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“Students dispositions on behalf of written feedback”

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I Problem statement

In the context of formative assessment, which according to Nicol and MacFarlane-Dick (2006) corresponds to the type of assessment given that provides feedback on the performance of the learner in order to let the students be aware of their own process of learning; therefore, it improves the development of students in a self-regulated learning process. Additionally, for Bloom (1969), the purpose of formative evaluation is to provide feedback and correctives at each stage in the teaching-learning process, being both formative assessment and feedback two concepts directly related in the learning process. Along the same lines, Pintrich and Zusho (2002) had previously declared that the term self-regulation refers up to what extent university students' regulation of their thinking, motivation, and behavior can vary during learning with the intention of empowering themselves as active learners. According to the MINEDUC (Ministerio de Educación de Chile) formative evaluation is the practice that evidences the performance of the learners, this performance is then obtained, interpreted and used for teachers and students in order to decide future steps.

The importance of feedback leads in the students' awareness of their own learning process as they can develop metacognitive strategies that will let them comprehend their own knowledge by letting them know their performance, and progress in a particular task. As a result of the action of being provided with feedback, either by teachers or peers, the students' performance may improve and this, in turn could allow them to become more proficient in writing tasks. Improving aided by the guidance of other people is what we know as Vygotsky's concept of learning in the Zone of proximal development (ZPD) and scaffolding, which corresponds to the start point and the future development stage that the learner should reach. In fact, the concept of the ZPD is an important aspect to take into account in the learning process. To understand what is the zone of proximal development we can consider the explanation given by Vygotsky (1978), the author explained the ZPD as follows *the distance*

between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peer (Vygotsky, L. S. 1978, p. 86). This idea can be understood as the potential development that a learner can achieve with some help. Consequently, there is a link between the concept of ZPD and the core of our investigation, which is feedback. A common point is that there is a collaboration between the learner and another person with a higher level of proficiency in the subject, which according to Anson. Dannels. Laboy.& Carneiro (2016) viewpoint involves several collateral features that are not broadly covered during the feedback process such as the perspective of the learner that receives the feedback. Consequently, there is still a lot more to find out on how students react to this type of teacher's response. Thus, there is still much we do not know about the nature of the learner, and more specifically, how they respond to different types of feedback, (Anson I & Anson C, 2017). For this reason, this thesis is concerned with studying the dispositions of students of two different disciplines, engineering and science. The nature of the students´ response in regard to the type of feedback that they receive is therefore a source of information that will be researched.

Consequently, the main purpose is to analyze undergraduate students' dispositions towards written feedback in question and order mode (Straub & Lunsford 1995) provided by university teachers of engineering and science disciplines in the context of written tasks. This research will be carried out separately, following the groups of engineering and science students as two different cases.

The study is focused on college students, provided that as they work with academic texts on a daily basis, they require feedback to know their progress. Written feedback is most predominant in this aspect, since it is designed to be permanent, and anyone can go back to it time and time again whenever they need to. This is the reason why it is the most common format in which teachers give feedback to their students.

The participants of this study can use this information to improve their productive outcomes, which in the same way, is the purpose of feedback itself. Additionally, this investigation may be important for ESL/EFL teachers, because they are one of the agents (students and peers)

in this research, that are in charge of providing feedback to their students, and to improve their productions more and more each time.

The research is primarily qualitative because it focuses on the students' dispositions of written feedback.

1.1 Research purpose and questions

In the context of the research problem stated, we propose the following research questions.

1. Is there any difference in the dispositions of humanities and engineering students?
2. What are science students' dispositions towards written feedback?
3. What are engineering students' dispositions towards written feedback?

Based on the previous research questions the following Research assumptions are stated:

1. There might be a difference between the disposition of the students from both disciplines.
2. Science students might show a positive disposition towards written feedback.
3. Engineering students' dispositions towards written feedback might possess a pragmatic focus based on the usefulness of feedback.

Subsequently, in the context of these assumptions the following objectives are proposed.

1.2 Research objectives

General objective:

To analyze engineering and science students' dispositions towards written feedback in *question and order mode* provided by university teachers in the context of written tasks.

Specific objectives:

a) To study the dispositions of engineering students regarding the use of feedback in the form of *question and order* mode in the context of written tasks.
b) To study the dispositions of science students regarding the use of feedback in the form of *question and order* mode in the context of written tasks.

c) To compare the dispositions of engineering and science students in the context of written tasks.

II. Literature review

Introduction

The process of evaluating the student's progress, or the way they have developed their skills through a certain period of time is something that has been modified through the years, especially in the field of formative assessment. For instance, the motive behind these changes was a mixture of different factors that needed to be improved in order to enhance the process of learning, the disposition of the learners being one of them. As an example, during the 90's, the concept of assessment was mainly preoccupied with the idea of learning, instead of the learner as an individual. However, recent conceptualisations of the formative assessment have shifted towards a more expanded relationship between the student and the teacher. (Hawe, E, Dixon, H, & Watson, E. 2008, p.1-2). Consequently, the role of the learners has acquired more significance on their learning process as well. These changes in formative assessment have helped the development of the current education system. Additionally, today the tendency in education is widely known, that being that in order to achieve significant learning, real interactions between the teacher and students must be present. The way these interactions between teachers and students happen during the learning process is normally through oral communication or written communication; both ways of communicating can happen through the provision of feedback.

Understanding that feedback is a communication process in its core can lead us to categorize feedback in many possibilities. Feedback is a tool not only to communicate with the students, but also a tool for learning. Sommers (1982) considers feedback as a form of dialogue between the teacher and student. Therefore, the author emphasizes the dialogic aspects of feedback. Hattie and Timperley (2007) consider that feedback is information provided by a specific agent, who could be any person with enough knowledge on the field. Any type of information that is understood by the receiver is considered feedback according to the

authors. In this way, focusing on the consequence of feedback which turns out to be the students' performance. Furthermore, into the literature review, additional definitions and classifications of feedback will be explained.

2.1 Writing

In order to understand feedback in the context of writing, we first need to study the area of writing, as the main objective of this research is to analyze students' dispositions when performing a written task. In other words, feedback co-exists with writing features, as it is necessary to study into this area of working development.

Writing is a physical and mental act. The physical part of writing is the basic act of commiting words or ideas into any medium. The mental part of writing refers to the mental work that the writer does at the moment of creating ideas, thinking how they are expressed, etc (Nunan, 2003).
Related to this, the authors Bereiter and Scardamalia (1987) studied and proposed different writing models and highlighted many important aspects of it, which are explained next in the models they have designed.

First, referring to the cognitive mechanism of writing Bereiter and Scardamalia (1987, p. 1) state, *Writing is, of course, easily recognized as an activity in which a good deal of human intelligence is put to use*; This suggests that we should consider writing as a mechanism with different steps, mainly involving the act of processing, creating and analyzing as its essential elements.

Additionally, one of the most important contributions these authors made is the conceptualization of both the "knowledge-transforming model" and the "knowledge-telling model."(Bereiter C. Scardamalia M. 1987). It is fundamental considering these models in this research, provided that they explain the language process of students at the moment of completing an assignment, relating the cognitive processes this person goes through.

Regarding the knowledge-telling model, the process works the following way. First, mentally, the writer constructs an overall model that represents the assignment. Second, the identification process begins with both the topic and genre. where some cues are generated by associating the concepts generated with the previous knowledge of the writer. Afterwards, these concepts are judged in the sense that if they are relevant for the assignment will pass, otherwise they will not be considered. In the case that the concepts are considered, the writing process begins with the creation of drafts or notes about the ideas. Finally, all this information is organized and represented mentally by the writer, who will appreciate the final product and represent it mentally.All this process is how the scattered knowledge from the writer (content knowledge) is transformed into a type of knowledge that can be told and explained to other people that may not know about the topic (discourse knowledge), transforming the information.

On the other hand we have the knowledge-transforming model, which could be explained as the following. First, from the ideas retrieved from the memory of the writer, a process of transformation occurs with the goal of resolving a conflict between both these same ideas and the unsolved objective. All of this gives as a result, the generation of new ideas, a new content and a higher understanding of the subject. According to Bereiter and Scardamalia, the writers that utilize this model are those who do not have the enough proficiency in which the topic is being developed. Depending either on the level of the disciple or in the discipline itself, feedback can be transformed into a tool that allows the learner to go from the telling model to the transforming model.

2.2 Writing in/out of the disciplines

As previously mentioned, our main objective is to analyze students' dispositions towards feedback given on written tasks. This is the reason for studying writing and acknowledging concepts on this scope. It has to be mentioned that within the topic of writing, we have to explore the area of writing in/out of the disciplines, provided that in the process of writing, this becomes an important feature that allows us to identify and notice differences in the style of writing. For example, it is not the same writing in the discipline of sciences than writing in engineering disciplines. The style, topic and focus are different one from each other.

According to Carter (2007) the gap between writing in and out the disciplines comes up as a crucial issue among scholars, due to the fact that disciplines are domains of specialized content knowledge. For this reason and in contrast with writing outside the disciplines, writing in the disciplines stands at the basis of the integrative relationship between writing and knowing. Consequently, writing in the disciplines emerged in response to the recognition that dissimilar disciplines are distinguished by specifically distinct ways of writing and knowing; and in order to understand this distinction, Carter (2007) established the difference between knowledge, where disciplines stand as repositories and delivery systems for static content, and knowing, where disciplines stand as active systems of content and learning. In other words, declarative or conceptual knowledge on the one hand, and procedural or process knowledge on the other. Carter (2007) states that doing is the “middle” term that links writing and knowing in the disciplines. The whole doing process enacts the knowing through individuals’ writing, and the writing act by itself gives shape to the different ways of knowing and doing within a discipline. In relation to the written assignment variation, as well as the writing process across disciplines, Gardner's (2008) viewpoint occurs due to the fact that some assignments are written individually whereas others involve teamwork. According to the author, the differences may emerge and could also be explained considering the nature of the disciplines.

In relation to Engineering students precisely; more specific features suchlike the structure of assignments, and the perceived and anticipated differences between the assignment types (for example, the type of an essay) can also have influence.

In the case of Science students Monaghan (2007) explains that *Science students need to write results, social studies and history students require the ability to report their findings and form coherent papers; even students in art, vocational, music and math classes might occasionally be required to write about their work, and to communicate with their teachers in writing* (p.8). So based on what Monaghan says, the aim of writing may be completely different depending on the subject which the writing is being performed.

Along these lines Russell (1997) points that, as professors are slowly acculturated to writing on their own disciplines in a natural way, they are not able to notice that writing itself is specific to the discipline at the moment of doing so. In other words, at the moment of writing on a specific discipline, the teacher, rather be the learner or the professor, is not realizing that he/she is doing so, given that the process of writing is so smoothly done over the years that while thinking that the person is writing out of the discipline, the situation is that the same person is writing in the discipline.

Finally, Carter (2007) argues that writing in the discipline is related to the knowledge people have on the discipline while stating the following: *In sharp contrast to writing outside the disciplines, writing in the disciplines is founded on an integrative relationship between writing and knowing.(p.387)* This previous quotation states a difference between writing in and out of the disciplines and that the pillars of the former are constructed above knowledge and writing, leaving in clear that there is a necessity of a mixture between what the student knows about the discipline and what the student writes in the discipline.

2.3 Feedback

As this thesis is related to the feedback of students of different disciplines it is relevant to study how feedback works in those two different contexts. According to Hattie and Timperley

(2007) Feedback can be defined as *information provided by an agent (e.g., teacher, peer, book, parent, self, experience) regarding aspects of one's performance or understanding.* (p.81) one of the conditions of feedback is that the receiver understands the feedback, thus if there is understanding there is a higher probability of improvement by the learner.

