examination focused on age-appropriate criteria:

- Linguistic Review: Given the students' A2 proficiency level, the focus is on comprehensibility and lexical accuracy rather than subtle phonetic distinctions. Students read along with the lyrics while listening, checking if the words sung correspond to the words they intended to use. They identify obvious errors, such as clearly mispronounced words that change meaning (e.g., 'ship' heard as 'sheep') or nonsensical phrases and assess the overall coherence of the lyrics (Fitria, 2025). The teacher may provide focused listening guides for specific, pretaught sounds if they are a learning objective, but the primary evaluation remains at the word and phrase level.
- Stylistic Review: Students assess whether the musical style (tempo, instruments, general mood) aligns with their original creative vision and the intended theme (Coelho, 2025).

This phase builds essential critical thinking and digital literacy, as students debate the AI's limitations and learn that they, not the machine, are the ultimate authors and evaluators of the content (Nezhyva et al., 2024).

- **Phase 4: Regenerate – Iteration and Problem-Solving**

The Regenerate phase is arguably where the deepest language processing and acquisition occurs. If the initial result is not what we have expected, students must return to the *prompting* stage. This iterative process reflects authentic creative and problem-solving workflows. As proposed by Campanini (2026), this requires persistence and analytical abilities. Students experiment with different vocabulary, restructure sentences and adjust parameters to improve their song. This active, reflective participation ensures that the final product is the fruit of deliberate student effort and linguistic selection (Choi & Chang, 2025).

- **Phase 5: Finalize – Production, Sharing and Agency**

The concluding stage, Finalize, encompasses sharing the final song and engaging in critical reflection. As Coelho (2025) highlights, the value of tangible creative results extends beyond the digital environment, fostering a sense of real-world accomplishment.

Students present their AI-assisted songs to the class, building community and shared achievement. This phase also includes a guided discussion on digital authorship and collaboration (Nezhyva et al., 2024). By recognizing the AI's role as a creative partner rather than the sole creator, students solidify their identity as capable, intentional users in a digital world, understanding the shared agency in human-AI co-creation."

In conclusion, the pedagogical model presented in this section exemplifies that the incorporation of GenAI into the Primary EFL classroom is not merely a digital trend, but a significant educational opportunity to transform language learning dynamics. By grounding the use of tools like *Suno AI* within the *TPACK* framework (Technological Pedagogical Content Knowledge; Campanini, 2026) and structuring student interaction through the *PGRRF* workflow (Choi & Chang, 2025), this proposal successfully navigates the tension between human creativity and technological automation.

The implementation of the *Reading-to-Writing (R2W)* approach ensures that the *prompting* phase remains a cognitively demanding exercise, mitigating the risk of passive consumption cautioned by Liu et al. (2025). Furthermore, the cyclical nature of the generation and review process fosters crucial evaluative literacy, empowering students to critically audit AI outputs rather than accepting them as absolute truths.

Ultimately, this methodological approach reinforces the premise that AI, when guided by a competent educator, serves as a powerful scaffold for self-efficacy (Wang & Li, 2024). It democratizes music composition, allowing A2-level learners to experience authorship and mastery over their creative products. As noted by Nezhyva et al. (2024) and Coelho (2025), the aim is not to replace the student with the machine, but to synergize their capabilities, ensuring that the ultimate “Classroom Anthem” is a testament to student ingenuity enhanced by technology. This comprehensive vision aligns the digital potential of GenAI with the pedagogical values essential for the 21st-century learner.

5.5 Implications for teaching Practice in Primary Education: Ethical Considerations and AI Literacy

The introduction of GenAI for students-led song creation requires a pedagogical shift where the teacher transitions from being the sole content creator to facilitator of AI-assisted co-creation. As pointed out by Cheng (2025), the automated nature of AI generation could potentially undermine the perceived merit of human creativity. Therefore, it is crucial that AI is used as a supportive tool rather than a total replacement for human artistic ideation, ensuring that students remain the primary creative agents.

A primary issue in teaching practice involves the ethical implications of these tools. According to UNESCO (2023) and Mycka and Mańdziuk (2025), the lack of transparency regarding the "black box" problem and intellectual property presents a key learning opportunity and a challenge. Teachers must guide students to understand the origins of GenAI content, discuss basic concepts of digital authorship and giving credit in age appropriate terms and distinguish between AI output and human input, thereby encouraging a foundational sense of digital ethics suitable for 11-12 years old.

