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OF SANTIAGO DE GUAYAQUIL
FACULTY OF ARTS AND HUMANITIES
SCHOOL OF ENGLISH LANGUAGE**

TITLE OF PAPER

**The elements of classroom physical environment that affect the
learning process of English as a Foreign Language of 2nd
Baccalaureate students from Colegio Fiscal Mixto Ismael Pérez
Pazmiño.**

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CERTIFICATION

We certify that this research project was presented by **Maria Gabriela Lorentzen Moreira** as a partial fulfillment of the requirements for the **Bachelor Degree in English Language with a Minor in Educational Management**.

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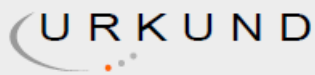


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ABSTRACT

Classroom physical design plays an important role in the academic achievement of students. For them, the classroom is not only a scholarly space, but also a physical, emotional and social setting. The objective of this study is to analyze how the physical environment affects the EFL learning process of students from “Ismael Pérez Pazmiño”. The research approach used to endorse this study was a descriptive research. Two groups of students are observed during this research study: students from 2nd National Baccalaureate and students from 2nd International Baccalaureate, both assigned to study under 2 different classroom environments. The International Baccalaureate group consists of 19 students who study in well-renovated classrooms; while the National Baccalaureate group includes 56 students who study in non-renovated classrooms. A survey was administered to both groups of students using Likert Type Scales to analyze how the physical environment perceived by them is. To reinforce this theory, the scores in the final English exam of the second five-month period for the two groups are compared to examine the physical environmental effect of the classroom on student academic achievement. These scores are tabulated and examined using descriptive statistics. The results show that there are meaningful differences between the achievements of the students from International Baccalaureate and the students from National Baccalaureate in English in favor of the International Baccalaureate group who have studied under positive classroom conditions. The researcher has also surveyed the teachers’ point of view regarding the learning environment and its potential impact on students’ academic achievement in English.

Keywords: *National Baccalaureate, International Baccalaureate, academic achievement, classroom environment, EFL learning process, research study.*

INTRODUCTION

Learning is one of the most important processes in human experience, which allows us the ability to make informed decisions in the rest of our lives. Classroom is the place where the students earn understanding of the contribution that they can make to build their identity and their society. It is the place where the students obtain the necessary knowledge to achieve their goals and objectives in future life. Ashton (2001). Classroom is an influential place in the growth and development of a student; therefore, it is important that the physical environment is the adequate in order to have maximum effective learning.

If the major concern of schools is to teach the students how to be successful adults, then every effort must be made so that the learning environment helps students work to achieve success. If the classroom is not in the appropriate conditions, it can influence in such a way that it interferes with creativity, or a way that it does not endorse an acceptable academic achievement (Kilie, 2012).

Unfortunately, in some schools there are several physical factors that can hinder the learning process, ranging from deteriorating classroom walls and uncomfortable desks, to abstract factors such as noise, temperature or the intensity of light. Each of these factors can negatively influence the learning process of students. Additionally, these factors could also affect the teacher's attitude toward the class and positively or negatively influence the students as well. The traditional seating arrangement in schools make students lose interest, particularly, in language learning.

Research shows that the classroom physical environment creates an evident impact on student's achievement. Factors like ventilation, colors of the walls, classroom size, light, noise and structure of the building can play an important role in determining if the classroom will be favorable for learning. A poor physical environment is expected to impact negatively on students ' academic performance.

PROBLEM STATEMENT

This research work was conducted at Colegio Fiscal Mixto Ismael Pérez Pazmiño. The institution counts with National and International Baccalaureate; the first one with an average of 800 students, and the second one with 45 students. However, because of being a low fiscal institution budget, the environment is not the most appropriate for the teaching-learning process.

This work is aimed to help students and teachers understand how environment contributes on acquiring a new language. In the learning situation, there are numerous factors that interactively determine student performance: learning activities, student characteristics, the nature of the materials, the teacher's attitude, but in this case, mostly, the environment.

Students have difficulties learning within this environment. They spend 7 hours every day in the classroom without ventilation, with excess light, desks in poor condition, scratched walls and a flat floor. All this without taking into account the external factors such as the noise from the other classrooms and the pigeons that enter through the windows and fly over the students' heads.

This type of environment causes motor disorders, impulsivity, disruptive behavior and non-participatory students; and in the case of teachers, it causes frustration, demotivation, deconcentration, anger and tiredness.

The importance of this study lies on providing evidence of how the physical environment could affect the learning and teaching of a foreign language process, considering the observable variables. Additionally, this work will carry a proposal for possible solutions to the difficulties in the learning process.

Research Questions:

- To what extent is the physical environment affecting the EFL learning process at Ismael Pérez Pazmiño High School?
- How is the physical environment perceived by students?

General Objective:

To analyze how the physical environment affects the EFL learning process of students from "Ismael Pérez Pazmiño".

Specific Objectives:

- Identify the physical environmental elements that may affect the students learning process in EFL classrooms.
- To describe in what form the learning process is affected because of the physical environment in the National Baccalaureate at Colegio Fiscal Ismael Pérez Pazmiño.
- To explain in what form the learning process is affected because of the physical environment in the International Baccalaureate Colegio Fiscal Ismael Pérez Pazmiño.

TOPIC:

The elements of classroom physical environment that affect the learning process of English as a Foreign Language of 2nd Baccalaureate students from Colegio Fiscal Mixto Ismael Pérez Pazmiño.

JUSTIFICATION

The following research study is relevant for education, since it allows the development of society. The improvement of the quality of Ecuadorian education is the responsibility of all: Government, educational authorities, teachers and parents. The research of teachers on prioritizing education and encouraging spaces that motivate learning for permanent knowledge in a climate of trust, respect, and commitment is an important field for understanding how learning a foreign language could be enhanced, which is a topic acknowledged in the law, according to Article 38 of the LOEI, Chapter 4 of Baccalaureate with international recognition states that: "Educational institutions that offer baccalaureate programs, approved by the ministry of education, can modify the infrastructure of the classroom, with the condition that they guarantee compliance with the learning standards and maintain the appropriate subjects in the national context".

In order to bring a new approach or perspective on the EFL learning process, Colegio Fiscal Mixto Ismael Pérez Pazmiño has been receiving students for the international baccalaureate for 8 years. The educational resources granted by the state for the proper functioning of the international baccalaureate are: Specialized bibliography for students and teachers, technology platforms of academic probity to establish a culture of creation and originality of texts, authorities and teachers with international training.

The main purpose of this study is to investigate the influence of classroom environment on the performance of students from 2nd baccalaureate from Colegio Fiscal Mixto Ismael Pérez Pazmiño. Specifically, this study seeks to assess the influence of classroom physical environment on achievement of 2nd national baccalaureate students in English and to give some practical suggestions to promote the learning environment. Through this study, the institution will gain background to consolidate its prestige and record of having adequate classrooms, learning spaces and a favorable ambiance for learning a foreign language in positive physical conditions.

CHAPTER 1. THEORETICAL FRAMEWORK

Teaching in public educational institutions is challenging due to the underlying problems that keep students from learning, and this situation is worsen by the physical environment of the educational institution. This chapter is going to cover basic concepts to understand the problematic situation on learning space design.

1.1 Physical Environment

In their book *A Guide To Teaching Practice*, Cohen, Manion, & Morrison (2002) state that the physical environment is the framework for learning and as it can contribute to either promoting or impeding learning; it must be under the teacher's control as much as it is possible. Indeed, the physical environment suitable ordered makes up part of the student teacher's resources powers and thus contributes to his or her personal power.

Savage & Savage (2010) mention that the physical classroom environment sets the stage for learning and influences student behavior. Besides of being useful to think of the classroom as a behavioral setting, the physical environment communicates behavioral expectations to the students.

1.2 Learning Environment

According to Waite (2017), the learning environment is related to the geographical idea to refer to the space where students learn; however, it was considered that the word "space" was insufficient to designate the action of the human being that actually studies and is gaining knowledge. That's why the proper concept defines everything that gathers that space, which involves the environment and the action of human beings on it. The environment must transcend to the simplistic notion of physical space as a natural contour and open to the various human relationships that provide meaning to its existence.

In this way, the learning environment is understood as the environment or the natural context within which human relationships are produced and which are part of the educational event (Egbert, Herman, & Lee, 2015). Arikan and Ozen

(2015) mention that teachers must transform their traditionalist teaching practice to the constructivist model, since the competency approach requires these to be mobilized in the students' practice.

One of the main characteristics of the school environment from the constructivist model is that the teacher focuses on the cognitive activity of the student and must provide conditions for them to build their own meanings, beginning with beliefs, knowledge and cultural practices they bring to the classroom to be able to achieve meaningful learning. In the same sense, Mahmood and Gondal (2017) propose the following principles for an appropriate learning environment:

1. Facilitate that all the people in a group gather to create a cohesive group with common goals and objectives.
2. Providing all the contact materials and various activities to cover a wide range of cognitive, emotional and social learning.
3. It must be diverse, transcending the idea that all learning takes place between the four walls of the classroom.
4. Offer different sub - scenarios in such a way that people of the group can feel welcomed, according to different states of mind, expectations and interests.
5. It must be actively built by all the members of the group and the school, seeing in it their peculiarities and their own identity.

Cazden (2017) talks about class climate, which is referred to as the atmosphere that is created in the classroom and that can be authoritarian, friendly, cold or warm. The learning environment should not be restricted to the classroom and it is necessary to incorporate into this concept any element in which students and teachers interact. This type of environment should encourage motivating and permanent learning, so students and teachers must cooperate to achieve an appropriate physical and emotional environment where freedom of expression, respect, solidarity and democracy are promoted. The learning environment is a socio-psychological and material environment where students and teachers work together. The relationships

established in this medium represent a network of cultural, psychological, institutional and social variables.

The type of interaction that is established is what gives each learning environment a special character. Using similar categories, Wang and Degol (2016) talk about the school climate as the learning environment where relationships are established between teachers, students and administrative personnel, where there is personal growth and clarity in the school rules. They assert that this is where coexistence and collective work occur, where the relationship between student-student and teacher-students are especially important because they are a space where everyone mutually enriches each other. A learning environment is the set of all the physical and symbolic resources of the environment that can be used to achieve the most efficient learning processes.

As explained above, the learning environment ranges from the environment that includes the physical part that surrounds the student such as classrooms, gardens, laboratories, sports facilities, to the type of relationship established between students, teachers and managers in search of achieving a better learning process.

1.3. Classroom Ambiance

Tabulawa (2013) briefly defines classroom ambiance as an orchestration of the teaching acting on the students. Also, as the elements of the environment which create a behavioral setting. Steele & Cohn-Vargas (2013) argue that students, like adults, respond to ambiance. They add that in a classroom, the ambiance reflects a teacher's style and values, and teachers can enhance it by arranging the room to facilitate interactions and physical comfort.

De Nobile & Lyons (2017) refers to ambiance as the impact of the physical classroom learning environment on class members' senses, how the classroom feels, smells and sounds. These factors influence how the teacher and the students feel about being in the classroom, and things that can influence behavior.

They also state 4 elements of ambiance that affect the teaching learning process:

- Temperature and humidity
- Smell
- Noise, and
- Appropriate Facilities

1.4 Poor Learning Environment

Woolner (2010) thinks that people feel that a poor physical environment will have a detrimental effect on the activities that take place there, and that consequently a poorly maintained and designed school must have an impact on learning. She adds that in a rundown school, staff and students are likely to feel less valued and motivated leading to more absence from school, poor behavior, and ultimately lower academic achievement. There is research evidence that suggest how bad buildings could affect learning, and it shows that both teachers and students notice the physical environment and develop opinions about it, recognising failings and short-comings. (Cohen, Manion, & Morrison, 2002); (Maxwell, 2000); (Burke & Grosvenor , 2003).

These feeling about the premises will influence their view and attitudes relating to the educational experience. This pressumbaly affects behavior in school, which leads to impacts on the morale of students and staff, and may influence attendance levels.

1.5 Dimensions of the Physical Environment

1.5.1 The Spatial Dimension

The most important aspect of the physical learning environments is spatial dimension, which according to Savage & Savage (2010) entails the following:

... the size, the shape and organization of objects within the space. The size and shape of the room, the location of doors and windows, and the movement of individuals within the space combine to form the spatial dimension of a classroom. This dimension creates the setting where

activities will take place, and the setting influences the types of activities that are possible as well as the behavior of those engaged in them (Successful classroom management and discipline, p. 67).

Aspects of the spatial dimension include:

- Size of the room
- Shape of the room
- Location of doors
- Location of windows
- Movement of individuals within the space

Teachers must be conscious of the spatial dimension in order to take advantage of it although they cannot transform the size of the classroom. In summary, spatial dimensions create behavior settings.

1.5.2 Behavioral Settings

Carter & Doyle (2006) state that a key concept in understanding the impact of the spatial dimension on behavior is that of behavioral settings. According to Savage & Savage (2010), the concept of a behavioral setting refers to environments that are designed in order to influence the behaviors or actions of those who occupy the setting. For example, places of worship use elements of the physical environment such as seating, lighting, symbols and color to create a setting that communicates to all who enter the space, certain behavioral expectations. Classrooms likewise need to be considered as behavioral settings. The arrangement of the space, including furniture and bulletin boards, should communicate to all who enter what will be expected of them while they occupy the space.

Savage & Savage (2010) also mention that developing a behavioral setting consistent with the teacher's purposes requires attention to several elements of the physical environment. This involves:

- Teaching stations,
- Learning stations,
- Students' desks,
- Teacher's desk,

- Location of instructional materials, and
- Classroom displays and decorations.

Because a classroom is a behavioral setting, it is important for teachers to ask:

- What types of behaviors do I want the students to exhibit?
- Do I want to excite students or calm them down?
- Do I want to encourage or discourage social interaction?

Once teachers are clear about the answers to these questions, they can consider how the environment should be changed in order to create the setting that will bring out the desired behaviors. Teachers who design informal classrooms should not be surprised when students behave in an informal way. Likewise, teachers who design very formal classrooms should not be surprised when students lack spontaneity.

1.5.3 Classroom Organization and Classroom Management

According to Duchesne, McMaugh, Bochner, & Krause (2015), classroom management are the actions of teachers to create a planned and organized classroom environment that supports student learning and socioemotional needs.

Classroom Organization focuses on the physical environment (setting). Effective teachers organize a safe classroom environment, Education Review Office, (1998). They place furniture, learning centers, and materials strategically in order to optimize student learning and reduce distractions.

Classroom management and organization are intertwined. While rules and routines influence student behavior, classroom organization affects the physical elements of the classroom, making it a more productive environment for its users. How the classroom environment is organized influences behavior in it (Stronge, Tucker, & Hindman, 2004).

Finley & Wiggs (2016) mention that good classroom organization is intuitive, so explanations are minimally needed. A well-organized space results on fewer classroom management problems, allowing the teacher to care for the important stuff: helping students learn content.

1.5.4 Managing Transitions

There are many times during the day when students have to make a transition between lessons or between activities within the lesson. Doyle (1986) estimated about 30 major transitions that happen every day in the typical elementary classroom. In the typical secondary classroom, there are fewer transitions, but still quite a few. A considerable amount of time can be lost during these transitions, and this is a time when many discipline problems show up.

By planning a transition, eliminating wasted time during transitions and keeping students engaged can be facilitated. The teacher should plan the steps of the transition, give the students clear directions, provide signals to communicate what they should be doing at specific points in the transition, and keep things moving at a brisk pace. If certain transitions occur repeatedly, the teacher can develop them into a routine that he teaches to students in order to practice it (Doyle, 1986).