In the field of written texts, Mack (2009) defines feedback as *any comments, questions or errors written in the assignments of the students. These written comments can range from questions about the author's intended meaning, praise for an interesting idea, grammar mistakes, corrections, and finally explicit corrections.* (p.33-34). Thus, we can consider feedback as information given to students in regards to their performance in order to help their development.

A common topic of discussion in the field of education is the use of feedback as formative assessment, considering formative assessment as a tool that provides information to both the teacher and the students. This information is relevant to the current development of the learners in relation to the class' learning goals. (Brookhart, 2017, p.1). Additionally, feedback or comments are necessary to improve both teaching and learning, provided that their objective is not only to 'correct' as it would be popularly stated, but also to make students self-aware of the proper way to analyze their own work and one of their friends, making them not that dependant on teachers. In relation to this previous idea, Sommers (1982) states that *Without comments from their teachers or from their peers, student writers will revise in a consistently narrow and predictable way (p. 149).* This gives us an idea of conformity from the students in response to their final work and the fact that they lack the need for improving if the feedback provided is not understood or it is too limited, in the sense that is not giving clues to the students. Referring to the revision process, the author (1982) comments that it often involves a threat because of the probability of misreading of the text by the teacher, making the written comment ineffective. Nonetheless, she also states that revision too often becomes a balancing act for students in which they make the requested changes but do not take the risk of altering something that has not been commented on.

The ideas stated before provide us a hint about the nature of students' response to their own work in terms of the concept of self-awareness and/or self-monitoring; their point of view is restricted to the objective they want to achieve or in other words, the fact that finishing the project is quite enough for them.

Hyland's (2006) ideas about positive and negative feedback may be focused in the development of the student as a writer. Negative feedback may have a harmful effect on the learner's confidence; as a consequence, the writer will end up blocked. Besides, positive feedback might have a detrimental effect as well. If premature and gratuitous praise is given to the writer, they may feel confused about their performance. Teachers tend to give praise to students when they want to produce an increase in the student's confidence; however, learners may expect to receive helpful guidance rather than praises.

The purpose of feedback, in theory, is that it is made to be effective; however, there is a problem with this statement, and it is that this is not always the case. Moreover, long periods of modifications had also caused effects on the way feedback is perceived. Causing educational theorists to leave the stimulus-response perspective to focus more on the role of the learner. Brookhart (2017) explains that the information received by the students is filtered through their own perception. So if the supervisor writes a comment in the student's writing, the learner after reading the comment may understand what the supervisor intends to transmit with the comment or may understand something else. For this reason, when a teacher intends to highlight some advice or command in a comment, it should be as clear as possible. Consequently, the percentage of misunderstanding by the learner may be reduced.

As the main objective of this investigation is to analyze engineering and science students' dispositions towards written feedback in question and order mode. These concepts are proposed by Straub and Lunsford (1995). The authors explain that "mode" corresponds to one of the two perspectives used in order to analyze teachers' comments. The first one, known as "focus", basically involves what a comment refers to in the writing, e.g., if the comment addresses the learner's wording. Whereas "mode" directs the attention to the shape

of the comment itself, in simple terms, it deals with the degree of control a teacher employs on the learner's writing. Thus, within the mode category, there are two sub-categories. On the one hand, Imperatives: This category refers to the requested in-text changes, or specific actions by the student, frequently by the use of imperative language (orders). On the other hand, the second sub-category corresponds to Problem-Posing Questions: where the teacher instead of requesting direct changes to students, uses a critical question -mainly about the writing, and specifically about its form- to identify a problem, or any other issue that needs to be addressed.

Straub and Lunsford (1995), highlight that problem-posing comments may take one out of two forms depending on how much room the teacher intends to offer the student for suggesting a change. The first form refers to the closed problem-posing questions where the teacher directly states in a comment that a mistake has been made. This influences the learner's response as it is considered an order disguised as a comment/question. Differently, in open-posing questions the teacher indirectly points out the problem, allowing the learner to identify and fix the mistake.

Referring to the different levels of feedback, Hattie and Timperley (2007. p.90) claims that there are four major levels of feedback and the effectiveness of feedback varies in every level. The first level states that feedback can be a task or product, such as whether the work is correct or incorrect (Hattie & Timperley 2007. p.90). In this level, directions may be included in order to acquire more, different or correct information. In the second level, feedback can be aimed at the process used to create a product or complete a task. This type of feedback is directly aimed at the processing of information, or learning requiring understanding or completing the task. The third level feedback can be focused at the self-regulation level, including greater skill in self-evaluation or confidence to engage further on a task. The last level feedback can be personal in the sense that it is directed to the "self" which is too often unrelated to performance on the task. The authors believe that feedback about self-regulation and about processing are powerful in terms of deep processing and mastery of tasks, and

feedback about the task is powerful when the task information subsequently is useful for improving strategy processing or enhancing self-regulation.

In addition, some important characteristics of feedback are given by Brookhart (2017). According to this author, a good feedback contains information that the students can use. If the information provided by the teacher to the students is not at the current level of the learners, this information will not be processed correctly. In the author's words *Students can't hear something that's beyond their comprehension; nor can they hear something if they are not listening or are feeling like it would be useless to listen*. (Brookhart, 2017, p 2). In other words, if students do not feel the necessity or interest about the topic, they would not consider it necessary to understand what they just heard or received.

In order to provide feedback, the teacher has to create an environment in which the students will comprehend that constructive criticism is a useful tool to learn. Besides, the teacher has to inform the students that learning cannot occur without practice. The result will be better if the learners are aware that making suggestions to their mentor can have a positive outcome in their learning process.

In relation to feedback, Wisker, Robinson, Trafford, Warnes and Creighton (2003) have an important point that relates with their investigation. They see the process of feedback as a dialogue between the students and the supervisor or teacher. The supervisors become aware of the different perceptions, backgrounds, motivational tensions and research practices that their students bring up. Here then comes the process in which the supervisor enters in dialogue with the work of the student, and at the same time, the supervisor encourages the student to engage in dialogue with published work in the field that they are imerse on. Hence, some practices, processes and outcomes such as the supervisory relationship to work, the appropriate level of outcomes to make a real contribution to knowledge, negotiating interaction, etc. These are essential to achieve this goal.

As a summary, in a context of written activities the feedback varies depending on the type of assignment that is being developed. Additionally, the way or the mood in which feedback is provided may influence the learner to respond in a certain way, implying that an open question about a mistake works differently as a comment that directly states that something needs to be changed in the written product like an order. Another feature that may influence the type of feedback is the discipline in which the learner is writing, provided that the focus of a discipline may be on different aspects of learning outcomes for each of them. In other words, each discipline highlights different aspects of their subjects, not having the same requirements for all of them at the same time. In general, feedback is not always the same, there are different aspects that influence it based on the different existing contexts.

2.4 Dispositions

So far we have discussed feedback, written feedback and its different features; As an overall, Hattie and Timperley (2007) share that given feedback has fifty percent more chance of influencing learners when it comes to their written works, so feedback can be labelled as a motivational tool. Following this line of reasoning, researchers such as McLeod (1987) establishes that dispositions can be classified within the affective domain, as they engage motivation. Consequently, it can be reasoned that the effects of feedback on the learner's dispositions will have an effect on their motivation. Thus, as feedback would be a direct factor on the learner's motivation during the learning process in the context of written tasks, it is important to go further in the topic of dispositions since it is one of the cores of the research.

Some scholars think of dispositions as particular temperaments, beliefs, personal traits and attitudes, according to Shiveley and Misco (2010). Whereas, others such as Damon (2007) considers that personality englobes all of the ideas, abilities, habits, motives, virtues, vices, attitudes and traits, as well as dispositions, and this combination is what defines each individual’s exclusive self. For this reason, the way these attitudes can be affected by external stimuli is one major reason why feedback is so important during the development of the learner.

Within the field of dispositions, Anson et al. (2016) made an important contribution to this concept in their article made in 2016, named “Students’ Perceptions of Oral Screencast Responses to Their Writing: Exploring Digitally Mediated Identities.” There, he explains the role of feedback, adding how is the process executed and how we mediate with it, concluding that the feedback depends on the way it is given and the classroom environment; in the written context of this research, learning and a more supportive classroom climate, as well as a greater satisfaction within the teacher-student relationship certainly lead students to a more active involvement in the learning process, as it enhances their dispositional aspects.

As a further matter, Beyers (2011) conceives dispositions as a process, whereby an individual becomes aware and acquires certain knowledge, as a cognitive mental function. In this case, the dispositional aspects emerge the minute an individual manifests a tendency, to either engage or not in a concrete cognitive process, suchlike: perceiving, recognizing, judging, reasoning, among others. On her way, Reid (2017) explains that dispositional attributes might be oppositional to cognitive achievements, following the traditional segregation between "affective" and "intellectual" achievement.

In a broader sense, Piazza and Siebert (2008) defined dispositions as a domain within the affective one, closely related to McLeod’s (1987) line of reasoning, in which writers use their individual resources such as self-discipline, perseverance, tolerance of ambiguity, autonomy, willingness to take risks, motivation, self-efficacy and interest. On the contrary, according to Lynn Driscoll & Wells (2012) dispositions are qualities that determine how learners use and adapt their knowledge, and include what is known as habits of minds, suchlike persistence, self-efficacy, and metacognition.

Moreover, Driscoll & Wells (2012) define dispositions considering five specific features and their relationship with transfer:

1) Dispositions are a critical part of a larger system that includes the person, the context, the process through which learning happens, and time.
2) Dispositions are not intellectual traits like knowledge, skills, or aptitude, but rather determine how those intellectual traits are used or applied.

3) Dispositions determine students' sensitivity toward and willingness to engage in transfer.
4) Dispositions can positively or negatively impact the learning environment; they can be generative or disruptive.
5) Dispositions are dynamic and may be context-specific or broadly generalized.

In simple terms, the dispositions of the students towards feedback depends on the previous knowledge or if the feedback allows them to transfer the knowledge to the writing. Hence the dispositions of the students improve if the student can understand the feedback as Hattie and Timperley (2007) established, which would eventually help students to transfer their previous knowledge to their writing.

As an overall, according to Zimmerman and Bandura (1994) either an individual with high, or low sense of self-efficacy has a determined set of beliefs that allows them to regulate their inner state through different processes. Thereon, in Hattie and Timperley's (2007) feedback model, the third level, known as the self-regulation connects directly with Bandura's line of reasoning, and pursues to engage learners further in specific tasks, and in a proper self-evaluation throughout the process.

Furthermore, in relation to the theory of attribution proposed by Weiner (2010) people's actions and beliefs are affected by the ways in which they attribute cause to events that impact them (Driscoll & Wells. 2012. P. 9). Thereby, within the learning context, as Schulze (2003) describes, a certain kind of feedback could act as a reinforcer, and aspects such as a student's personal needs, as well as personal expectations are highly important.

As an overall, these authors also agree that feedback about self-regulation is powerful in terms of deep processing and mastery of tasks. Consequently, feedback addressed to the self is actually intended to help with strategy processing abilities, and eventually enhance learner's self-regulation.

To sum up the previously discussed, the process of evaluation has suffered a number of modifications through the years, which in turn has caused a severe shift in the educational

system in the intent of improving it. These changes helped in short to improve the evaluation system, which was modified to suit the new wave of improvements that came with the new perspectives and technologies. Among these changes, one of the most important modifications to highlight are the shift in the perspective that focused on the result of the students, to the rather different outlook of considering the learners as individuals and, under the same frame, the improvements of the relationship between the student and the teacher as a whole.