Additionally, the risk of algorithmic bias must be considered. The UNESCO (2023) advises that AI models often reflect Western-centric datasets, which can restrict cultural diversity and perpetuate stereotypes. In the EFL classroom this requires the educator to actively curate and critique AI-generated musical content, selecting outputs that promote cultural pluralism and turning potential limitations into teachable moments about global diversity.

Ultimately, following the UNESCO (2023) guidance and the emerging AI competency frameworks, students must be taught to interact with AI as informed, critical, and ethical co-creators who comprehend the societal and technical implications of the tools they use. This comprehensive approach to AI literacy is non-negotiable for its successful integration into Primary Education.

5.6. Practical Proposal for the Third Cycle (6th Grade)

5.6.1 Introduction

This didactic proposal serves as the practical application of the theoretical framework explored in this study. It translates the core principles of using music and artificial

intelligence into a structured, engaging, and pedagogically sound project for sixth-grade students. Designed as a cohesive six-session journey, the project guides students through the collaborative creation of a unique "Classroom Anthem."

This initiative moves beyond isolated language exercices, aiming to cultivate a holistic learning environment where English becomes a tool for authentic expression, digital competence is developed through hands-on creation, and students experience the motivational benefits of a low-anxiety, student-centred task (Murphey, 1992; Ben et al., 2025). The proposal operationalises the PGRRF model, ensuring that the integration of AI is thoughtful, critical, and ultimately enhances human creativity and linguistic output.

5.6.2 Context

Castilla y León, fully aligned with the current educational legislation (LOMLOE; MEFP, 2022). It is assumed the school possesses adequate digital infrastructure, such as a computer lab or a classroom set of tablets with a stable internet connection, which is critical for accessing cloud-based AI tools. This context reflects the growing emphasis within the curriculum on developing digital competence as an integral part of cross-curricular learning.

2.2. Classroom and Learner Profile

- Participants: A standard 6th-grade classroom of approximately 25 students, aged 11-12, with a heterogeneous mix of abilities, interests, and confidence levels typical of this age group.
- Linguistic Level: The students are working within the A2 (Waystage) band of the CEFR. They can understand sentences related to areas of immediate relevance, communicate in simple routine tasks, and write short, basic texts about their environment (Council of Europe, 2020).
- Classroom Dynamics: The proposal is designed to capitalise on the engagement potential of collaborative, multimodal projects. The intrinsic appeal of music creation and digital tools is used as a key motivator. The task-oriented, cooperative work is structured to lower affective filters, encouraging participation from all learners within a supportive group setting (Krashen, 1992).

2.3. Attention to Diversity and Specific Adaptations

The proposal incorporates universal design principles and allows for specific adaptations to ensure inclusivity for all learners, including those with specific educational needs (e.g., dyslexia, ASD, attention difficulties). Potential adaptations include:

- Visual supports for prompt creation: word banks, sentence starters, pictograms, and graphic organisers.
- Flexible expression options: allowing oral contributions or drawings alongside or instead of written prompts.
- Strategic grouping: pairing students to complement strengths and provide peer support.
- Focus on individual strengths: students can contribute according to their abilities (e.g., artistic design, beat perception, idea generation, organisational tasks).
- Additional scaffolding: providing extra time, step-by-step checklists, or teacher guidance during the prompt-writing phase. The collaborative and multimodal nature of the project itself serves as a primary inclusive strategy, offering multiple entry points and ways to participate.

5.6.3. General and Specific Objectives

This proposal is designed to achieve a holistic development of key competences, with objectives formulated following SMART criteria (Specific, Measurable, Achievable, Relevant, Time-bound) and directly linked to curricular directives and the use of AI.

General Objective:

To design an original *"*Classroom Anthem*"* in English using AI- assisted songwriting tools, thereby demonstrating the integrated development of linguistic and digital competences.

Specific Objectives:

1. To identify key vocabulary, simple structures, and thematic elements from teacher-selected model songs (A2 level) and use them to draft coherent written prompts for an AI music generator.
2. To interact with an AI music generation tool (e.g., Suno AI) following the iterative PGRRF workflow, demonstrating basic skills in digital content creation, critical evaluation of AI output, and iterative problem-solving.

3. To collaborate in teams to negotiate a shared theme, contribute to all creative stages, and present the final co-created product to peers, reflecting on the collaborative process and the role of AI.