CHAPTER 2. LITERATURE REVIEW

2.1 Physical Space of the Classroom

The distribution of spaces plays an important role when it comes to achieving an adequate classroom climate. In recent years, education has had many changes, and therefore the physical space of the class has also changed. The groups are smaller and students are treated more individually. This is the reason why such spaces are necessary in order to meet the needs of attention to the students we have today (Perks & Alomari, 2016).

According to Zimmermann, Stallings, Pierce and Largent (2018), changes in the classrooms are necessary. If the same provision is maintained throughout the course, it will favor the formation of subgroups, some of them negative. To avoid this, occasional changes can be made, which can be of various types. In addition, some of these changes can be beneficial because they predispose to attention. As an example, some provisions may be:

- The teacher can control all students equally, eliminating "dark" areas of the traditional disposition: The teacher distributes attention equitably and facilitates communication among all students. This provision is very suitable for group activities, such as the debate.
- The teacher stands as one of the group: It is suitable for activities where the teacher does not have a necessary participation.
- Controlled partner disposition: It is interesting for individual activities since a peer help system is established, which saves heterogeneity of levels.
- Changes in the placement of students: Referring to a specific student, a change can be made to a position closer to the teacher, away from a disruptive partner, or uniting a partner that is a positive influence. In case of not wanting this change to be noticed as something personal with a student in particular, the location of all the students in the class can be changed.
- Changes in the location of the disturbing subgroup: In case a disturbing subgroup is formed, it can be separated from everyone, the leader or some of the members. According to Martínez (1996), the physical and

architectural characteristics of the classroom condition the type of perceptions that its members have. It is different the perception of a classroom with a distribution that is appropriate to the educational needs that have in each moment, that the perception towards a classroom with desks aligned and stuck in the ground.

In addition, depending on the type of class, one methodology or another can be encouraged. In smaller classes, more innovation can be done, and large classes favor the completion of tasks. In addition to the architectural characteristics, other physical factors must be considered, which are not given importance until their lack is perceived. This is the case of acoustics, luminosity, ventilation, temperature. That is, it is needed to have adequate environmental conditions so that the development of the class is not disturbed by environmental factors.

When there is no good acoustics, there are interferences that produce fatigue when it comes to maintaining attention to the teacher's explanations. The luminosity must be in its proper measure. A low light can even create vision problems for students, and excessive brightness, caused for example by the entry of sunlight, can cause direct discomfort in the students or reflections on the whiteboard. The correct ventilation and temperature will make both students and teachers feel comfortable. It is something that is valued when it lacks the right conditions. In a classroom where there is excessive cold or heat, it will be very difficult to get the attention of the students, as they are more aware of their discomfort. Finally, the necessary material must always be kept in the classroom. The lack of material that students and teachers may need, will produce disorganization at the time of directing the class and loss of time.

2.2 Psychology of Space and the Emotional Environment

2.2.1. Positive Learning Environment

According to De Nobile & Lyons (2017), a positive learning environment is a place where students are engaged and learning. These are places where

appropriate or “good” behaviors are frequently, regularly recognized and encouraged. Also, they are places where a teacher facilitates engagement and learning for their class group of students.

Haycock (2003) states that every object chosen for a space and how the space is used says something about the significance of that space and conveys a feel or image.

Graetz (2003) discusses the ability to become emotionally attached to a space, suggesting that this strong emotional attachment can lead to enhanced learning experiences.

About the emotional environment, Cohen, Manion, & Morrison (2002) state that important as the physical characteristics of the classrooms are, the learning environment is just the sum of them. It adopts such characteristics as the student teacher’s voice, his or her attitudes and expectancies, belief system, humor, techniques of control, favored leadership styles and the use of praise. These contribute to what may be defined as the emotional environment. This is perhaps more important than the physical environment, for not even the most desirable arrangement and use of the physical environment can compensate for an impoverished emotional one.

2.2.2. Characteristics of a Positive Learning Environment

Since the topic of this work is the psychology of space in the classroom, here are some characteristics taken from the work of Benes & Alperin (2016) which detail how a positive learning environment influences students.

- Students feel physically and emotionally safe. They see the classroom as a place where they can be themselves and express themselves and their ideas without judgment.
- Students know that they are valued and respected, regardless of other factors such as ability, gender, sexuality, race, ethnicity, or religion.
- Students have ownership and input related to class structure and expectations. This can range from creating spaces specifically for

student use to having a class discussion to establish norms and expectations.

- All students are challenged to achieve high expectations, and all students receive the support necessary to meet those expectations.
- Standards of behavior are established and are consistently and equitably enforced for all students.
- Class structure provides multiple and varied opportunities for students to experience success.
- The teacher gets to know all students and uses that knowledge to create meaningful experiences.
- There is a positive rapport (relationship) between the teacher and students and among students in the class. (p. 34)

2.3 Appropriate and Inappropriate Behavior in the Classroom

2.3.1. Ecological Systems Theory

The term 'ecological' has its origins in the biological sciences, and in that context, it refers to extensive and complex relationships between organisms and their environments. 'Ecological perspective' refers to a recognition of the reality that complex relationships occur between students and the several environments around them, and that these relationships should be considered when trying to understand and influence student's behaviors. (Bronfenbrenner, 1979).

Appropriate behavior is defined by De Nobile, Lyons, & Michael Arthur-Kelly (2017) as behavior that is socially acceptable, proper for the context in which it happens and respectful of the rights of others. Much of what is called appropriate behavior shows universal values that people deem important as appropriate behavior in schools, such as people caring for themselves and others, respecting others, being honest, treating others fairly, acting responsibly and so on.

They also define inappropriate behavior as behavior that is socially and contextually unacceptable, and that disrespects the rights of themselves and students, to learn and feel safe. It has been generally defined by Duchesne, McMaugh, Bochner, & Krause (2015) as behavior that disrupts the classroom, and defined more specifically by Beaman, Wheldall, & Kemp (2007) as behavior that interferes with a student's own learning or the learning of other students, and that prevents teachers from doing their work. Inappropriate behavior is also sometimes referred to as bad behavior, misbehavior, behavior problem and in extreme situations as delinquency.

2.3.2. The Effect of Classroom Environment on Achievement in English as a Foreign Language (EFL): A Case Study of Secondary School Students in Gezira State: Sudan

The following research study was carried out in Sudan. Two areas were studied, the renovated and the non-renovated schools. Classrooms were observed very closely in order to record all aspects of the classrooms' environment, which cover the seating arrangement, ventilation, temperature, size, lightning, level of cleanliness, and type of the furniture. Information gathered have clearly showed that the classrooms environment of the renovated and non-renovated schools were quite different.

Renovated school classrooms were equipped with various teaching facilities suchs as air conditioning, proper seating arrangement for the students as well as the teacher, well painted walls, proper lightning, whiteboards, billboard and lockers. In addition to these facilities, classrooms were quite spacious and kept clean most of the time. On the other hand, non-renovated classrooms had relatively poor environment and lacked most of the teaching facilities. These classrooms were under unfavorable conditions: dirty floor as well as the walls, excess of lighting and poor ventilation; however, both groups are taught the same English material.

An English achievement test was given to both groups in which students had previously studied six units of Spine Four (An English Language syllabus intended for primary and secondary school students in Sudan) in order to

examine the effect of the physical classroom environment on students' performance in English. Results showed that students from renovated schools scored better than their counterparts in the four language skills: reading, listening, writing and speaking.

These results led the researcher to conclude that students from renovated schools had done significantly better in English and perhaps in other school subjects since they study in more favorable classroom environments. These results gave answer to the main question of the study which inquires about the impact of classroom physical environment on students' achievement in English. Results showed that provision of adequate classroom facilities will make a positive impact on the achievement of Sudanese secondary school students in English.

The study cited above is very similar to this research work. English teachers from Ismael Pérez Pazmiño High School were asked to display the scores from both the national and international baccalaureate, and the results can be seen in the appendix part.

It can be seen that the academic performance of International Baccalaureate students surpasses the National Baccalaureate students with a better average of scores. This is because the physical conditions in which International Baccalaureate students study are much more favorable and comfortable than those of the National Baccalaureate students.

Indeed, all of the classrooms at the National Baccalaureate building are very large and overcrowded as well as the windows, whereby there is excess of light. Certainly, there are no air conditioners or even fans to control temperature. One of the English teacher's complains that "After ten AM, the classrooms become extremely hot". Unluckily, the English subject is normally scheduled after ten when it becomes extremely hot. Another English teacher said, "This group of students tend to have problems in acquiring the language skills and the concepts being taught. Their mood is disrupted so they become less motivated and less ready for learning. This is the case of the National Baccalaureate students whose achievement seems to be adversely influenced

by unfavourable classroom conditions. On the other hand, International Baccalaureate students have air conditioners, two whiteboards (one at the front and one at the back of the classroom), a projector, several lockers, proper lighting, well painted walls and a clean floor. Definitely, this favourable environment reflects positively on students' English performance.

CHAPTER 3. RESEARCH METHODOLOGY

The research design selected to determine the elements of classroom physical environment that affect the EFL learning process of students from “Ismael Pérez Pazmiño High School, was a descriptive analysis design on 2nd National Baccalaureate ambiance. This methodology could help to observe special features that characterize the institution’s physical space, in order to know the state in which students receive classes everyday.

Fox & Bayat, (2007) quoted that “descriptive analysis is aimed at casting light on current issues or problems through a process of data collection that enables them to describe the situation more completely than was possible without employing this method” (p.8). Descriptive research design involves the observation and description of the behavior of a subject without influencing it in any way. Similarly, Glass & Hopkins (1984) state that a descriptive research involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection. It helps the reader in understanding data distribution by using visual aids such as charts and graphs. In their guide for researchers, Loeb, et al., (2017) mention that “descriptive analysis characterizes the world or a phenomenon by identifying patterns in the data to answer questions about who, what, where, when, and to what extent. Whether the goal is to identify and describe trends and variation in populations, create new measures of key phenomena, or describe samples in studies aimed at identifying causal effects, description plays a critical role in the scientific process in general and education research in particular” (p.1).

In parallel, it is going to be applied a correlational study to understand how physical space works in a different setting as International Baccalaureate from the same high school.

Acoordingt to R. Forsyth (2009), a correlational study is a research design in which a investigator measures (but does not manipulate) at least two variables and then uses statistical procedures to examine the strength and direction of the relationship between these variables.

Additionally, a quantitative method was used to quantify opinions, attitudes and behaviors of students from the 2nd National Baccalaureate and the 2nd International Baccalaureate. George R, (2005) states the quantitative method is “assigning numerical values and utilizing descriptive or inferential statistics to mathematically calculate relationships of the sample under investigation and then generalizing to a population” (p.221-222). In other words, research method serves to quantify a problem by gathering data that can be transformed into usable statistics, also useful to quantify behaviors, opinions and attitudes, and generalize the results from a sample population using data collection methods such as surveys, interviews or questionnaires.

Quantitative research is described by Bryman & Bell (2015) as “entailing the collection of numerical data and exhibiting the view of relationship between theory and research as deductive, a predilection for natural science approach, and as having an objectivist conception of social reality” (p.160).

According to Matthews & Ross (2010) quantitative research methods are basically applied to the gathered data that is structured and which could be represented mathematically or through statistics. Once the researcher has adopted the epistemological approach, generally quantitative data are collected, which could be analyzed scientifically.

“Quantitative approaches tend to relate to positivism and seek to gather factual data, to study relationships between facts and how such facts and relationships accord with theories”, Fellows & Liu” (2015), (p.29). In order to obtain measurements – quantified data, scientific techniques are applied. The scrutiny of the data produces quantified results and conclusions obtained from the assessment of the results.

3.1 Data Gathering Instruments

Two surveys were administered using Likert-type scales; one for the students and one for the teachers.

3.1.1 Likert scale

Likert scales are psychometric instruments where the respondent must indicate their agreement or disagreement about an affirmation, item or reagent, which is done through an ordered and one-dimensional scale (Wilson, Hill, & Glazer, 2013).

3.1.2 Survey

The survey is a technique of collecting data by applying a questionnaire to a sample of individuals. Through surveys you can find out the opinions, attitudes and behaviors of citizens. In a survey, a series of questions on one or several subjects are made to a sample of selected people following a series of scientific rules that make that sample, as a whole, representative of the general population from which it comes (Glass & Hopkins , 1984).

Students were told to ask questions if anything was unclear, encouraged to write any comments about the related topic and assured the provided information would be confidential (Bhawna & Gobind, 2015). Surveys were administered to students as well as teachers during one class period. An observation was made in most areas of the institution where students and teachers spend their time; the survey was adapted with statements related to the topic.

The aim of the survey was to analyze the attitudes, opinions and behaviors of both sides towards the physical aspect of the institution in which learning is developed, for which an observation was first made to then gather that information and turn it into numbers in order to know to what extent the physical environment affects the learning process.

CHAPTER 4. DATA ANALYSIS

4.1. Survey for the National Baccaureate students

The following statistical charts belong to the surveys conducted to students of 2nd course at the National Baccaureate of Colegio Fiscal Ismael Pérez Pazmiño. This instrument tries to give answer to the research question “How is the physical environment perceived by students?”, There are 15 questions using a Likert Scale that goes from strongly disagree to strongly agree.

Table 1 Survey for the National Baccaureate students

Please rate how strongly you agree or disagree with each of the following statements by placing a check mark in the appropriate box.	Strongly Disagree	Disagree	Agree	Strongly Agree
Size of classroom meets the students' needs.	1	11	32	9
There are a variety of places, both inside and outside of the school, where students can meet together in both small and large groups.	3	7	23	20
The building suits the students' ability to personalize their workspace.	2	9	28	14
Classroom rules and consequences are posted in each room.	21	15	10	7
Suitable reception space is available for students, teachers and visitors, so they feel welcome.	41	2	7	3
Entrances and walkways are sheltered from sun and inclement weather.	31	12	4	6
Color schemes, building materials, and décor motivates learning.	19	10	18	6
Classroom furniture is functional.	3	6	35	9
Interior walls, including classroom spaces are in excellent condition.	9	24	12	8
There are exhibition spaces to display student work.	8	15	19	11
The light level in the building in the appropriate for learning.	8	7	23	15
Is the noise level distracting when learning?	11	5	26	11
Building is neat, clean, and in good repair. There are few, if any, signs of vandalism or graffiti.	39	10	3	1
Comfortable and stress-free classrooms.	23	20	5	5
Comfortable classroom temperature.	19	14	7	13

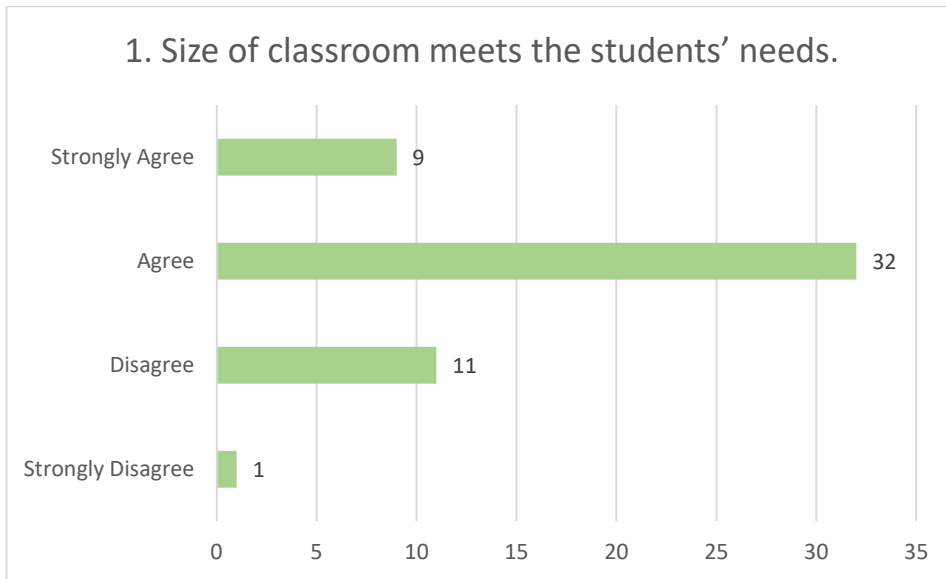


Figure 1 Size of classroom. Created by the author.