The shifting in the educational system had a considerable effect on the way students were exposed to feedback, this is because the planning involved in its execution went from focusing on the immediate correction of the students' mistakes, to a more deliberative process in which the teacher highlights some of the mistakes present in the learners' work in an effort for the learners to find their mistakes and subsequently correct them, while learning from the experience.

III. Methodology

3.1. Justification

The type of research chosen for this investigation is qualitative research. *Qualitative research is empirical research where the data are not in the form of numbers* (Punch, 2013, p. 4). Moreover, the type of qualitative research to be utilized can be categorised as a case study design. A case study is *an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident* (Rhee, 2004, p.1). A case study fits the purpose of this investigation since a rigorous observation will be applied in an interview of a selected group of students in order to determine their perception, opinions and feelings about feedback in written form. The resulting data from this research will then be analyzed, categorized and represented in a script

3.2. Participants

The participants of this research are seven students from Universidad Católica de la Santísima Concepción, which are divided into two different sample groups, one of them being three Engineering students majoring "Electrónica industrial y automatización", while the others are four Science students majoring "Nutrición". There is a reason of why those specific students are the ones chosen for this study, and it is that these students have already been part of a previous investigation, known as "Proyecto FONDECYT N° 1180586" regarding feedback, being the perfect case scenario as we can directly ask them about their previous experience in this topic. The students both from Engineering and Science, during "Proyecto FONDECYT N° 1180586" were in their third year, while in the research carried out for this study they were in their fourth year. Engineering students were asked to write progress reports on the project they were developing, this occurred during their "Electrónica industrial y automatización" course (See appendix 1). Science students were asked to write their progress report during their "Educación Alimentaria y Nutricional" course. In the previous

research during their writing tasks students were provided feedback in at least three different steps. The information gathered was regarding that process. (See appendix 2)

3.3. Instruments

As the aim of this research is to analyze the perceptions of different students the main instrument that was used to gather information was an interview (See appendix 3). The interview consisted of a set of open-ended questions provided by the researcher that the participants have to answer. The instrument is a semi-structured interview consisting of eleven questions where nine were open-ended questions and two with alternatives and analysis. This interview is composed of different topics, these are: the students understanding regarding affirmations on feedback and teaching style, feedback, the type of feedback that they have received, what the students do when they do not understand the feedback given. Consequently, the categorization as such will be described in the following chapters in detail. The interview was designed based on Anson´s paper "Students' Perceptions of Oral Screencast Responses to their Writing: Exploring digitally Mediated Identities" and validated by three experts in writing and feedback.

The agreement of using this instrument comes from considering that the results are easier to compare if we have possession of different samples. In other words, the information gathered from one source, in this case being one course, is more easily comprehended if it is compared to other sources of information, therefore, it was decided to work with two different groups of students corresponding to two different University courses. Moreover, this kind of approach was decided on in order to avoid possible misunderstandings regarding data that is hard to value based on their subjective features. Since information of this kind would be arduous to evaluate utilizing a Quantitative approach, a Qualitative method was selected instead.

3.4. Data collection procedures

The way in which this research is carried out is influenced by the prior decisions regarding the chosen group. The procedure is the following; first, we individually speak to each

participant in order to set an appropriate day and time where they can be interviewed. Secondly, the interview with a set of questions about dispositions was applied (see appendix 3) with the corresponding format and steps that an interview possesses (Determine the interviewee, design questions aimed at the topic, application of the questionnaire, data analysis). In addition, it is important to highlight that due to the current situation (COVID-19) the questions were applied in a digital format with previous consent of the participants. The questionnaires were sent to the participants via email. Thirdly, the answers of these students were categorized into two groups; one group corresponding to the engineering area while the other group corresponded to the humanities area. The answers given by the interviewees were analysed separately and according to the categories of this study in order to display the final results in an organized scheme. The results were studied and discussed in order to reach a proper conclusion of what are the dispositions of students towards feedback.

3.5 Data analysis procedure

In order to create the matrix data for the analysis, a triangulation was carried among the researchers to agree on how the answers can be categorized; one interview was used in the process of triangulation. All the researchers classified the information collected according to the predetermined categories and then we compare this classification. In case of disagreement we discussed it with our guide teacher. After thorough discussions and the addition of emerging categories proposed from the data collected, an agreement was reached and the rest of the interviews were analysed.

As it is necessary to establish the chosen categories before moving to the analysis of the data as such, it can be said that a total of nine categories were established; seven out of these nine categories have its correspondent subcategories, whereas, the other two do not present any subcategory.

Furthermore, it is necessary to add that categories N° 1 (Students' perception about teacher), Nº 3 (Feedback on students' participation), Nº 4 (Feedback on students' approval) and Nº 5

(Feedback on students' autonomy) are emerging categories for both disciplines, as it was necessary to create them due to particular issues addressed by the students that helped us to determine their relevance as categories in isolation, since these were not contemplated in the first place. On the contrary, categories N°2, 6, 7, 8 and 9 are predetermined categories; these were established ever since the beginning of this study, based on Anson et al. (2016). As a result, the final categorization and its description is shown in the following table:

Table 1. Categories and subcategories of analysis

Categories and subcategories	**Definitions**
1. Students' perception about the teacher	In this category we want to gather information about the perception that students have in relation to their teachers. Expected answers in this category will give specific information through a description in which we would see the teacher´s performance. Most of the answers are expected to be dichotomic, placing teachers in high or low levels of performance.
2. Students' perception about feedback 2.1. *Positive* 2.2. *Negative*	This category is focused on the perception of students towards feedback itself. The answers that fit this category are expected to give information about the perspective that learners have towards feedback.
3. Feedback on students' participation 3.1. *Agreement* 3.2. *Disagreement* 3.3. *Other*	This category provides detail about the students´ thoughts about their participation in the learning process, more specifically, in relation to feedback.
4. Feedback on students' approval 4.1. *Agreement* 4.2. *Disagreement* 4.3. *Other*	This category refers to the strategies that focus on students' needs to be respected during the feedback process.
5. Feedback on students' autonomy 5.1. *Agreement* 5.2. *Disagreement* 5.3. *Other*	This category focuses on addressing the students independence during the feedback process
6. Characteristics of feedback 6.1. *Good* 6.2. *Specific feedback* 6.3. *Not understood* 6.4. *Not agreed*	This category gathers information about specific features of feedback on the students´ experience. The information gathered is divided in different categories according to some

7. Preferences of types of feedback 7.1. *Received* 7.2. *Preferred* 7.3. *Not preferred*	This category focuses on the types of feedback that the students would rather receive, or on the other hand, the types of feedback that they do not want to receive. It is deeply connected to the learner's perspective and feelings towards feedback and its variations.
8. Contribution of feedback 8.1. *Order type* 8.2. *Question type*	This category provides information about the students' perspective towards the contribution of feedback to their own development as students, as well as the development of others.
9. Feelings	This category provides information on the affective aspects and perspective that students have towards the feedback process.

Lastly, in relation to the subcategories it is necessary to add that all but categories Nº 1 and 9 have its corresponding subcategories which were developed on the basis of the main categories and the main line of this research, thus considering the data since it was necessary to cover issues addressed by students which had not been considered in the first place. In the following chapter, each of the subcategories will be deeply analyzed in order to present the former connection with the data. That being said, this instance allowed us to broaden our scope in terms of extra information on important issues that one way or another are crucial within the educational context -as well as precisely in this context-, and without disregarding the main focus of this research that is students' dispositions on behalf of written feedback.

IV. Results and analysis

The following chapter analyzes the data collected in different categories and subcategories that were previously organized in this research. It involves a data analysis and requires a well-structured development step by step. Overall, an introduction of the data will be presented taking into consideration the three specific objectives established in this research beforehand, being each of these elements analyzed in isolation and presented in separated tables following the order established for these same categories and subcategories. They

include the different disciplines that are part of this research, while following the given order within the same objectives, namely, engineering's analysis first, where three students were involved, and science analysis afterwards, where four students took part. Furthermore, in order to separate the analysis, we will use the capital letters E for engineering and N for nutrition. Categories of analysis will be presented referring to the objectives previously stated on this research.

Specific objective 1:

To study the dispositions of engineering students regarding the use of feedback in the form of question and order mode in the context of written tasks.

The following tables correspond to the answers of the area of engineering (E), whose perception on feedback was organized in different categories, as previously agreed on the information gathering tool, and subsequently structured in 9 different tables with its corresponding categories and subcategories.
This table shows the engineering student's answers regarding this specific category of *Students' perception about the teacher*.

Table IV.1. Category 1: Students' perception about the teacher

Category 1: Students' perception about the teacher
Students' answers
E1: *En mi caso particular, una retroalimentación de parte del profesor me permite entender el nivel de exigencia que este aplica al ramo, es decir, si el profesor constantemente en sus retroalimentaciones busca que el alumno mejore, sería un claro indicador de que es un profesor exigente.*
E2: *Que al hacer un resumen de lo que enseñó anteriormente el profesor los alumnos entenderán de mejor manera lo que enseñó anteriormente.*

E3: *De esta frase entiendo que la retroalimentación es la característica más importante que tienen los profesores, debido a que depende de esta el cómo aprenderá el estudiante, debido a que esta se encuentra en cada profesor, y además, puede ser distinta en todos.*

As it was established in the previous chapters, feedback is not only a useful tool for learning, but also one that allows communication within the educational context; in Sommers (1982) words, feedback stands as a form of dialogue between the teacher and learners, and the evidence in the table suggests that students also consider it a tool to bridge the gap between the teacher and them. Similarly, Hattie and Timperley (2007) back up this theory, stating that feedback necessarily corresponds to information provided by an agent, which in this case corresponds to the teacher. Specifically, **E1**, **E2**, and **E3** in this case agree on the fact that the way a teacher behaves and particularly, delivers his expectations through feedback pointing out what he or she clearly wants from a learner, then it will cause a positive impact on the learner. Precisely, **E2** points that by the time a teacher does a summary of the previous contents, students will be able to understand in a better way. As an overall, these three participants agree that feedback coming from a teacher would help them to understand the contents in a better way.

Table IV.2 In this second category 'students' perception on feedback' the data was handled and classified into two subcategories, positive or negative respectively.

Table IV.2. Category 2: Students' perception on feedback

Category: 2.Students' perception about feedback	
Subcategories	**Students' answers**
2.1. Positive	**E1:** *La retroalimentación sirve para impulsar las ideas del estudiante o direccionarlas hacia el ámbito que crea el profesor que es mejor para que el alumno pueda aprender.*

	E2: *Si influye, ya que si es positiva los alumnos entenderán de mejor manera lo enseñado anteriormente de que si este fuera negativa esto porque los confundirá.*
	E3: *Si influye, un ejemplo sería, cuando un profesor me dice que diga de donde saque cierta información, esto me da a entender que debo manejar al revés y al derecho toda la información que tengo en mi presentación para poder responder a todas las preguntas de ese profesor, el cual, en un inicio no parecía que se fijara por detalles en las clases.*
2.2. Negative	**E1:** *En el único caso que podría restringir la libertad del estudiante sería, si se realizaran malas retroalimentaciones.* **E1:** *Constantemente estoy recibiendo retroalimentaciones negativas a pesar de que a mi parecer el trabajo está bien hecho, me generaría rechazo hacia el profesor. En caso contrario, si constantemente recibo retroalimentaciones positivas, me daría a entender que la exigencia es muy baja por parte del profesor. Y en último caso, si el profesor no realiza ninguna retroalimentación, este me sería indiferente.*
	E2: *"Si la restringe ya que el estudiante puede buscar más información sobre un tema visto y después al llegar a clases este vee que lo que busco está fuera de los parámetros de lo dicho por el profesor en clases"*

On the one hand, concerning the first subcategory, positive, particularly, **E1**, **E2**, **E3** clearly manifested that feedback does influence a learner's learning process in a positive way. Along these lines, Hattie and Timperley (2007) established that any type of information that is understood by the learners' and subsequently influences their type of performance in the educational context can be considered feedback. For this reason, the data in this subcategory shows an eventual change in the learning process, as it would be more effective after feedback.

