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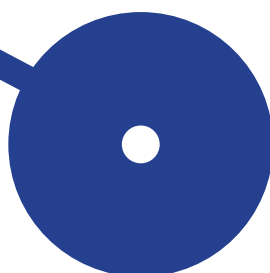
MESTRADO

Ensino de Inglês no 1.º Ciclo do Ensino Básico

# Using Project Based Learning to build memorable and meaningful learning experiences

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## **Using Project Based Learning to build memorable and meaningful learning experiences**

Relatório de Estágio

**Mestrado em Ensino de Inglês no 1º Ciclo do Ensino Básico**

Orientadora: Especialista Vanessa Cristina Ramos Sousa e Reis Esteves

Porto, Junho 2022

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**To my mother, Maria Luísa and my daughter, Francisca...**

Thank you for being an inspiration and always being there for me.

I love you.

## **ACKNOWLEDGEMENTS**

There are so many people that I need to thank, who supported me and guided me through this journey full of ups and downs.

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Finally, to all those who have been there one way or another, making it possible for this journey not to be a lonely one... my warm thanks, I am very lucky to have you all in my life.

## **ABSTRACT**

This report aims to reflect on how Project- based learning PBL can be included in a Primary English Curriculum as a privileged methodology to develop not only English language skills, but also enrichen the learning process. The report presents how schools can foster students' creativity, innovation, communication, and collaboration skills and how PBL can serve as a favored vehicle for developing all of these skills to create engaged language learners.

The main focus of this action research is to analyze how classroom practices can focus on student-centered activities, integrated with real-world issues and practices. Through an ethnographical methodology of both a qualitative and quantitative nature with action research outlines, it is apparent that learning occurs through students' inquiry, collaborative work and through strategies that are based on hands on projects, which lead to authentic meaningful lifelong learning experiences.

This report seeks to demonstrate that education needs to aim to do more than merely prepare children for the marketplace by providing them with the essential competences to make them participative, flexible, and responsible future citizens.

**Keywords:** Project-based learning, young learners, 21st century skills; curriculum; authentic/ meaningful learning.

## RESUMO ANALÍTICO

Este relatório pretende refletir sobre como a aprendizagem baseada em projetos (“PBL” em inglês) pode ser incluída num currículo de Inglês no 1º ciclo, enquanto uma metodologia privilegiada para desenvolver não só as competências da língua inglesa, mas também enriquecer o processo de aprendizagem. O relatório apresenta como as escolas podem fomentar a criatividade, inovação, comunicação e capacidades de colaboração dos estudantes e como o PBL pode servir de veículo privilegiado para desenvolver todas estas competências e contribuir para o empenho dos alunos.

O principal foco desta investigação-ação é analisar como as práticas de sala de aula podem concentrar-se em atividades centradas no aluno, integradas com questões e práticas do mundo real. Através de uma metodologia etnográfica de natureza qualitativa e quantitativa com esboços de investigação-ação, é evidente que a aprendizagem ocorre através da investigação dos estudantes, trabalho colaborativo e através de estratégias baseadas em projetos práticos, que conduzem a experiências autênticas e significativas de aprendizagem ao longo da vida.

Este relatório procura demonstrar que a educação precisa de ter como objetivo fazer mais do que apenas preparar as crianças para o mercado, fornecendo-lhes as competências essenciais para as tornar futuros cidadãos participativos, flexíveis e responsáveis.

**Palavras-chave:** Aprendizagem baseada em projetos, *young learners*, competências do século XXI; currículo; aprendizagem autêntica/ significativa.

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## **LIST OF ABBREVIATIONS**

CLIL: Content and Language Integrated Learning

EFL: English as a Foreign Language

ELT: English Language Teaching

IBL: Inquiry Based Learning

L1: First Language

L2: Second Language

PASEO: Perfil do aluno à saída da escolaridade obrigatória

PBL: Project Based Learning

TBL: Task Based Learning

YL: Young Learners

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# INTRODUCTION

The study presented in this final report is centered on teaching and learning practices of English in the 1st Cycle of Basic Education. The call for this theme comes from the aim to reflect on the challenge of being a primary teacher nowadays, focusing on curriculum design, the *Perfil dos Alunos à Saída da Escolaridade Obrigatória*, and how these guidelines can promote innovation and the creation of meaningful lessons that lead to long-term learning for primary students. The choice of the theme for my research project stems from the fact that I have been teaching young learners (YL) for the past 18 years and over this time projects and hands on and active learning activities have always been a passion in my teaching career.

However, non-traditional, student-led classrooms and lessons which are planned to attempt to meet students' needs are still approaches which are not very commonly included into curriculums and it is our belief that a substantial number of primary teachers defend that this type of approach is not attainable as it requires a tremendous amount of commitment by both teachers and students. As Nóvoa (2022) states, the curriculum matrix that predominated in the 20th century is exhausted (...) "New school environments will not arise spontaneously. Teachers have an essential role in their creation. Thanks to their own knowledge and professional experience they have a greater responsibility in the metamorphosis of the school." (p.45)

I believe that including a PBL approach into a Primary English Curriculum does not change the curricular objectives but the method and manner in which teachers plan their lessons. It also is especially important for the teacher to take genuine interest in students' passions, providing them with time and making them feel safe, appreciated and connected. As Hilton (2018) describes "building relationships with students is by far the most important thing a teacher can do. Without a solid foundation and relationships built on trust and respect, no quality learning will happen."

As a teacher, I have always tried to encourage students to think critically and creatively, identifying myself with practices that empower, motivate and actively involve students by

giving them more autonomy to complete tasks and construct their learning paths. According to Brophy (1999), in “these classrooms” students are expected to “strive to make sense of what they are learning by relating it to prior knowledge and by discussing it with others” (p.49). The class acts as “a learning community that constructs shared understanding” (Brophy, 1999, p.49). Edwards (2004) goes on to defend that in these classrooms, teaching methods or strategies include reflective thinking, inquiry, exploratory discussions, role-playing, demonstrations, projects and simulation games to name just a few.

The experience of carrying out this action research has been an important step and has helped me to better understand how to develop learning approaches in which I strongly believe in and that show that English teaching can go far beyond mere language teaching, which permits students to more easily take ownership of their learning, viewing it as something they help create, rather than something that comes from others and is administered to them (cf. Fernández-Corbacho, 2014; cf. Raya, Lamb & Vieira, 2007).

According to Ellison (2014), to attempt and to experiment with new practices in education gives student-teachers the opportunity of experiencing new understandings and appreciations for their practice, which may lead to their personal and professional development. Preparing myself for life-long learning in a world of constant change was another one of the reasons for choosing this path. Being able to deal with unpredictability, turning every incident or circumstance into a learning opportunity is a very big challenge which requires practice/training. By learning together, sharing ideas, being aware of what is being done in education and in other contexts you are able to grow and have a different vision of what can be done in your own classroom.

The theme of this report is related to my teaching profile and my vision of language teaching and the learning process, in which students are the leaders of their learning, having the space and freedom to explore what interests them and to develop personal projects (cf. Fernández-Corbacho, 2014; cf. Raya et al., 2007) and the interest in alternative educational approaches such as PBL. Added to this is the awareness of the increasing importance of the 21<sup>st</sup> century skills such as critical thinking, creativity, autonomy and collaboration which are

skills that will empower individuals to contribute positively to society and it is up to the education system to train citizens in that sense, which, fortunately, has been increasingly recognised by the Ministry of Education, as it may be observed in the first chapter of this report.

Education has a vital role to play in developing the knowledge, skills, attitudes, and values that enable people to contribute to and benefit from an inclusive and sustainable future. Learning to form clear and purposeful goals, work with others with different perspectives, find untapped opportunities and identify multiple solutions to big problems will be essential in the coming years. Education needs to aim to do more than prepare young people for the world of work; it needs to equip students with the skills they need to become active, responsible, and engaged citizens. (OECD, 2018)

While implementing this investigation, these competences have become even more important due to the consequences of the pandemic caused by the coronavirus. Different learning spaces had to be created, especially at home; adapted study and work schedules; diverse pedagogical methods, especially through remote learning; novel assessment procedures, etc. Necessity imposed itself, even if with fragile and precarious solutions. (Nóvoa, 2022). Students and teachers need to be able to adapt themselves to unpredictable situations, being flexible and having different competences to deal with the unexpected.

School needs to prepare students so that they can navigate through uncertainty being able to find solutions and to be more resilient. It is our belief that through PBL students are frequently provided with opportunities to develop a variety of 21<sup>st</sup> century skills, such as collaboration, communication, critical thinking, creativity among others. PBL is also a flexible working method, which implies that this framework enables teachers and students to be responsive to their and the community's needs and interests, therefore is able to constantly adapt them if and when the occasion arises. (Reagan, 2015)

The objectives outlined for this Final Internship Report were a) to look at and analyze curriculum design for YL and how a different approach can lead to the development of 21<sup>st</sup>

century skills b) to identify practices and resources of teaching English in the 1st CEB, tested in the context of supervised practice, which allowed students to be actively engaged in learning while collaborating and investigating and to empower themselves in order to promote their overall development and facilitate their full integration into society.

In addition to the stated objectives, this report seeks to contribute to the practice and research in the teaching of English in primary levels. Although PBL is not a new approach, this study will show evidence that it can be an approach worth including in lesson plans for primary levels and that it is an effective and positive way to teach and learn the English language. Therefore, I hope to contribute in some way to deepening the study of the PBL approach in a Primary English Curriculum and to raise the teachers' awareness to the need of promoting the skills and approaches focused on this study in their classes.

This report is divided into two main parts. The first part is dedicated to the exposition of the theoretical framework which supported my practice. It begins with an analysis of our educational system, our schools and the past teaching habits that are still being implemented in many cases and that, in my opinion, do not always keep up with the changes that have been taking place in society and the orientations and guidelines of the *Perfil dos Alunos à Saída da Escolaridade Obrigatória*. To begin with, it analyses some important curricular organization proposals, in order to determine if the recommendations in the Ministry of Education's guiding documents are adequate to promote changes required by the marketplace and to guarantee the educational success of all students. This leads to the urgency of reflecting on the ruling curricula, namely the need to adopt a more flexible management of the curriculum, in schools.

The concept of "curriculum" should be developed from "predetermined and static" to "adaptable and dynamic". Schools and teachers should be able to update and align the curriculum to reflect evolving societal requirements as well as individual learning needs. (OECD, 2018)

Following, section 1.2 reflects on the Ministry of Education's role and the importance of documents such as *Perfil dos Alunos à Saída da Escolaridade Obrigatória* and the

*Aprendizagens Essenciais*. These are valuable guidelines to guarantee that the necessary tweaks are made to the teaching and learning process. Simultaneously, it questions the fundamental principles of the widely spoken 21st Century Skills, namely if they are being incorporated in teachers' practices, how important they are in our schools and how they can be promoted. The report also emphasizes the crucial role that Project Based Learning can play to promote the acquisition of 21st Century skills and to promote the principles and values mentioned in *Perfil dos Alunos à Saída Escolaridade Obrigatória*, while motivating students to learn and to take charge of their learning process.

In the second part of this report, the methodological approach used is presented, more specifically, the study design, the data collected and the subsequent discussion of this data, and the analysis and interpretation of the study results. Details of the boundaries of the case study are provided and explained as are decisions regarding the design and methodology (section 1.2). Section 1.3 of part II, aims to include the answer to the research's questions, pointed out in the beginning of the study, as well as, the description of the project itself. Data from the teachers focus group's opinions, along with students' sample groups' point of view and also a questionnaire directed to primary teachers teaching English at the moment are analysed in order to demonstrate the success of the project.

Finally, a critical reflection is provided explaining the project's positive aspects and limitations, as well as the future implications for research and practices in education.

# **PART I - THEORETICAL BACKGROUND: NEW PATHS FOR TEACHING AND LEARNING**

## **1. OUR EVOLVING SCHOOL**

Society is a living organism which is in constant evolution and which has been moulded and adapted to each era throughout the ages, manifesting itself through different needs and responses. However, due to some crystallisation of the prevalent educational models and teaching practices, it is often said that today's school model does not meet the needs of our postmodern society and, therefore, its aims, objectives and methods are rapidly becoming obsolete. This growing inadequacy explains the recurrent reference to the urgency of putting innovation, change and transformation on the table. Faced with a school which no longer pre-guarantees social mobility and access to a given job and social status, it is valid to question what new role this institution should play, what objectives should guide it, how can it prepare our present students to become active and critical citizens and lifelong learners.

Today there is a broad consensus that education is an essential element to provide citizens with tools for action, to develop skills, competences and knowledge that enables them to deal with the great challenges of today's world. Evolution may occur slowly and gradually, however, the importance of thinking about change and the need to prepare our children to live in a different world, to be able to successfully fulfil their role in society, is unquestionable. Given this panorama, today's school cannot remain oblivious to all these factors that characterise our current times, thus it should aim to develop in students all the knowledge they will need throughout their lives. The objective of education in these times clearly transgresses developing literacy and numeracy skills. Nowadays, it is more about teaching the essential skills, so that individuals respond to the needs arising from their ever-changing social reality and can develop fully and harmoniously, in order to become responsible, free and autonomous citizens.

“[it] needs to aim to do more than prepare young people for the world of work; it needs to equip students with the skills they need to become active, responsible, and engaged citizens” (OECD, 2018, p. 4).

This inevitably implies that the cognitive, emotional, personal, social and moral development of the individual is being promoted, i.e., their integral development is taken into consideration. This does not mean that the school should or can substitute the educational function of the family nor should it deviate from its teaching-learning task.

On the other hand, as Nóvoa (2009) argues, individual learning has to be carried out in close symbiosis with the whole social process, which implies knowledge of the student's life context and social background. This goal is easier to achieve when education is based on concrete realities and contexts, in which students participate and are a part of, allowing them to learn more meaningfully. This leads, Cosme & Trindade (2010) to state that in order for pupils to learn, schools must provide surroundings and experiences that improve learning and non-formal educational contexts undoubtedly give learning circumstances that emerge from the experiences of all people who pass through such contexts.

Thus, there is the need to rethink the educational system, since today's school is characterised by a great social and cultural heterogeneity to which it has to respond, so it is important to take into account the life context of each student and consequently their educational needs. In order to achieve this goal, it is important to create the necessary conditions to implement an appropriate teaching practice, based on the sharing of experiences and knowledge between both teachers and students, which can be achieved through the promotion of diversified activities, the selection of appropriate methods and different learning strategies, so that we can build a more inclusive school, that leads to academic success and builds a "more human, creative and intelligent school, that takes into account the training and comprehensive development of all students and the promotion of truly significant learning experience for all" (Cabral & Alves, 2018).

It is crucial that we remember that learning should be a lifelong learning process with resources which are open and accessible to citizens, in a permanent training space for all, that is multi-ethnic, multilingual and culturally diverse in accordance with our mobile world. In our current multicultural society, learning to live together is based on the idea that it is essential to deepen the democratic ideal and to consolidate respect for cultural, religious and

ideological pluralism, ensuring mutual understanding and coexistence among peoples. In this context, education must promote tolerance and respect for other peoples and values, broaden knowledge of different cultures and religions and combat prejudice, preparing children for life together and for diversity, in a logic not only of passive tolerance, but of true intercultural dialogue and exchange.

Besides the multicultural factor in our society nowadays, the growing development of information technologies and the consequent globalization of information and communication, is another factor that merits consideration. All these factors bring about change that also targets schools and, therefore, it becomes mandatory to meet the needs of the modern world and our current generation of children, who have a different profile than previous generations. This requires a transformation of the strategies, methods, tools and instruments in our classrooms, which should become increasingly more practical, experiential, challenging and reflective.

Thus, the curriculum cannot be understood as a uniform body but as a binomial that articulates the learning considered common and fundamental to the students, i.e., what is socially recognized as skills, competencies and indispensable knowledge that the student should acquire at school and the curricular project, understood as the implementation that each school makes of the curriculum, taking into account its context, the characteristics of their students and the local and regional dimensions. This binomial is, in fact, the fundamental principle of flexible curriculum management (UNSECO, 2019).

According to this principle, each school has the possibility to organize and autonomously manage the teaching and learning process according to the national curriculum, in order to promote a gradual change in curriculum management practices and improve the quality of educational response to the problems arising from the diversity of the local school context and to ensure that all students learn more, better, i.e. in a more meaningful way. The implementation of this process is urgent, so, by taking into account the rapid and complex changes of our current society, schools should be managed in a more

flexible way and adopt a more open mindset and perspective an attitude of openness to what is "new, unexpected and timely" (Fernandes, 2000).

If one considers that Education "is far from being a timeless institution and not subject to change" (Goodson, 1999:114) then, it is inevitable that all this change is reflected in the educational systems and in the world of work itself, requiring constant adaptations to the growing needs of times. According to Jacques Delors (1996), training and lifelong education are key concepts for the 21st century, which considers that an individual, in order to be fully fulfilled, must be prepared to accompany the changes that occur throughout their lifetime, in their contexts and in the global world in which they are part of, in order to become active members of society.

A collaborative mindset between the various educational agents is very important, to develop a project, based on such an educational vision, strengthening the connection of learning to the local environment and extending learning to the local community by sharing it with the participation of a learning community, with parents and students, as well as, any other interested parties. Yet, this community involvement in the education of our young people is still one of the most difficult aspects to conquer. Nóvoa, (1999) talks about the importance of school as a privileged space for sharing and common life practices and Fernandes (2000) defines some priority areas for change within an inclusive educational system not only for students, but also for the whole surrounding community.

## **1.1 BEING A TEACHER TODAY**

It is clear that the changes that are being felt in today's society have repercussions, not only in a new conception of the curriculum and a model of organisation and school management, but also in terms of a new way of looking at the teacher's educational practice and in the awareness of his/her true role in the act of educating. Like the student, the teacher is also required to have a new set of skills that respond to the needs arising from the changes mentioned previously. The teacher must assume himself as an education professional whose function it is to teach, and to teach to learn, using "the proper knowledge of the profession,

supported by research and shared reflection on educational practice..." (decree-law 240/01-18-1-2001).

It is fair to state that teachers today are facing a particularly important educational challenge. The changes of the educational paradigm have been vastly discussed. As such, it is widely accepted that effective teaching implies teaching more than just cognitive skills and embracing the mission of teaching and forming competent students and future citizens, prepared to be flexible, polyvalent, thinkers, analytical people, ethical and creative learners and future citizens. This represents a significant challenge for today's teachers. In order to guide teachers and help them rise to the occasion, the ministry has provided a series of guiding documents like the *Perfil dos alunos à Saída da Escolaridade Obrigatória*, the *Aprendizagens Essenciais*, as well as, the 21st century Skills.

However, one may question whether these orientations are being fully taken in consideration in the terrain. This implies that teachers must be prepared to create lessons in which responsibility, integrity, reflection, innovation, citizenship, critical thinking are the values that underly their classes, but are they doing so? And if so, how are they implementing these core values? Are the teachers prepared to have student-centred classes where students' are given initiative and collaboration is the fundamental *modus operandi*? Are teachers willing to let go of past teacher centred habits and practices to empower students' learning?

Project based learning is, in fact, a valuable instrument to promote the aforementioned competences, allowing students to have a participative, responsible and ethical role, while acquiring the English language. In effect, it leads to pertinent learning that produces motivated students.

"By bringing real-life context and technology to the curriculum through a PBL approach, students are encouraged to become independent workers, critical thinkers, and lifelong learners." (Edutopia, October 19, 2007)

In addition, this approach also allows the teacher to incentivize the autonomous development of the student and his/her individual and cultural characteristics, and is responsible for the valorisation of different knowledge and cultures, from a civic and

formative point of view. This leads me to consider that, in order to promote meaningful learning, the teacher is responsible for the use of "knowledge specific to his/her own speciality and transversal and multidisciplinary knowledge". It is the teacher's task to develop "differentiated pedagogical strategies mobilizing values, knowledge, experiences and other components of the students' personal, cultural and social contexts and backgrounds." (UNESCO,2019)

Yet, all of these accomplishments will only be possible with the involvement of all intervenients: namely, the school's management, the head teachers, fellow teachers (with whom projects should be promoted in a horizontal articulation), parents and the students. All interested parties must work together to face obstacles like social and economic differences, organizational handicaps, like the number of students per class, classes' heterogeneity, motivation problems, to name just a few.

The concept of teaching the whole learner is not a new educational concept, but is it being considered when designing our student's curricula? In effect, are teachers current teaching practices contemplating it? For a long time, teachers merely followed the programmes in a strict way, which was pre-designed to create academically competent students and its success was measured by how well students had acquired all the problematic grammar and vocabulary topics.

Fortunately, the times have changed, and nowadays other learning areas have been introduced to the curriculum to ensure the whole learner formation. As has been previously discussed cognitive competence is paramount and an important part of the children's growth but it is the school's/ teachers' role to go much further and include the development of the social, emotional and behavioural skills in their goals, to prepare students and future citizens to be able to face personal, social and professional challenges in a responsible, active, collaborative and ethical way. This inevitably implies that, the practices and *strategies in today's classes must reflect these macro-objectives.*

The intent of whole person learning techniques is to produce high involvement learning. High involvement learning includes skill practice, learning by doing,

and learning by observing (Bandura, 1977; Manz & Sims, 1981). Thus, it includes the cognitive, emotional, and behavioral elements consistent with whole person experiential learning. (Hoover, Giambatista, Sorenson, and Bommer, *Academy of Management Learning & Education*, 2010, Vol. 9, No. 2, 192–203).

“High involvement learning” is assured by the teacher’s choices and practices and a starting point can be the well-known document, *Perfil dos Alunos à Saída da Escolaridade Obrigatória*, which represents a steppingstone to achieving the type of learning advocated.

“O Perfil dos Alunos aponta para uma educação escolar em que os alunos desta geração global constroem e sedimentam uma cultura científica e artística de base humanista. Para tal, mobilizam valores e competências que lhes permitem intervir na vida e na história dos indivíduos e das sociedades, tomar decisões livres e fundamentadas sobre questões naturais, sociais e éticas, e dispor de uma capacidade de participação cívica, ativa, consciente e responsável.” (Perfil do aluno à saída da escolaridade obrigatória, 2017. Ministério da Educação, Direção Geral da Educação).