This chart shows, according to the respondents, that most of the students agree the classroom size is ideal for their needs. Very few of them strongly disagree.

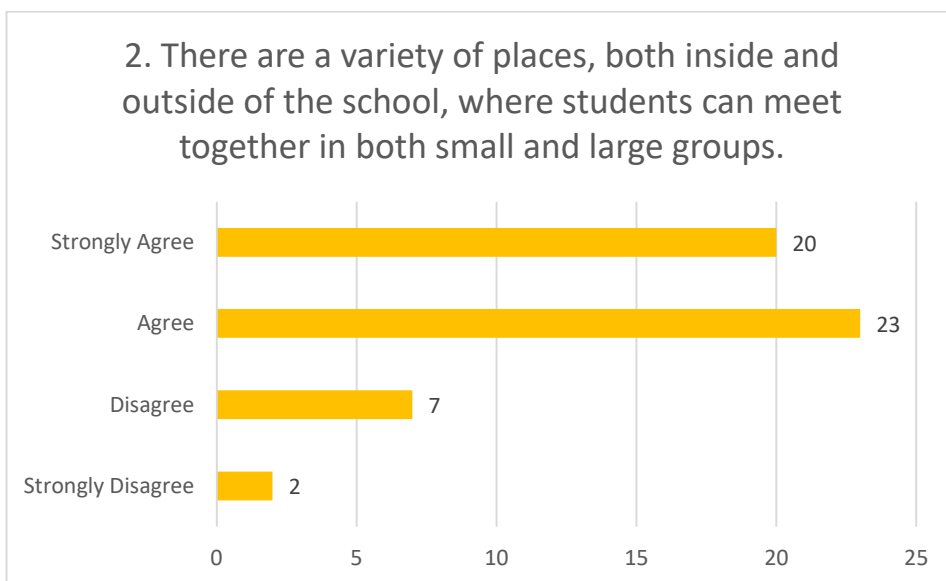


Figure 2 Places for students to meet. Created by the author.

In the previous figure, it is observed that students say there are variety of places to meet each other, both inside and outside the school; few of the students differ in this answer.

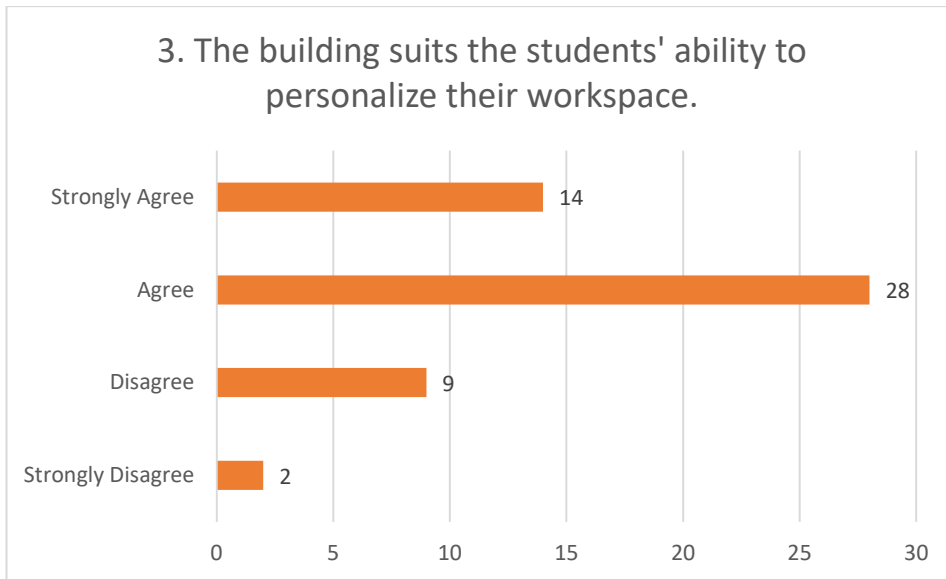


Figure 3 Suitability of the building. Created by the author.

Regarding to the building, students agree that it adapts to their ability to personalize their workspace. Only a small number of students strongly disagree.

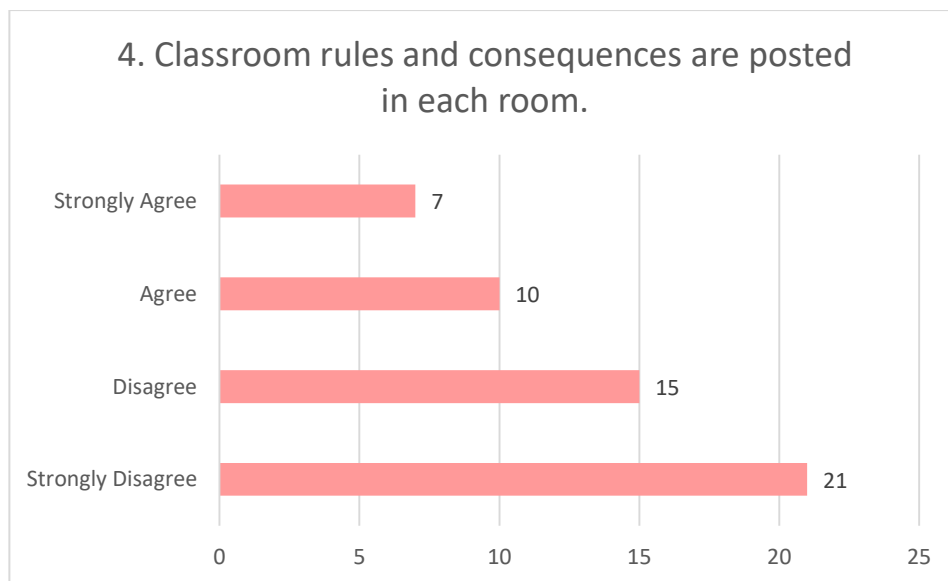


Figure 4 Classroom rules. Created by the author.

The results show that most of the students do not acknowledge to have the rules posted in each classroom, while the minority of students thinks this statement is true.

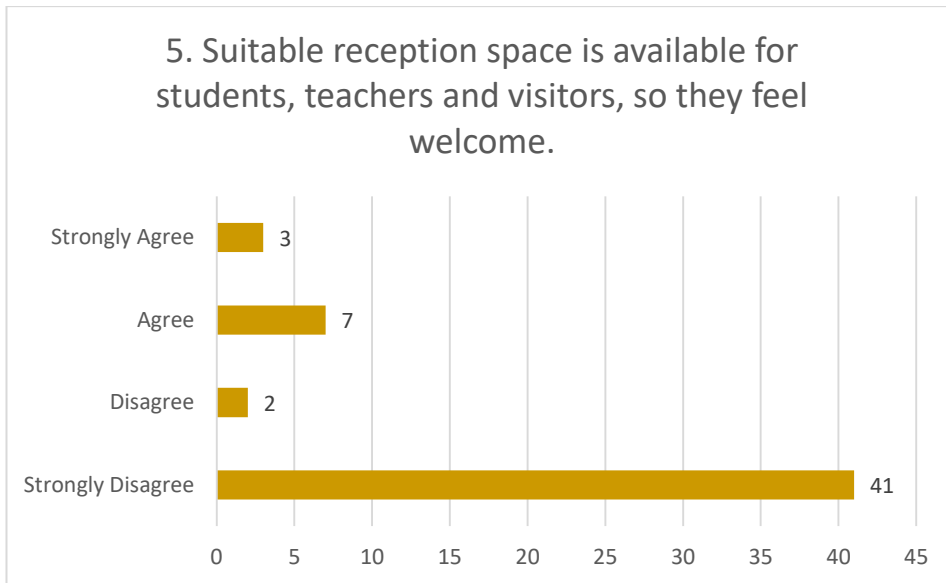


Figure 5 Reception Space. Created by the author.

It can be seen the reception space is not appropriate for students, teachers and visitors. Very few students agree.

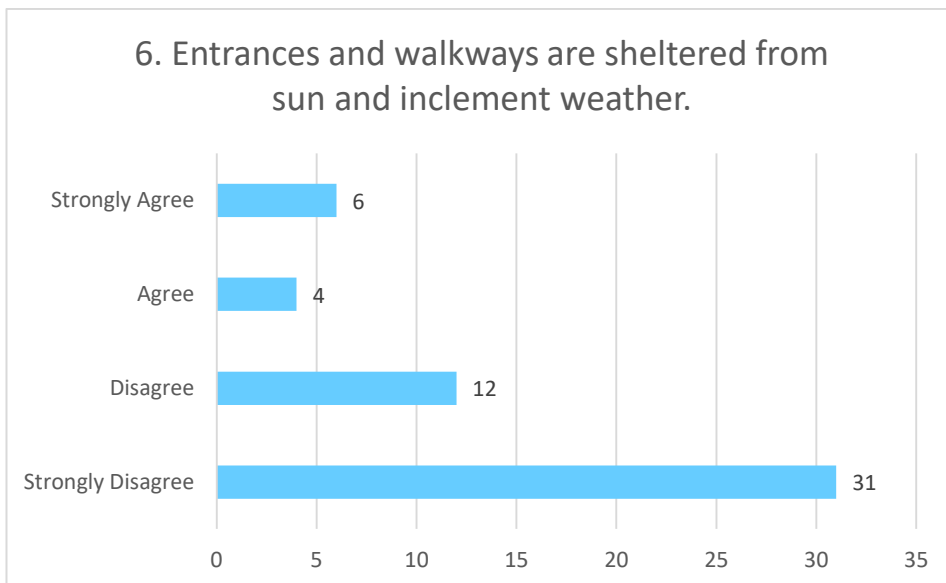


Figure 6 Sun and inclement weather. Created by the author.

According to most of the respondents, entrances and walkways are not protected from inclement weather; just a few of them agree the space meets the expectations.

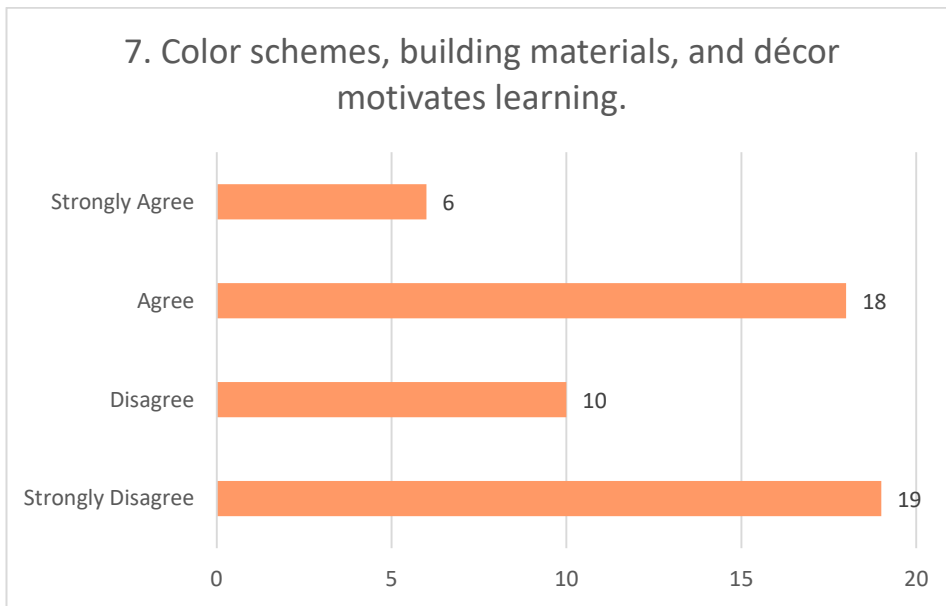


Figure 7 Building décor motivates learning. Created by the author.

Almost half of the students strongly disagree that physical space motivates learning, while the other half differs from this idea.

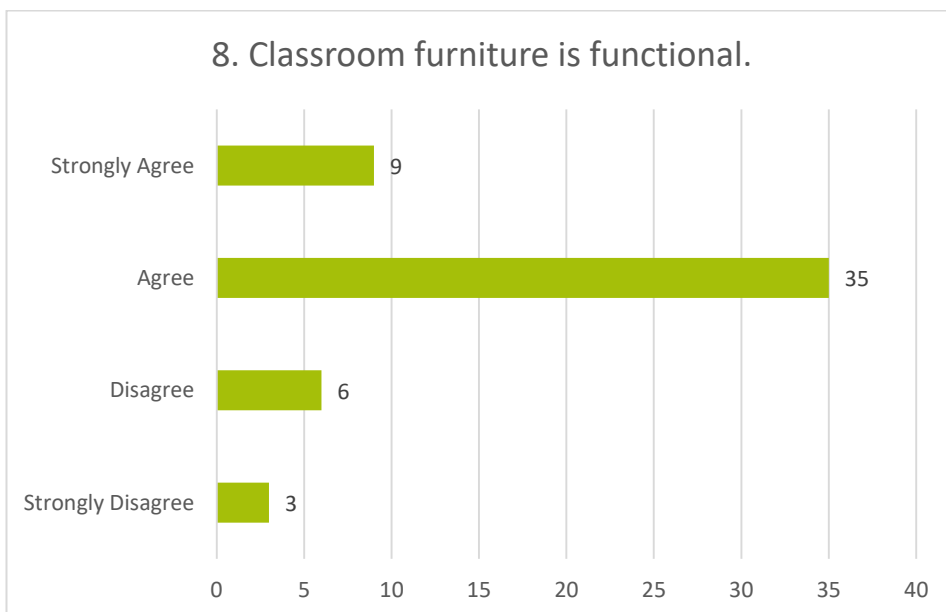


Figure 8 Functional classroom furniture. Created by the author.

Mostly, the respondents agree the furniture serves a functional purpose; although as observed in this research work, the desks do not fulfill their learning goals. Only a minority think that classroom furniture is not functional.