On the other hand, the data in the second subcategory, negative, shows that feedback, simultaneously, can restrict a learner's freedom if the feedback itself is bad, stated by **E1**; hence, the negative perception on feedback. **E1** also states that if it is totally negative, positive or if it doesn't exist, it could have different outcomes; if the teacher is not clear enough while communicating what he/she actually expects from learners', the same results will be observed. In relation to this, Anson et al. (2016) states that several participants' who underwent a feedback process, agreed on its benefits, because it reveals part of the teacher's

identity, which goes hand in hand with a good conversational instance between the teacher and the students, and subsequently helps to make the whole evaluation process a bit more transparent.

Anson (2016) defines participation as the learner's need to feel part of the evaluation process; the following table shows the student's answers to feedback on the student's participation category.

Table IV.3. Category 3: Feedback on students' participation

Category 3. Feedback on students' participation	
Subcategories	**Students' answers**
3.1. Agreement	**E2:** *Sí, porque si el estudiante participa este podrá comentar algo el cual puede estar bien o mal, por lo que en la retroalimentación este podría ser corregido*
3.2 Disagreement	NO EVIDENCE
3.3. Other	**E1:** *Creo que los tres conceptos tienen relación con la retroalimentación, debido a que una buena retroalimentación debe incentivar la* ***participación*** *y la autonomía del estudiante, además este debe sentir que este haciendo las cosas bien en caso de ser así, es decir, necesita la aprobación del profesor para continuar de manera autónoma y con más soltura."*
	E3: *Yo creo que todos tienen aunque sea un poco de relación con la retroalimentación debido a que todas estas son parte del aprendizaje del estudiante, entonces todas repercuten en este.*

Within their context, participants in Anson et al. (2016) research agreed that when the three strategies: participation, approval and autonomy are present in the feedback process, it will certainly yield more positive after-effects on learners.

Primarily, **E2** answer shows an example of what the category points out, particularly in the agreement subcategory by stating that throughout participation, the learner might solve part of his doubts, as the teacher would probably correct during the interaction. In this context, it can be stated that students who do not participate would not be able to benefit from this instance. Secondly, in the "Other" subcategory **E1** also agrees that participation must be enhanced by good feedback, as it is part of it, as well as **E3** who considers that participation, along with approval and autonomy are equally important as these have direct repercussion in the learning process. These last two declarations were classified in the previously mentioned subcategory since they involve the other two strategies too, and they agree on their importance as a whole, positively, without disregarding the other two. Lastly, there was no evidence that fit into the "disagreement" subcategory.

Following Anson's (2016) categorization of strategies, approval involves respect towards the student's needs during the feedback process

Table IV.4. Category 4: Feedback on students' approval

Category 4. Feedback on students' approval	
Subcategories	**Students' answers**
4.1. Agreement	**E2:** *Si, porque si se quiere opinar en la retroalimentación este debe tener ser aprobado*
4.2. Disagreement	(No evidence)
4.3. Other	**E1:** *Creo que los tres conceptos tienen relación con la retroalimentación, debido a que una buena retroalimentación debe incentivar la participación y la autonomía del estudiante, además este debe sentir que este haciendo las cosas bien en caso de ser así, es decir, necesita la* ***aprobación*** *del profesor para continuar de manera autónoma y con más soltura.*

	E3: *Yo creo que todos tienen aunque sea un poco de relación con la retroalimentación debido a que todas estas son parte del aprendizaje del estudiante, entonces todas repercuten en este.*

As student **E2** states it, in a very general viewpoint, within the subcategories the data shows agreement in relation to the question concerning the relation between the three strategies and feedback. Students **E1** and **E3** declare in the "other" category that the three main strategies of Anson et al. (2016), participation, approval and autonomy, have a direct relation with feedback, however student **E1** considers approval as an strategy that in this case it is related to the "permission" granted by a teacher, which here translates as an approval regarding the students' way of handling the learning process and gain more autonomy; in the same way, **E3** states, in similar terms that approval impacts the students' learning process.

Concerning Anson (2016) strategies, autonomy stands as a strategy that addresses students' need for independence during the evaluation process.

Table IV.5. Category 5: Feedback on students' autonomy

Category 5. Feedback on students' autonomy	
Subcategories	**Students' answers**
5.1. Agreement	**E2: ...***la retroalimentación lo que hace es repasar un contenido antes visto por lo que si uno quisiera saber más sobre el tema debería ser autónomo*
5.2. Disagreement	(No evidence)
5.3. Other	**E1:** *Creo que los tres conceptos tienen relación con la retroalimentación, debido a que una buena retroalimentación debe incentivar la participación y la* ***autonomía*** *del estudiante, además este debe sentir que este haciendo las cosas bien en caso de ser así, es decir, necesita la aprobación del profesor para continuar de manera autónoma y con más soltura.*

	E3: *Yo creo que todos tienen aunque sea un poco de relación con la retroalimentación debido a que todas estas son parte del aprendizaje del estudiante, entonces todas repercuten en este.*

In this category the data shows an agreement between students **E1**, **E2**, and **E3**, even when the last two don't refer particularly to autonomy, because students **E2** and **E3** clearly manifest, as it was previously stated, that the three strategies are equally important and relate directly to feedback, due to its consequential impact on the students' learning process. In general terms, **E3** declares that the three strategies are connected to feedback one way or another as they are part of the intrinsic process carried out by the student. **E1** refers that a good feedback must enhance students' autonomy, For this reason, the answers of **E1** and **E3** fall into the category "other", whereas student **E2** refers to a specific characteristic of feedback but highlights the importance of an individual's autonomy during the learning process. No evidence was found for the disagreement subcategory.

This category, characteristics of feedback, has four subcategories that correspond to: a) Good: which includes information that students can process and particularly understand, according to Brookhart (2017), b) Specific Feedback: which in Sadler's (1989) terms can be defined as a feedback that considers the students' nature, thus keeps in mind the start point and the final goal in order to enhance and help during the whole performance process, c) Not understood: Which in this context would not be an effective feedback, because as it was mentioned above, if certain information cannot be understood it would not produce any favorable results (Brookhart, 2017), and d) Not agreed: Which could be result of a misinterpretation by the learners, as Anson (2017) points out, therefore, in this case the dialogue instance between teacher and student is vital.

Table IV.6. Category 6: Characteristics of feedback

Category 6. Characteristics of feedback	
Subcategories	**Students' answers**

6.1. *Good*	**E1:** *...una retroalimentación debería ser lo más detallada posible y esta debería abordar todo el trabajo. De esta manera podría entender que es lo que requiere el profesor que modifique y además entendería que hizo una revisión exhaustiva a mi trabajo.*
	E2: *Sería la ortografía, uno que otro comentario positivo, decirle lo que falta en algún tema.*
6.2. *Specific feedback*	(No evidence)
6.3. *Not understood*	**E1:** *Hice las consultas pertinentes al profesor para poder entender lo que requería que modificara o añadiera al trabajo.*
	E2: *Le volvía a preguntar y le pedía algunos ejemplos para poder lograr entender*
6.4. *Not agreed*	**E1:** *A pesar de no estar de acuerdo con alguna retroalimentación del profesor, realice los cambios pertinentes según lo que él indicaba.*
	E2: *Le explicaba que lo que está diciendo está mal según mi punto de vista*

This category, characteristics of feedback, follows Mack's (2009) perspective corresponding to any given information transmitted from teachers to students in view of their performance with the intention of improving their development, or even any comment, question or an error written in the students' assignments. In the first subcategory "Good", students **E1** and **E2** manifest their viewpoints in reference to what a good feedback is, pointing out that feedback should cover the whole work, and the more detail the better, because a good feedback should include information that students' can use and process correctly, as Brookhart (2017) established; in the third subcategory "Not understood", **E1** and **E2** explain what they did, when the feedback was not understood, and both participants agreed that they, specifically, asked the teacher in order to understand what was expecting from them and their work. In relation to this, Brookhart (2017) stated that when learners understand the information that has been provided, they will consequently feel in control of their own learning process as it has a

motivational effect. On the contrary, there is a high chance of misreading the feedback, considering that is it written and making the comment totally ineffective, which may lead to the last subcategory, which is the subcategory “Not agreed”. Here the data shows that both, **E1** and **E2** clearly followed the feedback suggestions, but without questioning the teacher directly as **E2** stated, *Le explicaba que lo que está diciendo está mal según mi punto de vista.*

The following table relates to the preferences of feedback according to the students. This category is divided into three subcategories: Received, which refers to the type of feedback that students have received; prefered, which refers to the type of feedback that students prefer to receive; and not prefered, which refers to the type of feedback that students do not prefer to receive.

Table IV.7. Category 7: Preferences of types of feedback

Category 7. Preferences of types of feedback	
Subcategories	**Students’ answers**
7.1. *Received*	**E1:** *Orden, Juicio Negativo y Sugerencias o consejos.*
	E2: *Orden y Juicio Negativo*
	E3: *He recibido casi todas, la única que por el momento no me han dicho es del tipo correctivo.*
7.2. *Preferred*	**E1**: *De todas las anteriores, prefiero recibir Sugerencias o consejos, Juicio negativo y Comentario positivo. Porque considero que son las retroalimentaciones que más me alientan a mejorar un trabajo.*
	E2: *Comentario positivo y el de sugerencias y consejos, porque aumentaría mi autoestima y me motivará a hacer mejor las cosas*

	E3: *Preferiría tanto de comentario positivo como de sugerencias y consejos debido a que gracias a estas, uno sabe que lo hizo bien y aparte, te ayuda a mejorar en lo que estuviste mas débil al hacer la presentación, respuesta, etc.*
7.3. *Not preferred*	**E1:** *De todas las anteriores, no prefiero recibir las preguntas. Esto es debido a que siento que este tipo de retroalimentación no me lleva a nada, por lo que siento que quedo igual de estancado que antes de la retroalimentación.*
	E2: *Juicio negativo, porque bajaría mis niveles de motivación*
	E3: *Juicio negativo, debido a que da a entender que la información que busqué no sirve de nada para la opinión del profesor acerca de mi trabajo.*

Concerning the category preferences of feedback, it focuses on the data that relates to the type of feedback named in each of the subcategories; Received, Preferred and Not preferred. In the first subcategory, “received”, **E1** and **E2** manifest that they both received order and negative judgement type, however, **E1** also received suggestions and advice. Moreover, **E3** claims to have received all but the corrective type feedback. In the second subcategory, “preferred”, students **E2** and **E3** declare that they prefer to receive suggestions or advice, as well as positive comments, furthermore, they both agree that these types actually motivate them to keep on working. Similarly, **E1** also agreed to prefer suggestions or advice and positive commentaries, but also point out negative judgment as an interesting and extra option claiming that these three enhance motivation to improve an specific work. Lastly, in relation to the last subcategory, “not preferred”, where participants specified which type of feedback do not prefer, the data says that **E2** and **E3** do not prefer negative judgement due to its inner characteristic of being negative. **E2** claims that it would affect motivation in relation to the work, and **E3** manifests that it would mean that the revised information is not actually acceptable. Having said that, it is necessary to highlight that in Hyland’s (1990) words negative feedback can have a harmful effect on the learner’s confidence, which relates to categories “preferred” and “non-preferred” and the **E1**, **E2** and **E3** perceptions on feedback.