This document identifies a series of principles, values, competence areas that must underlie our action as teachers, ensuring that we teach the whole learner and not merely the student before us. But are the teachers following this mindset? Are these premises being taken in consideration while planning their classes? Do teachers have the support and means to do so? What impact will this change have on children’s assessment? Are parents prepared for a different approach and different assessment criteria? It is no surprise that this may be a turbulent path for many teachers, especially those that belong to a generation used to the simple task of transmitting academic knowledge. Thus, it is urgent to use the documents at our disposal, namely the *Perfil dos Alunos à Saída da Escolaridade Obrigatória*, the Principles of the 21st Century Skills, the *Aprendizagens Essenciais* and transform teaching practices and adapt them into strategies, instruments and methods that convey a 21<sup>st</sup> century approach to the teaching/ learning process. In order for this to be successfully conducted, teacher training in this field and self-reflection practices become crucial.

To promote lifelong learning, teachers should view their careers as "a constitutive element of professional practice, constituting it on the basis of the needs and achievements they become aware of, through problematised analysis of their teaching practice, reasoned reflection on the construction of the profession and recourse to research, in cooperation with other professionals". Teachers should invest in training to promote an improvement in the overall quality of teaching and learning, leading Paulo Freire to add that "training is a permanent action that is constantly remaking itself in action. Thus, the teacher training process should be seen as a process of ongoing development, of personal and professional valorisation." (Freire, 2002)

According to Roldão, M.C., higher education institutions, training centres and other entities will have to provide a wider range of training for teachers, as it is increasingly seen as an essential part of school management. This training could be based on the action-research process, since this is a reflective methodology, characterised by a permanent dynamic between theory and practice, leading to a contribution to in which the teacher interferes in the field of research by analysing the consequences of their action and reaping the direct effects of their reflection on their teaching practice. This process of reflection involves "planning, acting, observing, and reflecting more carefully, more systematically and more rigorously about what usually happens in everyday life" (Kemmis & McTarggart,1998).

Therefore, teacher training should be oriented towards acting in a changing reality, supported by the acquisition of knowledge under construction, and it should promote the acquisition and development of a wide range of skills, among which we highlight the capacity for observation, characterisation and intervention, diagnosis, decision making and evaluation. These skills develop better and in a more balanced way when the educational action results from the collaborative work between the various educational agents, namely between teachers, because "nobody learns alone, nobody teaches anybody, we learn from each other". (Paulo Freire, 2000). Thus, if teachers do not seek forms of collaboration that lead to a clarification of the participants in common projects, if the objectives of the implementation of these projects have not been the subject of shared reflection, then one runs the risk of

"promoting inconsistent, fragmented and low-quality learning that does not correspond to the desired results," (Fernandes, 2000).

In addition, collaborative work enables teachers to be more openly critical of their teaching practices, to be able to share their professional concerns with other colleagues and to show an interest in developing strategies to improve their overall performance. Fostering collaborative work among educational professionals allows them to promote the joint reflection of their practices so that they can be duly transformed. As Vilar, A.M (1999) defends, the collaborative commitment of educational professionals may function as "an excellent means of building curricular and organisational autonomy and a means of cooperating within the school institution and of creating a culture favourable to innovation and change".

Teamwork is one of the basic structures of participatory management (Bell, 1992), and is more effective when the different educational agents are involved. Thus, in a school, teams can be created by bringing together parents, students and teachers, for example, to plan, to moderate conflicts, to address problems and to come up with effective support solutions for the challenges being faced. It is commonly accepted that the School and family should complement each other, and parents should be more involved in their children's educational process, helping to motivate and stimulate their children, associating themselves with the efforts of teaching professionals (Nóvoa, 1999). Furthermore, one must not forget that their relationship with the school does not end in the formal educational process, but extends beyond it to the informal educational process. According to Barroso (1995), Parents and Guardians should assume the role of "coeducators [, i.e.,] articulate the school practices with the family educational practices; benefit from the contribution of their members, as educators, in activities of socio-educational nature; involve parents in decision-making on issues that directly affect the modalities of their collaboration with the school, or are related to the way the school defines and achieves its objectives". (Barroso, 1995)

This author goes on to state that, the school must create the necessary conditions so that an increasing and diversified number of parents can have an intervening role in the regular functioning of school life. Thus, the "educational community" is formed, mobilising all

the social actors of the groups around a common project. In order to participate actively in the school and the local community, teachers need to participate in the "construction, development and evaluation of the school educational project and the respective curricular projects" and in the development of intervention projects so that they feel like they are fully represented and identify themselves with them.

## **1.2 THE CURRICULUM**

According to Richards (2001), curriculum development focuses on identifying the knowledge, abilities, and values that students should learn in school, the experiences that should be offered to produce the desired learning outcomes, and the planning, monitoring, and evaluation of teaching and learning in educational institutions. When discussing language curricula development, this refers to a set of procedures focusing on designing, revising, implementing, and evaluating language programmes. (Richards, 2001).

As the curriculum embodies the whole process of change, we are faced with the need to understand the curriculum not as a list of subjects or a study plan for each cycle or year of schooling, nor as a list of contexts and methods to be taught in "compartmentalized" spaces and, therefore, should not be conceived or interpreted in the light of rigid and prescriptive guidelines, uniformizers of practices. The traditional notion of curriculum has become obsolete, and a new conception has emerged that stems from a construction resulting from social needs. This concept must take into account everything that happens and that promotes learning, namely in the school context and especially what is socially intended to make people learn, specifically in the school institution. In this sense, the curriculum should contemplate the main objectives for students' learning, including the main skills to be developed and the types of educational experiences that should be provided to all, as well as the definition of the curricular component areas of each cycle. As Roldão, (2001) states, "the curriculum has always been managed and will always have to be managed, that is, to decide what to teach and why, how, when, with what priorities, with what means, with what organization, with what results..." (Roldão, 2001).

One of the challenges we have been verifying is related to the fact that students often finish compulsory education without having developed the fundamental skills for the acquisition and access of other knowledge autonomously, such as knowing how to study, knowing how to organise their own work, being curious to learn, having the autonomy to consult a book or even to understand a text. In my point of view, a curriculum which aims to develop competences should be designed according to the principle of flexible management. Flexible curriculum management is understood as the possibility given to each school to organise and manage autonomously the whole teaching-learning process within the limits of the national curriculum. This process should be adapted to the specific needs of each school context.

This form of management aims to promote a gradual change in the practices of curriculum management in order to provide a more concrete answer to the problems arising from the diversity of school contexts, thus ensuring that all students learn more and in a more meaningful way. This vision is not in line with the traditional view of curriculum which reinforced the idea that the curriculum should be identified with a collection of extensive, normative and prescriptive programmes which erroneously guaranteed a uniformity of practice at national level.

Thus, the flexible management of the curriculum implies taking a different approach to students' learning to achieve it in a meaningful way and to support lifelong learning. Opting for flexibility implies the adoption of a "philosophy which values the educational actors and the contexts in which practices are developed and which relies on the pedagogical autonomy of schools, closer to the addressees of the curriculum and, therefore, in better conditions to make curricular decisions appropriate to each context (Roldão, 2001).

In this context, and according to Cosme, 2009; Trindade & Cosme, (2010), it is up to the teachers to assume themselves as qualified interlocutors, bearing in mind the fact that they are responsible for both fostering such a relationship and for contributing to making it a productive one, from the point of view of the learning and skills that the students are expected to achieve and develop.

Since our classrooms are filled with heterogeneous learners, as teachers, we need to strive to design learning experiences that respond to our students' interests and preferences. However, many teachers struggle to find time to use individualized instruction in the classroom. Although, meeting the varied needs of students is demanding, teachers must commit to the belief that adopting instruction for learners, helps children learn better through the use of different modes and methods of learning.

By adding concept of inclusion into the equation, this also implies talking about a common curriculum for all students which, at a later stage, should be adapted to each individual, taking into account the social and cultural context of the educational centre and of the individual learner. An inclusive curriculum must be open to diversity, which implies considering and developing attitudes of respect and tolerance in confronting different values, attitudes and ways of being and living. We will now move on to examining what we consider to be some of the main guiding principles that should be taken into account when constructing a curriculum for YLS.

### **1.3 A CURRICULUM FOR YOUNG LEARNERS**

Each age range of “young learners” inevitably has its own specific requirements with regard to course structure, learning environment, teaching methodology and materials to teach the age group in question a foreign language. (Ellis, 2014). According to Cameron (2001), young learner is being a learner aged between five and twelve years old. The term “young learners” in the specific context of this study and report refers to children from the age of 8-10 who study in primary levels.

When thinking of young learners and curriculum design for this age group, it is crucial that the teacher knows her students within their strengths and weaknesses. (Pantaleoni, 1991). It is important to get to know the students’ cognitive development at the point in which the foreign language is introduced. (Pantaleoni, 1991). Teachers may have mixed ability students and need to know how much contact they have had with the language before, to know exactly where to start their current teaching practices. Moreover, young learners need to have a variety of ideas and activities introduced during their lessons, as young learners learn best when they are interested, motivated and doing practical hands-on activities.

Besides this, a curriculum that yields positive results, should also include activities tuned to the learning needs of the pupils, rather than to the demands of a coursebook, an educational publisher or to the interests of the teacher (Cameron, 2001). Teachers should try to opt for a holistic approach that focuses on students physical, personal, social and emotional wellbeing, as well as cognitive aspects of learning. A holistic approach includes recognizing and identifying, teaching, counselling, supporting, challenging, encouraging and including children in their development. Students should be encouraged to explore all their intelligences and capacities. In order for this to happen and bearing in mind the students' profiles, the "curriculum and materials should aim to provide learning experiences which are motivating, suited to their cognitive and linguistic levels and take account of their special instincts and preferred ways of learning." (Moon, 2005)

In order to thrive and create a successful curriculum the Partnership for 21st Century Learning's competency framework (Figure 1), clarifies which skills students should require in order to become active future citizens, namely a mixture of essential knowledge, particular skills, expertise, and literacies. It should be noted that there is a greater focus "on creativity, critical thinking, communication and collaboration which are essential to prepare students for the future" (P21, 2009, p. 3).



Figure 1 - P21 Framework (P21, 2019b, p.2)

Students need to be able to quickly learn the core content of a field of knowledge while also mastering a broad portfolio of essential learning, innovation, technology and career skills needed for work and life. (Trilling & Fadel, 2012). Besides this, providing a safe

environment for students to express themselves and encouraging them to explore different learning methodologies and techniques, will foster creativity and thinking creatively which is crucial (OCDE, 2018).

Regarding the guidelines of the Ministry of Education, the *Aprendizagens Essenciais* are the curriculum guideline document, based on the planning, implementation and evaluation of teaching and learning, and aims to promote the development of the skills areas included in the *Perfil dos Alunos à Saída da Escolaridade Obrigatória*. The component of the curriculum reference designated as Essential Learning expresses the triad of elements - knowledge, skills, and attitudes - throughout the curricular progression, explaining:

- a) what students should know (the contents of structured disciplinary knowledge, indispensable, conceptually articulated, relevant, and significant);
- b) the cognitive processes that must be activated to acquire this knowledge (operations/actions required to learn);
- c) the associated know-how (to show that one has learned), in a given discipline - in its specificity and in the horizontal articulation between the knowledge of various disciplines -, in a given school year.

The *Perfil dos Alunos à Saída da Escolaridade Obrigatória (PASEO)*, (Martins et al., 2017) and the *Aprendizagens Essenciais* (Ministry of Education, 2018), seem to be more up-to-date and more in line with what is intended in 21st century education, in order to meet contemporary needs and challenges. The PASEO (2017), reveals a more constructivist perspective on the teaching and learning process as it refers to 'constructing knowledge' rather than 'transmitting and acquiring knowledge', which sees students as active agents inside and outside the classroom and seeks to respect the multifaceted and inclusive character of schools:

Trata-se de encontrar a melhor forma e os recursos mais eficazes para todos os alunos aprenderem, isto é, para que se produza uma apropriação efetiva

dos conhecimentos, capacidades e atitudes que se trabalharam, em conjunto e individualmente, e que permitem desenvolver as competências previstas no Perfil dos Alunos ao longo da escolaridade obrigatória (Martins et al., 2017, p. 32).

The document sets up a set of principles, values and areas of competencies that should guide learning until the end of compulsory education, pointing to an educational approach that encourages students to mobilize "values and skills that enable them to intervene in life and in the history of individuals and societies, to make free and informed decisions on natural, social and ethical issues, and to have a capacity for civic, active, conscious and responsible participation" (Martins et al., 2017, p. 10). The areas of competencies (see Figure 2) "aggregate competencies understood as complex combinations of knowledge, skills and attitudes that enable effective human action in diverse contexts" (Martins et al., 2017, p. 9).

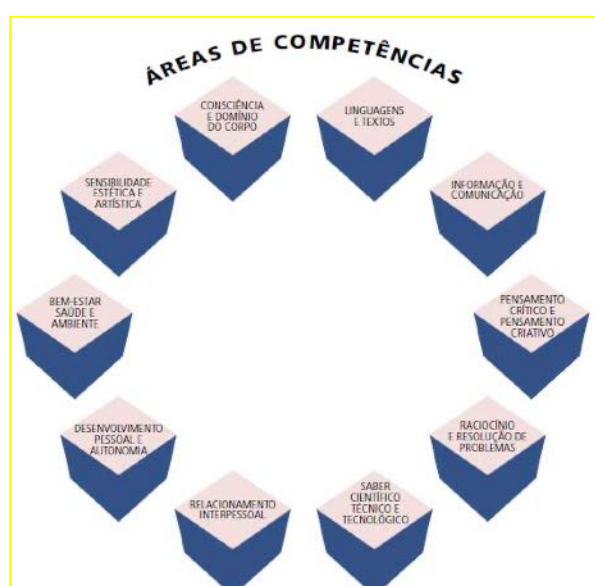


Figure 2 - Areas of competence in the Student Profile (Martins et al., 2017, p.20)

All this is duly integrated in each respective cycle and is developed in a continuous and vertical articulated approach, throughout the compulsory schooling period, which corresponds to the 12<sup>th</sup> year of obligatory education. It is important to bear in mind that there are other important guiding documents for language teaching nowadays that can contribute to building a more challenging curriculum for YL. The document entitled "New Vision for Education: Fostering Social and Emotional Learning through Technology", provides a special

focus on the importance of developing social and emotional skills in the 21st century. According to this document, these skills also include the development of creativity and critical thinking. Autonomy is also an essential competence, which is transversal and present in competences such as initiative, curiosity, and creativity.

Another important tool for developing the foreign language curriculum with primary school children is "*My First European Language Portfolio*" ("*O meu primeiro Portefólio Europeu de Línguas*"). The European Language Portfolio (ELP) was developed by the Council of Europe as a tool to implement the principles of the CEFRL - Common European Framework of Reference for Languages. This is a personal self-assessment document, which enables the learner to self-regulate their learning and to record all relevant language acquisition and intercultural experiences. Due to the previously mentioned considerations, this same project implemented some strategies such as "allowing students to have ownership and control over the process of creating and producing an innovative idea" were used (idem, p. 9).

## **1.4 METHODOLOGY FOR YL**

From a constructivist point of view, when children enter a classroom, they bring with them pre-existing knowledge (Bennett, and Dunne, 1994). Vygotsky explains that (1978:122), at each stage of development, children "acquire the means by which they can competently affect their world and themselves". This author supports the idea that children need a social context with the help of a more knowledgeable other to allow their learning to flourish by using various stimuli to scaffold learning. One of these stimuli are the tools provided by the culture the child is born into, and the other is the language used by those who relate to the child (Vygotsky, 1978). Vygotsky believed that children acquire a variety of information through their interactions with more knowledgeable others and through their zone of proximal development (ZPD).

The ZPD defines the acquisition of knowledge under adult guidance which follows the first acquisitions of child's mental functions (Vygotsky, 1978). A Child's development is not only due to the teacher's role but to a whole environment of people (peers, parents, in other words, a more knowledgeable other...) that surround the child (Vygotsky, 1978). Through this

guidance the child begins to mature. There is a significant difference between the individual knowledge obtained without aid and the knowledge achieved with the help of more knowledgeable others (Vygotsky, 1978). “What a child can do today in co-operation, tomorrow he will be able to do on his own” (Vygotsky, 1978: 52).

Bruner (1985), on the other hand, considers that, the development of the learner depends on “learning how to learn” and that depends on the conditions in which they are learning. Bruner postulates that teachers must find “optimal conditions for learning.” This author also highlights the importance of an environment where the child is encouraged to problem-solve, to develop higher thinking skills to develop an intrinsic interest in what he is learning, and where the child has the opportunity to revisit knowledge at distinct levels. (Bruner, 1985).

If a child is enabled to advance by being under the tutelage of an adult or a more competent peer, then the tutor or the aiding peer serves the learner as a vicarious form of consciousness until such a time as the learner is able to master his own action through his own consciousness and control. When a child achieves that conscious control over a new function, it is then that he is able to use it as a tool (Bruner, 1985, p. 24)

To achieve this, Bruner developed the concept of scaffolding; a theory in which he delineates the idea that one person in the role of teacher helps the development of another. (Bruner, 1985). Scaffolding is the guidance given in the pursuit of a specific learning activity, where learning is strongly supported at first, then gradually, as the child becomes stronger and more able to stand alone, the support is reduced until the child can work independently. For example, Bruner's theory can be applied when a child is learning a new language. In the first phase, the teacher should be responsible for reading and writing all the words, pronouncing them correctly and explaining their meaning. After a considerable period when the teacher is the main reader and writer of most texts, students begin to have increasingly independent reading and writing tasks in the new language, and as they gain more autonomy, they will perform more and more complex tasks.

The more students practice the new language, the more confident they become and the less reliant they are on help from their teachers. It should be noted that a social constructivist approach emphasizes the social contexts of learning, and that knowledge is mutually built and constructed (Bearison & Dorval, 2002). Involvement with others creates opportunities for students to evaluate and refine their understanding as they are exposed to the thinking of others and as they participate in creating shared understanding (Gauvin, 2001). In this way, experiences based on social contexts provide an important mechanism for the development of students' thinking (Johnson & Johnson, 2003).

This is reflected in a constructivist approach to learning as students create their own new understanding based on interaction between what they already know and what they meet. They learn actively while "learning by doing" causing Project Based Learning approach (PBL) to be a dynamic constructivist approach to teaching in which students explore real problems and challenges, simultaneously developing cross curricular skills. Research also indicates that students are more likely to retain the knowledge gained through this approach and that it seems to contribute to the acquisition of 21st century skills giving students the opportunity to take ownership and control over their learning, while simultaneously creating enjoyable and meaningful learning experiences.

Authors such as Noris, consider that guiding students in their learning process through "hands-on" projects will necessarily foster their thinking, collaborating, and communicating skills. As has been previously discussed, a 21st century approach to learning involves teaching skills for critical thinking, collaboration, communication, and employability. (Noris, 2019). Yet, interacting with the teacher or other more skilled person as well as with their peers in a problem-solving attitude will only be successful if students are open to listen, accept, give in, in other words, collaborate with each other. They must also be challenged to analyse, inquire, and draw conclusions in a critical way, to move forward. Thus, effective communication is paramount. In effect it means that both the teacher and student need to dedicate time to acknowledging the problem, defining goals, setting strategies, analysing results, all these stages while developing a project if it is to be enormously successful.

There are several methodologies that can be applied in teaching English as a foreign language. Taking into consideration the age of the children in which the present work is focused on, one can use picture books to set up a context for language exposure in context and meaningful language learning. Mourão (2015: 199) defines a picture book a:

“text, illustrations, total design; an item of manufacture and a commercial product; a social, cultural, historic document; and foremost, an experience for a [reader]. As an art form it hinges on the interdependence of pictures and words, on the simultaneous display of two facing pages, and on the drama of the turning page.”

As Mourão reiterates, picture books have been used in the English teaching over years, being an important method to contextualise students' understanding of English words, expressions and concepts (Mourão, 2016). The visual text is central to the understanding of the message and is characterised by being multimodal since it is dependent on the existence of words and images to create meaning. Picture books can promote affective, sociocultural, aesthetic, and cognitive development as well as develop language and literary skills (Mourão, 2016).

Another important methodology is the Experimental Communicative Approach. In this approach, language, according to Germain (1993), is seen as an instrument of communication or social interaction, and is a student-centred approach, orienting foreign language teaching towards student' concrete life situations, their present interests, and their future needs. The experimental communicative approach privileges authentic texts, the use of different media and the utilisation of open and varied materials, according to the interests, styles and learning rhythms of the students. At the level of human relations, the approach emphasises the process of communication and interaction (using the appropriate language for each communication situation), learner autonomy and individualised learning (Cuq, 2003).

Finally, when discussing a challenging methodology for young learners, it is mandatory to refer Content and Language Integrated Learning (CLIL). This approach allows the “fusion” between different subject areas (e.g. natural sciences, art, etc) and the English language learning process. It's a “cross curricular” methodology which has the fundamental goal of

giving meaning and a practical sense to the English learning process, allowing that this occurs in a more natural and contextualized way. The articulation between different areas for such young learners, is crucial as it endows the learning process with logic, meaning and context.

Considering the current teaching politics, backed by two essential documents, the PASEO and the *Aprendizagens Essenciais*, that advocate the importance of competences such as flexibility, collaboration, critical thinking, communication and adaptation skills and also the current need of developing an increasingly practical and meaningful approach, it makes all sense to encourage schools to use instruments that foster an interdisciplinary articulation and the integration of different knowledges. Learners are given the opportunity to learn the content by thinking, bringing their existing knowledge into the lessons, brainstorming, and learning by doing, and so, they not only acquire knowledge but also, construct their own knowledge and skills. Pupils also communicate in L2 to share their ideas, give suggestions, and solve a problem. As it is stated by Ellison (2014), CLIL puts emphasis on the use of language to learn a subject and a second language at the same time. For example, students can learn natural sciences in English, not only increasing their scientific knowledge but also their vocabulary in the foreign language (Matos, 2014).