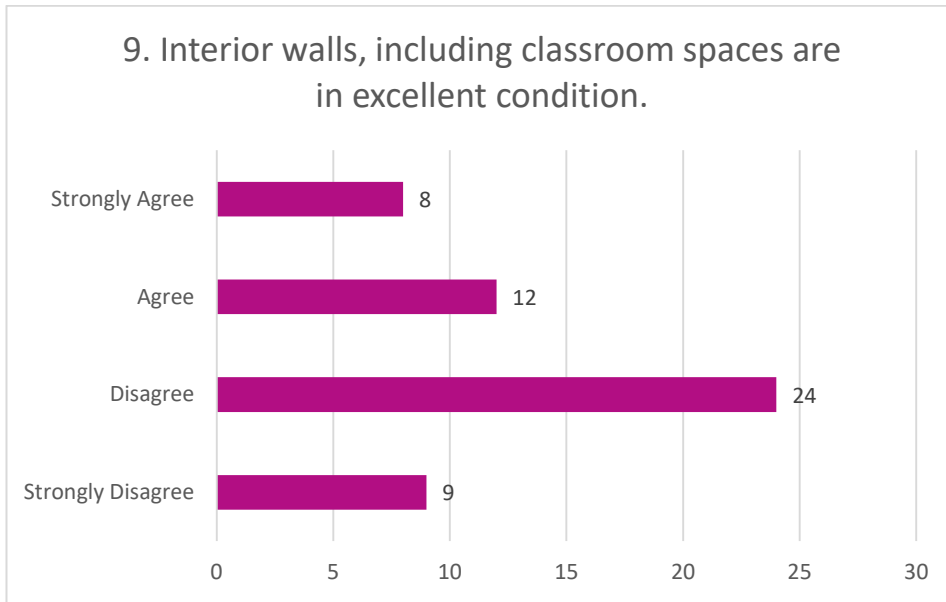


Figure 9 Condition of classroom spaces. Created by the author.

This chart shows students disagree that classroom and interior spaces are in outstanding conditions. A minority think that the physical space of the school holds favorable conditions.

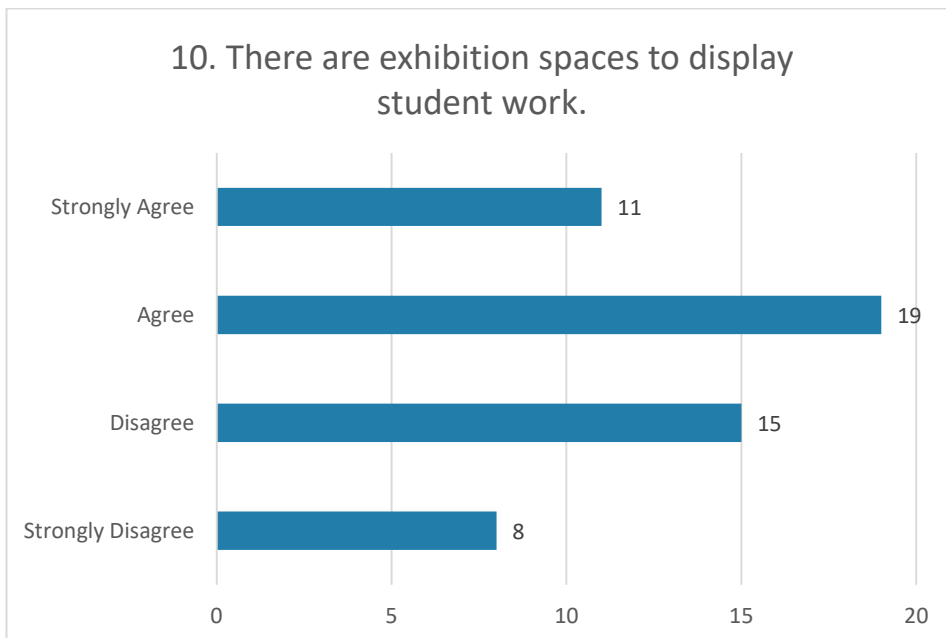


Figure 10 Exhibition spaces to display student work. Created by the author.

In the previous figure, the respondents agree the school has enough spaces to display students work; only few of them disagree.

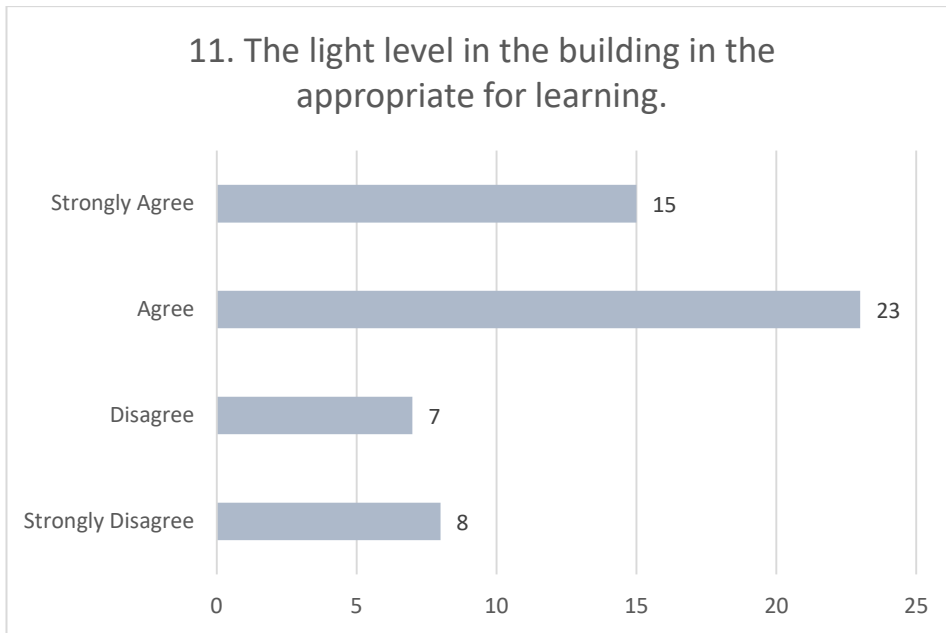


Figure 11 Appropriate level of light. Created by the author.

This graph determines most of the students state that the light of the building is good for learning, while few of them strongly disagree with this statement.

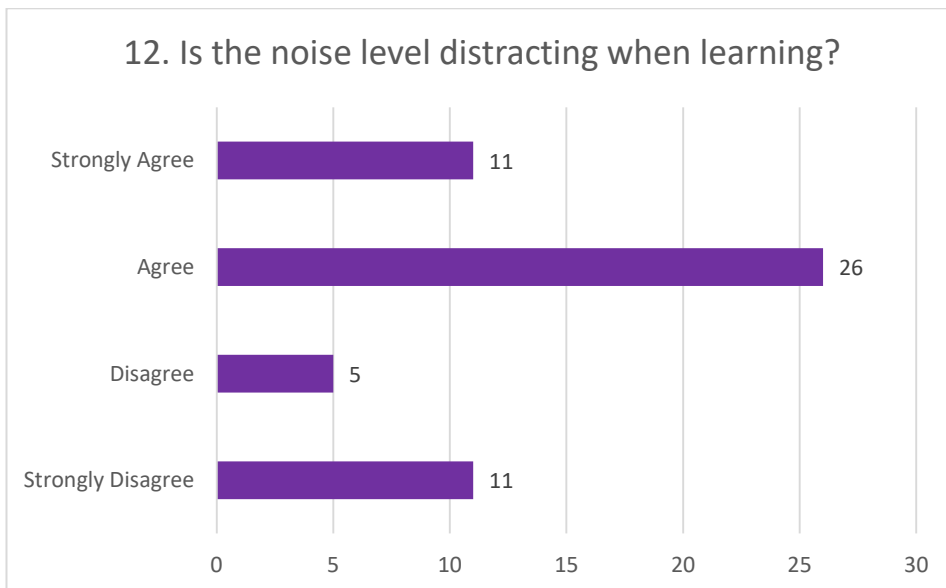


Figure 12 Distracting level of noise. Created by the author.

According to the majority of the respondents, the level of noise is not the appropriate for learning. On the other hand, hardly any of the respondents strongly disagree.

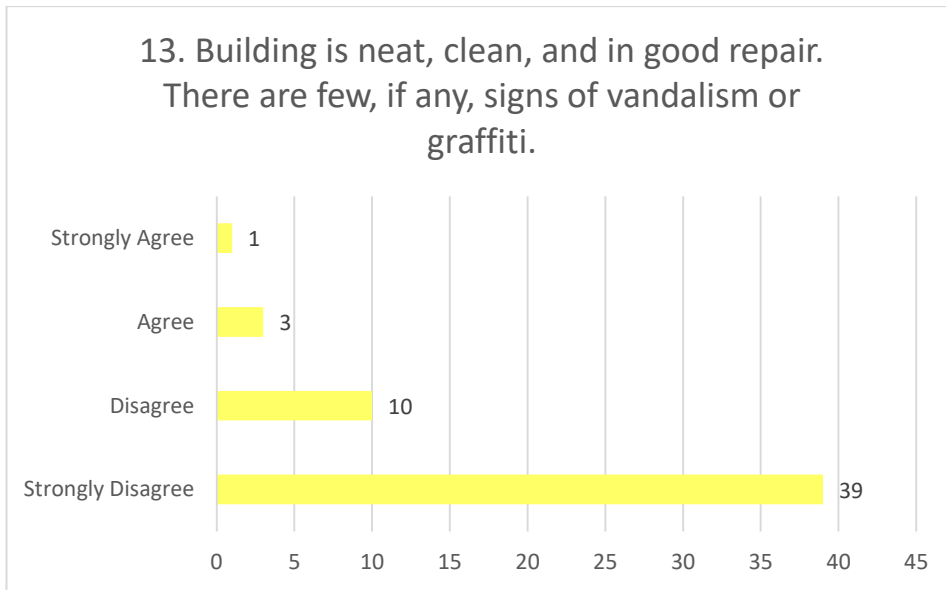


Figure 13 Appropriate building. Created by the author.

It can be clearly seen that a great part of the students affirms the school is not clean and tidy, and that it has signs of graffiti on the walls. In contrast, only one student thinks the school building is in good condition.

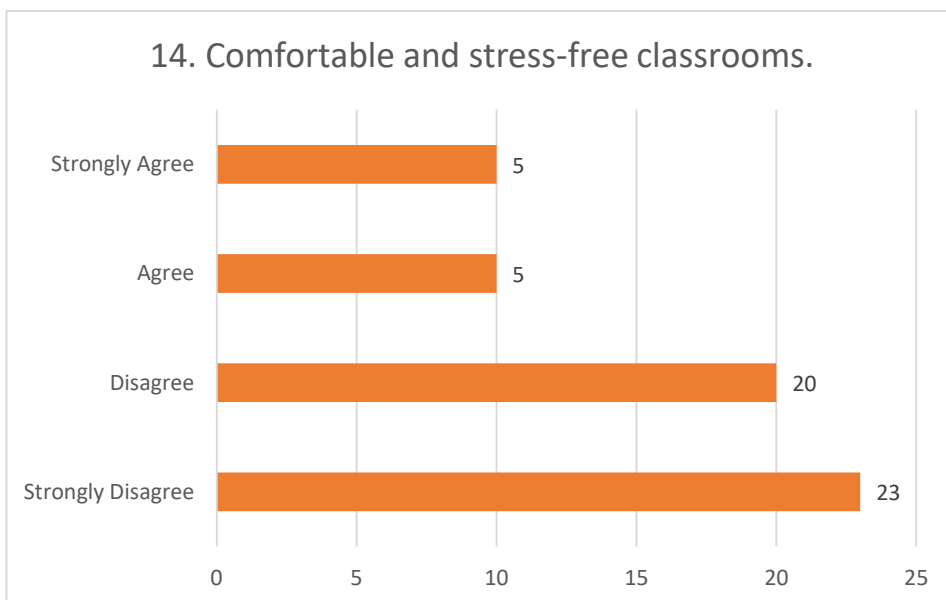


Figure 14 Comfortable classrooms. Created by the author.

This figure shows almost all of the students believe that classrooms are not comfortable or stress-free. On the contrary, very few students strongly agree they are.

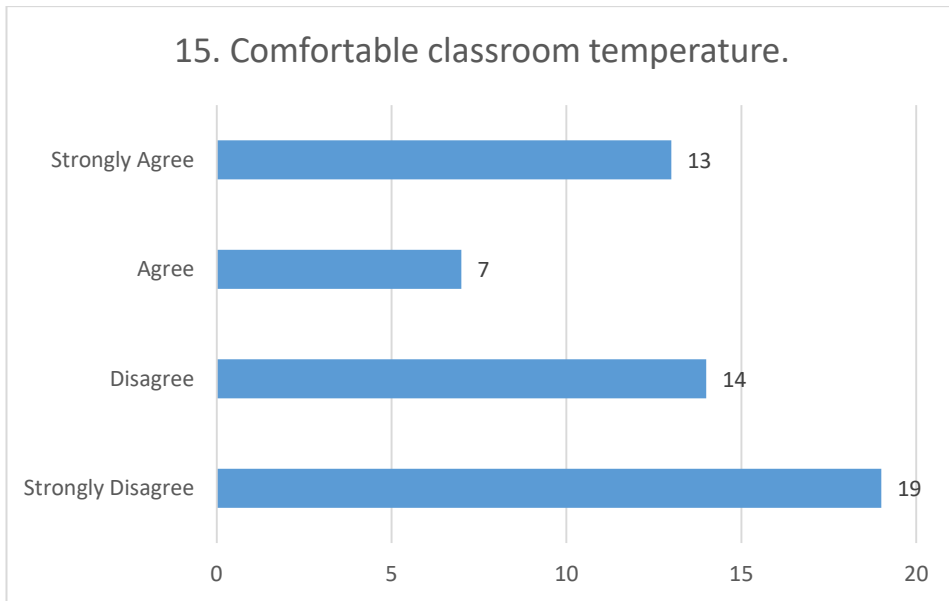


Figure 15 Classroom temperature. Created by the author.

Results demonstrate that the majority of students strongly disagree about comfortable classroom temperature. Approximately, a third of students disagrees.

4.2. Survey for the International Baccalaureate students

The following statistical charts belong to the surveys conducted to students 19 students of 2nd course at the International Baccalaureate of Colegio Fiscal Ismael Pérez Pazmiño. This instrument collects data for answering the question “How is the physical environment perceived by students?” There are 15 questions using a Likert Scale that goes from strongly disagree to strongly agree.

Table 2 Survey for the International Baccalaureate students

*Please rate how strongly you agree or disagree with each of the following statements by placing a check mark in the appropriate box.	Strongly Disagree	Disagree	Agree	Strongly Agree
Size of classroom meets the students' needs.	0	2	15	2
There are a variety of places, both inside and outside of the school, where students can meet together in both small and large groups.	1	3	12	3
The building suits the students' ability to personalize their workspace.	3	5	9	2
Classroom rules and consequences are posted in each room.	0	4	12	3
Suitable reception space is available for students, teachers and visitors, so they feel welcome.	3	8	4	4
Entrances and walkways are sheltered from sun and inclement weather.	4	3	7	5
Color schemes, building materials, and décor motivates learning.	1	1	12	5
Classroom furniture is functional.	2	4	8	5
Interior walls, including classroom spaces are in excellent condition.	0	0	5	14
There are exhibition spaces to display student work.	0	1	10	6
The light level in the building is appropriate for learning.	0	0	15	4
Is the noise level distracting when learning?	14	5	0	0
Building is neat, clean, and in good repair. There are few, if any, signs of vandalism or graffiti.	0	3	13	3
Comfortable and stress-free classrooms.	0	0	0	19
Comfortable classroom temperature.	0	0	0	19

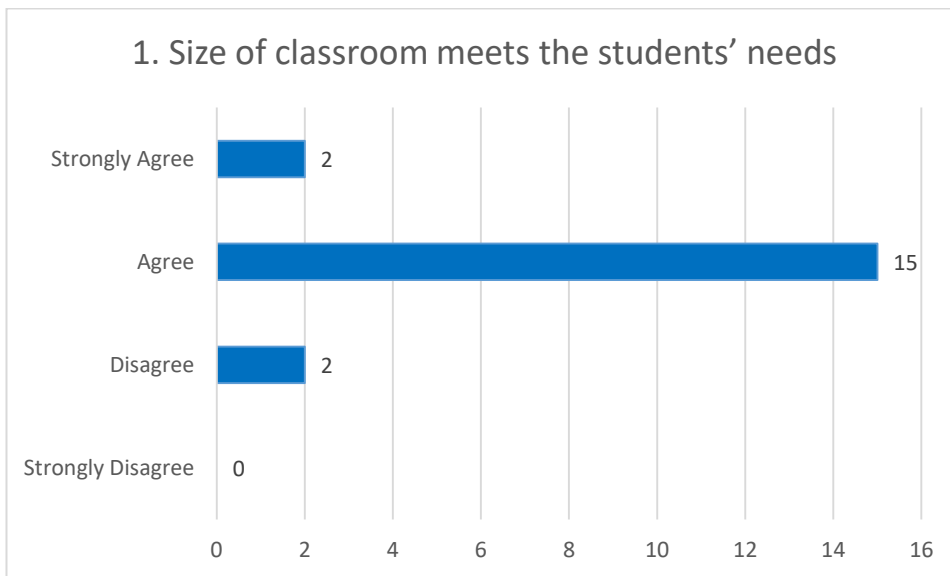


Figure 16 Size of classroom. Created by the author.