This category, Contribution of feedback, is divided into two subcategories which are order type and question type following Straub and Lunsford theory (1995).

Table IV.8. Category 8: Contribution of feedback

Category 8. Contribution of feedback	
Subcategories	**Students' answers**
8.1. *Order type*	**E1:** *Considero que la retroalimentación tipo orden contribuye a mejorar mi desempeño, no tanto así la retroalimentación del tipo pregunta. Debido a que la de tipo orden me ayuda a corregir de manera inmediata lo que este mal dentro del trabajo...*
	E2: *La retroalimentación tipo orden no ayudarían a mejorar el desempeño ya que esta podría causar que se desmotivara un poco el estudiante*
	E3: *Si, debido a que me hace mejorar en cuanto al análisis tanto de datos como resultados y así entender y explicar mejor al profesor*
8.2.*Question type*	**E1:** *...la del tipo pregunta no me ayuda a avanzar.*
	E2: *La retroalimentación tipo orden no ayudaría a mejorar el desempeño ya que esta podría causar que se desmotivara un poco el estudiante*
	E3: … en cuanto a la tipo pregunta, *uno debe ser capaz de manejar toda la información que uno presente, sabiendo de lo que trata y de donde buscó dicha información.*

In this category, contribution of feedback, there is a direct relation with feedback, specifically regarding the shape of the comment itself (mode) as Straub and Lunsford (1995) categorized; mode has two subtypes, imperatives (order) and problem posing questions as it was explained in the previous chapter which refer specifically to these two types of feedback commonly used, as well as how these two types contribute to the learner's development. As an overall result, it can be stated that **E1**, **E2** and **E3**. all referred to both types within one

same answer, however, there are significant differences: **E1** particularly declares that order type contributes to development as a learner, whereas question type not so much, basically because the order type has an immediate effect to improve the work. On the contrary, **E2** does not highlight any contribution from neither order nor question type feedback mainly because it would affect the learner's motivation. Lastly, **E3** balances the importance of both types after stating that order helps to improve data analysis as well as results in order to understand the content, and the other encourages to know all the necessary information starting from its original source and what is it about.

Table IV.9. Category 9: Feelings

Category 9. Feelings
Students' answers
E1: *Creo que las retroalimentaciones del profesor podrían haber sido más detalladas y no tan estándar, a veces parecía que respondía con las mismas palabras a cada uno de los grupos de trabajo.*
E2: *La experiencia que recibí fue buena ya que siempre daban comentarios positivos y nos intentaban de motivar.*
E3: *Sinceramente la retroalimentación que se me entregó en el curso de electrónica fue demasiado genérica, ya que estaba al tanto de otras retroalimentaciones que le enviaban a mis compañeros y no habían diferencias prácticamente, siento que se debió de poner mas esfuerzo y dedicación para saber básicamente en que estaba fallando y como poder hacerlo mejor en cuanto a la entrega de ese informe.*

In the final category of Specific Objective 1, which focuses on the participant's learners in relation to the feedback received during the "Electrónica industrial y automatización", the data shows that its effects were more negative than positive. **E1** and **E3** agree, as an overall that the feedback could have been way more detailed, and also more effective and specific. They did not notice significant differences between the feedback they received and the one that

was delivered to their classmates, mostly because, as both participants declared the teacher practically used similar words to respond to every group/student. On the contrary, **E2** manifested a quite positive viewpoint highlighting in his answer that this feedback intended to improve their motivation, a term that for this particular student seemed to be quite relevant considering the context and also in relation to this research.

Specific objective 2 :

To study the dispositions of science students regarding the use of feedback in the form of question and order mode in the context of written tasks.

Similarly to the first objective, and in order to collect data from different sources, it was considered to work with two different disciplines, in this case the science students belong to the Nutrition major. As in the first category, the objective is to analyze students' answers, being sciences (nutrition specifically) the corresponding discipline in this case.
This table shows the science student's answers regarding this specific category of *Students' perception about the teacher*.

Table IV.10. Category 1: Students' perception about the teacher

Category 1. Students' perception about the teacher
Students' answers
***N1**: Se entiende por esta frase, que gracias a la retroalimentación que entregue el profesor, los estudiantes pueden conocer el estilo de trabajo del profesor, de qué forma realiza las preguntas, en que se enfoca siempre, etc.*
***N2**: Por lo que entiendo, es que dependiendo de la manera en la que un profesor vuelve a explicar la materia a modo "resumen" uno puede conocer cuál es el estilo con el que profesor explica (ej: tablas resúmenes, dibujos, mapas conceptuales).* *Si, encuentro que si el profesor se maneja en lo que explica, puede explicarlo de varias formas. Además uno puede observar su dedicación y amor por lo que hace.*
***N3**: Lo que me da a entender la afirmación anterior es que mediante el ejercicio de la retroalimentación podre conocer los conceptos que el profesor encuentra más importantes para mi aprendizaje de igual forma me permite evaluar si el profesor logra enseñarme mejor en cómo arreglar los errores que tengo y por ende puede ver si busca nuevos métodos de aprendizaje. De esta forma conozco más a fondo cual es el estilo de enseñanza del docente.*

Ya que fácilmente puede volver a enseñar alguna temática de la misma forma que ya la enseño o simplemente decir que está bien y que está mal y quedarse con eso.
***N4**: Entiendo que se refiere a que la retroalimentación me ayuda a entender cuáles son los factores que el profesor prioriza a la hora de enseñar, así como los métodos que para él son más eficaces para enseñar.*

In this table we can observe the different perceptions that students have about their teacher in relation to the feedback received. Most of the answers agreed on that the teacher's teaching style can be perceived depending how the teacher provides the feedback. The perception that the student has of his teacher will affect the process in which the student understands the feedback, or as Hattie and Timperley (2007) explain, one of the conditions for feedback to be successful, is that it is necessary that the receiver understands the feedback. Hence, if there is understanding there is a higher probability of improvement by the learner. Furthermore, as it is explained by students **N1**, **N2** and **N3**, the presence of feedback in their learning process helps them to comprehend the particular way in which the teacher instructs. And therefore, having a greater understanding of the way they are being instructed by the teacher, they are able to better respond to that teaching strategy, further improving their own development. Similarly, students **N1**, **N3** and **N4** consider that feedback additionally provides information about the aspects of the learners' development that the teacher considers more important, at least at the moment of the feedback, which in itself is also useful to better comprehend one's learning process.

In this second category students' perception on feedback the data was handled and classified into two subcategories, positive or negative respectively.

Table IV.11. Category 2: Feedback on students' perception

Category 2. Feedback on students' perception	
Subcategories	**Students' answers**
2.1. Positive	***N1**: Si influye, ya que gracias a la retroalimentación del profesor nos damos cuenta de los errores que podemos estar cometiendo, y así ir mejorando en cuanto a un tema en particular.*

	***N3**: Yo siento que la retroalimentación guía al estudiante a obtener los conocimientos adecuados, le ayuda a comprender mejor algún tema y, a conocer y mejorar sus errores para que en un futuro no los siga cometiendo.*
	***N4**: Si, ya que al ser en general de tipo positivo, nos llama a seguir mejorando y aprendiendo cosas que tal vez la primera vez no conseguimos entender del todo, pero que después de la retroalimentación fue más fácil entender.*
2.2. Negative	***N1**: La retroalimentación no permite que el estudiante pueda generar sus propias ideas, y llevarlas a cabo de la forma que quizás él lo quiera.*

In this category the main concern is the perception of the students in relation to feedback. All the answers that belong to the subcategory of positive perception agree on that feedback improves the performance of the students. Answer **N3** in specific highlights that when feedback it is understood, the student will not make the same mistakes in the future. Answers **N4** also mention that after this student received feedback it was easier to understand some things that at the beginning were not very clear. Yet, not all the answers reflect positive connotations. In the subcategory of negative perceptions of the students in relation to feedback, the answer of the first student is divided in two. The first part mentioned a positive aspect while the second part indicates what may be one of the central displeasures for a student. This is that feedback most of the time, particularly with order mode, does not give to the student the capacity of performing as the student may prefer. An example of this may be the following comment provided by a teacher “It will be better if you change the structure of this paragraph for this other”. This may be seen as a restriction by the student.

According to Brookhart (2017, p.3.) information received is filtered through the students perception, hence, if the students have a positive perception they can receive more information than of a negative perception. Given that a majority of students have a positive perception towards feedback, they back up Brookhart´s theory.

The following table shows the student’s answers to feedback on the student's participation category. Anson et al. (2016) manifested that, specifically in relation to participation, it is important to address the learner’s need to feel part of the evaluation process, as well as, the subsequent strategies which are approval and autonomy respectively.

Table IV.12. Category 3: Feedback on students’ participation

Category 3. Feedback on students' participation	
Subcategories	**Students' answers**
3.1. Agreement	***N1**: Sí, porque la retroalimentación tiene como objetivo mejorar la comunicación, y para que exista eso considero que los tres conceptos se relacionan de buena manera.*
	***N2**: Coincido en las tres: participación porque si los estudiantes no opinan sobre lo que se les habla se asume que no tienen dudas y que entienden todo. Sin embargo al interactuar en la clase, el profesor puede darse cuenta del interés y dudas que puedan existir.*
	***N3**: Es importante que la retroalimentación integre al estudiante, para que este pueda dar a conocer con confianza lo que sabe y expresa con la misma confianza las debilidades que cree tener sobre algún tema.*
	***N4**: Sí, porque permite que el profesor sepa si su método de retroalimentación es eficaz.*
3.2. Disagreement	(No evidence)
3.3. Other	(No evidence)

In the present table it is recognizable that the subjects have a positive perspective towards the participation of the student in the process of feedback. Furthermore, students **N1**, and **N4**, consider that feedback also has the objective of improving the communication between the learner and the teacher. In addition, students **N2** and **N3** present the concept that the participation of the student is imperative for the process of feedback. Since, if the student does not participate, the teacher is likely to have a harder time locating the learner's weak points in the learning process.

The next table deals with Feedback on student's approval following Anson's research (2016). This category is subdivided into 3 different subcategories. These subcategories are 4.1 Agreement, the subset that regards students' positive outlook towards the subject. 4.2 Disagreement, which presents the students' diverging perspective towards it. Finally, there is

4.3 Other, which includes all of the perspectives and ideas that do not fit the other subcategories.

Table IV.13. Category 4: Feedback on students' approval

Category 4. Feedback on students' approval	
Subcategories	**Students' answers**
4.1. Agreement	***N1****: Sí, porque la retroalimentación tiene como objetivo mejorar la comunicación, y para que exista eso considero que los tres conceptos se relacionan de buena manera.*
	N2*: Considero que hay formas y formas de dar a conocer aprobaciones y rechazo, pero sin embargo, al emitir este juicio, la persona sabe que están considerando su opinión y a la vez puede seguir realizando esta dinámica.*
	N3: *[…]De igual forma la aprobación se relaciona también a la retroalimentación, a pesar de que el docente se dé cuenta que el alumnado tiene muchos errores no quiere decir que deba faltarle el respeto en ningún momento, de hecho, es sumamente relevante que en una retroalimentación se destaque los conocimientos en los que el estudiante está bien preparado[...]*
	N4: *Si, porque en general las observaciones positivas tienden a tener efectos positivos en quienes las reciben.*
4.2. Disagreement	(No evidence)
4.3. Other	(No evidence)

This category is defined as the need of the student to be respected in feedback interactions. In this category, answer **N2** mentions that despite there are certain predetermined ways of approving or refusing, the students know that their opinion is being considered by the teacher. **N3** by itself explains that even if the student made many mistakes, the teacher should not highlight them in a dispolite way. Besides, **N3** explains that the teacher should point out the information that the students had performed well. In other words, students should be praised when they carry out well. But reviewing Hyland´s (1990) ideas about praising students, we can consider praises as a double-edged weapon. If the students receive too much positive feedback it would cause a negative effect in the process of learning of the student, and too

little would demotivate them. Still, all the answers of this category agree on that respect at the moment of providing and receiving feedback it is essential.