As CLIL combines language learning with content it is considered one of the most innovative approaches which fosters pupils' 21st Century Skills. Although, sometimes CLIL is confused with bilingual education as Ellison (2014) refers. Ellison, 2014, points out 4 main principles of CLIL: Content, Communication, Cognition and Culture.

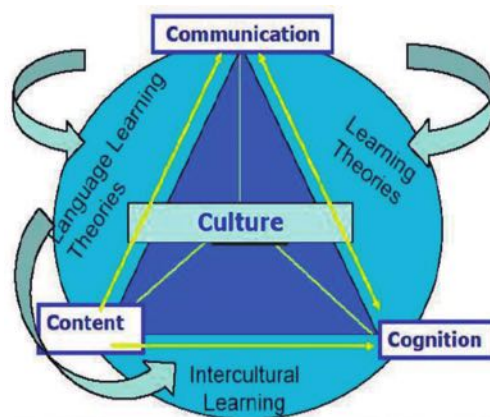


Figure 3 - The 4 Cs framework for CLIL (Coyle et al., 2010; Coyle, 2011)

All these skills together help students develop self-regulation, working memory and cognitive flexibility which will encourage them to learn new ideas and develop their social-emotional capabilities. The 4Cs framework for CLIL starts with Content (themes and cross curricular approaches) and focuses on subject matter, Communication which is related to language, Cognition related to thinking and Culture to intercultural awareness. The CLIL approach unites learning theories and intercultural understandings so the importance of using the 4Cs curriculum when planning seems to be very important. (Ellison, 2015). During the implementation of the project students were given the opportunity to learn the content by investigating and thinking, but also used their pre-existing knowledge while filling in the KWL chart, for example, as we will see further on in part II, where the development of the project is explained.

We will now move on to give an example of how to implement a learning approach for Young learners that is based on a PBL and CLIL approach to learning English as a foreign language.

## **2. FROM REFLECTION TO PRACTICE**

The growing needs of our competitive marketplaces and current changes in society, require us to continuously reflect and, consequently, to adjust our teaching methodologies and strategies in order to adapt them to the needs of our students and the marketplace. Although teachers are used to working together, there is the need to form an inter-disciplinary approach to learning to establish collaborative relationships between peers from other areas. In fact, "one of the most promising paradigms to emerge in the postmodern age is that of collaboration, as an articulating and integrating principle of action, planning, culture, development, organisation and research" (Hargreaves, 1998). Thus, as mentioned previously, it is essential that educational professionals apply their professional practices according to the students' needs, through dialogue and sharing, so that "there can be an evolution in the teaching-learning process that advocates the students' success" (Alarcão & Canha, 2013; Vieira, 2012).

This leads Cosme, (2018) to defend that cross-curricular learning through collaboration between teachers from different areas can enable the promotion of significant learning, with which "authentic experiences and experiences" are associated. As the title of my project suggests "Using Project Based Learning to build memorable and meaningful learning experiences", I too felt this very need. Firstly, there was the need to collaborate with the Primary English Teachers, and then also with the Art teacher, to define strategies and learning approaches, along with allocating time for the development of the project, forming groups and assigned tasks to each of the students. Thus, in this project students were given the opportunity to research, gather information, question, present ideas and share them with their individual groups in the various subjects.

The teachers involved agreed to promote a project-based approach to learning and to only intervene according to the needs of the working groups or to question the students to stimulate their critical thinking and to enhance the consolidation of learning. Another of the project's objectives was to develop students learning to learn skills, which all the teachers involved focused on.

While learning, students should be able to associate meanings with things around them and teachers should adopt the role of a mediator by asking open-ended questions, giving students voice and choice on the projects paths to explore, and providing feedback about what is happening in real time. This project approach allowed children to develop and use all their 21st century skills as they were encouraged to ask questions, seek out latest information, record their findings, make decisions, and cooperate to achieve a common goal and create a product that showcased their learning.

Thus, opportunities for self and peer-assessment were created, so that the students could take charge of their learning and come to conclusions regarding the path they had followed throughout the project (difficulties encountered, successful strategies adopted, gratifying individual experiences, etc.) Upon examining the results of this self and peer assessment, both the teacher and the students concluded that, on a large scale, the students would like to repeat this type of activity which provides them with an active voice, allowing them to present the result of their learning to their peers, thereby motivating them to learn.

This project constitutes an effective learning experience in which teachers descend into the child's world and create a classroom environment where creativity is stimulated and where the child feels respected and valued, as he / she explores and solves problems. Rubem Alves (2002) creates an analogy between schools, cages and wings: "There are schools that are cages and there are schools that are wings. Schools that are cages exist for the birds to unlearn the art of flight. (...) Schools that are wings do not love caged birds. (...) Flight cannot be taught. It can only be encouraged" (Alves, 2002). This project represents another step in the pursuit of meaningful learning and building a learning experience that stimulates the growth of wings in the classroom.

## **2.1 CONCEPTUAL CLARIFICATION OF THE TERMS: PROJECT-BASED LEARNING, INQUIRY BASED LEARNING AND TASK BASED LEARNING**

We will now move on to clarifying the difference between three terms that are often confused: Project Based Learning (PBL); Inquiry based learning (IBL), and finally, Task Based Learning (TBL). PBL differs from IBL as an IBL study has an essential question as the dynamo of the project. This question allows the students to become investigators who are curious to find out the answer to it.

This learning approach is similar to PBL, but PBL goes a step further as it "empowers learners to conduct research, integrate theory and practice, and apply knowledge and skills to develop a viable solution to a defined problem" (Savery, 2006). In this way, students try to solve an authentic real-world problem by undertaking research-based tasks. As PBL focuses on teamwork and implies communicative skills, students seem to keep motivated all through the project and become more confident in their English and other skills (Aznar, 2019).

In short, PBL focuses on building knowledge through long work and continuous study, where the main goal is to answer a question, a problem, or a challenge. Students begin the research process by defining hypotheses and identifying the resources needed to conduct the activity. At the same time, they make a practical application of all the information obtained during the research process, until a satisfactory answer to the research question is obtained.

Thanks to its methodology, PBL allows one to a certain extent, to make the teaching process and practice inseparable, since learning will involve exploring the context, developing ideas and one's knowledge from information gathering, and communicating with peers (Edström e Kolmos, 2014). The following table presents the distinct characteristics of PBL regarding content, activities, conditions, and results.

<p><b>Content</b></p> <p>The problems are presented in all their complexity.</p> <p>Students try to relate ideas in an interdisciplinary way.</p> <p>Students are confronted with complexity, ambiguity, and unpredictability.</p> <p>Real-world issues that students care about are addressed.</p>
<p><b>Activities</b></p> <p>For long periods the students develop multifaceted research work.</p> <p>Students encounter obstacles, search for resources, and solve problems.</p> <p>Students establish their own relationships between ideas, acquiring new skills as they complete the different project tasks.</p> <p>Students use authentic materials, such as real-life technologies and resources.</p> <p>Feedback on their ideas is given through expert sources and objective tests.</p>
<p><b>Conditions</b></p> <p>Students are integrated into a research group to develop their work in a social context.</p> <p>Students have the responsibility to manage their tasks and time both individually and as members of a group.</p> <p>Students conduct their own work, monitoring their learning.</p>
<p><b>Results</b></p> <p>Students create complex intellectual products demonstrating their learning, such as reports.</p> <p>Students participate in their own assessment.</p> <p>Students decide how they demonstrate their skills.</p> <p>Students show development in often neglected areas important for the real world, such as self-management, social and self-learning skills.</p>

Source: <https://www.pblworks.org/>, consulted on 13 June 2022.

*Table 1 - PBL content, activities, conditions, and results*

As can be seen from the analysis in table 1, PBL stands out from traditional teaching methods due to the creativity and innovation it brings into the classroom, developing learning, whenever possible that meets the students' reality and needs, not focusing on a single subject but working on an interdisciplinarity basis. We will now clarify the term task-based learning in order to show how it differs from PBL and IBL. In Task Based Learning (TBL) teachers ask their students to perform tasks that resemble authentic, "real-life" situations. According to Willis (2007), this is done by designing tasks- discussions, problems, games, which require learners to use the language for themselves. Thus, this approach is less ambitious than both PBL and IBL. TBL is an approach for teaching, that involves the performance of tasks, the searching of information, and the opportunity to reflect and give their opinion about the tasks performed. This is a widely used methodology in teaching a foreign language (Pinto, 2011).

A task can be defined as a learning activity or set of learning activities with the goal of making learners able to convey meaning in a specific situation, relating it to the world around them, meaning that learners need to manipulate, produce, and interact in the learning language to solve a communicative situation (Van Thienen, 2009). The accomplishment of the tasks involves cognitive processes of selecting, reasoning, sorting, organization, and transformation of information from one form of representation to another, making the students' systems progress by activating their acquisition processes (Long & Crookes, 1993).

The TBL approach seeks to provide students a language learning experience based on real contexts, since the tasks have a clear pedagogical relationship to the communicative needs of the real world. Thus, it is especially important that the social context in which language is used is considered, and students should be conscious of this social dimension (Vez, 2004). At the same time, it is also necessary that students understand how language is used in these contexts, since they will be able, in their own way, to understand that language and its use varies according to the context, the purposes and the circumstances of its use (Pinto, 2011). Pedagogically, TBL reinforced the following principles and practices (Nunan 2004):

- a) The content of the tasks is selected considering the student's needs.
- b) Focus on communicative learning, through interaction in the language under study.
- c) Introduction of authentic texts into communicative situations.

- d) The possibility for students to focus not only on the language but also on the learning process itself.
- e) The enhancement of the students' own personal experience as an important contribution to their learning in the classroom
- f) The relationship of the language being learned in the classroom to the language used outside the classroom.

Finally, the IBL teaching methodology has as objective the student's direct participation in the process of searching for information and applying acquired knowledge in solving day-to-day problems. The process is catalysed through questioning, especially about issues that can be perceived. The word "inquiry" refers to a set of techniques and paradigms applied to a scientific approach that targets the teaching and learning process. Essentially, the method seeks effective and meaningful significant learning results through the application of the scientific method with student's direct participation in the teaching-learning process, that is, the learning or construction of knowledge happens through stages that include the formulation of hypotheses experimentation, and dissemination of the results by the learners, as researchers would do in their scientific investigations (National Research Council, 1996).

IBL embraces a spectrum of methods and techniques that that spark students' curiosity about solving problems through an active process of investigation and critical analysis of the data obtained. Inquiry-based instruction can vary in intensity of implementation and include different approaches such as one-on-one or group instruction in conventional classes or out-of-class, with or without supervision from a teacher (Freeman, et al., 2014).

Besides all this, unlike TBL, PBL provides opportunities for the natural integration of all four skills (reading, listening, writing and speaking, (Stroller, 2002). PBL seems to involve these four skills too, as well as other skills, such as the 21<sup>st</sup> century skills which TBL and IBL don't.

## **2.2 THE TEACHER'S ROLE IN PBL**

PBL was responsible for redefining the role of three important educational agents: knowledge, considered as a valuable asset; the student as the main responsible for his / her knowledge construction; and the teacher as a mediator between the first two agents. This

redefinition gives the teaching-learning process innovative characteristics: active participation of students in the planning and execution of their activities, the use of new teaching resources and the conception of the researcher-teacher (Barbosa et al., 2013). Papert (1997) believes that the role of the teacher is to provide the conditions for invention, rather than providing previously consolidated knowledge. The student must construct new knowledge in any situation.

In a PBL context, the teacher must be able to offer new challenges to his or her students, thus promoting the opportunity for them to acquire new knowledge. This requires continuous work that extends the knowledge that the student already has (Libâneo, 2007). The role of the teacher in PBL is radically different compared to the role of the teacher in the expository method and with an emphasis on the transmission of knowledge and its memorization. Thus, the teacher ceases adopting the role of being the "owner of knowledge", to become a guide, advisor, motivator, and facilitator who guides the students towards the achievement of the learning objectives. The cognitive process is also a relevant aspect for the teacher, in developing a pedagogical model that seeks to ensure the learner acquires self-learning skills (Múnera, et al., 2012).

In conclusion, in PBL, the teacher is viewed, not only as a facilitator, but also as an activator who is deeply engaged with students rather than only scaffolding learning for them (Pieratt, 2020). While learning, students should be able to associate meanings to things around them and teachers should adopt the role of a mediator by asking open-ended questions, giving students voice and choice on the projects paths to explore, and providing feedback about what is happening in real time. This project approach will allow children to develop and use all their 21st century skills and dispositions as they will be encouraged to ask questions, seek out latest information, record their findings, make decisions, and cooperate to achieve a common goal and create a product that showcases their learning.

## **2.3 MEANINGFUL/AUTHENTIC LEARNING**

One of the main goals of today's teachers is to foster self-directed learners with a deep and long-term understanding of various educational concepts. It is in this sense that authentic

learning (or active learning) becomes crucial. This is defined as real-life learning, a style of learning that motivates learners to create tangible, useful and quality outcomes to be shared with the world (Mushtaq et al., 2020). Authentic learning brings theoretical concepts closer to reality, making them relevant to students. So, learners can retain information and apply knowledge to real-world situations. In this model, the teacher has the role of stimulating the student along his journey, through frequent low-scoring assessments and with constructive feedback. At the same time special assessments should be planned for the development of the relationship between teacher and student (Mushtaq et al., 2020).

One of the most important features of authentic learning is the possibility of multiple outcomes for the same problem compared to only one right answer. This makes students think outside the box, developing their problem-solving skills, which are so important in the real world (Stenger, 2018). Another important feature of this learning model is that it develops the intrinsic motivation of learners, i.e. their behaviour is directed through internal rewards as the nature of the work is in itself satisfying (Jones et al., 2010). As Mathewson (2019) points out, stimulating students' intrinsic motivation is the most effective way to maintain students' interest, and motivated students learn better. Teachers have a central role in encouraging authentic learning and should have the following characteristics (Maina, 2004; Almisnid et al., 2017):

- a) Be a role model for students by showing passion for learning and teaching.
- b) Give examples of the material use, so that students can make sense of their learning.
- c) Clearly communicate expectations for each assignment.
- d) Provide constructive, early feedback to help learners understand the next steps in their journey.
- e) Conduct frequent, low-scoring assessments so that learners can learn from mistakes.
- f) Ensure fair assessment.
- g) Give students control of their own learning by giving them the opportunity to choose their own research topics or reading lists.

Alongside authentic learning comes meaningful learning. In 1963, David Ausubel coined a new concept within the teaching and learning process known as meaningful learning. This strategy consists of the non-arbitrary and non-literal interaction of new knowledge with relevant prior knowledge. From successive interactions, a given subsurface, progressively acquires new meanings, becomes richer, more refined, more differentiated and can serve as an anchor for new significant learning. The central point of reflection in Ausubel's Theory is that, among all the factors that influence learning, the most important is the student's previous knowledge; which should always be regarded as the starting point of new learning (Agra et al., 2019). Therefore, unveiling what the student already knows is more than identifying their representations, concepts, and ideas, because it requires consideration of the totality of the cultural/social being in its manifestations and corporal, affective and cognitive languages. To achieve this, the teacher should facilitate the process of the students becoming aware of their expectations, the objects incorporated in their lives, their existential conditions and not only the intellectual aspect associated with learning (Moreira, 2012).

Summing up, authentic learning and hands-on-learning occur while students try to identify a problem, investigate collaboratively, and find answers. Tasks and activities should be planned, clean, goal-focused in an authentic and realistic setting. Contextualization and meaning leads to a natural development of students' skills. Meaningful learning will occur when learners are active in the process of acquiring knowledge.

Fernández-Corbacho (2014:2) defends that classroom tasks engage students in cooperative strategies, making them responsible for their learning. The author defends that there are different learning styles in the classroom group and that activities should be varied to cater for each individual learner's characteristics and learning needs. As (Fernández-Corbacho, 2014: 3) explains:

“Our students are primarily people who enjoy experiences and are full of expectations regarding what life has to offer. For this reason, learning based on mechanical and abstract tasks, or with little relation to the real world, makes them disconnect from learning itself. That is why the emotional

dimension fosters their connection to their own identity, their previous experiences, and with the world of sensations.”

In conclusion, according to literature, studies may lead one to conclude that pupils can think deeply about issues in creative ways by working collaboratively in real contexts.

## **2.4 TWENTY-FIRST CENTURY SKILLS**

The 21st century student is necessarily different from the students of the previous century, having been born and raised in a highly technological context where the digital world and easy access to technology is an ever-present reality. Due to the access to a large amount of information at a mere click away, this generation is more critical and questioning of their reality, thereby not identifying themselves with the traditional teaching system. The Generation Z, as it's commonly known, will necessarily have to dominate a number of skills and tools and invest in a more perseverant attitude towards life. Although, these are young people naturally connected to the digital world, living in a technologically advanced era at social, affective, professional and academic levels, the obstacles like the consequences of covid 19, the pandemic and the subsequent world order change is crucially affecting these young people's future chances to succeed, making it vital to be able to think critically about the society, find solutions for the coming problems and use all these new skills to face this generation's barriers.

Thus, learning should be based on innovation and the exchange of experiences. First, we need to combine the acquisition of knowledge with technological resources, which are already part of the everyday lives of these children. At the same time, these children ask questions and aren't passive receptors of knowledge, but active builders of their knowledge. In 2015, the World Economic Forum published a report that focused on presenting 16 skills for the 21st century considering the increasingly technological environment in which we live, and the fact that globalisation is a reality, blurring borders and reducing distances between different nations (World Economic Forum, 2015). According to this report, skills for the 21st century fall into three main groups: foundational literacies, competences, and character qualities:

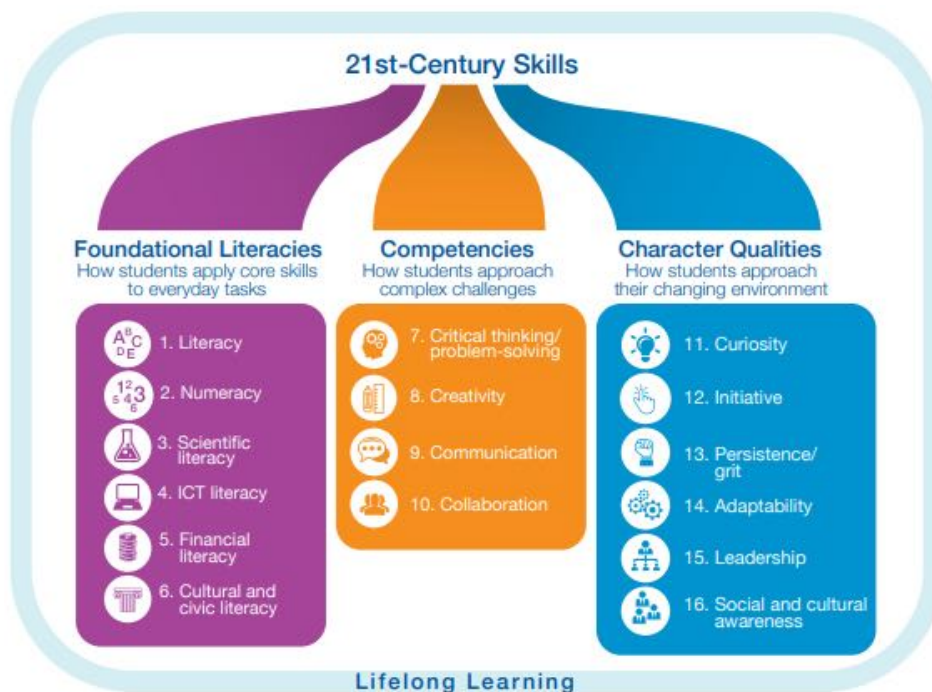


Figure 4 - The 16 core skills required by students for the 21st century (Source: World Economic Forum, 2015: 3)

Foundational literacies represent the way students apply their core competencies in everyday tasks. These skills are the foundation all students need to build more advanced skills and character traits. These include skills that have long been the central focus of traditional education systems: skills of literacy and numeracy, but also scientific literacy, ICT literacy, financial literacy, and cultural and civic literacy (World Economic Forum, 2015).

Competencies concern the way students approach complex tasks. These kinds of skills are essential for work in the 21st century, where teamwork, critical appraisal, and knowledge conveyance have become the norm. Competencies include critical thinking/problem solving, creativity, communication, and collaboration (World Economic Forum, 2015).

Finally, character qualities describe how students react to contextual changes. Due to the rapidly changing markets, these skills are of immense importance to overcome obstacles, develop positive and constructive interactions in a culturally, ethically, and socially appropriate way. These skills include curiosity, initiative, persistence/grit, adaptability, leadership, and social and cultural awareness (World Economic Forum, 2015). The definition of all the 21<sup>st</sup> century skills can be observed in figure 5.

	Skill	Definition
Foundational literacies	<b>Literacy</b>	Ability to read, understand and use written language
	<b>Numeracy</b>	Ability to use numbers and other symbols to understand and express quantitative relationships
	<b>Scientific literacy</b>	Ability to use scientific knowledge and principles to understand one's environment and test hypotheses
	<b>ICT literacy</b>	Ability to use and create technology-based content, including finding and sharing information, answering questions, interacting with other people and computer programming
	<b>Financial literacy</b>	Ability to understand and apply conceptual and numerical aspects of finance in practice
	<b>Cultural and civic literacy</b>	Ability to understand, appreciate, analyse and apply knowledge of the humanities
Competencies	<b>Critical thinking/problem-solving</b>	Ability to identify, analyse and evaluate situations, ideas and information to formulate responses and solutions
	<b>Creativity</b>	Ability to imagine and devise new, innovative ways of addressing problems, answering questions or expressing meaning through the application, synthesis or repurposing of knowledge
	<b>Communication</b>	Ability to listen to, understand, convey and contextualize information through verbal, nonverbal, visual and written means
	<b>Collaboration</b>	Ability to work in a team towards a common goal, including the ability to prevent and manage conflict
Character qualities	<b>Curiosity</b>	Ability and desire to ask questions and to demonstrate open-mindedness and inquisitiveness
	<b>Initiative</b>	Ability and desire to proactively undertake a new task or goal
	<b>Persistence/grit</b>	Ability to sustain interest and effort and to persevere to accomplish a task or goal
	<b>Adaptability</b>	Ability to change plans, methods, opinions or goals in light of new information
	<b>Leadership</b>	Ability to effectively direct, guide and inspire others to accomplish a common goal
	<b>Social and cultural awareness</b>	Ability to interact with other people in a socially, culturally and ethically appropriate way

Figure 5 - 21st century skills definition (Source: World Economic Forum, 2015: 3)

# **PART II - A REFLECTION ON HOW PBL CAN BE IMPLEMENTED IN THE PRIMARY CLASSROOM LEADING TO MEMORABLE AND MEANINGFUL LEARNING EXPERIENCES**

## **1. DESIGN AND METHODOLOGY OF THE STUDY**

### **1.1 RESEARCH DESIGN**

Having discussed the theoretical basis underlying the project title Using Project Based Learning to build memorable and meaningful learning experiences, we will now move on the presentation of the methodological options taken to achieve the objectives of the project.