The chart shows that most of the students acknowledge that the size of the classroom meets their needs. Only a few of them disagree.

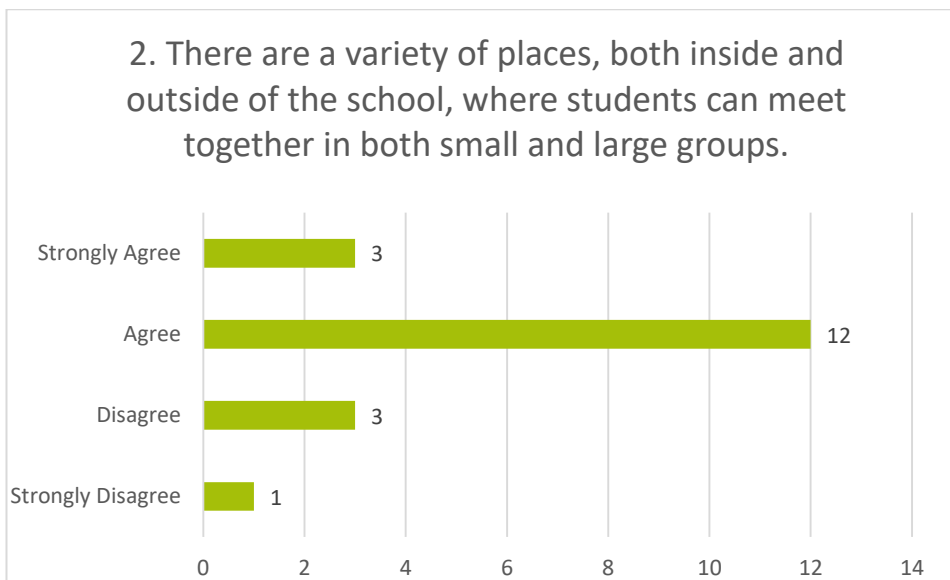


Figure 17 Places for students to meet. Created by the author.

The chart above represents the common belief that there are variety of places in the school where they can gather together. A small group disagree on this idea.

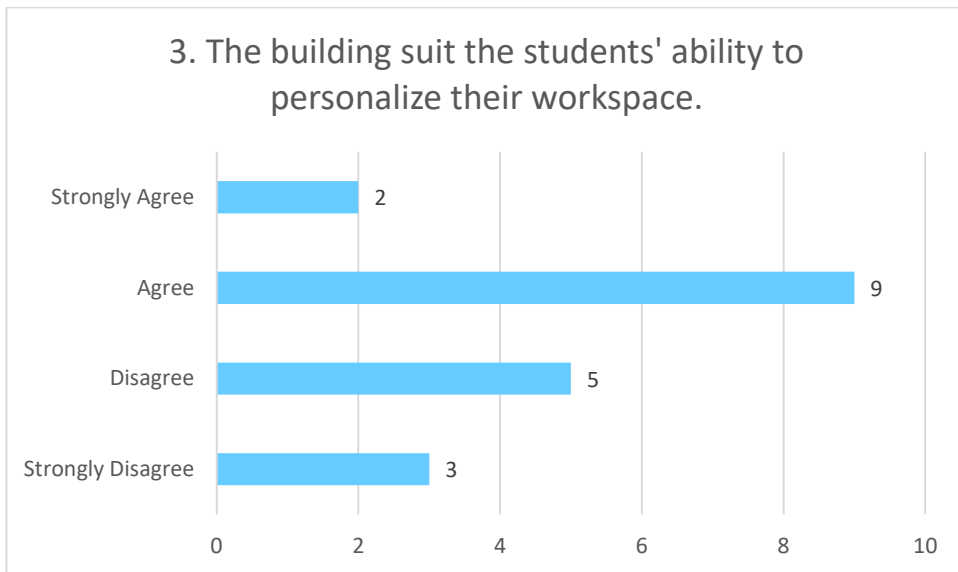


Figure 18 Suitability of the building. Created by the author.

It can be reflected in the graph above that almost half of the students believe the building suits their ability to personalize their workspace. A small percentage of students don't think in the same way.

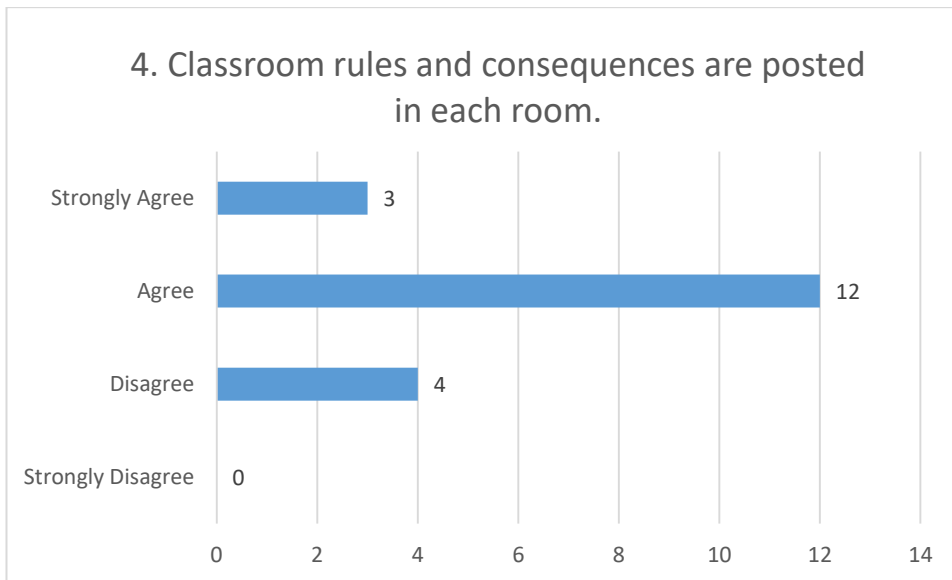


Figure 19 Classroom rules. Created by the author.

It is demonstrated in the chart that students agree the classroom rules and consequences are posted in each room. A few group of students disagree on this fact.

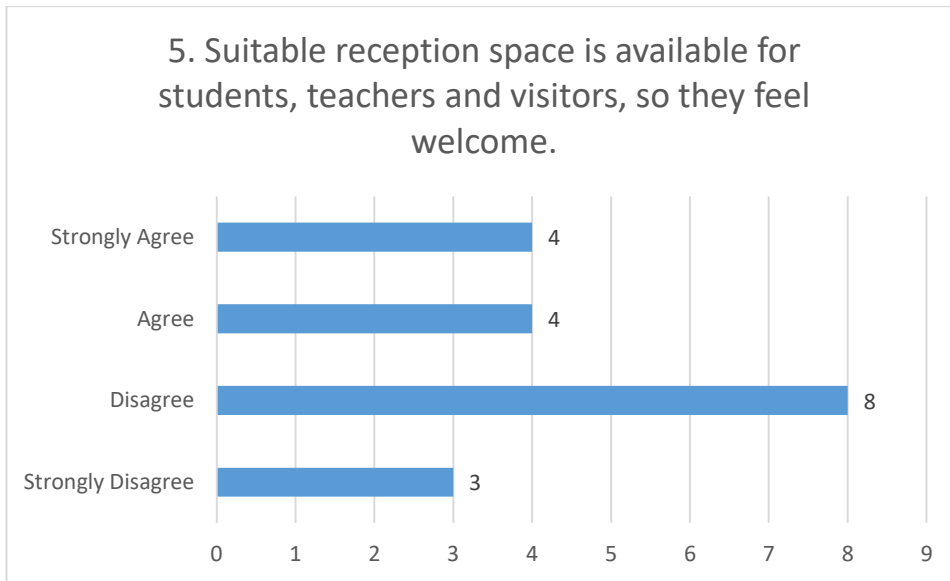


Figure 20 Reception Space. Created by the author.

Most of the respondents stated that they do not think the reception space is available for students, teachers or visitors. Almost half of the respondents believe this statement is true.

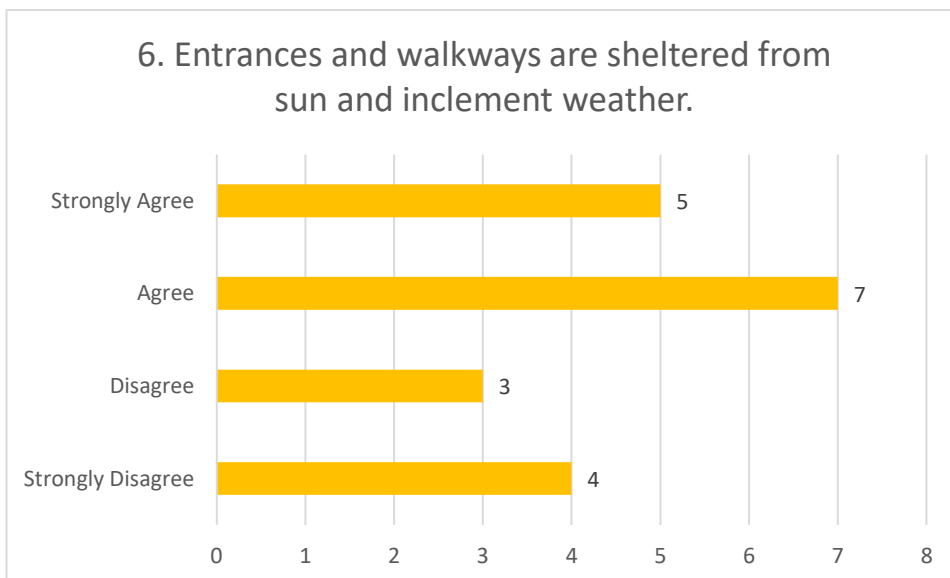


Figure 21 Sun and inclement weather. Created by the author.

Most of the students conclude that the entrances and walkways are protected from inclement weather, while almost half of them disagrees.

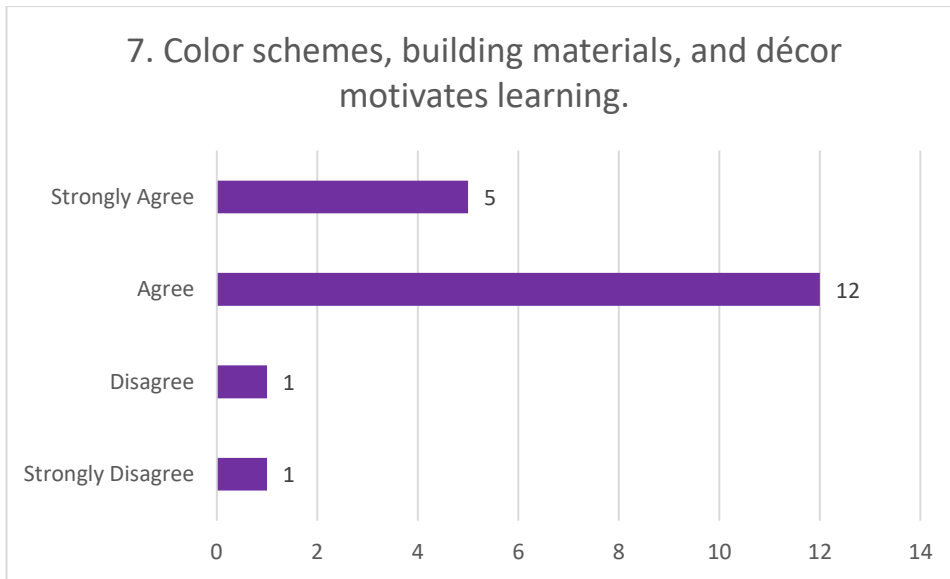


Figure 22 Building décor motivates learning. Created by the author.

Almost all of the students believe the building colors, materials and décor motivates learning. Only a small part of students differs on this answer.

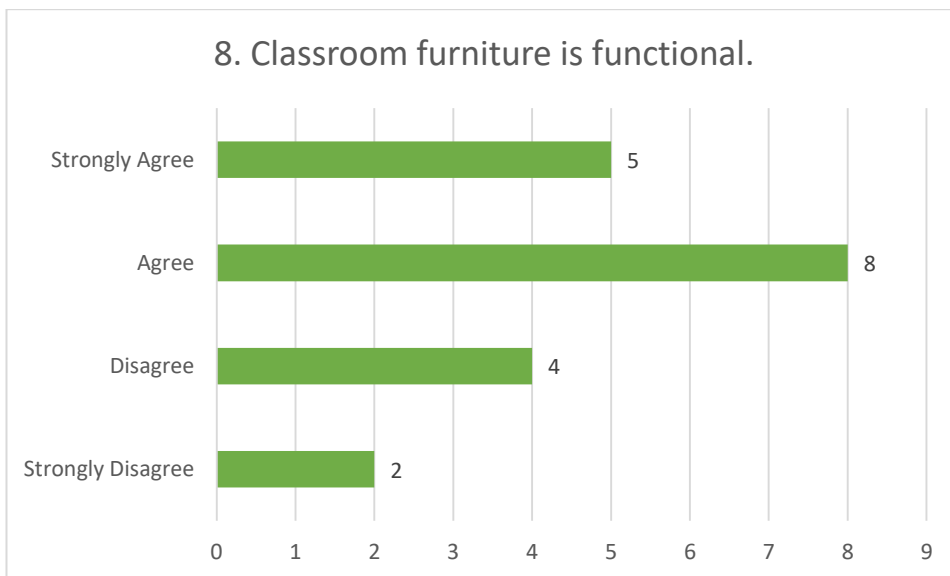


Figure 23 Functional classroom furniture. Created by the author.

The chart above determinates that most of the respondents admit the classroom furniture is functional. On the other hand, there are few respondents who disagree.