5.6.4. Didactic activities: A six-session project

This cohesive project unfolds over six successive 50-minute sessions, centred on the unifying and age-appropriate theme of Our Community: Friendship and Teamwork. This theme provides relevant, positive, and accessible vocabulary at the A2 level and serves as the narrative thread connecting all sessions towards the final creative product.

Session 1: Discovering Our Song Blueprint

- **Learning Objectives:** To identify the main theme and repetitive structures in teacher-selected pop songs about teamwork; to brainstorm and categorise vocabulary related to class identity and values.
- **Materials:** Audio/video of 2-3 level-appropriate pop songs (e.g., *Count on Me* by Bruno Mars, *You've Got a Friend in Me*) (Annex 1), poster paper, markers, vocabulary word bank handout.
- **Procedure** (50 min):
  1. Warm-up (5 min): Quick discussion: "What makes a song memorable?"
  2. Listening & Analysis (20 min): Play song choruses. Use guided questions: "What is this song's message?" "Which words or lines repeat?" "How does it make you feel?" Direct students' attention to specific linguistic features at A2 level, such as the use of a modal verb "can" to express ability (e.g., "you can count on me"), simple present tense for routines or states (e.g., "I´ll be your friend"), and common adjectives for feelings (e.g., "happy", "sad", "strong"…)
  3. Group Brainstorm (20 min): In "songwriting teams," students create an "Identity Map" poster with sections: "Our Strengths," "Fun Times," "Class Goals." They generate relevant English words/phrases.
  4. Wrap-up (5 min): Each group shares one key word from their map.

- **Assessment**: Observation of group participation; completion of the Identity Map with relevant, theme-related vocabulary.

- **Differentiation**: Provide sentence starters ("We are good at...", "We like to..."); allow drawing symbols alongside words; use mixed-ability grouping.
- **Theoretical Connection**: Applies the *Reading-to-Writing* (R2W) methodology (Chattuchai & Sappapan, 2024) by providing comprehensible input before production. Develops the A2 competency of *comprehending oral and multimodal texts*.

Session 2: Becoming AI Prompt Architects

- **Learning Objectives**: To understand the concept of an AI prompt; to formulate clear, specific instructions in simple English to guide a music AI.
- **Materials:** Whiteboard, examples of good/bad prompts, team "Identity Maps" from Session 1, prompt-writing worksheet.
- **Procedure** (50 min):
    1. Introduction (10 min): Teacher explains that we "talk" to AI using prompts. Models how different elements (genre: "happy pop song," mood: "energetic," keywords: "friends, team, fun") shape the output.
    2. Prompt Crafting (25 min): Teams review their Identity Map and draft their first prompt on a worksheet. The challenge: write 2-3 clear sentences in English (e.g., "Make a happy pop song about friendship for our class. Use these words: team, learn, friends. The chorus should repeat.").
    3. Peer Feedback (10 min): Teams swap worksheets and give feedback on clarity using a simple checklist: "Is the mood clear?" "Are the key words included?"
    4. Close (5 min): Teams revise their prompts based on feedback.
- **Assessment:** Completion of the prompt worksheet; quality of peer feedback (clarity and constructive nature).
- **Differentiation:** Provide a prompt template with blanks to fill; allow teams to dictate prompts to the teacher or a scribe.
- **Theoretical Connection**: This is the essential Prompt phase of the PGRRF model. It is a demanding A2 writing task that applies descriptive language for a real-world purpose, fostering AI literacy.

Session 3: First Creation & Critical Listening

- **Learning Objectives**: To generate initial musical drafts using AI; to initiate a critical, evaluative dialogue with the AI's output.
- **Materials**: Teacher computer with internet access and a Suno AI account, team prompts, "Critical Listener's Checklist" handout.
- **Procedure** (50 min):

    1. AI Generation (15 min): Using a single, teacher-controlled account for privacy and safety (UNESCO, 2023), each team's prompt is entered into Suno AI to generate two song variations. The class listens to each output.
    2. Structured Evaluation (25 min): Teams use a "Critical Listener's Checklist" to evaluate their songs. They assess:
    3. Do the lyrics match our words? (Lexical accuracy).
    4. Does the music sound like we wanted? (Style alignment).
    5. Is it easy to sing along? (Engagement).
    6. Group Discussion (10 min): Teams note what they like and what needs improvement ("glitches" or mismatches).
- **Assessment**: Completion of the Critical Listener's Checklist with thoughtful observations; quality of team discussion.
- **Differentiation**: Provide checklist with visual icons (smiley faces for mood); pre-teach evaluation vocabulary.
- **Theoretical Connection**: This combines Phase 2 (Generate) and Phase 3 (Review). The instant creation boosts creative self-efficacy (Fitria, 2025), while the review task builds critical digital literacy (Liu et al., 2025), teaching students to assess, not just accept, AI outputs.