Thus, in this first section (chapter 1), the guidelines and methodologies used will be clarified, followed by a discussion of the questions raised and the set objectives chosen for the research project. The chosen techniques and data collection instruments for carrying out the research conducted will be discussed and, finally, a characterization of the context in which the educational intervention present in this report occurred will be presented.

In a second section (chapter 2), the methodological paths of investigation will be described by analysing the different procedures applied. The next section will provide a detailed presentation of the project itself, in addition to an analysis and discussion of the data collected through the teachers' (focus group) points of view, students' self-reflections and opinions, the researcher's field notes and questionnaires aimed at primary English teachers, teaching in other contexts in Portugal (private and public schools).

The section will end with a conclusion in which the questions that served as a starting point for this study, will be answered. An analysis of the projects' limitations will also be provided in addition to a reflection related to the next steps of our teaching practice.

## 1.2 RESEARCH GUIDELINES AND METHODOLOGIES

The objective of this research project was to focus on the implementation of Project Based Learning in an English as a Foreign Language Primary context in a private Portuguese school. The research sought to examine how a six-day project can be implemented in a Primary classroom leading students to develop 21st century skills, such as, critical thinking, collaboration, communication and creativity while involving them in meaningful and authentic learning experiences. It also aimed to ascertain how the project in question, was an opportunity for teachers to implement the curriculum in a way that places the learner at the centre of the learning experience.

To carry out this study, an ethnographic research methodology was used, predominantly of a qualitative nature, with action research outlines. Therefore, we will now clarify the concepts of "qualitative research" and "action research", which justify the choice of methodologies followed.

According to Bogdan & Biklen, qualitative research is "research methodology that emphasises description, induction, grounded theory and the study of personal perceptions" (1994, p.11). It is not intended to test or confirm previously constructed hypotheses and research questions "are not established by operationalising variables" (Bogdan & Biklen, 1994, p.16), Instead, this type of research is formulated with the purpose of "investigating phenomena in all their complexity and in natural context." (Bogdan & Biklen, 1994, p.16) This methodology was chosen for the current project as the researcher based her findings on observations, field notes, interviews and focus groups. The conclusions of the collected data were reached in collaboration with both the researcher and the participants of the project.

The data collection required for this study was carried out "on the basis of an in-depth contact with individuals" (Bogdan & Biklen, 1994, p.16) in that same natural context, which in the concrete case of this study, was the school where the researcher intervened as a teacher-researcher, believing that this was the best way to understand the aim of the research project in question.

This type of collected data is also characterised by being "rich in descriptive detail about people, places and conversations" which is easily observed in the type of data that is presented in this report (students' records, questionnaires, observation data...).

It can also be stated that a triangulation strategy was also used throughout the study. This led to the use of different data collection tools to provide more reliable and diversified sources of evidence. (Bowen, 2009). As for the concept of action research, the term was coined by Kurt Lewin in the 1940s and described as "a participatory and democratic form of research which, in terms of method, is defined by a reflexive spiral of cycles of planning, action, observation and reflection" (Sá, 2007, p.95).

On the other hand, Kemmis (1984), defined action research as a form of self-reflexive enquiry to improve the rationality and fairness of social or educational practices, their understanding and an understanding of the very institutions and situations in which these practices occur. Lomax (1990) considers action research as an intervention in professional practice with the purpose of improving it. In short, action research is a form of research in which the teacher "gets actively involved, observing closely and for some time the reality that interests him/her, intending to modify it and intervene as a result." (Sá, 2007, p.96).

Thus, the present study aims to show how the researcher implemented a different approach in terms of lesson planning trying to prove that through a PBL approach students not only develop their language learning, but also enhance their 21st Century Skills, through meaningful and authentic learning contexts and experiences. The research techniques and instruments which the researcher also intended to use were based on documental analysis- field notes, collection of images (photographs) trying to understand the target audience's motivation and feelings. This method seems to be more descriptive allowing one to quite easily draw conclusions from the data that was obtained.

### **1.3 RESEARCH QUESTIONS AND OBJECTIVES**

The research questions that were chosen in order to further analyse the impact of PBL on students' learning processes were:

- 1) How beneficial would it be to include PBL in a curriculum for YLS that aims to follow the recommendations of the Perfil do Aluno à Saída da Escolaridade Obrigatória?
- 2) In what ways does PBL promote the development of 21st century skills in YLS?
- 3) What kind of tasks and activities are the most effective for implementing a PBL approach to learning and engaging YLS?

These questions were chosen in order to find out if by implementing a PBL approach to learning students would develop their 21st century skills, mainly: collaboration, communication, critical thinking and creativity. In addition, a further aim of this research project was to attempt to find which were the most effective and engaging activities that combined both students' profile goals and led to a meaningful learning were.

With these questions in mind, the following objectives were set:

- 1) To analyse children's ability to cooperate, think critically and communicate while developing a) the project b) their language skills and c) their autonomy;
- 2) To Involve students and create meaningful learning experiences;

## **1.4 DATA COLLECTION TECHNIQUES AND INSTRUMENTS**

We will now move on to describing the research techniques and instruments adopted, as well as the purposes of each one.

To obtain more detailed and objective conclusions, as has been previously mentioned, the researcher chose to triangulate her data and focus on a documentary and perspectives analysis. The data used was obtained in a variety of ways such as a) lesson plans; b) photos of the practices (photographs of the lessons and students' reactions); c) student's self-reflections; d) researcher's field notes; e) focus group teacher questionnaire; f) student interview script; g) questionnaire to Primary English teachers working in other schools and teaching contexts;

The project lesson plans, (Appendices A-D) and photographs (Appendix Q) of the lessons allowed one to revisit and analyse the teaching practices implemented in each lesson, by contrasting the planned lessons with their corresponding goals with what actually happened in the classroom and was accomplished in practice. The student's self-reflections (Appendix K) were analysed in detail, which allowed one to draw pertinent conclusions as the students were encouraged to reflect on their performance as well as on the project itself.

The field notes (Appendix P) written by the researcher before and after the project, revealed how the students were engaged in the proposed activities, as well as, strategies that were felt to be more effective. The researcher also wrote down the challenges encountered while implementing the PBL approach in the young learner classroom. An analysis of the teachers' opinions that implemented the project at the same time as the researcher, were also very revealing in order to understand if the project achieved a similar impact on students of the same age when implemented by different teachers in their classrooms.

As for the student's focus group, this was composed by four students. The chosen students were the ones which the researcher felt were more fluent while using the English language. The choice was also dictated by the pandemic, as these students were the only ones present at school after the implementation of the project and during the interviewing phase. The students were interviewed (Appendices O&N) individually in the classroom where the internship practices took place, and the interviews were recorded (with the permission of the parents) using a mobile phone so that it would be easier for the researcher to draw her conclusions.

The teachers' questionnaires (Appendix R) were also very revealing in terms of the benefits and general opinions of including a PBL approach in the primary curriculum. The questions were chosen as a means to understand if teachers in different contexts had already implemented this approach in their lessons and if not, why this was the case. This was done through a Google Forms questionnaire. However, not as many teachers as would be desired participated in this questionnaire, probably due to heavy teaching schedules and limited availability. In spite of this, we believe that this type of tool is an important source of data, as it helps researchers gain insights while exploring the beliefs and practices of teachers (Bowen,

2019). This helped the researcher draw other conclusions besides the ones based on her own context.

Having presented the study's data collection techniques and instruments we will now move on to providing a description of the action-research context in which the present study was conducted.

## **1.5 CHARACTERISATION OF THE SCHOOL CONTEXT AND LEARNING ENVIRONMENT**

The school where the study was conducted is located in Oporto, Portugal. It is a private school, and it focuses on the future and innovation, which requires academic brilliance and calls for human excellence in a demanding world increasingly marked by unpredictability. This school prepares resilient students, who are both creative and innovative, who will be able to assert themselves as proactive citizens, capable of embracing future challenges that await them. In fact, these ideals are in alignment with the guidelines of important legislative documents dealing with the matter of education in Portugal, such as *The Future of Education and Skills*. (OECD, 2018, p. 2). As the document states, the rapid globalization that characterizes our modern world challenges us to adapt to an exceedingly fast rate of social, economic, and technological advancements. Therefore, there is a moral and professional responsibility to seize the opportunities that come in order to reach a higher form of human improvement.

As educators, the teachers at this school represent a talented and creative teaching community, with firm educational beliefs, who strive to educate future generations in order to contribute to the transformation of society. Therefore, they bet on integral training, providing all their students with an educational space in which each one feels happy, accompanied in his/her uniqueness, and stimulated to achieve their fullest personal development as is recommended by the OECD<sup>1</sup> (2018, p. 2). In other words, for reasons of force majeure due to the uncertainty and unpredictability of a globalized world, students are

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<sup>1</sup> Organisation for Economic Co-operation and Development.

required to develop key skills, such as resilience, curiosity, and self-regulation. They are also expected to learn how to appreciate and respect different point so view and how to cope with the fact that it may imply rejection, or even failure. With enough sensible training, students of the 21st century should be equipped with traits that allow them to keep going forward even when facing adversity.

Since 1999, the school has valued the learning of the English language, aware of its importance as a fundamental communication tool in the global world. In the belief that learning a foreign language early allows students to expand their thinking and acquire a more global knowledge of the world - thereby understanding and respecting different cultural realities - the school offers its students, from Pre-School (3 years) to the 12th year, daily contact with the English language, through classes and a variety of other proposals like CLIL, STEAM projects, weekly homework, updated syllabuses, and technological training, etc. The certification of learning at the various levels, according to the University of Cambridge system, has added even more recognition of the Project.

By encouraging its' students to obtain international certification they are encouraged to develop essential skills of our current knowledge society, but also a true competitive advantage in academia and in the world of work. To date more than 3,500 students at the school have taken Cambridge exams. About 100 students managed to reach the maximum qualification level, *Certificate of Proficiency in English* and nearly 300 have reached the penultimate level, *Certificate of Advanced English*. Thus, in this learning path, certification is foreseen at various levels of education, tending according to the following scheme, based on Cambridge ESOL (English for Speakers of Other Languages):

<b>Cambridge ESOL Levels</b>	
Starters- 2 <sup>nd</sup> year	FCE (First Certificate in English)- 8 <sup>th</sup> to 12 <sup>th</sup> years
Movers- 4 <sup>th</sup> year	CAE (Certificate of Advanced English) 10 <sup>th</sup> to 12 <sup>th</sup> years
KET- (Key English Test)- 6 <sup>th</sup> year	CPE (Certificate of proficiency in English) 12 <sup>th</sup> year
PET- (Preliminary English Test) 6 <sup>th</sup> - 9 <sup>th</sup> years	

*Table 2 - Cambridge ESOL levels*

The CLIL (Content and Language Integrated Learning) project, developed in the 1st cycle, stems from the conviction that learning a foreign language is more effective when used as a content acquisition tool. As Marsh, 2000, p.6) states, “CLIL is about gaining knowledge and skill simultaneously (Marsh, 2000, p.6). Furthermore, in the words of King (2009, p.4), it “offers an alternative fresh approach to learning which deals with ‘real’ content in authentic learning contexts which offer learners “new ways of seeing the world through studying a new language” and opportunities to “develop their abilities as communicators through accessing this new knowledge”. The current demands of the society that students belong to and will become active citizens in, point to the importance of knowledge as a process of integrating a wide range of skills, content, and learning. From an early age this school has been aware of the importance of educating its students to be citizens of the global world, which includes the mastery of the English language and its use as a tool of communication with and integration in this broad context amongst the development of many other equally important skills.

The implementation of the English Project at the school for almost two decades attests precisely to this longstanding concern, visible through the enormous investment in and evolution of the English curricular project which follows European legislative guidelines of coherent frames of reference for language assessment and learning. As it is well-expressed by the Council of Europe (2001, p.18), a thorough and action-focused approach to language teaching primes in viewing students as “social agents”, who will make use of English to accomplish a fairly wide-range of tasks on a daily basis in their lives. The main purpose of these educational guidelines is to make language a realistically meaningful tool on the hands of students/citizens.

Therefore, taking advantage of the fact that the students are exposed to learning the English language on a daily basis since pre-school, it was decided that it would be possible to take a step forward, placing the foreign language at the service of content learning (specifically in the areas of Science, History and Art)- and thus embodying the approach of knowledge as a process of integrating skills and language as a tool at the service of learning. The concept behind this project is that it is easier and more effective to learn a foreign language when it is used as a tool and not just as an object of knowledge as may be read in Council of Europe

(2001, p. 9) which states that language is a vital portion of wider social contexts, opposing the belief that the learning of such is only valuable in coursebooks, or inside classrooms. Students will make use of languages activities and “tasks” in a very personal way, each one exerting their own specific competences to reach a certain result, which will be strategically meaningful for them individually.

In practice, this project is built on the premise that History, Science and Art classes in the 1st cycle are taught by two teachers simultaneously - one teacher for each specific curricular area. In order for the learning process to be meaningful for the students, the classes involve a very strong practical component, through the realization of projects, posters, research, and daily experimental work. The aim is to create a rich experimental context to introduce relevant concepts and involve students in order to help them build their self-confidence to communicate in English in these specific content areas.

Much of the success of this project, it is believed, lies in the collaborative work of teachers in different areas and in the natural predisposition of children to learn foreign languages at an early age, a predisposition that is enhanced by the intentionality of all the work carried out by all the involved parties. As Moran (2001) states, collaboration among teachers, teacher-parents, teacher-students, and the school administrator is crucial to creating an effective school environment.

The ELT classroom context at this school is based on curricular and pedagogical differentiation and regular work with groups of students defined by levels of competence in the English language domain. The English lessons start at Pre-School level, where there are two groups per age group and one teacher for each group. At a Primary level, there are three groups per year and a teacher assigned for each group. This procedure is repeated at a Middle School and Secondary level. Every year the syllabuses are revised, each group follows the syllabus and uses additional material not only related to it, but also obtained from external sources, such as stories, songs, videos, games, small projects, etc, that teachers find necessary to complement the content being taught. The technology available, like interactive boards, internet, online books, and materials enhances the quality of the teaching performance.

The students are assigned a group according to the “Projeto de Rotatividade”, which consists of the rotation of students and teachers in the 1st cycle. Its main purpose is to consolidate the spirit of group / year, breaking with the traditional concept of class as a closed group about itself and immutable over 4 years of permanence in the cycle.

In this context, each group assumes different compositions throughout the course of each year and each cycle, constantly adjusting itself to the teaching objectives of the teachers and to the rhythms and learning of each individual and group of students. The result in terms of the group and work dynamics created has been surprising, especially in the way it helps students, from an early age, to know how to make the best of the changes and challenges that the world poses to them. This new dynamic of work and pedagogical organization points to a path of innovation and continuous improvement and enhances mechanisms for preparing students for the changes they will have to face, both in their school pathways and in their life paths.

Besides these differentiating projects (English Project, CLIL and First Cycle Student’s Rotativity Project), the school also tries to integrate Project and Inquiry based learning into its curriculum. Students confront themselves with real-world issues and problems and create solutions and present their results. Also, teachers of all areas work together to prepare a transdisciplinary approach to learning, designing projects for various content areas across all primary grade levels. This was very positive for the researcher as it was in accordance with the projects’ objectives and actions.

The 4th grade group that participated in this project have English classes integrated in a fixed timetable, taking place every day at the end of the school day (from 15h30 to 16h30). They usually come to class after an afternoon break. Therefore, the pupils come to the classroom full of energy and take about 5 to 10 minutes to calm down. As a result, the teacher needs to begin by creating learning readiness by using warm-up activities. Most of the students in this class have been together since kindergarten, and eight of them entered this school only in the first grade. Furthermore, there is one student, who is Chinese, who came from an international school and another Portuguese student who studied in a French school before enrolling in this school.

Most of these students have a high living standard, and the majority of their parents are very adamant to being present and close to their students' school life. Parents participate in meetings at the end of every term with the class teachers and also have the opportunity to talk to the subject teachers directly. The group was of mixed ability, having one student who had special learning needs and was supported by the (CAA) Centro de Apoio à Aprendizagem e à Inclusão (“com diferenciação pedagógica”). In general, the group was very participative and motivated, which is corroborated by their usual high marks and performance. They were very hard working and receptive. As they have 60 minutes of English every day, it's apparent that their language level is quite high – especially since many of them started to learn the language while still in kindergarten. Pupils get along with each other very well and interact in a healthy and enthusiastic way among themselves.

During the internship, the classroom was displayed in a typical layout where the tables were in rows. This because, due to the pandemic, students were not allowed to have their tables in a collaborative layout. Despite the rather unfortunate circumstances caused by COVID-19, collaborative work was still a priority and was most definitely carried out in classes (i.e., instead of rearranging the classroom layout, a student partakes in a group work with the three classmates that are the closest to his/her desk). We will discuss the classroom layout and how the project was carried out in more detail in chapter 2.

Taking into account everything that has been previously mentioned, we can conclude that the school is one based on an ideology that appears to be rooted in a 21st century teaching perspective. Nevertheless, we must not forget that the students and teachers were living a moment of pandemic and it was obviously a very big challenge to try to integrate projects into the curriculum, when students weren't supposed to work in close proximity in the interest of their health safety.

The next section will be dedicated to the reflection of the implementation of the project, the analysis and discussion of the collected data.

## 2. PRESENTATION, ANALYSIS AND DISCUSSION OF THE COLLECTED DATA

In this section, we will present how the project was conducted (section 2.1). Then, in the next sections, we will present and analyse the researcher's reflections, the interviews with the focus group teachers, the student's self-reflections and then interpret the results of the student and teacher's questionnaires. We will then move on to providing a more in-depth reflective exploration of the researcher's educational intervention.

The next section of this chapter aims to provide a basic outline of the project in addition to more detailed information concerning its organization.

### 2.1. THE PROJECT

As mentioned before, this project was conducted with a fourth-grade class, composed of a group of 19 students, 7 boys and 12 girls from 9 to 10 years old. All the children were L1 (first language) Portuguese speakers. The project was implemented in a total period of six days (Figure 6), in 6 lessons of 60 minutes, where the students were able to learn through a Project Based Learning approach and gain the target knowledge and desired skills by investigating and responding to an authentic, engaging and complex challenging core guiding question which was: *What comes first? The egg or the nest?*

**SCHEDULE**

<b>NOVEMBER</b>							
	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>Sat</b>	<b>Sun</b>
<b>Week 1</b>	1	2	3	4	5	6	7
<b>Week 2</b>	8	9	10	11	12	13	14
<b>Week 3</b>	15	16	17	18	19	20	21
<b>Week 4</b>	22	23	24	25	26	27	28
<b>Week 5</b>	29	30	1				

Figure 6 - Action Research week plan

The project started off with an engaging step, as Cameron defends “in classrooms where English is learned as an L2 (second language), picture books are considered appropriate, authentic resources for language learning.” (Cameron, 2001). This activity was done in order to increase student’s attention and focus, motivating them to practice higher-level critical-thinking skills and leading to a meaningful experience which we shall proceed to describe. (Appendix A)

The teacher presented the theme to the students through a pre-reading activity, which was for the teacher a guarantee of the children’s interest, as in the previous year they had shown great enthusiasm while learning the animal unit in class and where those animals came from. This strategy was followed because as Beers (2003) explains in order for meaningful learning to occur, new learning needs to be related to previous learning.

“Before students read a book, it is imperative for teachers to activate their prior knowledge to help them connect the information to their newfound knowledge (...)It is important for teachers to enforce that pre-reading strategies will help students understand the information and engage them in reading.” (Beers, 2003)

Following the pre-reading activity, students were invited to listen to the story of Robyn Boid architect, by Maree Coote. Open-ended questions were asked throughout the entire story reading activity in order to develop the students’ critical thinking skills. The story also contributed to developing the students’ intercultural awareness as several well-known buildings and cities from around the world were referred to and illustrated in the story throughout the lesson.

The teacher/researcher read the story in a reading corner of their classroom which was prepared especially to involve the students in this reading moment by creating a real and motivating storytelling environment, a shift in the children’s attitude was obvious. According to Ellis and Brewster (2014: p.2) “Stories often hold a strange and magical quality that can interest and engage learners in a way that few other materials and methods have.” In effect, the students were mesmerized during the storytelling moment, as the corner in which the

story was read was ideal, leading the children interact meaningfully with the teacher and the story.

After reading the story, the teacher wrote the essential question, chosen to guide the entire project as an open-ended question, on the board and that would work as a dynamo to raise the students' curiosity leading to the answer by the end of the project: *What comes first? The egg or the nest?*

This essential question came up as pertinent since Robyn Boid (the bird character in the story) is a very dedicated bird, who loves to build nests and dreams of becoming an architect. He lives on the ledge of a window in the University of Architecture window, where he listens and learns all about architecture (shapes, sizes, monuments) to find the perfect design for his own nest. However, despite his efforts all the nests turn out to be inappropriate as they are too high, too big or not good enough for the egg "to rest". Inspired in the books' message, the students were challenged to find a solution for the essential question and to investigate more information about birds and different kinds of nests.

In order to scaffold the research/investigation process, a handbook (Appendix F) was handed out where students were able to take down their notes throughout the project and record their findings about birds. In addition, it served as evidence of learning so that they could revisit what they had already found out and the information they still needed to find, to answer the essential question.

The classroom layout (Figure 7) was organized in order to create a working environment which facilitated investigation and collaboration, so that they could interact and communicate more naturally. Thus, the tables were displayed in groups where the students were challenged to start working collaboratively, since collaboration is one of the most important characteristics of PBL (Bell, 2010).