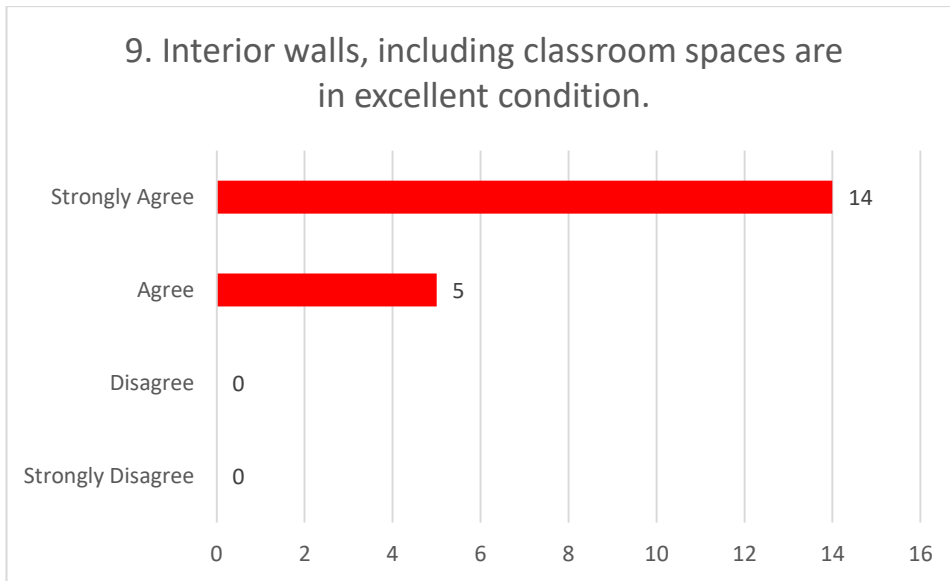


Figure 24 Condition of classroom spaces. Created by the author.

It can be clearly seen that the entire group of students strongly agree their classrooms and interior walls have excellent conditions.

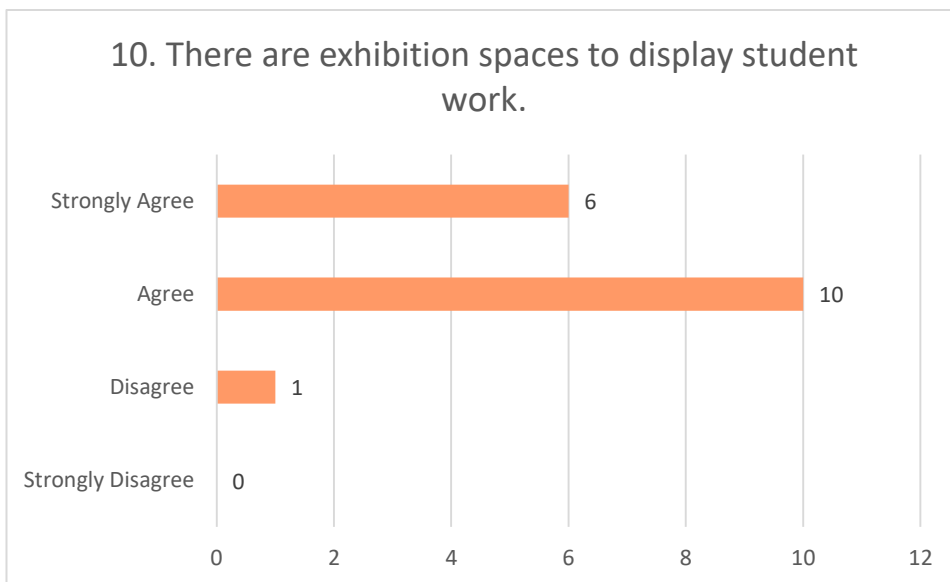


Figure 25 Exhibition spaces to display student work. Created by the author.

Results show that most of the students believe there are enough spaces to display their works, while only one student dissents.

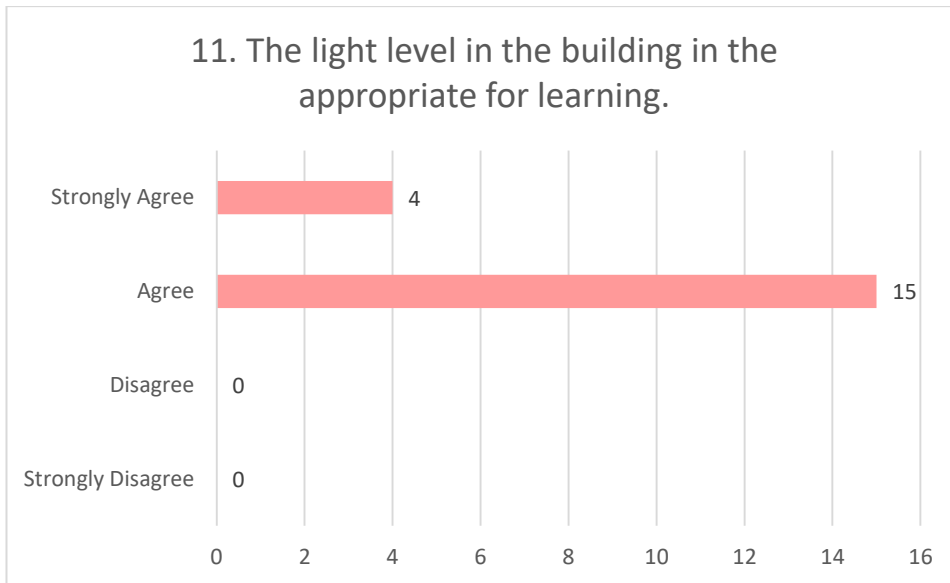


Figure 26 Appropriate level of light. Created by the author.

According to the respondents, all of them acknowledge that the building level light is convenient for learning. None of them think otherwise.

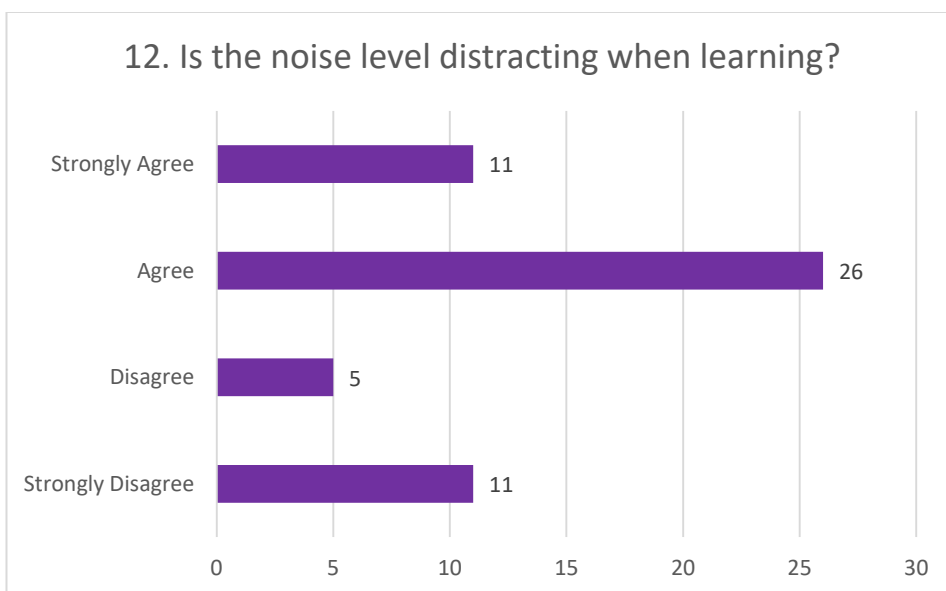


Figure 27 Distracting level of noise. Created by the author.

All of the students believe the noise level does not distract them from learning.

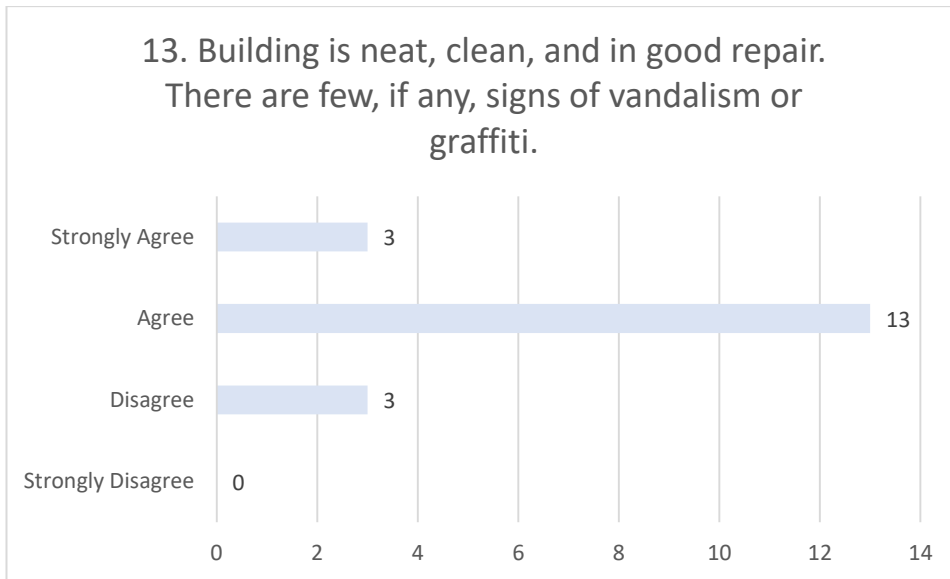


Figure 28 Appropriate building. Created by the author.

A great part of the students consider the building is in good conditions and with no signs of vandalism or graffiti. Only a small part of students differ.

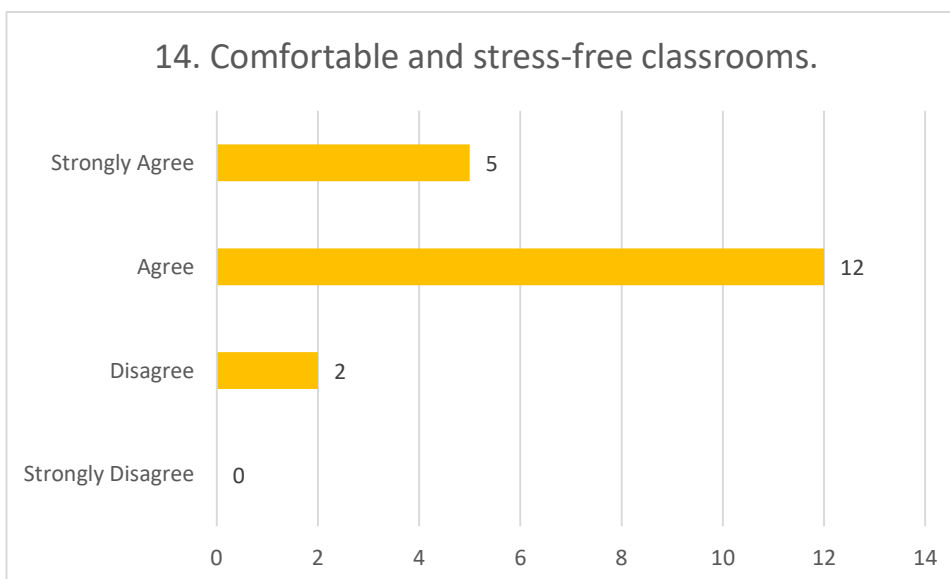


Figure 29 Comfortable classrooms. Created by the author.

Results show almost all of the students agree classrooms are comfortable and stress-free. There are few students who do not agree on this statement.

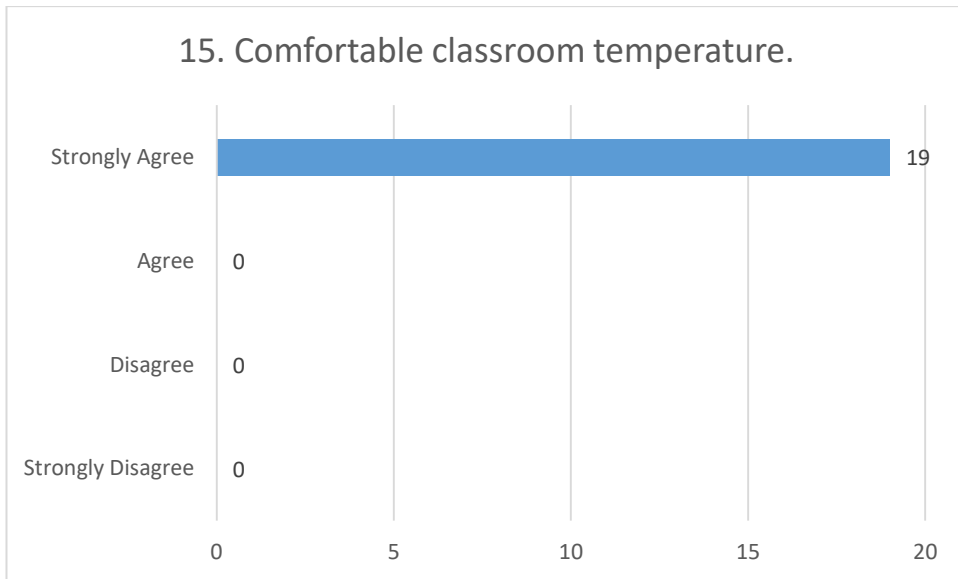


Figure 30 Classroom temperature. Created by the author.

100% of the students think temperature in the classroom is the appropriate.
Any of the students think otherwise.

4.3. TEACHERS' SURVEY

The following statistical charts belong to the surveys conducted to teachers of 2nd course at the National Baccalaureate as well as the International Baccalaureate of Colegio Fiscal Ismael Pérez Pazmiño. These statistics tries to answer the question “To what extent is the physical environment affecting the EFL learning process at Ismael Pérez Pazmiño High School? There are 8 questions using a Likert Scale that goes from strongly disagree to strongly agree.

Table 3 *Teachers' survey*

Please rate how strongly you agree or disagree with each of the following statements by placing a check mark in the appropriate box.	Strongly Disagree	Disagree	Agree	Strongly Agree
Learning environment impacts academic achievement.	3	1	0	0
I like my teaching environment.	0	1	3	0
My classroom environment encourages cultural diversity.	4	0	0	0
The seating arrangement in my classroom is organized so students can collaborate	0	2	2	0
Technology is used to assist learning in my classroom.	4	0	0	0
My classroom environment is viewed positively by the students.	4	0	0	0
Seats in my classroom are arranged in traditional lecture format (desks are in rows).	0	0	0	4
Most students in my classroom perceive class assignments as meaningful.	1	3	0	0

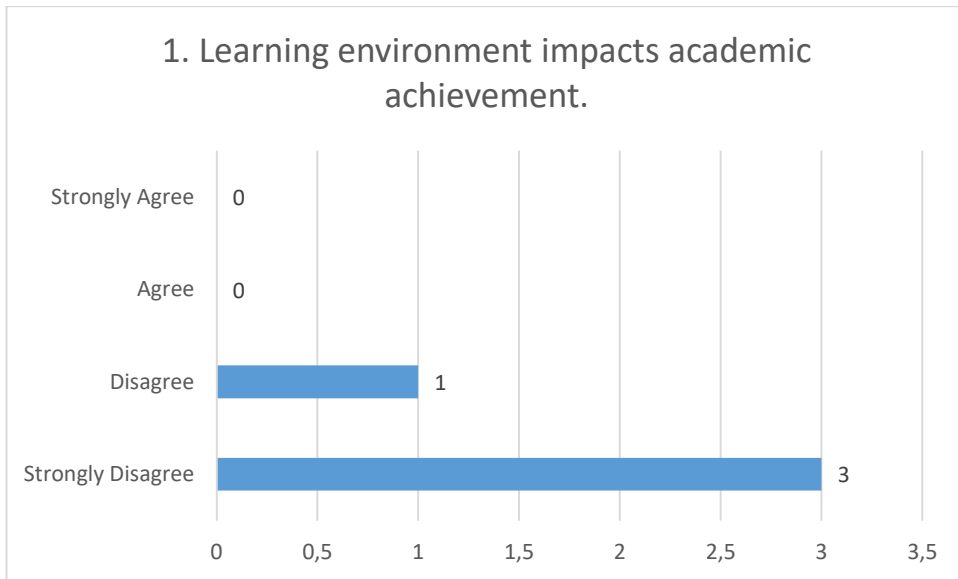


Figure 31 Academic Achievement. Created by the author.