Session 4: The Iterative Revision Lab

- **Learning Objectives**: To diagnose issues in the initial AI output; to refine creative instructions through iteration; to understand revision as a core part of the creative and problem-solving process.
- **Materials**: Team checklists from Session 3, revised prompt worksheet, access to Suno AI.

- **Procedure** (50 min):

1. Diagnosis Meeting (15 min): Teams analyse their checklist notes. The teacher facilitates with simple questions: "Was the song too fast/slow?" "Did the AI missing a word?"
2. Prompt Revision (20 min): Teams collaboratively revise their original prompt. This may involve simplifying language, swapping a keyword, or adding a clearer style reference (e.g., "like a song in a cartoon").
3. Regeneration & Comparison (15 min): Teams generate a new version (*Regenerate*) and compare it to their first attempt, articulating what improved and why.

- **Assessment**: Evidence of iterative thinking in the revised prompt; ability to articulate improvements between versions.
- **Differentiation**: Offer a menu of revision strategies; provide a word bank of simpler synonyms for complex terms.
- **Theoretical Connection**: This is the heart of the Regenerate phase. It transforms potential frustration into a lesson in problem-solving and perseverance (Campanini, 2026), reflecting authentic creative workflows.

Session 5: Adding the Human Signature

- **Learning Objectives**: To personalise and claim ownership of the AI-generated track by adding original human performance or artistic elements.
- **Materials**: Final AI audio track for each team, classroom instruments (percussion, keyboards), art supplies, recording device (tablet/phone).
- **Procedure** (50 min):

    1. Planning (10 min): Teams decide on one "human touch" to add: singing the final chorus together, adding a live percussion rhythm, creating album artwork, or choreographing simple dance moves.
    2. Creation & Rehearsal (30 min): Teams work on their chosen modification, practising their performance or creating their artwork.
    3. Recording/Preparation (10 min): Teams record their vocal addition or finalise their artwork.

- **Assessment**: Active participation in the co-creation activity; successful integration of the human element with the AI base.
- **Differentiation**: Offer a choice of modification activities with varying demands; allow students to choose roles based on their strengths (singer, artist, percussionist).
- **Theoretical Connection**: This directly addresses concerns about authenticity and human agency in AI-assisted work (Cheng, 2025; UNESCO, 2023). It prevents passive consumption and reinforces that the AI is a tool in service of their creative vision, solidifying student ownership and authorship (Coelho, 2025).

Session 6: Premiere & Reflection Gala

- **Learning Objectives**: To share the finished anthems with the learning community; to engage in a structured reflection on the creative process, the role of AI, and related ethical considerations.
- **Materials**: Final songs and presentations, reflection question prompts, "premiere" atmosphere (lights off, etc.).
- **Procedure** (50 min):

1. The Premiere (25 min): Each team presents their final Classroom Anthem, sharing a brief story of their journey—initial idea, challenges, and solutions.
2. Reflective Dialogue (20 min): Teacher facilitates a whole-class discussion using prompts: "Who is the author of this song?" "What surprised you about working with AI? What were its limits?" "How did this project make you feel about using English?"
3. Project Closing (5 min): Celebration of collective achievement.

- **Assessment**: Quality of team presentation; depth of contribution to the reflective dialogue.
- **Differentiation**: Allow teams to present in different formats (live, pre-recorded video); provide sentence stems for reflection ("I learned that...", "I was surprised when...").
- **Theoretical Connection**: This completes Phase 5 (Finalize), providing a platform for sharing achievement and building community (Nezhyva et al., 2024). The reflective dialogue is essential for developing the AI literacy and ethical

understanding necessary for students to navigate the digital world as informed citizens (UNESCO, 2023).