Collaboration is also a prized skill in the workplace as Barron explains that in order to become successful inside and outside school children need to learn how to cooperate with others, which makes skills for working together an educational outcome in its own right (Barron, 2003).



*Figure 7 - Classroom display*

The reading activity was followed by the filling in of a KWL chart (Lucidchart, s/d, WEB) (Appendix E), where students and teacher filled in the first column of the chart (K- What I already KNOW) together. This strategy was relevant because as Ogle (1987) stresses KWL charts help the students organize information before, during and after a unit or a lesson. They can be used to engage students in a new topic, activate prior knowledge, share unit objectives and monitor student's learning (Ogle, 1987). (Figure 8)

TOPIC: _____		
WHAT I K NOW	WHAT I W ANT TO KNOW	WHAT I L EARNED

*Figure 8 - KWL chart*

The students' KWL charts were diverse, but they also revealed that the students already possessed a lot of knowledge relating to birds. Furthermore, our fieldnotes reiterated the fact that the students were naturally drawn to and motivated by the theme.

(Appendix P) "students were participating in a motivated way, engaged in the theme and especially those that didn't usually participate as much, were participating too."

At the end of lesson 1, the teacher/researcher displayed the essential question above the board so that the students could visualise the question along the project, keeping it in their minds and making them focused on their goal.

After having heard the story about Robyn Boid- Architect and filled in the first two columns of the KWL chart, the students were instigated to answer all the questions that had come up during the previous lesson, like: Which materials do birds need to make their nests? How long does it take a bird to make its' nest... and to keep working on the answer for the essential question: *What comes first? The egg or the nest?*

In Lesson 2 (Appendix B), the teacher/researcher once again challenged the students to work in groups. Each group was given an envelope with all the information they needed to investigate about birds. The teacher prepared all the material beforehand as the entire project was to be carried out in a week. Had time not been such a limiting factor, it would have been interesting to let the students prepare the materials for themselves and to have even more student-centred classes, but due to the time constraints felt, this seemed to be the best way to carry out the project effectively.

The interaction between the students when working together as a group was one of the major concerns of the researcher, as this strategy had not been a normal procedure in the classroom for some time, which could mean that the students were likely to have lost some of the collaboration skills they had developed previously to the lockdown, due to the Covid19 pandemic. Furthermore, this was, indeed, one of the competences that the researcher intended to develop, their ability to cooperate while finding the answer for the essential question together. So, students were encouraged to reflect on their own knowledge by asking

and answering questions, to share their ideas with their groups, to be critical about them but tolerant at the same time.

“Through cooperative learning pupils get a lot of opportunities to practice their group work skills. For instance, during cooperative learning all pupils get the chance to use various speech elements: ask questions, provide answers, give suggestions, and critically reflect on each other's ideas” (Gillies, 2003).

For this activity, each group had to investigate about one kind of bird from 5 different countries, and complete their booklets according to the result of their research. The investigation was carried out with the precious help of iPads, a technological device familiar and particularly interesting for the children. Each group of students (5 groups of 4 students) completed an oriented WebQuest and tried to find the answers to the challenges handed out previously. (Appendix D)

In order to involve each student in the next project's phase, each group was handed out 5 badges, allocating a role to each member. The star badges included an iPad Searcher; a Challenge Reader; a Writer, a Time Keeper and a Speaker to allow the students to develop complementary soft skills, which would improve their collaborative efforts (figure 9). Students chose their roles autonomously within the group and proceeded with identifying and selecting relevant information, negotiating according to their roles and finally sharing their findings.

This strategy goes hand in hand with the acknowledged 21<sup>st</sup> century skills such as collaboration, critical thinking, responsibility, autonomy, and for that reason its pretence became obvious. The 21<sup>st</sup> century learning is about having the courage to change the focus in the classroom from a teacher centred classroom (...) to a student-centred classroom in which children are the discoverers and builders of knowledge.

As a result, the students felt empowered and had control over their learning, which motivated them to deal with the challenges of finding the answers together and encouraging each other to continue investigating.



*Figure 9 - Badges- Roles in group work*



*Figure 10 - Students investigating in groups about their bird*

In lesson plan 3 (Appendix C) the students continued to investigate about nests and how birds build their nests. The result of the students' investigative efforts was the basis for

the Art class participation that week, when the learners were invited to do a Nest Building Challenge (Appendix Q)- using materials such as straw, twigs, cotton wool, leaves... so that they could have a real-life experience of how difficult or easy it was to build a nest that could hold 3 eggs (Figure 11) Working in articulation with the Art teacher, as it should preferably, occur was essential for the outcome of the project. As there was only one week to implement the project in the English classes, encouraging the students to build their nests in the weekly Art class gave the students more time to explore and experience a more engaging hands-on approach to this challenge.

These first three lessons clearly suggested that PBL has a lot of potential to enhance the students' development of 21st century skills and engage them in real-world tasks. Students were learning together and trying to find the answers for themselves, although the researcher noticed that two of the groups weren't working as well as they could, as they found collaborative activities to be quite a challenge for some of the learners.



*Figure 11 - Project's Essential Question*

The groups of students presented the information they had found out about their birds (Black Bird; Starling; Norwich Canary; Red-Billed Leiothrix and Dimond Dove- (Table 3). These

specific birds were chosen because they represent birds from the various countries in the picturebook alluded to by the monuments in the story.

Thus, the teacher prepared the envelopes with “typical” birds from these specific countries/continents, so that the students could relate them to the story.

Portugal	Black Bird
France	Common Starling
England	Norwich Canary
Asia	Red- Billed Leiothrix
Australia	Dimond Dove

*Table 3 - Type of Birds*

To support their presentations, the students made posters, which they then used to present their conclusions to the class. The remaining groups were involved throughout the entire presentation process as the students were required to take notes in their handbooks, which ensured that all the students had an active, participative and collaborative role.

Each student had to fill in their booklets with important information about the other birds (Appendix H) and also to reflect and take notes on how the groups were presenting their work, namely, if they were clear, if their poster was well organised and subsequently, they were asked to give each group and overall qualitative mark. This stage required good critical and assessment skills.

At the end of each presentation, each group told the other group what they thought about their presentation, what they liked the most and what could have been done clearer to help the groups understand how to improve their work in the future. In order to guarantee that meaningful feedback was given, students were provided with three frame sentences for their feedback- 1-One thing I loved... 2-One thing they could do even better next time... 3- One thing they should repeat in a future group work... (Appendix J). As we can see in part one of this report, this was an example of an activity that helped the students to reflect on their learning. It was very interesting to observe as it allowed students to see and reflect on their peers’ assessment while developing their evaluation skills. The presentations and peer

assessment task took two lessons. Students were very motivated to present their presentations with colourful cardboard posters that even had QR codes that cross referenced one to short films about birds, their nests, how they flew in addition to many other interesting findings. The last lesson of the AR research project started off with a quiz game to encourage students to check and assess their own knowledge development along the project, by being able to answer the different questions. Simultaneously, this strategy created a healthy competitive environment, leading to a playful and fun moment, while recapping what was learned.

To conclude the project, students were asked to fill in the last column of the KWL chart (Appendix E) (What I have Learnt...) together with the teacher. Afterwards, they were challenged to do a self-reflection about the whole project carried out during the last 6 lessons.

The self-assessment (Appendix K) was very important as it allowed the learners to become aware of and self-regulate their learning by recording it and critically reflecting on it. By recording what they already knew, how they learned and what they would like to learn next, students were able to have a very interesting and productive conversation, using the English language whenever they could. The use of L1 was not discouraged in some stages like the assessment and reflection moments, since the main goals of these tasks of the project are the development of behavioural/ soft skills and not the language ones, they complement each other. Naturally, some students used L1 to facilitate their communication in key moments.

To conclude the project the students were challenged to draw their dream nest, after watching a video about a little Bird inside a little house. This activity was completed for homework, as there were no more lessons to continue the project (Appendix Q).

The next sub point will focus on providing an analysis of the project and moves on to present the researcher's reflections.

## **2.2. ANALYSIS OF THE PROJECT AND RESEARCHER'S REFLECTIONS**

This project was carefully planned and enthusiastically carried out, as it was for the researcher a challenge to accurately and realistically prove how successful and effective the PBL approach can be. Undoubtedly, the final outcome showed that the upside and advantages outweighs the constraints that existed along the process.

The researcher believes that the highlights of the project started with the theme itself, since the learners related to it immediately. The use of the storytelling represented again a safe but motivating choice, although the book chosen, was a bit ambitious due to its demanding vocabulary especially to some of the students. It also required some mental agility and abstract thinking, so the pre-reading activity was specially worrying for the researcher, nevertheless, overall all, the students were able to understand and get involved by the story. The linguistically weaker students did understand the story, but felt less confident to speak/participate in some moments.

The high point of the project was the group work, it was also the strategy that was more likely to create some obstacles in terms of soft skills management, negotiation capabilities, roles acceptance and others. To minimize the problems the researcher identified the different roles but the students showed some difficulties in assigning them to each group member requiring the teacher's intervention. The researcher, despite having been successful, acknowledges that these type of activities involve constant supervision and mediation from the teacher, being time-consuming and struggling. However, once the "machine is working" the children's enthusiasm, involvement and final result make it all worth.

The peer and self-assessment stage was also crucial and compensating. The ability for children to be critical and reflective was sometimes surprising, which made the researcher wonder if children aren't many times undervalued. All in all, teachers must be willing to work hard, interact more, to accept noisy moments and to be able to deal with unpredictable situations, in order to guarantee that all the intervenients were engaged.

The researcher's filed notes (Appendix P) clearly demonstrate the dedication and effort that was put into the planning and preparation of the project. This could prove to be

challenging as it implied having good time management skills to guarantee that the lesson plan for each lesson was carried out effectively:

“Today was the day that I started doing my AR project. I had so much work in preparing all the lesson plans and materials and I knew that I needed to manage my time really well, in order to get everything done.”

The aforementioned fieldnotes also demonstrate that the story telling activity was a great success. Students enjoy listening to stories, although, once again, time constraints were mentioned. Regardless, the researcher stated that she did accomplish the main goals of the lesson plans. It is interesting to note that the researcher said that she “also noticed that the students with more difficulties were the ones that were participating more enthusiastically in the investigation challenge. Some participated so much more than in a “normal” lesson.”

This motivation may have been due to the way the project was carefully structured and scaffolded allowing students to have the opportunity to discuss and find solutions creatively, share their ideas in context and work collaboratively. Also, as the lessons were student centred, students were challenged to develop their 21st Century Skills, enhancing their “Creactical skills”, since they used both critical thinking skills and creativity to find the answer to the essential question. (Cruz, 2021).

Overall, the proposed activities were dynamic and appropriate for the age group and the researcher specifically mentioned that she really liked the peer assessment done by the students. “I didn’t think this lesson was going to be easy, and it wasn’t. Although it did turn out to be very interesting. Each group, presented their findings and after their presentations their colleagues had to tell them one thing they loved; one thing they could have done ever better next time and one thing they should repeat in a future group work...”

The teacher went on to mention that the students looked like “little adult teachers” giving advice to each other, giving constructive feedback and helping each other out. This activity encouraged the development of social and communication skills by getting children to talk openly about their own and others’ work as is exemplified by the fieldnotes taken: “I felt that there was an incredibly supportive, “non-threatening” environment where the students

felt safe and secure to share their thoughts.” The fieldnotes also demonstrate the role and value of investing in self and peer evaluation as it gives students the power to take control of their learning. As the researcher mentioned in her diary:

“Peer assessment was also promoted as a means to make feedback less daunting for children and to encourage self and peer analysis, as a normal procedure in a project, fostering in this way critical thinking and meaningful learning. This also encouraged the development of their social skills and communication skills. Another conclusion that may be drawn is that one of the biggest challenges that the researcher mentioned when implementing this project was time management. “I wish I had had more time to listen to them. 60 minutes of lesson was not enough for so much engagement and learning.”.

Time management was always the major challenge, as the lesson plans were very ambitious. In effect, each lesson contained many interesting and engaging activities, which proved to require more time to be fully developed. Regardless of this, the researcher considered that she was able to make the project meaningful and to engage the students to learn English while learning about the real world.

Another observation that the teacher wrote down was the importance of the scaffolding strategies which were used and proved to be essential for the weaker students that managed to participate, even if only minimally, during the lessons dedicated to the project. All lesson plans included scaffolding strategies through miming, picture dictionaries, using L1 when necessary. It should be noted that these students’ participation was negatively impacted by 4 or 5 stronger and more extroverted students who participated more during the whole class thereby not allowing other students to participate as much as they could have. It should however be noted that these students were actively involved and engaged throughout the entire project always showing great enthusiasm while conducting the tasks and activities they were challenged with.

## **2.3 ANALYSIS OF INTERVIEWS AND MEETINGS WITH FOCUS GROUP TEACHERS**

As already mentioned, while implementing the project there was a focus group composed by the researcher, 2 ESL teachers and an art teacher. This focus group had one meeting before the project started in order to plan and decide which activities were going to be done. The teachers had the research questions in mind and took notes while implementing the project with their groups. As for the art teacher, his role was to do the nest challenge with the students and help them try to come up with an answer to the essential question “What comes first? The egg or the nest?”

A second meeting was scheduled where all teachers described how the activities were being carried out, if students were engaged and motivated with the project’s theme and if the proposed activities were being successful or not, and why. This was very important for the researcher’s conclusions, as one of the main questions was “What kind of tasks and activities are the most effective for implementing a PBL approach to learning and engaging YLS?”

At the end of the project, individual interviews (Appendix M) were done to the teachers where the researcher tried to find answers to the research’s objectives and questions. One of the ESL teachers that collaborated in the focus group and project said that the students showed great engagement and motivation while doing the project. She said that students were asking questions about the project and if it was going to be carried out until the end of term, if they were going to be able to see the birds in real life, showing a lot of enthusiasm with regards to the theme.

The teacher also mentioned that the students were certainly more engaged in group work activities and in the research/investigation part. The teachers also mentioned that they perceived themselves as facilitators in the classroom and that this was greatly beneficial. Students took responsibility in their learning and actively participated in the activities.

It was also concluded that PBL promoted the development of critical thinking skills, problem-solving abilities and communication skills and that it also provided opportunities for working in groups, finding and evaluating research materials.

In the interviews and conversations with the focus group teachers, we may conclude that all of them agree that including PBL into their lesson plans was very engaging and motivating and also made students learn while doing hand on activities.

One of the teachers mentioned that “ Students were very motivated and engaged and that there was a big shift from the traditional classroom.” The same teacher mentioned that in spite of this type of projects taking a lot of time to prepare, if teachers manage to work collaboratively that the project will certainly be successful. All teachers mentioned that in the end of the project students did acquire 21st skills like collaboration, communication, critical thinking and creativity.

## **2.4 STUDENTS FOCUS GROUP OPINIONS ANALYSES AND STUDENTS SELF-REFLECTIONS**

At the end of the AR project the researcher interviewed some of the students that participated in the project in order to reach to the final conclusions (Appendix N). Some of the questions were a) Did you enjoy this type of lessons? b) Do you think that you learned more about birds? c) Do you think it’s motivating to learn this way? Why?

While preparing the reflection topics to present to the students, the researcher focused once again in the main questions revolving this project, namely, how engaged the students are in this type of approach, how effective was the learning and how beneficial it would be to include PBL in future primary curriculums.

It was consensual that these type of lessons and activities are enjoyable and motivating for the students. Students, actually, liked investigating about birds, they were enthusiastic while preparing their presentations, they enjoyed doing peer assessment and especially trying to make their own nest (Nest Challenge). (Appendix K)

When analysing the students answers to the question of which activities they enjoyed most (figure 12), 37% voted in the Nest Challenge, the activity executed together with the art

teacher and that involved a more hands-on-approach while trying to answer the essential question.

In addition, 26% of the students showed their preference for the working in groups strategy. Almost simultaneously with the investigation part of the project, so it becomes clear, that research through technology, interaction between peers in group work and the practical and experimental part of the project were the ones more meaningful for the learners.

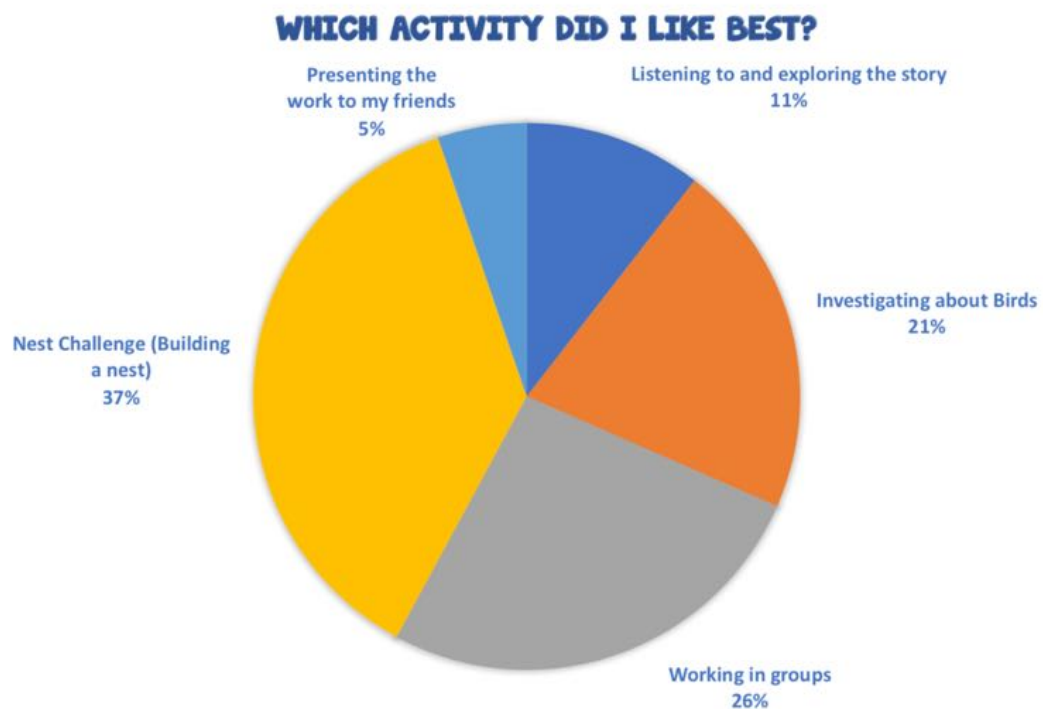


Figure 12 - Which activity did students like best?

The students' reflections matched the teachers focus group's point of view. While examining their opinions, one is lead to believe that the project provided unique and enriching opportunities for students to actively learn in a meaningful way, developing collaboration and teamwork skills and responsibility in their learning. Furthermore, students stated that it would be an advantage to integrate PBL in English learning classes.

On the other hand and curiously enough, when asked about which activity they found more difficult, the most common answers were the group work and the nest building as well.

The students agree that it's easier to accomplish a task together with other people because they can help each other, but on the other hand, there may be situations in which interpersonal issues come up and negotiation and tolerance are mandatory so that collaboration may arise. This may be sometimes problematic (APPENDIX O).

The second most mentioned difficulty was the nest building. It required imagination, creativity and patience so that they created the ideal nest and not break the eggs.

Student A: *“Eu senti mais dificuldade em trabalhar em grupos.”*

Student B: *“Eu achei mais difícil construir o ninho e tive de pedir ajuda aos meus colegas”*

When analysing the students self-reflections (Appendix K) which took place in the last lesson of the project, it became clear that continuing to follow this type of approach would be important for the students and that it would add a value to the whole learning process.

After taking part in the planning, execution and evaluation of their own work in the different stages of the project and bearing in mind the importance of giving the students the sense of ownership, of control over their learning and the chance to make decisions, empowering them, it seemed only natural to involve students in the identification of other relevant themes to be worked in the future, instigating willingness and motivation. The students responded actively and enthusiastically to this challenge, suggesting various relevant themes and topics.

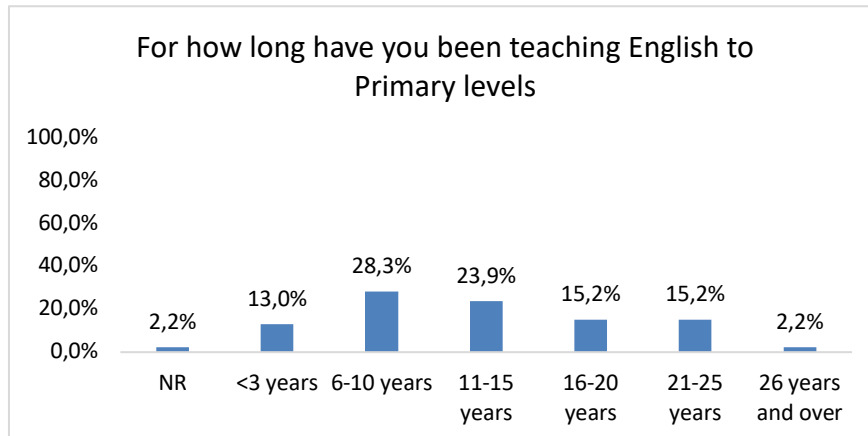
## **2.5 ANALYSES OF QUESTIONNAIRE TO PRIMARY TEACHERS**

In order to collect data to understand the opinions of primary school English teachers in Portugal about the PBL approach, a digital questionnaire in google forms was created and sent to a large number of members of the target audience. In total, there were 46 participants, whose answers to the questions asked were of great relevance for this study and allowed us to reach important conclusions which we will now present. (Appendix R)

## PART III – STATISTICAL ANALYSIS

The data analysed and descriptive statistics was calculated as frequencies (n) and percentages (%) for categorical variables and medians (Mdn) and percentiles (P25-P75) for original variables. Throughout the following section, the results will be taken into account and discussed.