Most of the teachers conclude that the academic achievement is influenced by the learning environment, while only one teacher does not agree on this statement.

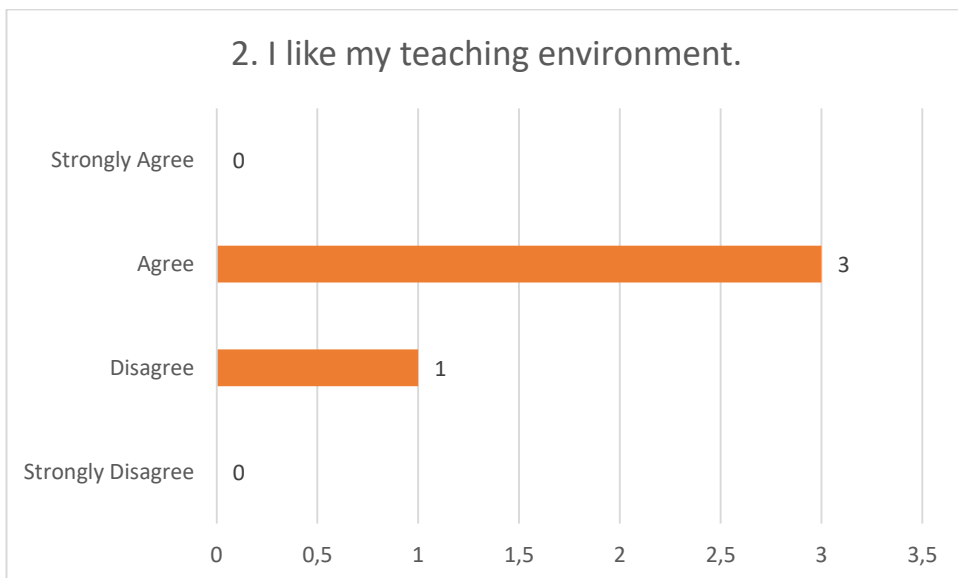


Figure 32 Teaching environment.

Almost all of the English teachers enjoy their teaching environment. There is only one teacher who differ in this answer.

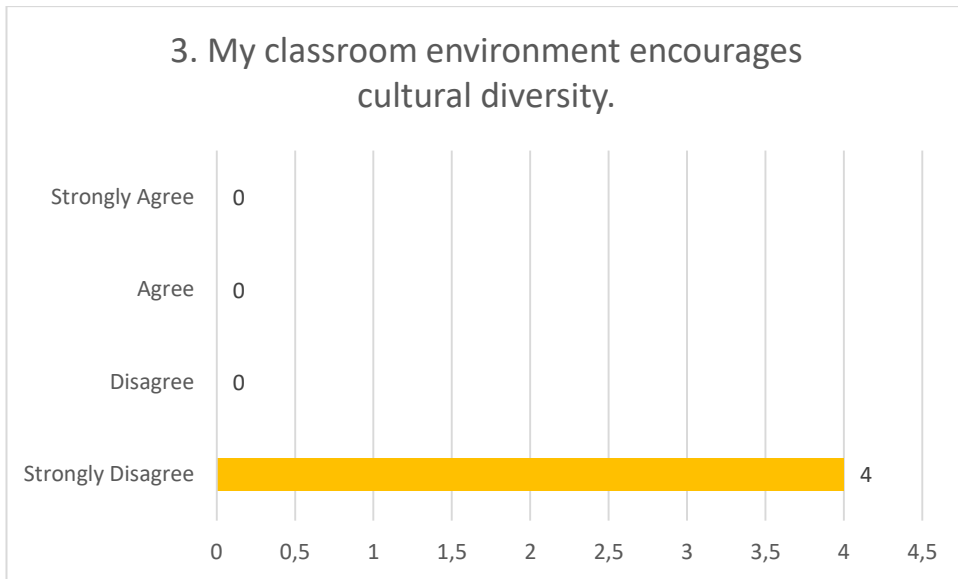


Figure 33 Classroom environment encourages cultural diversity. Created by the author.

According to all of the teachers, the physical environment does not stimulate cultural diversity. None of the teachers think otherwise.

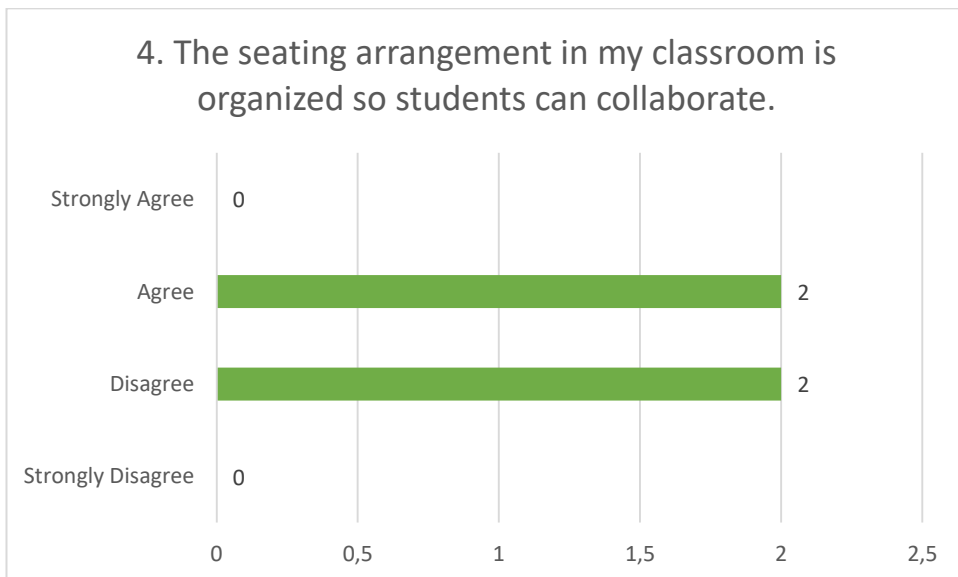


Figure 34 Classroom seating arrangement. Created by the author.

According to the chart, half of the teachers think the seating arrangement is not arranged in a way students can collaborate, while the other half think it does.

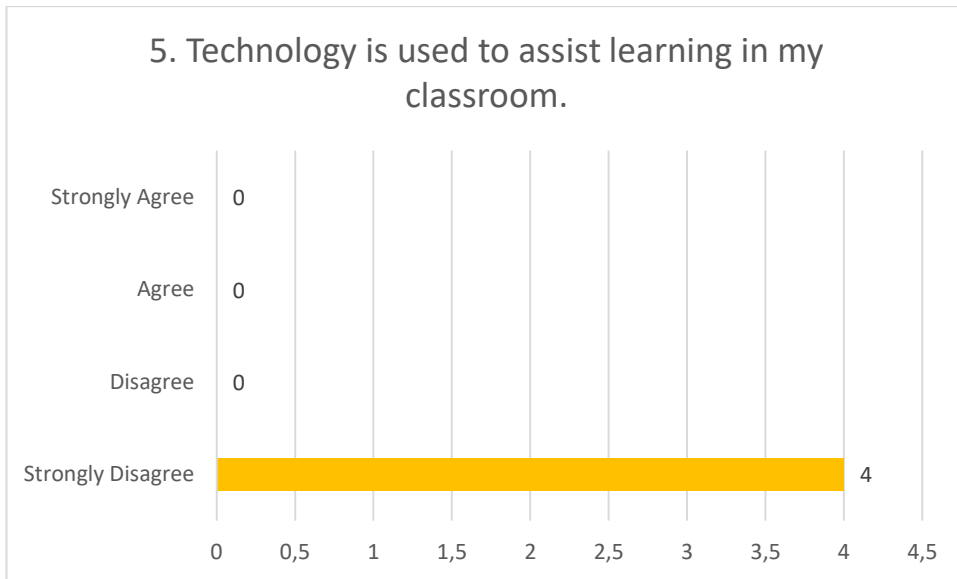


Figure 35 Technology in the classroom. Created by the author.

The chart shows technology is not used to promote learning. All of the teachers agree on this statement.

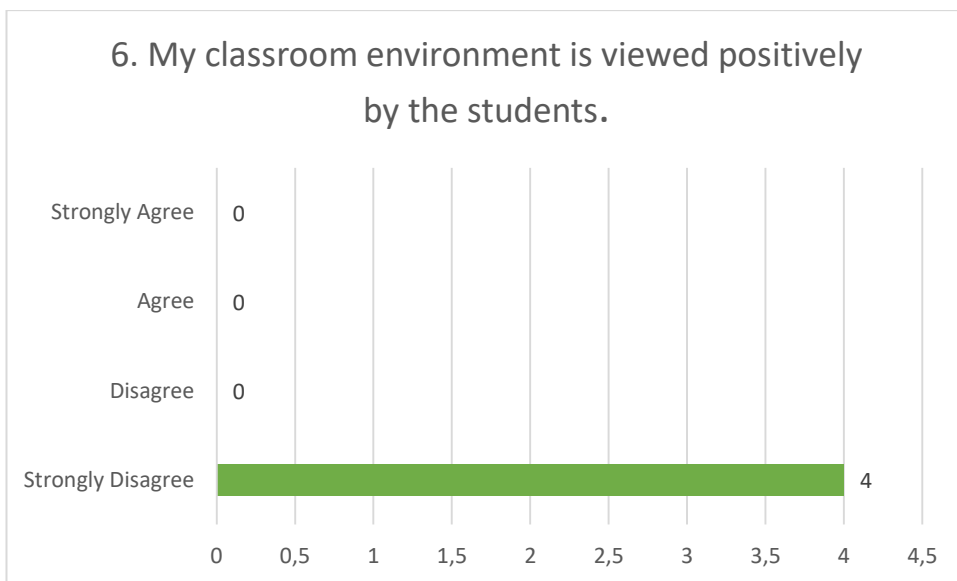


Figure 36 Positive classroom environment. Created by the author.

All of the teachers stated they strongly disagree on the fact that students perceive the environment as positive.

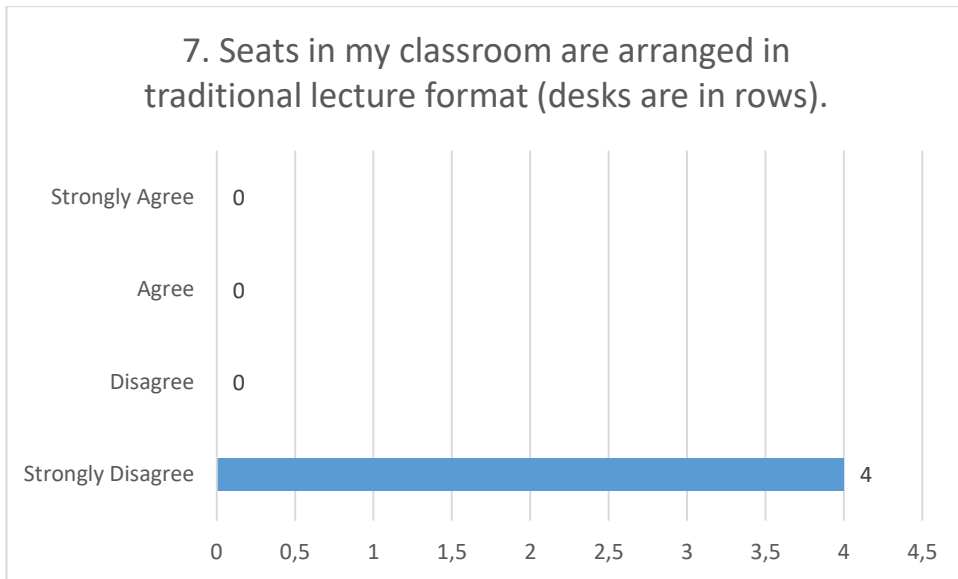


Figure 37 Seating arrangement. Created by the author.

Results show all of the teachers think the seating arrangement in the classroom remains in the traditional way.

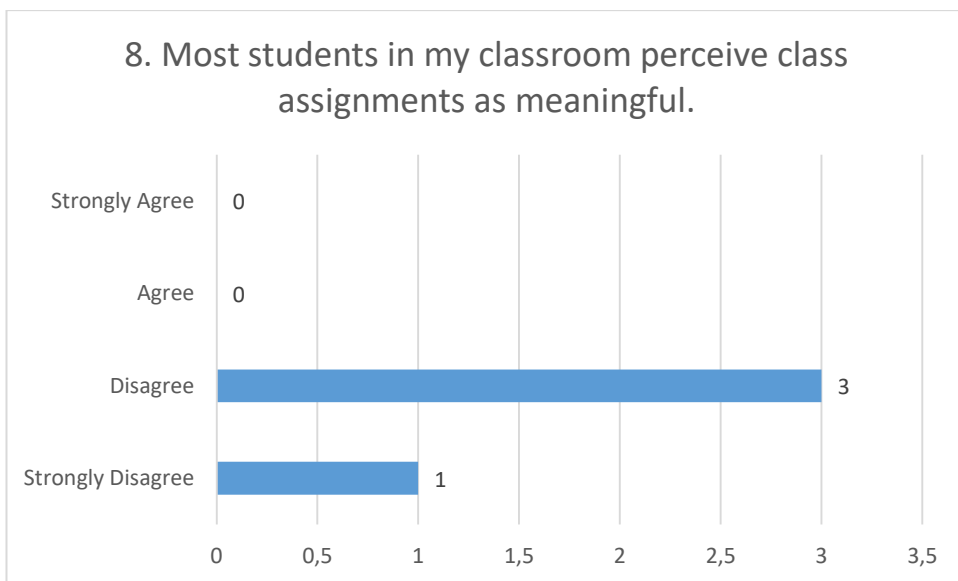


Figure 38 Meaningful class assignments. Created by the author.

All the teachers mentioned they do not believe class assignments are meaningful to students.

FINDINGS

After conducting the surveys on educational physical environment for EFL students from the national baccalaureate and international baccalaureate of Ismael Pérez Pazmiño High School, it could be concluded that:

- Students from 2nd course think the room satisfies their needs, the school has variety of places where they can gather together, and that they are able to personalize their workspace.
- The national baccalaureate students as well as the international have the common thought that the building is not the adequate to students, teachers or visitors.
- Results showed that students from national baccalaureate strongly disagree that classroom physical space motivates learning; this affects how well students and teachers can communicate in EFL, so the English lessons don't usually have the desired outcomes. Contrarily, the building colors, materials and décor from international baccalaureate students motivates learning. For this reason they are more advanced in English academically.
- Students stated classroom furniture serves a functional purpose, although as observed in this research work, the desks do not fulfill their learning goals.
- According to both groups, the level of light in the building is convenient for learning, although in the field research it could be noticed that the light level in the national baccalaureate building is too intense since the windows of the classrooms are very large and do not have curtains that dampen a bit the intensity of the light; therefore, this can cause eye fatigue, headache or stress. In the case of international baccalaureate classrooms, the windows and doors have dark sheets that do not allow much light to pass through. It is easier for them to stay focused during the EFL process.
- For students from national baccalaureate, the level of noise distracts them from learning. Reasons are because of overcrowded classrooms as well as windows and doors always open. Therefore, noise can be heard easily from surrounding courses, which may cause discomfort and interference that impede teacher concentration and student attention. It also causes a

decrease in reaction time when learning; whereas doors and windows of the international baccalaureate classrooms remain closed all the time, which avoids distractions during the English lessons.