The next table shows the students answers regarding the Feedback on student's autonomy category. Concerning Anson strategies, autonomy stands as a strategy that addresses students' need for independence during the evaluation process.

Table IV.14. Category 5: Feedback on students' Autonomy

Category 5. Feedback on students' Autonomy	
Subcategories	**Students' answers**
5.1. Agreement	**N1**: Sí, porque la retroalimentación tiene como objetivo mejorar la comunicación, y para que exista eso considero que los tres conceptos se relacionan de buena manera.
	N2: No necesariamente un docente puede retroalimentar. Uno también puede hacerlo.
	N3: […]Y, por último, una retroalimentación siempre debe motivar e incentivar a que el estudiante sea autónomo en sus estudios ya que no siempre podrá depender de los conocimientos del docente a cargo. Añadiendo que la idea final es que el estudiante, en base a lo que le enseña el docente, genere sus propios criterios y opiniones. [...]Le ayuda a comprender mejor algún tema y, a conocer y mejorar sus errores para que en un futuro no los siga cometiendo.
	N4: Si, porque si no existiera, el estudiante no podría ir más allá de lo que se le indica. [...]Personalmente considero que la retroalimentación me ha ayudado en muchas ocasiones a tener más interés por lo que se me explicó en un principio, por lo que podría decir que me ha dado más herramientas para seguir investigando por mi cuenta.
5.2. Disagreement	(No evidence)
5.3. Other	**N2**: Encuentro que si una persona quiere aprender más o ir más allá de sus conocimientos debe hacerlo por su cuenta y no sentirse limitado por sólo quedarse con lo que te explican en un curso.

This category presents a number of different perspectives towards Feedback on students' autonomy, the majority of which were positive/agreed with this idea. Furthermore, students **N3** and **N4** propose that the importance of students' autonomy resides in them taking their learning development in their own hands and not depending entirely on the role of the teacher.

In the same way, if the concept of autonomy was not present in the learner, they would not be able to develop through their own actions and strategies. On the other hand, student **N2**, focuses on the idea that autonomy's importance relating to the process of feedback is that it is not an action entirely unique to the teacher, but the student can also give feedback to their peers. Furthermore, student **N1** explains that the purpose of feedback is to improve the communication between student and teacher during the learning process, and the presence of autonomy helps make this process smoother. Finally, a different perspective is present in the category "Other", in which student **N2** explains that, from their own perspective, if a student has the desire of learning, they should do so through their own actions and strategies instead of depending entirely on the teacher.

The following table relates to the Characteristics of feedback. There are four subcategories and they are good, specific feedback, not understood and not agreed.

Table IV.15. Category 6: Characteristics of feedback

Category 6. Characteristics of feedback	
Subcategories	**Students' answers**
6.1. *Good*	***N1**: [...] la retroalimentación debe ser presentada de una manera positiva, que sea adaptada al destinatario.*
	***N2**: Ser atractiva, didáctica, ordenada y coherente.[...]*
	***N4**: Creo que lo principal sería que se manifieste con sinceridad.*
6.2. *Specific feedback*	***N1:** Utilización de un lenguaje correcto, específico para el desempeño de quien lo recibe[...]*
	***N2**: [...] Detallista también, con aspectos importantes y no generalizar hasta volverlo como una clase.*
	***N3**: Una buena retroalimentación escrita, te indica cuales son tus errores, te da sugerencias para solucionarlos, te motiva a seguir adquiriendo conocimientos y te guía a cómo conseguirlos de mejor forma. Además, de destacar positivamente los conocimientos que manejas muy bien.*
6.3. *Not understood*	***N1**: Siempre pregunto, trato de no quedar con dudas, ya que eso solo perjudica el desarrollo de mi trabajo.*
	***N2:** Pedí explicarlo de otra manera o ejemplos, preguntarle a otro profesor si es que no podía entenderlo o ir a su oficina y que me*

	explicara con más calma según mi forma de aprender.
	***N3**: Depende el contexto, la mayoría de las veces vuelvo a consultarle al docente para que la retroalimentación sea de otra forma.*
	***N4**: La mayoría de las veces, lo manifesté, y en esos casos la profesora lo explico de otro modo para que lo entendiera*
6.4. *Not agreed*	***N1**: Con respeto se lo comento, y con una excelente comunicación se puede llegar a una conclusión.*
	***N2**: Se lo comenté, pedí fundamentación, di a conocer mi comentario*
	***N3**: A veces cuando no coincido con el comentario de algún docente me guardo mi opinión, porque hay docentes que son muy fieles a sus ideas y uno como estudiante solo le queda la opción de respetarlas, aunque no concuerde con ellas.*
	***N4**: Lo manifesté, aunque de una forma respetuosa, ya que la profesora en general suele dar el espacio para ello.*

In this category of characteristics of feedback, the aim is the same as presented on the the stated on the name of it, to highlight characteristics of feedback; thus, we divided this category into four sub categories which are 1-Good (the interviewee gives specific characteristics of a good quality feedback) 2-Specific feedback (the interview 3-Not understood (the interviewee explains what procedure they do when they do not understand the feedback provided) and 4-Not agreed (the interviewee explains what they did when they were not agreed with the feedback received). In the first category, **N1**, **N2** and **N4** give characteristics of good quality feedback; however, the characteristics they mention are different depending on the answer. Some of the most important of these characteristics are that feedback should be presented in a positive way and adapted for each student. It also must be didactic, ordered and coherent. In the second subcategory, same as in the first subcategory, all the answers provide different specific characteristics of feedback. **N1** mentions that feedback should use a proper language and be specific for each student. **N2** also mentions that feedback should be detailed, because feedback that is too general may not be easily understood. **N3** gives even more details including motivation, suggestions and guidance as an important aspect of feedback. In the third subcategory, all the four interviewees tried to solve their misunderstandings. **N2**, **N3** and

N4 asked the teacher to provide the feedback in another way, so they could understand it. In the last subcategory, when the students did not agree with the feedback received, most of them directly talked with the teacher in order to solve the problem. **N1** and **N4**, both mention that they present their point of view with respect. Nonetheless, **N3** explains that when there is a disagreement, most of the time she does not mention the problem to her teacher. The reason is that apparently some of her teachers usually do not accept other points of view that do not fix their way of providing feedback.

As an overall and considering the the participants' answers in this category, Sadler's (1989) viewpoint claims that an important characteristic of feedback relates directly to the importance given by the teacher to the learners' goals, and which strategies can be used in order to bridge the gap between the start point and the learners' development throughout the process. This relates directly to the answers provided by the participants in the first and second subcategory, who highlight the relevance of a more focused feedback, meaning adapted and specific respectively.

The following table relates to the preferences of feedback according to the students. This category is divided into three subcategories which are received, prefered and not prefered.

Table IV.16. Category 7: Preferences of types of feedback

Category 7. Preferences of types of feedback	
Subcategories	**Students' answers**
7.1. *Received*	***N1****: De orden, comentarios positivos, sugerencias o consejo y correctivo.*
	N2: *Orden, Comentario Positivo, Sugerencias o consejos, preguntas y correctivo*
	N3*: Orden, Comentario positivo, Juicio Negativo, Sugerencias o consejos, Preguntas, Correctivo.* *[...]Siento que influye mucho los diferentes tipos de retroalimentación en el aprendizaje de cada persona, claramente a una mayor retroalimentación mejor será el conocimiento adquirido y mayor cantidad de dudas serán resueltas.*
	N4: *Orden, Comentario positivo, Juicio Negativo, Sugerencias o consejos, Preguntas, Correctivo.*

7.2. *Preferred*	***N1**: Las sugerencias o consejos, creo que son medidas, que en lo personal me ayudan bastante para llevar un orden en mis ideas, y dentro del escrito que voy desarrollando.*
	***N2**: Las seleccionadas que he recibido. Las correcciones nos ayudan a ser mas detallistas. [...]Uno recuerda los comentarios que le hacen a sus trabajos, pruebas, etc y ayuda a no cometer el mismo error.*
	***N3**: Prefiero; comentario positivo, sugerencias o consejos, juicio negativo y correctivo. puesto que un comentario positivo me motiva e incentiva a seguir estudiando, el juicio negativo me permite conocer mis errores, pero la idea es que siempre vaya acompañado de alguna sugerencia o corrección para saber cómo arreglar el error que cometí. De lo contrario solo me quedaría con la idea de que esta malo, pero no sabría qué hacer con ese conocimiento errado.*
	***N4**: Todas. Porque me ayudan a mejorar aspectos que tal vez por mí misma no soy capaz de ver.*
7.3. *Not preferred*	***N1**: Un Juicio negativo, porque creo que es muy directo, y a veces se puede malinterpretar.*
	***N2**: Considero que el juicio negativo no es malo, pero no todas las personas lo saben plantear y pueden ser crueles. Sólo por eso.*
	***N3**: El orden, por sí solo no lo prefiero porque siempre que me piden mejorar algo, sin decirme muy bien cuál fue el error, al final no sé cómo mejorarlo y termino sintiéndome más perdida como estudiante.*
	***N4**: Creo que más que no preferir recibir alguna, tal vez sería tener más en cuenta la forma en que se expresa cada tipo de retroalimentación, por ej, si fuese un juicio negativo, sería preferible oirlo mas como una crítica constructiva que por ejemplo no dar una sugerencia para que ese juicio negativo se vuelva algo positivo*

The information in the table presents, on one hand, the feedback preferences of the interviewees. Noticeable similarities can be observed in the answers of the students. Most of the students showed a prevailing preference for “kinder” types of feedback, while having an inclination to avoid more direct and/or even “aggressive” types of feedback, at least from the student’s perspective. In other words, the students presented a preference for types of feedback such as tips and suggestions, along with positive comments. On the other hand, the types of feedback that students do not prefer are direct negative observations and orders, explaining that most of the time they feel too direct, or even cruel, since the teacher does not often consider how their words can affect them, however, student **N4** expresses that rather than having an issue with a particular kind of feedback, they consider that the delivery of such feedback is more important. In other words, it is not the type of feedback that is being used,

but the words and tone that the teacher uses when giving such feedback. Nevertheless, and as to be expected, the students do not receive exclusively the types of feedback that resonate the best with them, but the ones that the teacher chooses to utilize. From the data collected it can be observed that the most common types of feedback that the students have received through their learning process have been a mixture of comments, tips and suggestions, but also orders, questions and negative observations.

Similarly to the participants' answers in Category A, most of the participants openly manifest that there is a preference to avoid more direct type of feedback, because it is even considered as negative, and not only Anson et al. (2016), but also Hyland (1990) agree that this type of feedback can be more threatening than helpful for learners.

The following table relates to the contribution of feedback according to the students. This category is divided into two subcategories which are order type and question type following Straub and Lunsford theory (1995).