A total of 46 English teachers were included in the quantitative data analysis, 4 (8.7%) males and 41 (89.1%) females; one (2.2%) participant did not provide this information. The most prevalent age group was 36-45 years old (n=23, 50.0%), followed by 46-55 years old (n=13, 28.3%), ≥ 56 years old (n=5, 10.9%), 26-35 years old (n=4, 8.7%) and 23-25 years old (n=1, 2.2%). Porto was the most prevalent city in the sample with a total of 19 (41.3%) participants. Northern Portugal totalized 30 (65.2%) of all responses. Figure 13 shows the distribution of time teaching English to primary levels. The most prevalent categories were 6-10 years (28.3%) and 11-15 years (23.9%).



*Figure 13 - Time teaching English to Primary Levels*

A total of 32 (68.9%) teachers were acquainted with the PBL approach to teach English as a foreign language in the YL classroom and 28 (60.9%) teachers tried to include the PBL approach in their lessons (as aforementioned in Table 4).

	n	%
Acquainted with the PBL approach to teach English as a foreign language in the YL classroom		
NR	1	2.2%
No	13	28.3%
Yes	32	69.6%
Tried to include the PBL approach in your lessons		
No	18	39.1%
Yes	28	60.9%

*Table 4 - PBL approach*

In 19 responses with more than one answer option, the most prevalent reason **not** to include PBL approach on the lessons was lack of knowledge (n=14, 30.4%), as attested in Table 5.

	n	%
I would like to include PBL if I had a work partner	1	2.2%
Don't think it is an important strategy/approach	1	2.2%
Lack of knowledge	14	30.4%
Lack of time	7	15.2%
Lack of resources	6	13.0%
Lack of interest from students and families	1	2.2%

*Table 5 - Reasons not to include PBL approach in lessons*

Table 6 presents the challenges encountered while implementing PBL. The most relevant challenges were time-management (n=16, 34.8%), planning (finding the right resources) and classroom management, both with 15 (32.6%) responses.

	n	%
Planning (finding the right resources)	15	32.6%
Time-management	16	34.8%
Classroom management	15	32.6%
Assessment	5	10.9%
Don't know	2	4.3%
I haven't implemented it yet	1	2.2%
Helping learners acquire skills needed for PBL	1	2.2%

*Table 6 - Challenges encountered while implementing PBL*

Teachers' opinions were very favourable towards learning through projects as a mean of acquiring 21<sup>st</sup> century skills (median=9.0, P<sub>25</sub>=8.0, P<sub>75</sub>=10.0) and doing hands on tasks and more practical activities to make students more engaged and motivated in the classroom (median=10.0, P<sub>25</sub>=8.0, P<sub>75</sub>=10.0).

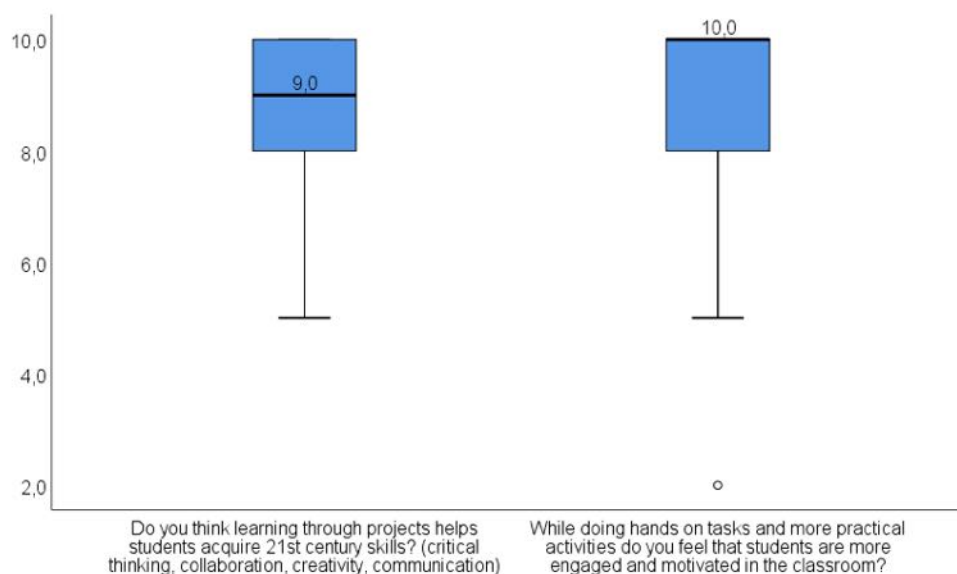


Figure 14 - Opinion towards learning through projects and motivation associated to hands on tasks and practical activities

Almost half of the teacher's sample think PBL may lead to a more authentic/meaningful learning experience (n=22, 47.8% and more than half of the sample think it should be mandatory for teachers to implement PBL activities as part of the curricular strategies (n=25, 54.3%).

	n	%
Do you think PBL may lead to a more authentic/meaningful learning experience		
NR	2	4.3%
No	22	47.8%
Yes	22	47.8%
Do you think it should be mandatory for teachers to implement PBL activities as part of the curricular strategies		
NR	1	2.2%
No	20	43.5%
Yes	25	54.3%

Table 7 - PBL learning characteristics and curricular implementation

The most referred types of summative assessment resources teachers would you use to evaluate learning, following a PBL approach were group presentations (n=36, 78.3%), self-reflections (n=32, 69.6%) and peer assessment (n=23, 50.0%) (Table 8).

	n	%
Self-reflections	32	69.6%
Group Presentations	36	78.3%
Peer Assessment	23	50.0%
Text Production	13	28.3%
Test	5	10.9%
Mind/concept maps	1	2.2%
Portfolio	1	2.2%

Table 8 - Summative assessment resources (following a PBL approach)

About the type of assessment practices that teachers chose to conduct a thorough evaluation of your students, 34 (73.9%) consider them to be sufficient (Figure 3).

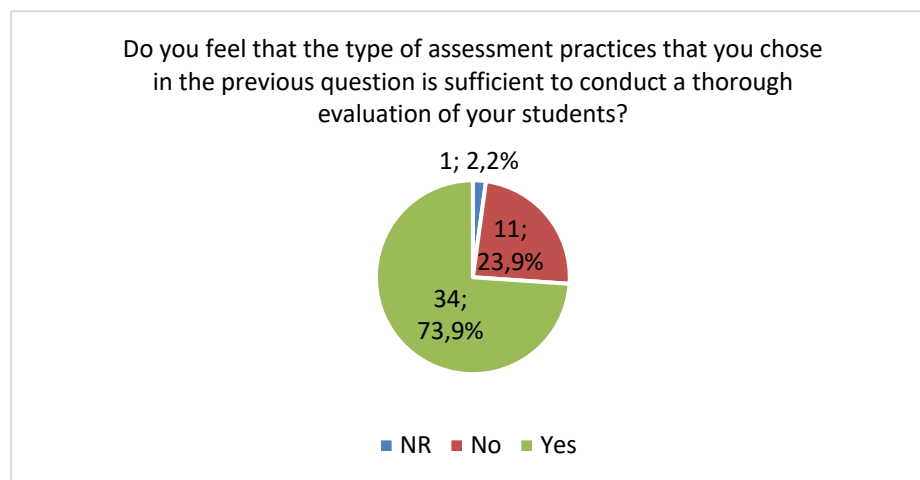


Figure 15 - Assessment practices sufficient to conduct a thorough evaluation of students

Table 9 shows that teacher’s opinion towards learning process using PBL approach is very favorable, namely regarding the agreement of teachers cater for their students’ interests and needs to motivate them to learn (Mdn=9.0, P25=7.0, P75=10.0), PBL approach to learning as a useful strategy to implement the “Perfil dos Alunos à Saída da Escolaridade Obrigatória” as it places them at the centre of the learning process” (Mdn=9.0, P25=7.0, P75=10.0), agreement that course books are being overused to the detriment of the use of other learning

approaches such as a PBL approach” (Mdn=8.0, P25=7.0, P75=10.0) and being in favor of including a PBL approach in lesson plans and lessons (Mdn=9.5, P25=8.0, P75=10.0).

	Med	P25	P75
Do you agree that teachers cater for their students’ interests and needs to motivate them to learn?	9.0	7.0	10.0
Do you think that a PBL approach to learning is a useful strategy to implement the “Perfil dos Alunos à Saída da Escolaridade Obrigatória” as it places them at the centre of the learning process”?	9.0	7.0	10.0
Do you think that course books are being overused to the detriment of the use of other learning approaches such as a PBL approach?	8.0	7.0	10.0
Are you in favor of including a PBL approach in your lesson plans and lessons?	9.5	8.0	10.0

*Table 9 - Opinion towards learning process using PBL approach*

The results obtained as a result of the questionnaire lead one to conclude that the majority of the participants are in favor of including a PBL approach in their lesson plans and lessons, but, due to a lack of methodological knowledge, time, and planning procedures, PBL is viewed as not being an easy strategy to implement. Most teachers agree that these type of lessons/projects lead to meaningful learning experiences and that students are more engaged while doing hand on activities. It seems to be evident that while doing this type of projects 21st century skills are promoted.

## FINAL CONSIDERATIONS: A REVIEW OF THE JOURNEY TAKEN

This study was set up in order to understand if including PBL in a Primary English Curriculum is a successful methodology, helping students develop important skills and competences that are required to create the active citizens of tomorrow. Both teachers and students were able through the different kinds of interaction they instigated and the various roles they played, to benefit greatly from the various stages of the project.

However, despite the unquestionable success of the project, the data collected, has clearly proven that more time is required in order to maximize the learning potential of the project. Regardless of this, it may be stated that the time dedicated to it was minimally sufficient for one to explore and analyze the project and its benefits, thereby allowing for the development of the different stages of the project and our overarching goal to be achieved.

Due to time constraints inherent to the conclusion of this work, the researcher wasn't able to interview the entire group of students and analyze their answers, in order to back up the sample group's opinions in a more detailed manner with regards to the students' motivation levels and the importance of developing 21<sup>st</sup> century skills such as critical thinking, problem solving, collaboration and creativity, among others. Nevertheless, the sample used was sufficient to make relevant reflections and draw important conclusions.

Furthermore, it must be acknowledged that the practices, as well as the techniques and data collection tools chosen, together with the participation of the class, were implemented in a specific teaching context, so their applicability in other educational realities could lead to different results, meaning that the present study is limited in scope to the teaching / learning context of the school where the action research was carried out. The students have one hour English class every day and this fact alone enables the implementation of this kind of projects without negatively affecting the development of the *Aprendizagens Essenciais*, which may not be as simple in public schools, where students only have two hours of English per week. So, finding the balance between keeping the students motivated and engaged while developing their essential skills and following the mandatory curriculum, namely, the *Aprendizagens Essenciais* is undoubtedly a difficult task, that the researcher did

not have to face. We will now move on to answering the research questions presented at the beginning of this report.

The research questions raised in this study were:

- 1) How beneficial would it be to include PBL in a curriculum for YLS that aims to follow the recommendations of the *Perfil do Aluno à Saída da Escolaridade Obrigatória*?
- 2) In what ways does PBL promote the development of 21st century skills in YLS?
- 3) What kind of tasks and activities are the most effective for implementing a PBL approach to learning and engaging YLS?

With regard to the first question, and as the theoretical framework of this report demonstrates, including PBL in a curriculum for YLS follows the recommendations of the *Perfil do Aluno à Saída da Escolaridade Obrigatória*, placing the students at the centre of learning through implementing a holistic approach to learning. Moreover, PBL implies that children have different and more active roles in class, that linguistic acquisition is complemented by behavioral skills, and a more flexible attitude, being able to take different roles in the community and to have a more practical view inspired by hands on projects. It is also clear that communication and creativity is more and more important in every stage or context of our lives, so they underlie the success of children at school and of adults in their community.

Regarding the second question, the activities and strategies used throughout the project, clearly enabled the researcher to analyze children's ability to cooperate, think critically and communicate while developing a) the project b) their language skills and c) their autonomy.

With regard to the third research question, understanding how to implement PBL by involving students and creating meaningful learning, this project allowed us to conclude that there is a great diversity of practices and resources which, contribute to the development of the whole child, namely: (a) choosing resources that are meaningful and appealing to students, such as games and picture books, motivating them to engage proactively in their

learning experience while respecting the characteristics and needs of YLS; (b) fostering challenges that promote and even expand on students' creativity such as hands-on-activities (Nest Challenge) c) implementing collaborative practices that allow students to rely on their peers, to distribute tasks among themselves and to learn under the guidance of a teacher who is a facilitator of knowledge thereby promoting the development of autonomy skills; d) asking questions that encourage students to think or reflect about their own learning and (self-assessment strategies, and resources such as the KWL chart); e) encouraging students to be curious, to ask their own questions and to take the initiative to autonomously look for what they want to know, using digital resources to access information f) involving students in problem solving practices, calling not only on knowledge and skills in English, but also in other areas (Arts)- answering essential questions; g) group work presentations. All of the above mentioned, should preferably revolve around themes that they can relate and find meaning.

As already mentioned, due to the short period of implementation of the project, it cannot be stated that students clearly became problem-solvers who are more creative and more capable of dealing with the demands of today's world, but it became clear that an important contribution was made in this sense and that the project in question made the class become more aware of the importance of developing these skills.

According to what was observed in the classes and the feedback provided by the students, not only during the actual lessons, but also in the questionnaires and interviews that were carried out, it may be considered that the students responded positively to these practices and resources, taking into account the target objectives. Their motivation and commitment were constantly visible, they were actively involved in the different activities.

This leads to the conclusion that in the future it would be pertinent to develop a similar study, in another Primary educational context, to find out if it would be possible to carry out the same type of practices and whether or not the same type of results would be obtained in a different teaching / learning context.

Secondly, it would be relevant to extend the sample of teachers interviewed. Apart from speaking to primary school English teachers teaching in a national context, it would be

interesting to extend the questionnaires to teachers teaching in an international context and then to compare the results obtained, in order to find out if there are differences in the opinions of teachers from different countries.

To conclude, it is our firm belief that schools, and teachers must prepare resilient students, who are both creative and innovative, who will be able to assert themselves as proactive citizens, available to embrace new challenges that await them. As educators, teachers must bet on integral training, providing all students with an educational space in which each one feels happy, accompanied in his/her uniqueness, and stimulated to achieve their fullest personal development as well-rounded learners and not mere language students.

Thus, the ELT classroom context should be based on curricular and pedagogical differentiation and regular work with groups of students defined by levels of competence in the English language domain. Every year syllabuses should be revised, each group should follow the syllabus and additional material not only related to it, but also seek for external sources and tools, such as stories, songs, videos, games, small projects, etc., that teachers find necessary to complement the content being taught in the coursebook.

This project and adventure has undoubtedly made me a more motivated and well-prepared teaching professional for what lies ahead, fully aware that there are even more challenging contexts with even more challenging students, but that despite everything, students deserve my best practices, all my efforts to make them happy and motivate students to preparing them for this ever-changing future. Without this purpose, our role in education is meaningless.

After years of working as a teacher, and trying to keep up with the innovative approaches, this project made me realize, once more that there's so much to be done and that letting the guard down is not a possibility... building memorable and meaningful learning experiences... is our job.

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## APPENDICES

### APPENDIX A – ACTION RESEARCH- LESSON PLAN 1

SCHOOL:	
STUDENT TEACHER:	
<b>THEME: Project Based Learning – Action Research Project</b>	
TIME:	03:30- 04:30 pm (60m)
DATE:	02 -11-2021
CLASS LEVEL	4th Year Primary (A1/A2)
CLASS SIZE	20
<b>CONTEXTUALIZATION:</b>	
<p>This lesson is going to be the first one of seven lessons where the students will be able to learn through a Project Based Learning approach and gain knowledge and skills by investigating and responding to an authentic, engaging, and complex challenging question.</p> <p>To start off the project, stage 1 will be the <b>Engaging</b> step. The T is going to present the theme to the students through a story, a theme which she already knows that they will be interested in and will clarify the learning objectives for the students.</p>	

A pre-reading activity will be done so that Ss get acquainted with the vocabulary and develop their critical thinking skills and also their intercultural awareness since various well-known buildings will be mentioned and shown throughout the lesson.

The story will be read to the students in a reading corner which will be set up in the classroom to create a real and motivating storytelling environment.

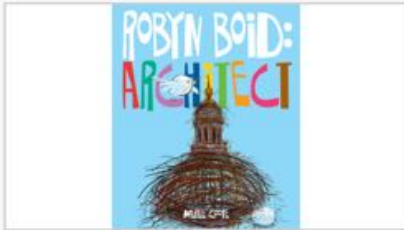
After reading the story the T will write the Essential Question on the board, which will be an open-ended question that students will be challenged to answer at the end of the seven lessons. A handbook will also be handed out where students will be able to take down their notes throughout the project and record the findings they have learnt.

The display of the classroom will be organized in order to create a working environment facilitating investigation, collaboration and to allow them to interact and communicate more naturally.

<b>SUMMARY</b>	Introduction to the T's Action Research Project (Project Based Learning) through a story, aiming at engaging students to answer an open-ended question. Guidelines for the next lessons and clarifying the learning objectives.
<b>GRAMMAR IN CONTEXT</b>	The Ss will recognize and understand the interrogative form and question words when answering to questions related to the story.
<b>LANGUAGE SKILLS</b>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"><input checked="" type="checkbox"/></div> <div style="text-align: center;"><input checked="" type="checkbox"/></div> <div style="text-align: center;"><input checked="" type="checkbox"/></div> <div style="text-align: center;"><input checked="" type="checkbox"/></div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <span>Listening</span> <span>Speaking</span> <span>Reading</span> <span>Writing</span> </div>

<p><b>EVIDENCE OF LEARNING</b></p>	<p>Ss will be able to recognize the vocabulary of the story with the aid of images which will be provided by the T;</p> <p>Ss will be able to share an opinion about the story;</p> <p>Ss will be able to understand what their investigation topic is and what their end goal is by filling in a KWL chart.</p>
<p><b>21<sup>st</sup> CENTURY SKILLS</b></p>	<p>Critical Thinking, Communication, Collaboration.</p> <p><b>Character Qualities:</b> curiosity, social and cultural awareness;</p>
<p><b>ASSESSMENT</b></p>	<p>Participation and involvement of each learner throughout the lesson. T will note down her observations in her teaching journal and later reflect on them.</p>
<p><b>ANTICIPATED PROBLEMS AND SOLUTIONS</b></p>	<p>Ss may need some scaffolding strategies to understand exactly what is intended for them to do from the beginning to the end of the project. Some vocabulary of the story is quite specific and related to architecture, so T needs to make sure Ss understand these terms. Using L1 sometimes will probably be needed.</p> <p>Time management can also be challenging because the proposed activities are lengthy and will take time especially if the Ss ask too many questions. If there isn't enough time, the T might leave the KWL chart filling for the next lesson and do it calmly with the Ss on the day after the story.</p>
<p><b>RESOURCES   MATERIALS NEEDED *</b></p>	<p>Power point presentation with pre-reading photos and vocabulary; Power point presentation with pictures to scaffold target vocabulary;</p>

Story Book: Robyn Boid-Architect, by Maree Coote;  
 Project Handbook for students to take down their notes and  
 write the essential question for their investigation;  
 Interactive board.



1



2



3



**Vocabulary Drilling and discussion**

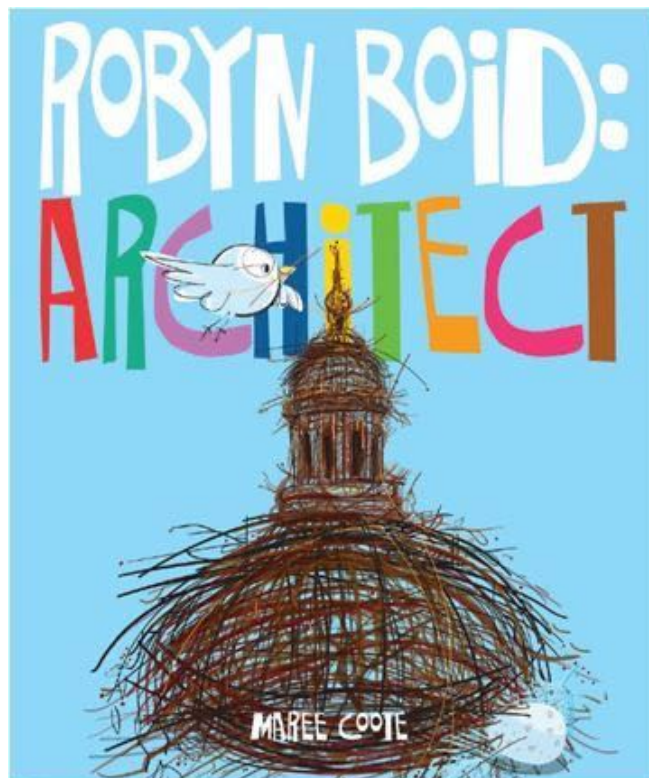
<b>Architect</b>	<b>Shapes</b>	<b>Right shape</b>
<b>Builder</b>	<b>Designer</b>	<b>Cylinders and cones</b>

**Marked for hours and hours**      **Where does my egg fit in?**

**A nest is not a nest if there is no where for an egg to rest...**

**Think outside the circle**

**Out of the blue... an idea came to her**

## APPENDIX B – ACTION RESEARCH- LESSON PLAN 2

SCHOOL:	
STUDENT TEACHER:	
<b>THEME: Project Based Learning – Action Research Project</b>	
TIME:	03:30– 04:30 pm (60m)
DATE:	03 -11-2021
CLASS LEVEL	4th Year Primary (A1/A2)
CLASS SIZE	20
<b>CONTEXTUALIZATION:</b>	
<p>After having heard the story about <i>Robyn Boid- Architect</i> and filling in the first two columns of the KWL chart, students should be motivated and curious to answer all the questions that came up during the previous lesson, like for example, <i>Which materials do birds need to make their nests? How long does it take a bird to make its' nest...</i> and also find the answer for the Essential Question: <b><i>What comes first the egg or the nest?</i></b></p> <p>In this lesson, students are going to investigate about 5 different kinds of birds from 5 different countries spoken about in the previous lesson and complete their booklet. Through a technological device- Ipad, each group of students (5 groups of 4 students) will do an oriented WebQuest and try to find the answers to the challenges given inside the envelope, which the teacher will hand out to each group.</p> <p>Each student will have a badge and a role (Writer, Ipad Searcher, Challenge Reader, Timekeeper and Speaker). Ss will choose their roles autonomously with their groups.</p> <p>Ss will have to prepare what they are going to share with the class and the teacher in the next lesson.</p>	
SUMMARY	Investigating about 5 species of birds of 5 different countries by filling in a fact file sheet and preparing a presentation to share with the class.
GRAMMAR IN CONTEXT	The Ss will recognize and understand instructions and information about what they are told to search for.
LANGUAGE SKILLS	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"><input checked="" type="checkbox"/> Listening</div> <div style="text-align: center;"><input checked="" type="checkbox"/> Speaking</div> <div style="text-align: center;"><input checked="" type="checkbox"/> Reading</div> <div style="text-align: center;"><input checked="" type="checkbox"/> Writing</div> </div>
EVIDENCE OF LEARNING	<p>Ss will be able to understand the tasks written on the investigation sheet.</p> <p>Ss will be able to search for the correct information and take notes.</p> <p>Ss will manage to prepare a presentation to share with the rest of the class and teacher.</p> <p>Ss will be able to understand what they need to investigate about and what their end goal is.</p>

<b>21<sup>st</sup> CENTURY SKILLS</b>	Digital ICT Literacy, Communication, Collaboration; Character Qualities: curiosity, social and cultural awareness
<b>ASSESSMENT</b>	Participation and involvement of each learner throughout the lesson and with their group. T will note down her observations in her teaching journal and later reflect on them.
<b>ANTICIPATED PROBLEMS AND SOLUTIONS</b>	Ss will most certainly need some guidance while looking through the internet searching for their answers. T will scaffold each group by moving round the classroom and helping Ss complete the tasks.  Trying to decide which role each student will have in the group autonomously might need the T intervention as Ss are not used to choose these roles by themselves.
<b>RESOURCES   MATERIALS NEEDED *</b>	Project Handbook for students to take down their notes. Envelopes with 5 different birds to investigate about. IPads (1 per group) Badges for students to wear when roles are decided.