5.6.5. Analysis, Benefits and Challenges of the Proposal

The "Our Classroom Anthem" proposal offers a comprehensive framework for integrating innovative methodologies onto primary EFL. It successfully connects the motivational power of music, the principles of communicative language teaching, and the potential of GenAI within a coherent, ethically grounded pedagogical sequence aligned with the PGRRF model. By progressing through this structured process, students experience English as a purposeful tool for authentic expression, engage with digital tools critically and participate in collaborative, iterative creativity.

Principal Benefits of the Proposal:

- Enhanced Motivation and Engagement: The authentic, creative task of songwriting, combined with the novelty of AI co-creation, captures student interest and sustains involvement, directly addressing issues of disengagement noted in the justification (Murphey, 1992).
- Holistic Competence Development: It seamlessly integrates linguistic (CEFR A2), digital (DigComp 2.2, particularly content creation and problem-solving), social, and cultural competences within a meaningful, real-world project, fulfilling key mandates of the LOMLOE.
- Tangible Product and Community Building: The final anthem fosters a sense of shared class identity, pride, and achievement, creating a positive emotional reference point for language learning.
- Foundational AI Literacy: Students gain hands-on, critical experience with generative AI, preparing them as informed digital citizens capable of interacting with technology as evaluative co-creators rather than passive consumers (UNESCO, 2023).

Key Challenges and Mitigations:

- Digital Infrastructure Requirement: The project requires reliable devices and internet. *Mitigation:* Preview and download possible AI outputs in advance, have engaging non-tech backup activities prepared.

- Time-Intensive Process: The PGRRF cycle needs careful pacing over six sessions. *Mitigation:* Implement strict timekeeping during sessions and consider flexible scheduling or extending the project if needed.
- Classroom Management: Collaborative, tech-based work can become noisy and unfocused. *Mitigation:* Establish clear group work rules and roles (e.g., Prompt Writer, AI Operator, Checker); use visual timers and structured phases.
- Varied Student Abilities: Differences in English proficiency, digital skills, and confidence. *Mitigation:* Employ the differentiated tasks, strategic grouping, and inclusive adaptations outlined in section 2.3, ensuring the project is accessible and rewarding for all learners.

This proposal ultimately aims to provide students with a memorable demonstration of how technology can amplify, rather than replace, human expression and connection in the language learning journey, while equipping them with essential competences for the digital age.

6. Conclusions

6.1 General conclusions

This Final Degree Project has undertaken a comprehensive exploration into the innovative integration of contemporary pop music and generative artificial intelligence (AI) as pedagogical tools for teaching English as a Foreign Language (EFL) in the Third Cycle of Primary Education. The theoretical analysis and subsequent design of a practical pedagogical proposal led to several overarching conclusions.

Primarily, the study confirms that the strategic use of music, particularly contemporary songs aligned with student interests, constitutes a powerful didactic instrument for the primary EFL classroom. Music inherently cultivates a low-anxiety learning environment, effectively reducing the affective filter and thereby enhancing motivation and receptivity to linguistic input. Songs function as authentic, multimodal texts that concurrently develop communicative competencies (listening comprehension, vocabulary acquisition, phonological awareness, and grammatical pattern recognition) while serving as a conduit for intercultural understanding.

Furthermore, the project establishes that the incorporation of GenAI for song creation represents a significant and timely pedagogical evolution. AI tools, such as music generators, open up the creative process of composition, overcoming technical barriers that might limit young learners. This empowers students to transition from passive consumers to active co-creators of learning content. The investigation highlights that AI acts not as a replacement for human creativity but as a sophisticated scaffold, amplifying student agency and creative self-efficacy. When students engage in crafting prompts and critically evaluating AI-generated outputs, they undertake profound cognitive and linguistic tasks that go beyond traditional exercise-based learning.

The core theoretical contribution of this work is the synthesis of a robust, integrated framework that links key educational pillars: the communicative objectives of the CEFR (A2 level), the competence-based approach of the LOMLOE, and the digital literacy dimensions of the DigComp 2.2 framework. This synthesis formalises the argument that a modern

language education must be holistic, developing plurilingual, intercultural, and digitally competent citizens simultaneously.

The practical application of this framework is realised through the proposed PGRRF (Prompt, Generate, Review, Regenerate, Finalise) pedagogical model. This structured, iterative workflow guarantees that the use of AI remains pedagogically sound, critical and student-centred. It transforms the act of prompting from a mere technical step into a demanding exercise in precise linguistic communication and self-regulated thinking. The subsequent phases of generation, review, and iteration promote essential 21st-century skills, including digital content creation, problem-solving, evaluative literacy, collaborative work, and resilient perseverance.