Table IV.17. Category 8: Contribution of feedback

Category 8. Contribution of feedback	
Subcategories	**Students' answers**
8.1. *Order type*	**N1**: Sí, considero que es una excelente alternativa, porque estos dos tipos de retroalimentación se complementan entre sí, y puede existir buena cohesión.
	N2: Orden: sí, orden físico y orden mental nos ayuda a no estresarnos, saber dónde empezar y terminar y seguir una secuencia lógica.
	N3: Por lo dicho anteriormente, encuentro que esas dos retroalimentaciones por sí sola no mejoran mi desempeño, ya que personalmente no me ayudan a entender muy bien mis errores. Además, la retroalimentación de pregunta, a veces el docente pregunta cosas que no escucho que yo sí sabía o no vio escritas en mi informe, certamen, cual sea la evaluación. Y solo debo indicarle donde está escrito. Por lo mismo encuentro que no son retroalimentaciones tan relevantes por sí solas.
	N4: Depende de la situación, creo que en general las preguntas nos ponen en situaciones hipotéticas que es interesante tener en cuenta al momento de ejercer la profesión, al menos en el caso de mi carrera. En el caso de la retroalimentación tipo orden, aunque es importante, creo que mientras los pasos a seguir se cumplan, el orden no es tan relevante.

8.2. *Question type*	***N1**: Sí, considero que es una excelente alternativa, porque estos dos tipos de retroalimentación se complementan entre sí, y puede existir buena cohesión.*
	***N2**: Retroalimentación tipo pregunta: si es oral, considero que puede ser muy lábil, podemos no escuchar bien, es más aburrido y presiona a las personas. Por ende, no considero que mejore mi desempeño.*
	***N3**: Por lo dicho anteriormente, encuentro que esas dos retroalimentaciones por sí sola no mejoran mi desempeño, ya que personalmente no me ayudan a entender muy bien mis errores. Además, la retroalimentación de pregunta, a veces el docente pregunta cosas que no escucho que yo sí sabía o no vio escritas en mi informe, certamen, cual sea la evaluación. Y solo debo indicarle donde está escrito. Por lo mismo encuentro que no son retroalimentaciones tan relevantes por sí solas.*
	***N4**: Depende de la situación, creo que en general las preguntas nos ponen en situaciones hipotéticas que es interesante tener en cuenta al momento de ejercer la profesión, al menos en el caso de mi carrera. En el caso de la retroalimentación tipo orden, aunque es importante, creo que mientras los pasos a seguir se cumplan, el orden no es tan relevante.*

The evidence gives detail on the perspective of the students related to the contribution of two different kinds of feedback, order type and question type, which were categorized by Straub and Lunsford (1995), corresponding to the most common types of feedback, as it was previously mentioned in Category A, and simultaneously, both have an impact on the students' performance. When referring to order type feedback, students explain that it is useful for their development. In that sense, student **N1** proposes that it is well complemented by question type feedback. Furthermore, student **N3** considers that none of these types of feedback (these being question and order type) work on their own, but they need to coexist together in order to help the learner. Finally, when referring to question type feedback, student **N4** considers that the degree of success that it sees is related to the situation, however, the use of questions when giving feedback helps the students to think in otherwise unconventional ways, and therefore learn in new ways. On the other hand, student **N2** considers that question type feedback to be unreliable if its presented orally, it is possible that the learner is not able to hear the details in the teacher's explanation, that they are not paying attention, or even that they feel pressured when the teacher speaks to them so directly.
The following table relates to the feelings students have towards feedback.

Table IV.18. Category 9: Feelings

Category 9. Feelings
Students' answers
***N1**: Siempre es bueno recibir retroalimentación, se generan nuevos aprendizajes y se van desarrollando habilidades, y conocimientos nuevos.*
***N2**: Considero que las técnicas recibidas para mi fueron las óptimas, ya que son mi forma de aprender, por lo que fue grato para mi.*
***N3**: En el curso de manejo nutricional de la persona mayor, los conocimientos son muy variados y se debe tener muy presente el criterio de cada alumno. Por lo mismo la docente supo manejar muy bien las diferentes retroalimentaciones que debía hacer, puesto que a pesar de que las respuestas que yo daba eran diferentes a las de mi compañera. Ambas eran buenas. Y la docente fue muy hábil en saber escuchar, corregir cuando fuese necesario y felicitar a cada estudiante. Por todo lo anteriormente dicho, me sentí bastante cómoda.*
***N4**: Fue una buena experiencia, ya me ayudó a mejorar mi conocimiento y la seguridad de que he aprendido lo que necesito aprender.*

In this last subcategory, the focus is on the feelings that they related with the feedback they received. All the four answers agree on that the experience of receiving feedback was positive. **N1** does not directly refer to its experience during the process of feedback, but it describes feedback as a positive process. **N2**, **N3** and **N4** on the other hand, explain that this whole experience has resulted in a set of new techniques, knowledge and in improving their confidence. **N3** goes further in the explanation, saying that the teacher knew how to provide feedback to each one of the students. In addition, the teacher had the ability to listen and correct when it was necessary, praising when the students performed well.

Specific objective 3:

To compare the dispositions of engineering and science students in the context of written tasks.

After analyzing the answers of both students separately, it is necessary to now compare them in order to fulfill the third objective, comparing and contrasting both points of view of students of Engineering and Science, regarding the previously answered questions. This will allow us to realize how similar or different the answers may be, depending on the discipline that the student is on.

Table IV.19. Category 1: Students' perception about the teacher

Category 1	**Participants**	
Students' perception about the teacher	**Engineering**	**Sciences**
	E1: *En mi caso particular, una retroalimentación de parte del profesor me permite entender el nivel de exigencia que este aplica al ramo, es decir, si el profesor constantemente en sus retroalimentaciones busca que el alumno mejore, sería un claro indicador de que es un profesor exigente.*	***N1**: Se entiende por esta frase, que gracias a la retroalimentación que entregue el profesor, los estudiantes pueden conocer el estilo de trabajo del profesor, de qué forma realiza las preguntas, en que se enfoca siempre, etc.*
	E2: *Que al hacer un resumen de lo que enseñó anteriormente el profesor los alumnos entenderán de mejor manera lo que enseñó anteriormente.*	***N2**: Por lo que entiendo, es que dependiendo de la manera en la que un profesor vuelve a explicar la materia a modo "resumen" uno puede conocer cuál es el estilo con el que profesor explica (ej: tablas resúmenes, dibujos, mapas conceptuales).* *Si, encuentro que si el profesor se maneja en lo que explica, puede explicarlo de varias formas. Además uno puede observar su dedicación y amor por lo que hace.*
	E3: *De esta frase entiendo que la retroalimentación es la característica más importante que tienen los profesores, debido a que depende de esta el cómo aprenderá el estudiante, debido a que esta se encuentra en cada profesor, y además, puede ser distinta en todos.*	***N3**: Lo que me da a entender la afirmación anterior es que mediante el ejercicio de la retroalimentación podre conocer los conceptos que el profesor encuentra más importantes para mi aprendizaje de igual forma me permite evaluar si el profesor logra enseñarme mejor en cómo arreglar los errores que tengo y por ende puede ver si busca nuevos métodos de aprendizaje. De esta forma conozco más a fondo cual es el estilo de enseñanza del docente. Ya que fácilmente puede volver a enseñar alguna temática de la misma forma que ya la enseño o simplemente decir que está bien y que está mal y quedarse con eso.*
		***N4**: Entiendo que se refiere a que la retroalimentación me ayuda a entender cuáles son los factores que el profesor*

		prioriza a la hora de enseñar, así como los métodos

Concerning this first category, it can be stated as an overall that participants from the two different disciplines value feedback, but they focus on different aspects, and consequently assign different grades of importance to each of these depending on their particular experience and personal viewpoints. On the one hand, Engineering students' statements reflect that their perception about the teacher is mainly supported by their declarations which claim that feedback is a means to get to know how demanding a teacher can be, but the main focus falls on understanding and how feedback itself can define how well a student can learn. On the other hand, Science students mainly focus on how feedback helps them to get to know more about the expertise, and the way the teacher does things, as they highlight the style and also the teaching method. Nevertheless, both disciplines agree that feedback allows them to understand the contents more efficiently.

Primarily, in relation to the different focus across disciplines, as Santos and Pinto (2008) declare the context appear to be a fundamental feature within the feedback process, which eventually has a direct relation to the nature of each discipline (science and engineering respectively), and precisely the type of written assignments, as they may suffer variation, similarly to what occurs to the writing processes as Gardner (2008) reveals. Finally, an important aspect that correlates directly to what students manifested in relation to understanding is in Brookhart's words (2017) the fact that learners can be aware of which stage are they in their development process, and what could be their next move as they understand and analyze the information given (cognitive feedback feature), which would certainly have an impact on how well they can learn.

Table IV.20 shows evidence of the data collected in order to establish a comparison across disciplines in the context of students' perception on feedback.

Table IV.20. Category 2: Students' perception on feedback

Category 2	Participants	
Subcategories	**Engineering**	**Science**
2.1. Positive	**E1:** *La retroalimentación sirve para impulsar las ideas del estudiante o direccionarlas hacia el ámbito que crea el profesor que es mejor para que el alumno pueda aprender.*	***N1**: Si influye, ya que gracias a la retroalimentación del profesor nos damos cuenta de los errores que podemos estar cometiendo, y así ir mejorando en cuanto a un tema en particular.*
	E2: *Si influye, ya que si es positiva los alumnos entenderán de mejor manera lo enseñado anteriormente de que si este fuera negativa esto porque los confundirá.*	***N3**: Yo siento que la retroalimentación guía al estudiante a obtener los conocimientos adecuados, le ayuda a comprender mejor algún tema y, a conocer y mejorar sus errores para que en un futuro no los siga cometiendo.*
	E3: *Si influye, un ejemplo seria, cuando un profesor me dice que diga de donde saque cierta información, esto me da a entender que debo manejar al reves y al derecho toda la información que tengo en mi presentación para poder responder a todas las preguntas de ese profesor, el cual, en un inicio no parecía que se fijara por detalles en las clases.*	***N4**: Si, ya que al ser en general de tipo positivo, nos llama a seguir mejorando y aprendiendo cosas que tal vez la primera vez no conseguimos entender del todo, pero que después de la retroalimentación fue más fácil entender.*
2.2. Negative	**E1:** *En el único caso que podría restringir la libertad del estudiante seria, si se realizaran malas retroalimentaciones.* *Constantemente estoy recibiendo retroalimentaciones negativas a pesar, de que a mi parecer el trabajo esta bien hecho, me generaría rechazo hacia el profesor. En caso contrario, si constantemente recibo retroalimentaciones positivas, me daría a entender que la exigencia es muy baja por parte del profesor. Y en ultimo caso si el profesor no realiza*	***N1**: La retroalimentación no permite que el estudiante pueda generar sus propias ideas, y llevarlas a cabo de la forma que quizás el lo quiera.*

	ninguna retroalimentación, este me seria indiferente.	
	E2: *"Si la restringe ya que el estudiante puede buscar más información sobre un tema visto y después al llegar a clases este vee que lo que busco está fuera de los parámetros de lo dicho por el profesor en clases"*	

In this second category, which exclusively refers to the students' perception on feedback and how this actually restricts or not their freedom, Engineering participants (**E1**, **E2**, **E3**) data evidences that the main focus lies on how to orient the writing in order to fulfill teacher's expectations, and they also emphasize the understanding feature, with a positive outcome, since feedback eventually allows them to prepare to face the teacher's questions successfully. Similarly, Science students (**N1**, **N3**, **N4**) manifest openly that feedback has a positive outcome as they find it useful due to the help that provides them in order to realize about their mistakes, while comprehending the contents and improving on the way, as well as understanding in a better way after receiving it in order to avoid repeating future mistakes. Additionally, there is also a negative vision concerning feedback (**E1**, **E2**, **N1**), as the participants focus on how it can certainly restrict the students' freedom when it does not allow them to generate their own ideas and venture beyond the established parameters on their own. Particularly, **E1** manifests that constant negative feedback would cause rejection, whereas that purely positive feedback would give an impression that the teacher is not strict enough, and lastly if the teacher did not deliver any feedback would not be meaningful for this student at all.