<b>STAGE TIME INTERACTION</b>	<b>PROCEDURE</b>	<b>AIM</b>	<b>SCAFFOLDING STRATEGIES</b>	<b>LEARNING OBJECTIVES</b> (ANEXO- APRENDIZAGENS ESSENCIAIS)
15:30  Bridge In (Motivation) (2 min)  T↔Ss  Ss↔T	1- Class opening routine. T greets Ss and asks about what they did in the previous lesson.	1 - Set Ss in the mood for the English lesson and motivate students to continue to investigate about Birds and Architecture (nests).	1-Facial expressions; pointing to essential question which will be stuck on the wall.	1.6  2.1.1 2.1.2  2.3.3
	2-T will ask students to sit down in their groups. (T has already organized the groups beforehand so that		2- T walks round the classroom guiding the groups and helps with their research work	2.2.1 2.2.3

<p><b>1<sup>st</sup> Activity: Let's investigate!</b> (35m)</p> <p>T↔Ss Ss↔Ss</p>	<p>they are mixed ability groups)</p> <p>T explains what each group needs to investigate about, and that S must be very careful with the Ipad.</p> <p>T tells students to choose who will be who and put the badges on.</p> <p>T hands out an envelope to each group.</p>	<p>2- Getting Ss ready for teamwork and investigation.</p> <p>Ss must be able to work as a team and fulfill the role that was chosen for them.</p>	<p>and any doubts they might have.</p> <p>T looks at the time and makes sure Ss are managing it correctly.</p> <p>T projects a digital watch on the board to help the timekeeper.</p>	<p>2.3.1</p> <p>2.4.1</p> <p>4.2</p> <p>4.2.1</p> <p>4.2.3</p> <p>4.3</p> <p>4.5</p> <p>4.6.3</p>
<p><b>2<sup>nd</sup> Activity: Preparing Poster for Presentation</b> (20m)</p> <p>Ss↔Ss</p>	<p>3- Ss start preparing their poster with all the facts and information that they want to share with the class in the next lesson.</p>	<p>3- Ss should be able to select the correct information and write it down clearly to make a poster.</p>	<p>3- T shows an already made poster of a different bird so that students can understand what kind of poster they can make.</p> <p>T continues to walk round the classroom and talks to each group while they are working, giving them suggestions, or asking them open ended questions to make them think.</p> <p>In the envelope T provides Ss with photos of their birds that they can use to stick on their poster.</p>	<p>4.1.3</p> <p>4.2</p> <p>4.2.1</p>

<p><b>Wrap Up</b></p>	<p>6- T asks Ss to tidy up and to keep the information to themselves about what they have investigated.</p> <p>T asks students to leave quietly to the sound of a bird singing- Ss can try to identify which bird sound it is.</p>	<p>6- To make sure that Ss were able to investigate about their bird and also about how to make a nest.</p>	<p>6- T goes to each group and congratulates their good teamwork.</p> <p>T uses the sound of one of the birds that was presented during the lesson.</p>	<p>2.1.1</p> <p>2.1.2</p>
<p>Further ideas and resources</p>				
<p>Personal notes/ Other considerations</p>				

\* RESOURCES | MATERIALS NEEDED

HANDBOOK FOR STUDENTS' INVESTIGATION

## Hummingbird




**Habitat:** near open woodlands

**Diet:** nectar, tree sap, small insects, spiders

**Young:** size of a jelly bean when born, the female raises the babies alone

**Fun Fact:** the male dances to attract the female

FORM 1\_A1 about birds

My notes 

All about \_\_\_\_\_

<b>Habitat</b> <small>Where do they live?</small>	<b>Diet</b> <small>What do they eat?</small>	<b>Young</b> <small>What are their babies like?</small>

Nests: \_\_\_\_\_

FORM 1\_A1 about birds

EXAMPLE OF FACT SHEET INSIDE  
ENVELOPE

**Black Bird**



The name of this bird in Portuguese is \_\_\_\_\_

Where can you find Black Birds? \_\_\_\_\_

Habitat: \_\_\_\_\_

Diet: \_\_\_\_\_

Young: \_\_\_\_\_

Fun Fact: \_\_\_\_\_

Here are some suggestions:

<https://www.vinehousefarm.co.uk/birds/blackbird>



Listen to the sound that the black bird makes:

Do you recognize it? Have you heard it before?



**Blackbird nesting - from building the nest to leaving the nest** (don't watch the whole video - just use the important information)



**Don't forget to draw the Black Bird's nest and see what it is made of...**



## APPENDIX C – ACTION RESEARCH- LESSON PLAN 3

SCHOOL:				
STUDENT TEACHER:				
<b>THEME: Project Based Learning – Action Research Project</b>				
TIME:	03:30 – 04:30 pm (60m)			
DATE:	04 -11-2021			
CLASS LEVEL	4th Year Primary (A1/A2)			
CLASS SIZE	20			
<b>CONTEXTUALIZATION:</b>				
<p>Students have been divided into 5 groups of 4 and have investigated about 5 different species of birds, from 5 different countries. They have also investigated about nests and how these birds build their nests.</p> <p>In Art class, during the same week, Ss have been doing a Nest Building Challenge- using materials such as straw, twigs, cotton wool, leaves... so that they can have a real-life experience of how difficult or easy it is to build a nest that can hold 3 eggs.</p> <p>In this lesson, the groups of students will present what they have found out about their birds (Black Bird; Starling; Norwich Canary; Red-Billed Leiothrix and Dimond Dove).</p> <p>They will have their posters ready and while they are telling their classmates and teacher what they found out about these birds the other groups will be taking notes in their handbook.</p> <p>They will also have the opportunity of doing peer assessment at the end of each presentation. Each group will tell the other group what they thought about their presentation, what they liked the most and what could have been done in a clearer way. They will be guided with three sentences for their feedback- 1-One thing I loved... 2-One thing they could do even better next time... 3- One thing they should repeat in a future group work.</p>				
<b>SUMMARY</b>	Presentation of each groups' investigation. Peer assessment.			
<b>GRAMMAR IN CONTEXT</b>	The Ss will be able to communicate using the English language and using the correct verb tenses and vocabulary while doing their presentations. When giving feedback Ss should be able to use these structures "What I liked best was... I thought this fact was very interesting..."			
<b>LANGUAGE SKILLS</b>	<input checked="" type="checkbox"/> Listening	<input checked="" type="checkbox"/> Speaking	<input checked="" type="checkbox"/> Reading	<input checked="" type="checkbox"/> Writing

<b>EVIDENCE OF LEARNING</b>	Ss will be able to talk about and present what they have investigated about in a clear way. Ss will be able to take notes about what the other students are presenting. Ss will assess each other (peer assessment) and give their opinions on what was presented (feedback). Ss will be engaged to follow other groups' presentations.
<b>21<sup>st</sup> CENTURY SKILLS</b>	<b>Learning skills:</b> Communication, Collaboration; <b>Character Qualities:</b> social skills; curiosity, social and cultural awareness
<b>ASSESSMENT</b>	Participation and involvement of each learner throughout the lesson and with their group. T will note down her observations in her teaching journal and later reflect on them.
<b>ANTICIPATED PROBLEMS AND SOLUTIONS</b>	Ss will probably need some help in their peer assessment (especially with the first group) to understand exactly how they should do it and in way in which they don't "exaggerate" with their comments. The objective of peer assessment is that they improve their social skills and communication and give feedback on what they thought about the other groups' presentations.  Time management might also be a problem so T must give each group about 5/10 minutes to present and other 5/10 minutes for feedback.
<b>RESOURCES   MATERIALS NEEDED *</b>	Posters; Interactive board; Peer assessment guidelines.

<b>STAGE TIME INTERACTION</b>	<b>PROCEDURE</b>	<b>AIM</b>	<b>SCAFFOLDING STRATEGIES</b>	<b>LEARNING OBJECTIVES (ANEXO-APRENDIZAGENS ESSENCIAIS)</b>
15:30 <b>Bridge In (Motivation)</b> (2 min) T↔Ss	1- Class opening routine. T greets Ss and explains that in this lesson Ss are going to listen to the presentations of each group.	1 - Set Ss in the mood for the English lesson and prepare them to listen and take notes while listening to their friends.	1-Facial expressions; pointing to essential question on the wall.  Write on the board the title: "Presentations" and the word "Listen".	1.6  2.1.1 2.1.2 2.3.3
				2.1 2.1.1

<p><b>1<sup>st</sup> Activity: Presentation of bird facts to class (50m)</b></p> <p>T↔Ss Ss↔Ss</p>	<p>2- T explains that while the presentations are being done that they should take notes in their Handbooks.</p> <p>T also explains that at the end of each presentation that the Ss should give their opinion on what was presented using language like: “What I liked best was... I thought this fact was very interesting...” and should fill in their peer assessment sheet.</p> <p>T explains the criteria for giving the groups feedback.</p>	<p>2- Ss should be able to listen and take notes of what is being presented.</p> <p>Ss should give feedback to each group giving their opinion.</p>	<p>2- T writes down on the board language that can be used for their peer assessment and projects handbook page in interactive board to guide them while they are taking their notes.</p> <p>T also shows the videos that the group asks for in the computer so that it makes their presentations more engaging.</p> <p>T also gives students with more difficulties a card which will allow them not to fall behind.</p>	<p>2.2.3 2.3.3 2.3.5 2,4 2,4.1 2.5 2.5.2 2.6.2 4.1 4.1.1 4.1.2 4.1.3 4.2 4.2.1 4.2.3 4.3 4.3.2 4.4 4.4.1 4.4.2 4.6 4.6.2 4.6.4</p>
<p><b>Wrap Up (5 min)</b></p>	<p>6- T tells Ss that if they want to investigate a little more about any bird that wasn't theirs that they are welcome too and that they can bring more interesting facts to share in class.</p>	<p>6- To get Ss motivated and eager to learn more about the theme.</p>	<p>6- T congratulates all Ss for their work and presentations and focuses on specific details giving her feedback to the groups too.</p>	
<p>Further ideas and resources</p>				
<p>Personal notes/ Other considerations</p>				

## APPENDIX D – ACTION RESEARCH- LESSON PLAN 4

SCHOOL:			
STUDENT TEACHER:			
<b>THEME: Project Based Learning – Action Research Project</b>			
TIME:	03:30- 04:30 pm (60m)		
DATE:	09-11-2021		
CLASS LEVEL	4th Year Primary (A1/A2)		
CLASS SIZE	20		
<b>CONTEXTUALIZATION:</b>			
<p>This lesson will be the conclusion of the AR Research Project. Students will start the lesson with a Quiz Game to encourage their awareness of the progress they have made and to self-assess the project. Following the quiz game, the Ss will be asked to fill in, together with the T, the last column of the KWL chart (What I have Learnt...).</p> <p>After the KWL chart, the students will do a self-reflection about the project and these last eight lessons.</p> <p>In the end, Ss will be challenged to make their dream nest, after watching a video about a little Bird inside a little house. This activity will be finished for homework.</p>			
SUMMARY	Self- reflection about AR Bird Project. Conclusion.		
GRAMMAR IN CONTEXT	The Ss will be able to communicate using the English language and using the correct verb tenses. They should use structures like I think... I would like... This was good... This wasn't so good.		
LANGUAGE SKILLS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Listening	Speaking	Reading
			<input checked="" type="checkbox"/>
			Writing
EVIDENCE OF LEARNING	<p>Ss will be able to complete a multiple-choice quiz about the theme worked in class.</p> <p>Ss will be able to complete the last column of a KWL chart- What I have learnt- and show evidence of learning.</p> <p>Ss will use their creativity to make an imaginary dream nest.</p>		
21 <sup>st</sup> CENTURY SKILLS	<p><b>Learning skills:</b> Communication, Collaboration; Creativity; Critical Thinking</p> <p><b>Character Qualities:</b> social skills; curiosity, social and cultural awareness</p>		
ASSESSMENT	<p>Participation and involvement of each learner throughout the lesson. Involvement in the activities.</p> <p>T will note down her observations in her teaching journal and later reflect on them.</p>		
ANTICIPATED PROBLEMS AND SOLUTIONS	The T will need to be very organized in managing her time otherwise there will not be enough time to complete all 3 activities.		

<b>RESOURCES   MATERIALS NEEDED *</b>	Handbook- All about Birds; Quiz Game worksheet; White paper with rubric giving students instructions on what they need to do; Interactive board.
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STAGE TIME INTERACTION	PROCEDURE	AIM	SCAFFOLDING STRATEGIES	LEARNING OBJECTIVES (ANEXO- APRENDIZAGENS ESSENCIAIS)
15:30 <b>Bridge In (Motivation)</b> (2 min)  T↔Ss	1- Class opening routine. T greets Ss and explains that this will be the last lesson about this theme.  T asks Ss to prepare their pencil and eraser.	1 - Set Ss in the mood for the English lesson and prepare them for the first activity.	1-Facial expressions; pointing to Ss pencil case so that they have their material ready to start.	2.1 2.1.1 2.1.2  2.3.3
<b>1<sup>st</sup> Activity: Multiple Choice Quiz Game</b> (10m)  T↔Ss Ss↔Ss	2- T explains that Ss are going to do a small multiple choice quiz game and that they need to circle the correct answer.  T starts the quiz.  In the end T collects the Quiz and takes it home to correct but looks through some of the answers with Ss.	2- Ss should be able to answer the questions easily as they are being read.	2- T projects the Quiz on the interactive board.  If Ss need support, T will repeat the question twice.	1.6  2.1 2.1.1  2.2.3 2.3.3 2.3.5  4.1 4.1.1 4.1.2  4.2 4.2.1
<b>2<sup>nd</sup> Activity: KWL chart</b> (20 min)	3- T asks students to open their hand booklets on KWL chart so that together they fill in the last column- <i>What they have learnt with this project.</i>  <i>Answer Essential Question- What comes first the egg or the nest?</i>	3- Ss should participate actively and show that they found out the answers to all the initial questions.	3- T asks Ss that are less participative to participate and says that they may use L1 if they are finding it hard to answer in English.	4.4  4.4.1  4.4.2




<b>3<sup>rd</sup> Activity: Self-Reflection (20 min)</b>	4- T hands out a self-reflection sheet and reads the steps/questions out loud so that students may reflect on the project and their work.	4- Ss should be able to self-reflect about these last eight lessons.	4- T goes to Ss place to help them understand the question and do their self-reflection in a guided way.	4.6.1 4.6.2 4.6.4
<b>4<sup>th</sup> Activity: My dream nest (5 min)</b>	5- T shows a small video of a Bird entering a dream nest with a house inside and challenges the students to draw (be architects of) their own dream nest, inspired by the story they heard of Robyn Boid. This is a task which will be done for homework.	5- Ss should use their creativity and inspire themselves in the video.	5- T talks about her dream nest so that Ss get some ideas.	4.5
<b>Wrap up</b>	6- T says goodbye to the Ss and finishes the lesson.	6- Ss should tidy up calmly and take their work home.	6- T tells Ss that they were really good in doing this project.	
Further ideas and resources				
Personal notes/ Other considerations				

\* RESOURCES | MATERIALS NEEDED

Quiz Game

**Quiz Game- All about Birds...**



1. LISTEN. WHICH KIND OF BIRD IS SINGING?			
a. Dimond Dove	b. Canary	c. Red Billed Leiothrix	
2. WHICH OF THESE MATERIALS DONT BIRDS USE TO MAKE THEIR NESTS?			
a. Stone	b. Grass	c. Twigs	
3. LOOK AT THE PICTURE. WHICH BIRD IS IT?			
a. Black Bird	b. Starling	c. Red Billed Leiothrix	
4. WHICH BIRD IS INCLUDED IN A FOOTBALL CLUB'S SYMBOL?			
a. Black Bird	b. Dimond Dove	c. Canary	
5. WHICH BIRDS FLY IN GROUPS AND MAKE BEAUTIFUL SHAPES IN THE SKY?			
a. Black Bird	b. Canary Bird	c. Starling	
6. WHICH OF THESE BIRDS IS BLACK AND HAS GOT AN ORANGE BEAK?			
a. Red Billed Leiothrix	b. Starling	c. Black Bird	
7. WHICH BIRDS FLY REALLY FAST?			
a. Starling	b. Dimond Dove	Black Bird	
8. WHICH BIRD MAKES A SOUND THAT SOUNDS LIKE AN OWL?			
a. Dimond Dove	starling	c. Canary	
9. WHICH BIRD HAS THE NAME OF SQUALS WHEN THEY ARE BABIES?			
a. Black Bird	b. Dimond Dove	c. Canary	
10. WHICH BIRD IS TYPICAL IN NEW ZEALAND AND AUSTRALIA?			
a. Canary	b. Black Bird	c. Starling	

## APPENDIX E- KWL CHART- ALL ABOUT BIRDS

TOPIC: All about birds and nests

WHAT I <b>K</b> NOW	WHAT I <b>W</b> ANT TO KNOW	WHAT I <b>L</b> EARNED
<ul style="list-style-type: none"> <li>• We know that some birds live in nests</li> <li>• Birds are part of the bird group</li> <li>• Nests can be built in different shapes.</li> <li>• Nests are for birds to rest/live</li> <li>• Nests are difficult to build</li> <li>• Nests can be anywhere</li> </ul>	<p>How hard is it to build a nest?</p> <p>How long does it take to build a nest?</p> <p>To investigate about different kind of birds.</p>	<ul style="list-style-type: none"> <li>• The egg comes first but it needs a nest to rest.</li> <li>• 6 different kinds of birds &amp; their characteristics</li> <li>• Nests are difficult to build.</li> <li>• It takes about 30 minutes to build a nest.</li> <li>• An egg needs a safe space to rest</li> </ul>

APPENDIX F – HANDBOOK FOR STUDENTS' INVESTIGATION (FIRST PAGES)

# ALL ABOUT birds



Name: \_\_\_\_\_

<https://youtube/8U48-yS94AJ>



# Hummingbird



Habitat: near open woodlands

Diet: nectar, tree sap, small insects, spiders

Young: size of a jelly bean when born, the female raises the babies alone

Fun Fact: the male dances to attract the female

## My notes



All about \_\_\_\_\_

<b>Habitat</b> Where do they live?	<b>Diet</b> What do they eat?	<b>Young</b> What are their babies like?

Nests: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



APPENDIX G—EXAMPLE OF FACT SHEET INSIDE ENVELOPE

# Black Bird



The name of this bird in Portuguese is \_\_\_\_\_.

Where can you find Black Birds? \_\_\_\_\_.

Habitat: \_\_\_\_\_

Diet \_\_\_\_\_

Young: \_\_\_\_\_

Fun Fact: \_\_\_\_\_

Here are some suggestions:

<https://www.vinehousefarm.co.uk/birds/blackbird>



Listen to the sound that the black bird makes:

Do you recognize it? Have you heard it before?



Blackbird nesting - from building the nest to leaving the nest (don't watch the whole video- just use the important information)



Don't forget to draw the Black Bird's nest and see what it is made of...

# APPENDIX H- EXAMPLE OF FILLED IN BOOKLET INVESTIGATION

## My notes



All about Comarops

### Habitat

Where do they live?

They live in small forests with small trees

### Diet

What do they eat?

Varied of seeds, insects, centians, fruits, berries and vegetables.

### Young

What are their babies like?

When Comarops have 15 days they live in the nest

Nests: twigs, sticks, leaves.



FORM 4\_All about birds

**APPENDIX I- EXTRA HOMEWORK- DRAW YOUR CREATIVE NEST**



**Draw a super creative nest! Inspire yourself on the video and in the story about Robyn Boid Architect. What would you like your nest to look like?**










FORM 4\_All about birds

APPENDIX J – PEER ASSESSMENT HANDOUT

# Peer Assessment

Group 1 | \_\_\_\_\_

The group spoke clearly.	
Their work was organized.	
They worked well as a group. (collaborated)	
They investigated more facts about the animal. (investigators)	
The group managed to use the time well.	
I understood everything and learnt new things.	
I really enjoyed learning about this BIRD.	
Overall I give this group (1-5) 5 being maximum	

## How I felt about the presentation (Speaking)

1. One thing I loved...
2. One thing I think you could do even better next time...
3. One thing you should repeat in a future group work...