The designed didactic proposal, "Our Classroom Anthem," serves as a tangible application of this theoretical framework. It exemplifies how a six-session project can weave together musical engagement, targeted language practice, digital tool mastery, and collaborative creativity. The proposal addresses the initial problem of student disengagement by capitalising on the intrinsic appeal of music and technology to create a meaningful, authentic learning experience. It posits that through careful design, AI can be employed to personalise learning, boost motivation, and finally contribute to a more dynamic, inclusive, and effective EFL classroom for sixth-grade students.

This study set out to address two central research questions. Regarding the impact of contemporary pop songs on learner motivation and linguistic acquisition, the theoretical findings strongly support their efficacy. As synthesised in the theoretical framework, music inherently lowers the affective filter (Krashen, 1983), creating a low-anxiety environment that fosters intrinsic motivation (Murphey, 1992). Simultaneously, songs function as authentic, multimodal input that enhances phonetic awareness, vocabulary retention, and grammatical pattern recognition (Engh, 2013; Juan Rubio & García Conesa, 2016). Concerning the second question (how AI-generated songs can be systematically integrated to meet LOMLOE key competences) this project proposes the PGRRF model as a concrete answer. This structured workflow (Prompt, Generate, Review, Regenerate, Finalise) ensures that AI is not a mere novelty but a pedagogical tool that directly develops linguistic communication (CEFR A2), digital competence (DigComp 2.2 content creation and

problem-solving), and the 'learning to learn' competence through its iterative, reflective nature.

In essence, this project argues that the confluence of music pedagogy and GenAI presents a powerful opportunity to revitalise primary EFL teaching. It advocates for a shift towards more hands-on and digitally literate methodologies that prepare learners not only to communicate in English but also to interact with the digital world as informed, critical, and ethical participants.

6.2 Study Limitations

While this project provides a thorough theoretical foundation and a detailed pedagogical proposal, it is crucial to acknowledge its inherent limitations, which primarily stem from its conceptual and design-based nature.

The first and most significant limitation is the project's conceptual scope, as this pedagogical proposal has not been implemented in a real classroom setting. Consequently, the conclusions and framework proposed are derived from a comprehensive literature review and analytical synthesis, not from direct empirical application in a real classroom setting. Consequently, the claims regarding the impact on students' motivation, anxiety reduction, and language acquisition, while strongly supported by cited research, are not yet corroborated by primary data collected from the implementation of the "Our Classroom Anthem" proposal. The perceived benefits and potential challenges of the PGRRF model remain hypothetical until tested through classroom experimentation.

Secondly, the practical proposal, though detailed, operates under optimal conditions. It presupposes access to adequate and reliable digital infrastructure (e.g., stable internet, sufficient devices), which may not be universally available in all educational contexts within Castilla y León or beyond. The feasibility of managing simultaneous group work with AI tools, within the time constraints of standard sessions, presents a classroom management challenge that has not been tested in practice. Furthermore, the proposal presumes a certain level of teacher competence and confidence in using both AI music generators and facilitating a novel, technology-driven creative process, which may require significant prior professional development.

Thirdly, the focus on the Third Cycle of Primary Education (specifically 6th grade, A2 level) limits the immediate generalisability of the framework. The characteristics of suitable songs, the complexity of prompt engineering, and the proposed activities are tailored to the cognitive, linguistic, and social development of 11–12-year-olds. The direct application of this model to younger cycles (e.g., first or second cycle) or to different proficiency levels would require considerable adaptation and further research.

Finally, the rapid evolution of generative AI technology itself presents a limitation. The specific functionalities, interfaces, and ethical considerations surrounding tools like Suno AI are likely to change. The pedagogical principles outlined (e.g., critical evaluation, iterative refinement) are designed to be transferable, but the practical guidance related to specific platforms may become less relevant relatively quickly, necessitating ongoing updates to the practical aspects of the proposal.