- As stated by the national baccalaureate students, classrooms are not clean and tidy. In addition, graffiti can be seen inside and outside of them. This produces a deficit in the development of learning as students can not reach their maximum concentration on EFL lessons because the external conditions are not the best for the full development of their cognitive abilities; however, cleanliness and order are very noticeable in the building of international baccalaureate students, their focus is on what the teacher is teaching and not in external factors.
- The survey showed that national baccalaureate students do not feel comfortable with the temperature of the classroom, this relies on the lack of air conditioners or fans. The increase in temperature produces sweats, dehydration and disorders that can cause fatigue, which clearly interferes with the learning process as it is uncomfortable to stay focused in such environment. On the other hand, students from international baccalaureate said they feel very comfortable in their classrooms with air conditioning. The appropriate temperature contributes to increase the comfort and well-being during the development of the teaching activity.
- Regarding to EFL teachers' responses, they mostly agree that physical learning environment affects both English academic performance and the psychological well-being of students.
- School physical environment does not promote the diversity of culture among students, so the surroundings do not motivate them in any way to learn English.
- All the teachers agree the seating arrangement is in the traditional lecture format, even though students like to move their desks in a way they can work in groups and thus collaborate in the EFL learning process establishing adequate communication and improving teaching processes.
- In the case of teachers from national baccalaureate, their students do not have access to technological tools that encourages them to learn English. Conversely, each of the international baccalaureate students has a laptop

with internet access, so for the teacher as well as the students it facilitates the EFL teaching learning process.

- All the teachers agree students from national baccalaureate do not think class assignments are meaningful to them, which is reflected in their English scores; however, students from national baccalaureate do well in EFL classes.

CONCLUSIONS

- Students from International Baccalaureate who study under favorable classroom environment have done better in EFL lessons than students from National Baccalaureate who study under unfavorable classroom environment.
- Students from the International Baccalaureate obtained 22% of performance more than the students of the National Baccalaureate, based on the results of the scores of the second five-month period in the English subject.
- Unfavorable conditions such as inappropriate classroom, poor ventilation, high classroom temperature, and lack of technological tools, coupled with inappropriate desk and seating arrangement seem to have a negative impact on the National Baccalaureate students.
- National Baccalaureate teachers have problems in the EFL teaching process due to the factors that surround this group of students.
- International Baccalaureate teachers do not struggle with EFL lessons because the environment is suitable for learning.

RECOMMENDATIONS

This research work has proved that the physical environment of the classroom plays an important role in determining students' academic achievement; therefore, as a recommendation, the classroom environment should be meticulously structured, besides of being provided all the necessary facilities. All classrooms should be equipped with visual aids, maps, murals, charts, posters, etc., since these materials are likely to develop students' interest. Regarding the size of the classroom, it is acknowledged that appropriate class size is determined as an essential factor that settles students' success in learning various school subjects. This evidence makes it imperative that the ministry of education should apply the recommended standard size in designing classrooms throughout the country. The government should collect enough money for building public schools in appropriate areas and emphasize that the amount of students in each classroom are the proper. Moreover, it is necessary to implement technology inside the classroom. Cupboards and lockers should be installed in each classroom so that students as well as teachers can store their belongings. In the same way, it is also important that windows are covered with curtains or dark sheets in such a way that the level of light inside the classroom is the appropriate for the learning process. In addition, it is crucial that classrooms are equipped with fans or air conditioners to moderate classrooms atmosphere, as heat affects the students' mood so they are prone to perform negatively. The last and most important recommendation is the provision of English audio-visual aids in each classroom as these aids help strengthen students' motivation, and therefore, enhance their EFL learning process.

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APPENDIX

DATOS GENERALES		DATOS-Q1-P1		ACTA-Q1-P1		ACT. Q1-P1		DATOS-Q1-P2		ACTA-Q1-P2		
COLEGIO FISCAL "ISMAEL PEREZ PAZMIÑO" 2018 - 2019 ACTA DE CALIFICACIONES PARCIAL 2 - SEGUNDO QUIMESTRE												
ASIGNATURA: INGLÉS A.B. NM PROFESOR(A): PINTO CRUZ PEDRO LUIS NIVEL: BACHILLERATO INTERNACIONAL JORNADA: MATUTINA CURSO: SEGUNDO PARALELO: A FECHA: Wednesday, January 23, 2019												
SEGUNDO QUIMESTRE - PARCIAL 2												
No.	NÓMINA	NOTA PARCIAL 2						Cuantil	0			
		Cualit	Cua	9-1	7-8	4-6	Cuantil					
1	ANGULO PALMA ASHLEY FERNANDA	DAR					9,8				0	
2	ARMIDOS ESPINOZA DIANA DENISSE	DAR					10				0	
3	BAÑO CORDERO CHRISTELL NICOLLE	DAR					9,73				0	
4	ESPINOZA ALBUJA ANTHONY EMILIO	DAR					9,7				0	
5	GONZALEZ GUARACA CRISTHINA FERNANDA	AAR					8,33				0	
6	LUCERO CORONADO ROMINA ANAHI	DAR					9,32				0	
7	MANZO VINZA EMILY NOHEMI	DAR					9,07				0	
8	PALIZ PEREZ ANGELO FABIAN	AAR					8,2				0	
9	PALIZ PEREZ ANTHONY ISAAC	AAR					8,53				0	
10	PILCO CURICAMA GLORIA BELEN	AAR					8,93				0	
11	REYES TIGUA HILARY ROMINA	DAR					9,73				0	
12	ROSADO VAZQUEZ DANA BELEN	DAR					9,4				0	
13	SORIANO MORAN JOSE DAVID	AAR					7,2				0	
14	SUAREZ CONTRERAS BORIS ISMAEL	AAR					8				0	
15	TOALA LARA ANGELO GABRIEL	AAR					8,2				0	
16	TORRES ALVARADO KATHERINE ADBIANA	DAR					9,33				0	
17	TUTIVEN INTRIAGO DOMENICA GISELLA	DAR					9,8				0	
18	ZAMBRANO TORRES JOSE LUIS	DAR					9,07				0	
										Total alumnos:	18	
										Promedio del curso:	9.02	
DAR (Domina los aprendizajes requeridos) AAR (Alcanza los aprendizajes requeridos) PAR (Está próximo a alcanzar los aprendizajes requeridos) NAR (No alcanza los aprendizajes requeridos)												
Totales:												
PINTO CRUZ PEDRO LUIS												

		COLEGIO FISCAL "ISMAL PEREZ PAZMIÑO"		Distrito 5		
		2018 - 2019		TARQUÍ - TENGUEL		
		ACTA DE CALIFICACIONES PARCIAL 2 - SEGUNDO QUIMESTRE				
		ASIGNATURA:	INGLÉS A.B. NM			
		PROFESOR(A):	PINTO CRUZ PEDRO LUIS			
		NIVEL:	BACHILLERATO NACIONAL			
		JORNADA:	MATUTINA			
		CURSO:	SEGUNDO			
		PARALELO:	A	FECHA:	miércoles, 23 de enero de 2019	
		SEGUNDO QUIMESTRE - PARCIAL 2				
Nº	NOMINA	NOTA PARCIAL 2		Cualit	Cuantit	
1	ARRIAGA ZAMBRANO CÉSAR ISMAEL	AAR	8,03			
2	BRAVO NAVAS ALISSON NOEMÍ	PAR	5,64			
3	CAICEDO JARAMILLO ANDREA ESTEFANÍA	AAR	8,3			
4	CALDERÓN MORALES BRUNO DAMIÁN	AAR	7,42			
5	CHICHANDA ZAMBRANO EDWIN ALEX	AAR	8,2			
6	COQUE CHOEZ STEFANY MICHEL	AAR	7,2			
7	DE CIAN RAMOS ARIANNA VALENTINA	PAR	4,8			
8	DILLÓN QUIÑONES OSWALDO MATHEO	PAR	5,4			
9	DUQUE CAICEDO JORGE MICHAEL	AAR	7			
10	ESCOBAR SUÁREZ ANA PAULA	PAR	5			
11	FIGUEROA LEÓN OSCAR MIGUEL	AAR	7,4			
12	GÓMEZ QUINDE ANTHONY JAVIER	PAR	5,6			
13	GRANIZO RONQUILLO SALVATORE ANDRÉS	PAR	5,4			
14	GRANOBLE UZICA JENNIFER ANAHÍ	AAR	8			
15	GUZMÁN ALVARADO JOSH MATEO	PAR	5,2			
16	GUZMÁN CAICEDO EDISON ALEXANDER	PAR	6			
17	GUZMÁN CORONEL JOEL JOSUÉ	PAR	5,25			
18	IBARRA CAICEDO ESTEFANI SOLANGE	AAR	7,4			
19	JIMÉNEZ DUARTE DIANA ISABEL	AAR	7,2			
20	LÓDR CAICEDO CARLA ANAHÍ	DAR	9,8			
21	MAZZA BANGUERA NEIBA SOLANGE	PAR	5,6			
22	MEJÍA ANCHUNDIA ISAAC JACINTO	AAR	7,8			
23	MONGE ALVARADO ALEX WLADIMIR	AAR	8			
24	MONTESDEOCA MUÑOZ ADRIANA MELISSA	PAR	6			
25	NICOLA ALFONSO EMILY LISBETH	DAR	9,8			
26	NORIEGA CARRIÓN DENISSE DOMÉNICA	PAR	4,8			
27	OLIVEROS FLORES DANIELA CAMILA	AAR	8,4			
28	ORTEGA YOZA EDISON JOSUÉ	AAR	7			
29	ORTIZ ZURITA MARCO ANDRÉ	DAR	9,4			
30	PATA VALENCIA DENISSE VALENTINA	PAR	5,6			
31	PEREZ PÉREZ NEIBI ARIANA	DAR	9,4			
32	PLÚA ORTIZ CECILIA JULEXY	AAR	8,4			
33	POZO ALBARRACÍN OMAR ADRIAN	AAR	7,6			
34	RECALDE MITE NELLY NICOLE	PAR	6,2			
35	REYES TERRANOVA MARIA JOSÉ	PAR	6			
36	USEY CHOEZ MELD ASHLEY	PAR	6,8			
37	VELASCO AGUILERA MAYSA ALEJANDRA	PAR	6,8			
38	VÉLEZ MANRIQUEZ KEYLHA SCHESELLE	PAR	6,6			
39	VERA RODRIGUEZ RICARDO	NAR	0			
40	VILLAD MARISCAL JAMILETH ESTHER	PAR	5,8			
41	VILLENNA MONSERRATE DANIELA	AAR	7,2			
42	VIVAS MARIN GLEMS	PAR	6			
43	WANGBARI SNACHEZ YAZMÁN	PAR	4,2			
					Total alumnos:	43
					Promedio del curso:	6,87
		Rango	Nº de Estudiantes	%		
DAR (Domina los aprendizajes requeridos)		9,00 - 10,00	4	9,30		
AAR (Alcanza los aprendizajes requeridos)		7,00 - 8,99	14	32,56		
PAR (Está próximo a alcanzar los aprendizajes requeridos)		4,00 - 6,99	24	55,81		
NAR (No alcanza los aprendizajes requeridos)		0,00	1	2,33		
		Totales:	43	100%		

PINTO CRUZ PEDRO LUIS

It can be seen that the academic performance of International Baccalaureate students surpasses the National Baccalaureate students with a better average of scores. This is because the physical conditions in which International Baccalaureate students study are much more favorable and comfortable than those of the National Baccalaureate students.



DECLARACIÓN Y AUTORIZACIÓN

Yo, **Lorentzen Moreira, Maria Gabriela**, con C.C: # **0930369665**, autora del trabajo de titulación: **The elements of classroom physical environment that affect the learning process of English as a Foreign Language of 2nd Baccalaureate students from Colegio Fiscal Mixto Ismael Pérez Pazmiño**, previo a la obtención del título de **Bachelor Degree in English Language with a Minor in Educational Management**, en la Universidad Católica de Santiago de Guayaquil.

1.- Declaro tener pleno conocimiento de la obligación que tienen las instituciones de educación superior, de conformidad con el Artículo 144 de la Ley Orgánica de Educación Superior, de entregar a la SENESCYT en formato digital una copia del referido trabajo de titulación para que sea integrado al Sistema Nacional de Información de la Educación Superior del Ecuador para su difusión pública respetando los derechos de autor.

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Guayaquil, 18 de Marzo de 2019

f. _____

Lorentzen Moreira María Gabriela

C.C: **0930369665**



REPOSITORIO NACIONAL EN CIENCIA Y TECNOLOGÍA

FICHA DE REGISTRO DE TESIS/TRABAJO DE TITULACIÓN

TÍTULO Y SUBTÍTULO:	The elements of classroom physical environment that affect the learning process of English as a Foreign Language of 2nd Baccalaureate students from Colegio Fiscal Mixto Ismael Pérez Pazmiño		
AUTOR(ES)	Maria Gabriela Lorentzen Moreira		
REVISOR(ES)/TUTOR(ES)	Mariela Vásquez, Natasha del Pozo		
INSTITUCIÓN:	Universidad Católica de Santiago de Guayaquil		
FACULTAD:	Facultad de Artes y Humanidades		
CARRERA:	Licenciatura en Lengua Inglesa		
TITULO OBTENIDO:	Bachelor Degree in English Language with a Minor in Educational Management		
FECHA DE PUBLICACIÓN:	18 de Marzo de 2019	No. DE PÁGINAS:	69
ÁREAS TEMÁTICAS:	Educational environment, classroom physical ambiance, EFL learning process.		
PALABRAS CLAVES/ KEYWORDS:	National Baccalaureate, International Baccalaureate, academic achievement, classroom environment, EFL learning process, research study.		

RESUMEN/ABSTRACT:

Classroom physical design plays an important role in the academic achievement of students. For them, the classroom is not only a scholarly space, but also a physical, emotional and social setting. The objective of this study is to analyze how the physical environment affects the EFL learning process of students from "Ismael Pérez Pazmiño". The research approach used to endorse this study was a descriptive research. Two groups of students are observed during this research study: students from 2nd National Baccalaureate and students from 2nd International Baccalaureate, both assigned to study under 2 different classroom environments. The International Baccalaureate group consists of 19 students who study in well-renovated classrooms; while the National Baccalaureate group includes 56 students who study in non-renovated classrooms. A survey was administered to both groups of students using Likert Type Scales to analyze how the physical environment perceived by them is. To reinforce this theory, the scores in the final English exam of the second five-month period for the two groups are compared to examine the physical environmental effect of the classroom on student academic achievement. These scores are tabulated and examined using descriptive statistics. The results show that there are meaningful differences between the achievements of the students from International Baccalaureate and the students from National Baccalaureate in English in favor of the International Baccalaureate group who have studied under positive classroom conditions. The researcher has also surveyed the teachers' point of view regarding the learning environment and its potential impact on students' academic achievement in English.

ADJUNTO PDF:	<input checked="" type="checkbox"/> SI	<input type="checkbox"/> NO
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	E-mail: xjarrin@yahoo.com ; Ximena.jarrin@cu.ucsg.edu.ec	

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Nº. DE CLASIFICACIÓN:	
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