# APPENDIX K– STUDENT’S SELF REFELCTIONS ON PROJECT WORK

























## Self-Reflection I am a reflective learner!

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### STUDENT-LED LESSONS



I like doing these type of lessons.	  
I enjoyed doing research work.	  
I worked well with my group. (collaborate)	  
I investigated more facts about the theme at home. (Investigate)	  
I liked listening to my friends and thinking about our performance. (think critically)	  
I learnt new things.	  
I really enjoyed learning about Birds.	  
Overall I rate these lessons...	  

What I liked best: (Listening to and exploring the story; Investigating about Birds; Working in groups; Building the Nest- Nest Challenge; Presenting the work to my friends; Drawing a creative dream nest)

-----

What did I find more difficult? How did I solve my problem?

\_\_\_\_\_

\_\_\_\_\_

What next? (What would you like to learn about for our next project)?

\_\_\_\_\_



# Self-Reflection

## I am a reflective learner!

Name: \_\_\_\_\_  
Date: \_\_\_\_\_

### STUDENT-LED LESSONS



I like doing these type of lessons.			
I enjoyed doing research work.			
I worked well with my group. (collaborate)			
I investigated more facts about the theme at home. (investigate)			
I liked listening to my friends and thinking about our performance. (think critically)			
I learnt new things.			
I really enjoyed learning about Birds.			
Overall I rate these lessons...			

What I liked best: (Listening to and exploring the story; Investigating about Birds; Working in groups; Building the Nest- Nest Challenge; Presenting the work to my friends; Drawing a creative dream nest)

*Building the Nest - Nest Challenge*

What did I find more difficult? How did I solve my problem?

*Eu senti mais dificuldade em trabalhar em grupos.*

What next? (What would you like to learn about for our next project)?

*dogs*



## **APPENDIX L– INTERVIEW QUESTIONS (FOCUS GROUP)TEACHERS**

1. Do you think students were more motivated and engaged while doing this type of lessons?
2. In which activities did you feel that they were more engaged?
3. In which type of activities do you think the students learnt more?
4. Do you think that the project was well organized?
5. Do you think it was difficult to implement this type of approach in the lesson plans?
6. Do you think that it would be beneficial for the students to continue doing this type of approaches in class?
7. Do you think that students acquired 21st century skills while doing the activities? Which ones?

## **APPENDIX M– INTERVIEW (FOCUS GROUP)TEACHER A- TRANSCRIPT**

THIS INTERVIEW WAS DONE WITH ONE OF THE TEACHERS WHICH COLLABORATED IN THE FOCUS GROUP AND DID THE PROJECT WITH THE STUDENTS AS WELL.

**RESEARCHER:** Do you think students were more motivated and engaged while doing this type of lessons?

**TEACHER A:** Yes, I certainly think so, they showed great motivation and engagement. This was a transformation from the traditional type of class to this kind of project work.

**RESEARCHER:** In which activities did you feel that they were more engaged?

**TEACHER A:** They were more engaged in the group work activity, the collaboration, the peer assessment and also the research part.

**RESEARCHER:** In which type of activities do you think the students learnt more?

**TEACHER A:** I believe that the whole process was very positive for the students to acquire this type of skills. So the whole process for me and for the students was very beneficial.

**RESEARCHER:** Do you think that the project was well organized?

**TEACHER A:** It was very well organized.. and it takes some work, so everybody should be involved. Team work is crucial in this type of work... to make it successful.

**RESEARCHER:** Do you think it was difficult to implement this type of approach in the lesson plans?

**TEACHER A:** Again, I am not going to say that it's not hard work. However, due to the positive results that we have seen, if everybody works together it will be certainly easier and easier to implement it in the lesson plans.

**RESEARCHER:** Do you think that it would be beneficial for the students to continue doing this type of approaches in class?

**TEACHER A:** I think more and more that it is essential and beneficial for students to do use and develop these type of skills through project work, because it will improve their

collaboration approach, their communication skills, critical thinking as well... so yes, beneficial for sure...

**RESEARCHER:** Do you think that students acquired 21st century skills while doing the activities? Which ones?

**TEACHER A:** Undoubtedly... while working in groups they learnt how to work together, which in some groups was quite hard. I also felt that they were quite autonomous while investigating and preparing their presentations. I didn't need to intervene. They worked by themselves, and liked it...

## APPENDIX N– QUESTIONNAIRE TO STUDENTS FOCUS GROUP

1. Did you enjoy this type of lessons?
2. Do you think that you learned about birds?
3. Do you think it's a motivating way to learn this way? Why?
4. What did you like best?
  - Listening to the story;
  - Investigating about birds;
  - Working in groups;
  - Doing group presentation;
  - Assessing your friends;
  - Making the nest challenge;
  - Drawing a creative dream nest;
5. Do you prefer working in groups or working by yourself?
6. What did you find difficult to do?
7. Would you like to repeat this type of lessons?

## APPENDIX O– STUDENT B (FOCUS GROUP) TRANSCRIPT SAMPLE

### Student B- Transcript Sample

**Researcher:** Did you enjoy this type of lessons?

**Student B:** Humm... Yes, I did because I think it's a good lesson...

**Researcher:** Do you think that you learned about birds?

**Student B:** Yes, I learned a lot more about birds... I didn't know a lot of things and now I do.

**Researcher:** Do you think it's a motivating way to learn this way?

**Student B:** Yes... I think it's very cool to learn like this. I like it.

**Researcher:** Why? Why do you like it?

**Student B:** Because... we have group works... We have stories...and I really like projects because, like, it's something special to do in English classes, which are one of my favourite classes.

**Researcher:** What did you like best?

- Listening to the story;
- Investigating about birds;
- Working in groups;
- Doing group presentation;
- The nest challenge;

**Student B:** I think I really liked investigating about Birds because I learned a lot more... so...

**Researcher:** Do you prefer working in groups or working by yourself?

**Student B:** I prefer working in groups, because if I am only by myself there are somethings I can't do... but if I have two or more persons they can help me...because they can know somethings that I don't and others know things that I do.

**Researcher:** What did you find difficult to do?

**Student B:** I did find difficult working with some of my friends because sometimes it can be... a bit of like...confusion but.. yeah I did find a bit difficult...

**Researcher:** Would you like to repeat this type of lessons?

**Student B:** Yes, I would love to repeat this type of lessons they are motivating and cool.

**Researcher:** Okay... Thank you very much student B.

**Student B:** Yeah! 😊

## APPENDIX P- RESEARCHER'S FIELD NOTES

02/11/2021

### REFLECTIVE JOURNAL 6<sup>th</sup> ENTRY

For this lesson I did have to have some strategies prepared beforehand. This lesson was going to be student-centred, the students were going to be working in groups and my role was barely to scaffold them and guide them when they needed.

I prepared the groups beforehand, but I knew that there were some students who were not going to be very happy because they would not be working with their closer friends.

After having heard the story about *Robyn Boid Architect* and filling in the first two columns of the KWL chart, the students were motivated and curious to answer all the questions that came up during the previous lesson, like for example, *Which materials do birds need to make their nests? How long does it take a bird to make its' nest...* and also find the answer for the Essential Question: *What comes first the egg or the nest?*

In this lesson, students had to investigate about 5 different kinds of birds from 5 different countries spoken about in the previous lesson and complete their booklet.

Each group had an ipad, and did an oriented WebQuest and tried to find the answers to the challenges given inside the envelope.

The part that worked best, was undoubtedly each student having a badge and a role (Writer, Ipad Searcher, Challenge Reader, Time Keeper and Speaker). They chose the roles together

students were curious, motivated and engaged. To finish off, I decided to take a can of baked beans so that each student could have the opportunity to try some. This was a lot of fun.

This is what I call a meaningful lesson, where students cooperated, interacted and had the opportunity to develop their cultural awareness.

Throughout my practice, I realise more and more that students come first, and I have to adapt to the characteristics of the group and not the other way round, especially in the present circumstances we are all living in.

I also think that my lesson plans are clearer and that the way that I started mentioning how the aprendizagens essenciais are being taught in the class is better. I numbered them and keep them at the end of the lesson plan- easier to read and easier to plan.

**Mariana Lampreia**

**15/10/2021**

### REFLECTIVE JOURNAL 5<sup>th</sup> ENTRY

Today was the day that I started doing my AR project. I had so much work in preparing all the lesson plans and materials and I knew that I needed to manage my time really well, in order to get everything done.

I was very excited with everything that was going to happen. I already know that these are the type of lessons that I like preparing and teaching so my motivation was at its peak!

The first lesson was observed by Professor Vanessa Esteves, my mentor/supervisor Mrs Eva Costa and Eliana Rodrigues.

I started off by telling a story in a “reading corner” which I created in the classroom and the students sat down on the floor while listening. This was really good. They were all participating and attentive while reading the story.

The story, in my point of view has so much to learn from... I wish I had more time to go through it with the students. Anyway, I think they understood the main idea and were

I wish I had had more time to listen to them. 60 minutes of lesson was not enough for so much engagement and learning.

Mariana Lampreia

04/11/2021

### REFLECTIVE JOURNAL 8th ENTRY

The project is nearly finished and I do think that all the activities and strategies proposed worked out and that the main objectives were accomplished.

In this project students listened to, spoke about and explored a story, and from the story's theme they investigated about nests and birds.

Students were able to identify simple vocabulary related to architecture; learned about 5 different species of birds from 5 different countries and presented their findings to their classmates.

Students also filled in a KWL chart which will allowed them to compare and contrast what they knew in the beginning of the project and at the end of it.

Students investigated (in groups) about these species and developed their ICT skills, by using iPads and QR codes.

Self and Peer assessment was also promoted as a means to make feedback less daunting for children and to encourage self and peer analysis, as a normal procedure in a project, fostering in this way critical thinking and meaningful learning. This also encouraged their social skills and communication.

In their Art class, students built their own nests, using natural materials and trying to find the answer to the project's essential question: *What comes first? The egg or the nest?*

These lessons showed that PBL had a lot of potential to enhance 21<sup>st</sup> century skills and engaged students in real-world tasks.

Classroom management was always the major challenge, as trying to do all these activities needed more time. I do think that we managed to make the project meaningful and that the students benefited from it. Looking at the self-reflections, I can see that most students would like to continue doing this type of approach. They suggested various themes on what they would like to work next.

and autonomously and it was very interesting to see how this gave them voice and how each of them played his/her part.

This was a lesson that developed 21<sup>st</sup> century skills like Digital ICT, Communication, collaboration, curiosity, social and cultural awareness.

I also noticed that the students with more difficulties were the ones that were participating more enthusiastically in the investigation. Some participated so much more than in a “normal” lesson.

I think this lesson worked out just right. 😊

**Mariana Lampreia**

03/11/2021

#### REFLECTIVE JOURNAL 7th ENTRY

For this lesson, I tried to follow my mentor’s and supervisor’s advice on trying manage time a little better.

Regarding today’s lesson, according to my mentor Dra. Eva Costa, overall, the proposed activities were dynamic and appropriate for the age group and she specifically mentioned that she really liked the peer assessment done by the students.

I didn’t think this lesson was going to be easy, and it wasn’t. Although it did turn out to be very interesting. Each group, presented their findings and after their presentations their colleagues had to tell them one thing they loved; one thing they could have done ever better next time and one thing they should repeat in a future group work...

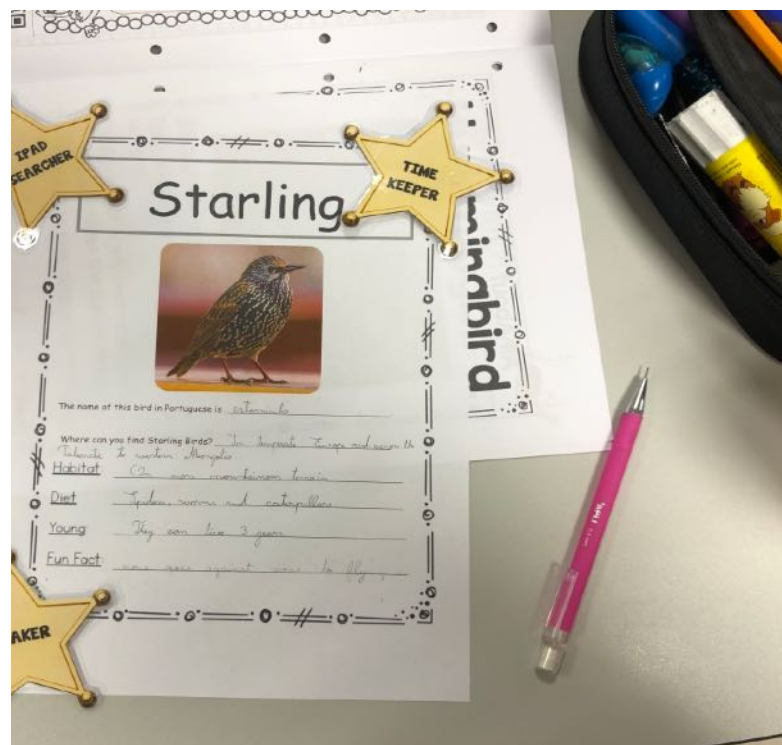
It was amazing how the students looked like “little adult teachers” giving advice to each other, giving constructive advice and helping each other out. This activity encouraged their social skills and communication by getting children to talk openly about their own and others’ work. I felt that there was a very supportive, “non-threatening” environment where the students felt safe and secure to share their thoughts.

I do think I need to try and find scaffolding strategies for the students that participate less during the lessons. We have a group of 4 or 5 students who participate during the whole class not giving opportunity to the others.

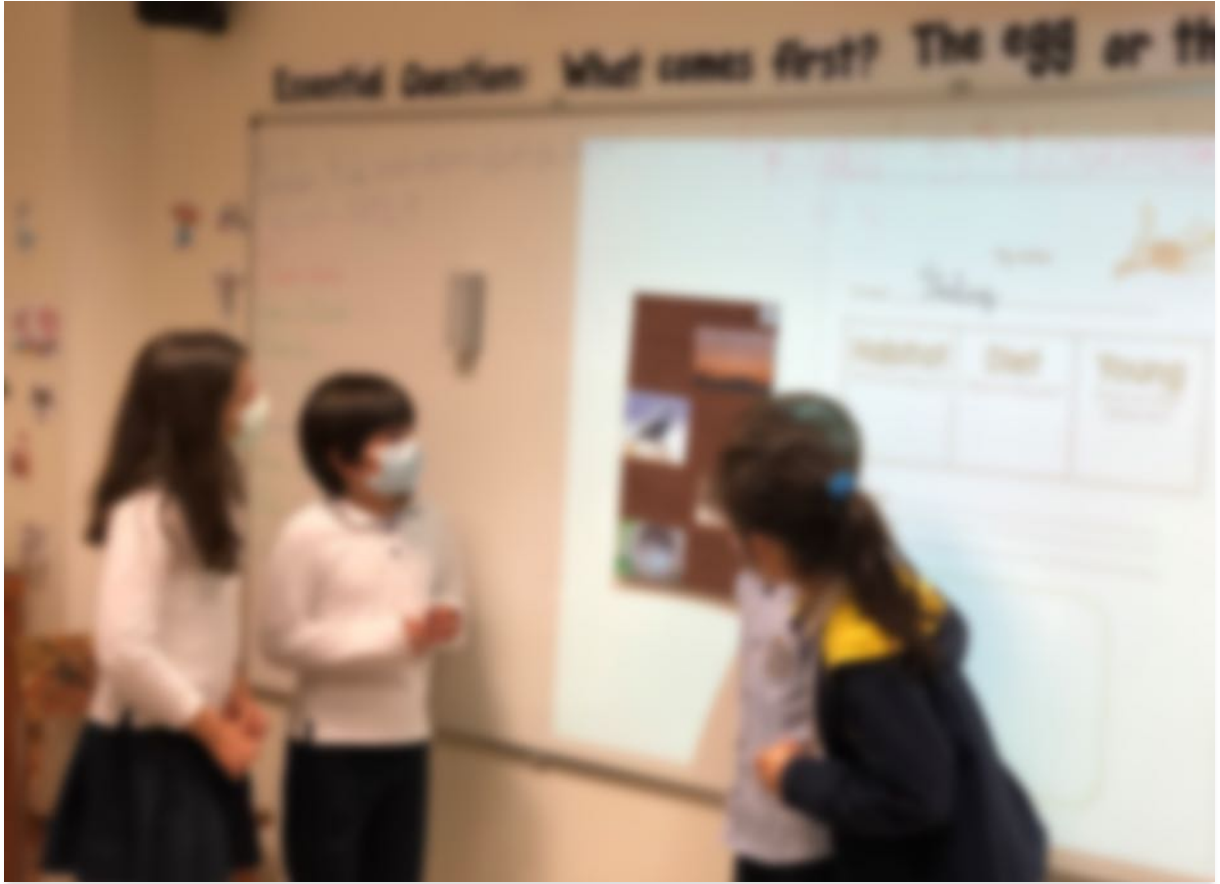
09/11/2021

Mariana Lampreia

## APPENDIX Q- PHOTOGRAPHS OF THE IMPLEMENTATION OF THE PROJECT



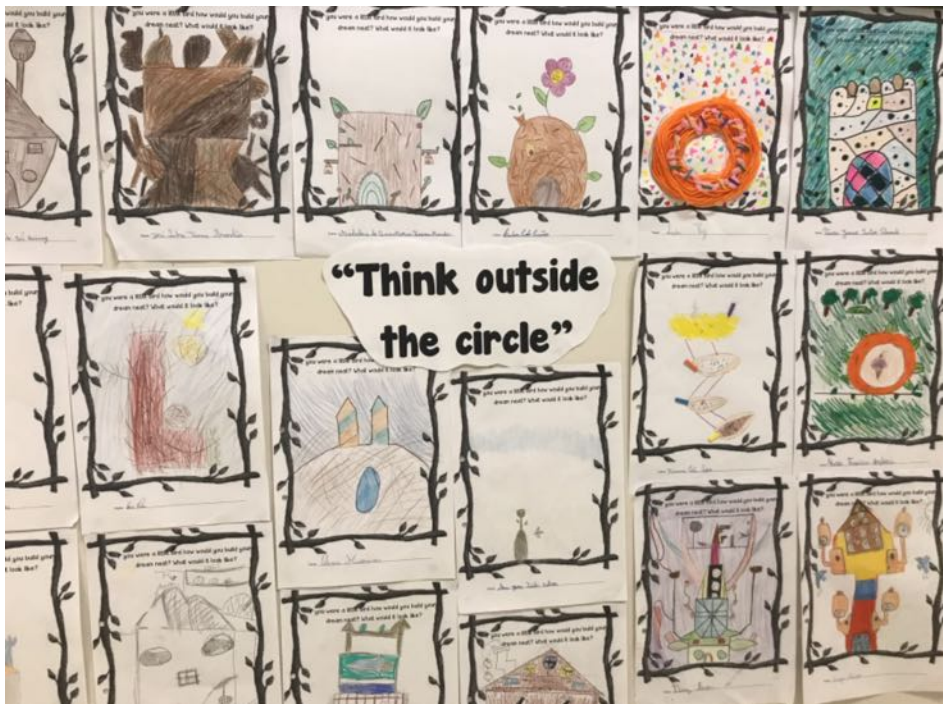
## GROUP WORK AND EXAMPLE POSTER



# NEST CHALLENGE



**DRAWING OF CREATIVE NESTS**



## APPENDIX R– QUESTIONNAIRE- TEACHER’S PERCEPTIONS IN INCLUDING PBL IN A PRIMARY ENGLISH CURRICULUM

### Questionnaire- Teacher’s perceptions in including Project Based Learning in a Primary English Curriculum

As part of my Masters Degree in Teaching English in the 1st Cycle of Basic Education, at Escola Superior de Educação, I hereby invite you to participate in a 5 minute online survey which focuses on the importance of including PBL in a Primary English Curriculum. The main purpose of this questionnaire is to understand the current impact that PBL has on the teaching/learning process and what would be the advantages of including PBL in Primary Classrooms leading to meaningful and authentic learning.

I thank you in advance for dedicating your time to further developing knowledge in the field of the inclusion of PBL in a Primary English Curriculum.

1. 1- Please select your gender

*Mark only one oval.*

Female

Male

2. 2- Please select your age group

*Mark only one oval.*

23-25

26-35

36-45

46-55

56 and over

3. 3- Where do you teach? (city)

---

4. 4- For how long have you been teaching English to Primary levels?

*Mark only one oval.*

- <3 years  
 6-10 years  
 11-15 years  
 16-20 years  
 21-25 years  
 26 years and over

5. 5- Are you acquainted with the PBL approach to teach English as a foreign language in the YL classroom?

*Mark only one oval.*

- Yes  
 No

6. 6- Have you ever tried to include the PBL approach in your lessons?

*Mark only one oval.*

- Yes  
 No

7. 7- If not, why?

*Check all that apply.*

- Lack of knowledge  
 Lack of resources  
 Lack of time  
 Don't think it is an important strategy/approach  
 Other: \_\_\_\_\_

8. 8- What challenges have you encountered while implementing PBL?

*Check all that apply.*

- Time-management;
- Classroom management;
- Planning (finding the right resources);
- Assessment;
- Other: \_\_\_\_\_

9. 9- Do you think learning through projects helps students acquire 21st century skills? (critical thinking, collaboration, creativity, communication)

*Mark only one oval.*

1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. 10- While doing hands on tasks and more practical activities do you feel that students are more engaged and motivated in the classroom?

*Mark only one oval.*

1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. 11- Do you think PBL may lead to a more authentic/meaningful learning experience?

*Mark only one oval.*

- Definitely
- Yes, sometimes.
- Not really.



16. 16- Do you think that a PBL approach to learning is a useful strategy to implement the "Perfil dos Alunos à Saída da Escolaridade Obrigatória" as it places them at the centre of the learning process"?

*Mark only one oval.*

1	2	3	4	5	6	7	8	9	10
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17. 17- Do you think that course books are being overused to the detriment of the use of other learning approaches such as a PBL approach?

*Mark only one oval.*

1	2	3	4	5	6	7	8	9	10
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18. 18- Are you in favor of including a PBL approach in your lesson plans and lessons?

*Mark only one oval.*

1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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**MESTRADO**

Ensino de Inglês no 1.º Ciclo do Ensino Básico

**Título: Using Project-based learning to build memorable and meaningful learning experiences**

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