6.3 Future Research Lines

The limitations outlined above directly give rise to several promising and necessary lines for future research, which would validate the foundations laid by this theoretical project

The most immediate and critical line of research is the empirical validation of the proposed framework. A quasi-experimental or action research study implementing the "Our Classroom Anthem" project in one or more 6th-grade classrooms is essential. Such research should measure quantitative and qualitative metrics: pre- and post-tests on target vocabulary/structures; surveys and interviews measuring changes in motivation, anxiety, and self-efficacy; teacher journals documenting observational data on engagement and challenges; and analysis of the creative outputs (prompts and songs) produced by the students. This would provide definitive evidence of the model's real-world effectiveness and refine its practical application.

Secondly, research should explore the adaptation and application of the PGRRF model to other educational stages and contexts. How could a simplified version function in the First or Second Cycle of Primary Education? Could a more advanced version be suitable for Secondary Education, targeting higher CEFR levels? Investigating the model's versatility across ages and proficiencies would extend its impact and utility.

A third vital avenue is longitudinal research into the development of AI literacy and critical digital competence through such projects. Studies could track how sustained engagement with AI as a co-creative tool over a school year or cycle influences students understanding of algorithmic bias, digital authorship, ethical use, and their general critical stance towards digital content. This aligns with the core goals of DigComp 2.2 and UNESCO's recommendations, moving beyond mere tool use to foster responsible digital citizenship from an early age.

Furthermore, specific research into the role and professional development of the teacher in this new paradigm is crucial. Studies could focus on identifying the specific TPACK (Technological Pedagogical Content Knowledge) needs of educators aiming to implement AI-assisted creative projects, the main obstacles they encounter, and the design of effective training programmes to support them for this facilitator and guide role.

Finally, as technology evolves, research should continuously evaluate new AI tools and their pedagogical affordances for language learning. Comparative studies between different music generation platforms, or explorations into integrating multimodal AI (e.g., generating video clips for the created songs), could open new frontiers for creating even more immersive and personalised language learning experiences.

In conclusion, this Final Project lays out a compelling theoretical and practical case for a novel approach to primary EFL education. By proposing a pathway that integrates music, language and AI within a coherent pedagogical framework, it aims to contribute to the ongoing evolution of teaching practices. It is hoped that this work will serve as a catalyst for both practical experimentation in classrooms and for the further academic research necessary to consolidate this promising interdisciplinary field.

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8. Annexes

ANNEX 1

Count on me- Bruno Mars

Oh-oh-oh
If you ever find yourself stuck in the middle of the sea
I'll sail the world to find you
If you ever find yourself lost in the dark and you can't see
I'll be the light to guide you
We find out what we're made of
When we are called to help our friends in need
You can count on me like one, two, three, I'll be there
And I know when I need it
I can count on you like four, three, two and you'll be there
'Cause that's what friends are supposed to do, oh, yeah
Ooh-ooh-ooh, ooh-ooh-ooh
Yeah, yeah
If you're tossin' and you're turnin' and you just can't fall asleep
I'll sing a song beside you
And if you ever forget how much you really mean to me
Every day, I will remind you, oh
We find out what we're made of
When we are called to help our friends in need
You can count on me like one, two, three, I'll be there
And I know when I need it
I can count on you like four, three, two and you'll be there
'Cause that's what friends are supposed to do, oh, yeah
Ooh-ooh-ooh, ooh-ooh-ooh
Yeah, yeah

You'll always have my shoulder when you cry
I'll never let go, never say goodbye
You know you can count on me like one, two, three, I'll be there
And I know when I need it
I can count on you like four, three, two and you'll be there
'Cause that's what friends are supposed to do, oh, yeah
Ooh-ooh-ooh, ooh-ooh-ooh
You can count on me 'cause I can count on you
Source: Musixmatch

You´ve got a friend in me- Randy S. Newman

You've got a friend in me
You've got a friend in me
When the road looks rough ahead
And you're miles and miles
From your nice warm bed
You just remember what your old pal said
Boy, you've got a friend in me
Yeah, you've got a friend in me
You've got a friend in me
You've got a friend in me
If you've got troubles, I've got 'em too
There isn't anything I wouldn't do for you
We stick together and can see it through
Cause you've got a friend in me
You've got a friend in me
Some other folks might be
A little bit smarter than I am
Bigger and stronger too
Maybe

But none of them will ever love you
The way I do, it's me and you
Boy, and as the years go by
Our friendship will never die
You're gonna see it's our destiny
You've got a friend in me
You've got a friend in me
You've got a friend in me

Source: Musixmatch
Songwriters: Randy S. Newman