For instance, Hyland (2006) claims that if the feedback is aimed towards the writer, a negative one would evidently harm the learner's confidence, and a positive type could certainly be injurious too, since learners expect to receive more helpful guidance instead of merely praises. Correspondingly, Hattie and Timperley (2007) clarify that it is important to avoid inconsistencies between the current understandings, the learner's performance and the goal,

thus the level at which feedback operates must be considered. For this reason, feedback can succeed, as long as it is oriented toward the writing, not toward the writer; or as Hattie and Timperley (2007) claim if it is directed toward the accomplishment of a specific goal. However, the information they get from feedback would be filtered by students' own perception as Brookhart (2017) established, and this would certainly influence their development eventually as well, which correlates to what **E1** declares explicitly in the case of positive, negative and neutral feedback.

The following table shows evidence of the data collected in order to establish a comparison between disciplines in the context of feedback on students' participation. As it was established in the preceding Objectives 1(a) and 2(b), this corresponds to the first of the three strategies established in Anson's (2016) research, therefore the two subsequent which are approval and autonomy are also inherently connected

Table IV.21. Category 3: Feedback on students' participation.

Category 3	**Participants**	
Subcategories	**Engineering**	**Sciences**
3.1. Agreement	**E2:** *Sí, porque si el estudiante participa este podrá comentar algo el cual puede estar bien o mal, por lo que en la retroalimentación este podría ser corregido.*	***N1****: Sí, porque la retroalimentación tiene como objetivo mejorar la comunicación, y para que exista eso considero que los tres conceptos se relacionan de buena manera.*
		N2*: Coincido en las tres: participación porque si los estudiantes no opinan sobre lo que se les habla se asume que no tienen dudas y que entienden todo. Sin embargo al interactuar en la clase, el profesor puede darse cuenta del interés y dudas que puedan existir.*
		N3*: Es importante que la retroalimentación integre al estudiante, para que este pueda dar a conocer con confianza lo que sabe y expresa con la misma confianza las debilidades que cree tener sobre algún tema.*
		N4*: Sí, porque permite que el profesor sepa si su método de retroalimentación*

		es eficaz.
3.2 Disagreement	(No evidence)	(No evidence)
3.3. Other	**E1:** *Creo que los tres conceptos tienen relación con la retroalimentación, debido a que una buena retroalimentación debe incentivar la* ***participación*** *y la autonomía del estudiante, además este debe sentir que este haciendo las cosas bien en caso de ser así, es decir, necesita la aprobación del profesor para continuar de manera autónoma y con más soltura."*	
	E3: *Yo creo que todos tienen aunque sea un poco de relación con la retroalimentación debido a que todas estas son parte del aprendizaje del estudiante, entonces todas repercuten en este.*	

In relation to the third category, specifically feedback on students' participation, which goes hand in hand with the two subsequent categories, the data was classified beforehand in three different subcategories. Also, it is necessary to mention that only the first subcategory (agreement) and the third one (other) were used to classify the statements from the students, since none of the participants manifested a disagreement about the category's focus (participation). Concerning the first subcategory, Engineering participant main focus was on commenting and how this can be corrected later, whereas Science participants focus on communication, and how participation can be evidence of interest, and also evidence of doubts that required to be solved. Thus, they also focus on how participation becomes an instance where students show their weaknesses and strengths, and where the teacher can confirm if the feedback is effective or not.

Following Anson et al. (2016) study, it is necessary to address students' need to feel involved in the evaluative setting, and in simple terms this is the reason why participation in this context stands out as a category. The evidence suggests that for both disciplines this becomes a crucial instance where they can try out if they are on the right track by testing out how they are working while clarifying doubts, without fearing their possible mistakes but being actively involved in the learning process. Thus, there is an undeniable and direct relation to feedback as they explicitly perceive that this can be favorable for both, teachers and students as well, which could also help to bridge the gap between them as the communication could certainly improve, as Sommers (1982) declares.

This table shows evidence of the data collected in order to establish a comparison between the two disciplines in the context of feedback on students' approval.

Table IV.22. Category 4: Feedback on students' approval

Category 4	**Participants**	
Subcategories	**Engineering**	**Science**
4.1. Agreement	**E2:** *Si, porque si se quiere opinar en la retroalimentación este debe tener ser aprobado*	***N1**: Sí, porque la retroalimentación tiene como objetivo mejorar la comunicación, y para que exista eso considero que los tres conceptos se relacionan de buena manera.*
		***N2**: Considero que hay formas y formas de dar a conocer aprobaciones y rechazo, pero sin embargo, al emitir este juicio, la persona sabe que están considerando su opinión y a la vez puede seguir realizando esta dinámica.*
		***N3:** […]De igual forma la aprobación se relaciona también a la retroalimentación, a pesar de que el docente se dé cuenta que el alumnado tiene muchos errores no quiere decir que deba faltarle el respeto en ningún momento, de hecho, es sumamente relevante que en una retroalimentación se destaque los conocimientos en los que el estudiante está bien preparado[...]*
		***N4:** Si, porque en general las observaciones positivas tienden a tener efectos positivos*

		en quienes las reciben.
4.2. Disagreement	(No evidence)	(No evidence)
4.3. Other	**E1:** *Creo que los tres conceptos tienen relación con la retroalimentación, debido a que una buena retroalimentación debe incentivar la participación y la autonomía del estudiante, además este debe sentir que este haciendo las cosas bien en caso de ser así, es decir, necesita la* ***aprobación*** *del profesor para continuar de manera autónoma y con más soltura.*	
	E3: *Yo creo que todos tienen aunque sea un poco de relación con la retroalimentación debido a que todas estas son parte del aprendizaje del estudiante, entonces todas repercuten en este.*	

This fourth category specifically deals with approval within the context of feedback. There is an overall tendency manifested by the two disciplines, and consequently most of the data is concentrated in the first and third subcategories (agreement and other respectively), whereas that in the second subcategory again, none of the participants declared to be in disagreement. In the agreement subcategory, Engineering participant focuses on the approval in relation to a particular opinion during the feedback instance, which relates up to a certain point to what Science participants manifest as they focus on the importance of communication and how approval promotes this; similarly, approval also allows a student to know if his or her opinion is considered, and they highlight the respect between the main agent during the feedback process. Their viewpoint on this feature is positive due to its effect on the students' development which should always be encouraged, as positive observations tend to have

positive outcomes in the ones who receive it. Lastly, in the third category, but without manifesting neither a negative nor a positive inclination towards this particular feature, engineering participants focus on the importance of approval and how this complements directly to autonomy and participation, as these three are directly involved in the student's learning process.

As it was clearly mentioned above, Anson (2016) claims that approval is where respecting the students' needs during the feedback interaction remains the cornerstone of the strategy, and one of the Science participants openly manifests this as a basis during the feedback process. Moreover, knowing that their opinion, whether right or wrong is considered can encourage a learner's development as once again communication stands as a crucial feature for the participants throughout the learning process, where also participation and autonomy have a direct impact on.

This table shows evidence of the data collected in order to establish a comparison between disciplines in the context of feedback on students' autonomy.

Table IV.23. Category 5: Feedback on students' autonomy

Category 5.	**Participants**	
Subcategories	**Engineering**	**Science**
5.1. Agreement	**E2: ...***la retroalimentación lo que hace es repasar un contenido antes visto por lo que si uno quisiera saber más sobre el tema debería ser autónomo*	**N1**: Sí, porque la retroalimentación tiene como objetivo mejorar la comunicación, y para que exista eso considero que los tres conceptos se relacionan de buena manera.
		N2: No necesariamente un docente puede retroalimentar. Uno también puede hacerlo.
		N3: […]Y, por último, una retroalimentación siempre debe motivar e incentivar a que el estudiante sea autónomo en sus estudios ya que no siempre podrá depender de los conocimientos del docente a cargo. Añadiendo que la idea final es que el estudiante, en

		base a lo que le enseña el docente, genere sus propio criterios y opiniones. Le ayuda a comprender mejor algún tema y, a conocer y mejorar sus errores para que en un futuro no los siga cometiendo.
		N4: Si, porque si no existiera, el estudiante no podría ir más allá de lo que se le indica. [...]Personalmente considero que la retroalimentación me ha ayudado en muchas ocasiones a tener más interés por lo que se me explico en un principio, por lo que podría decir que me ha dado más herramientas para seguir investigando por mi cuenta.
5.2. Disagreement	(No evidence)	(No evidence)
5.3. Other	**E1:** *Creo que los tres conceptos tienen relación con la retroalimentación, debido a que una buena retroalimentación debe incentivar la participación y la* ***autonomía*** *del estudiante, además este debe sentir que este haciendo las cosas bien en caso de ser así, es decir, necesita la aprobación del profesor para continuar de manera autónoma y con más soltura.*	**N2**: Encuentro que si una persona quiere aprender más o ir más allá de sus conocimientos debe hacerlo por su cuenta y no sentirse limitado por sólo quedarse con lo que te explican en un curso.
	E3: *Yo creo que todos tienen aunque sea un poco de relación con la retroalimentación debido a que todas estas son parte del aprendizaje del estudiante, entonces todas repercuten en este.*	

In relation to this fifth category, and particularly in the first subcategory, Engineering participant focus is set on reviewing as part of the feedback instance and how a student should be autonomous in order to pursue further knowledge, and Science participants keep the focus on how autonomy should always be encouraged by feedback, declaring that

students' can always go beyond the contents taught in order to avoid future mistakes. Moreover, they focus on the relation that autonomy has with approval and participation, and how these concepts enhance communication. Similarly to the previous category, none of the participants manifested to be in disagreement with this feature in the context of feedback, for this reason, there is no data in the second subcategory. Lastly, in the last subcategory, the relation between the three concepts (autonomy, approval and participation) is the focal point for Engineering students, whereas the last Science student points to proactivity as an option whenever an individual intends to learn more, similarly to the main focus described above.

Anson et al. (2016) manifested that students' need for autonomy during the evaluation process should be addressed, and participants openly manifest that students' should be autonomous during the learning process, and how this feature should be encouraged during the feedback process in the same manner, so they can eventually go beyond in order to avoid future mistakes while generating their own feedback process, because as Brookhart (2017) declare, this will allow them to move forward and feel that they are in control of their own learning process.. Once again, communication comes up as a highlighted feature too, but most importantly is the participants' outlook concerning these three strategies relation and their impact on the learning process, which resembles up to a certain extent to what participants in Anson's (2016) study agreed, declaring that when participation, approval and autonomy are present in the feedback process, then it turns out to be considerably more helpful, easier to follow and acquire.

In this following table, students of engineering and sciences state their opinion about what characteristics define a specific type of feedback, either good or specific as well as their actions when the feedback received was not agreed or understood.

Table IV.24. Category 6: Characteristics of feedback

Category 6	**Participants**	
Subcategories	**Engineering**	**Sciences**
6.1. *Good*	**E1:** *...una retroalimentación debería ser lo más detallada posible y esta debería abordar todo*	***N1****: … la retroalimentación debe ser presentada de una manera positiva, que sea adaptada al destinatario.*

	el trabajo. De esta manera podría entender que es lo que requiere el profesor que modifique y además entendería que hizo una revisión exhaustiva a mi trabajo.	
	E2: *Sería la ortografía, uno que otro comentario positivo, decirle lo que falta en algún tema.*	***N2**: Ser atractiva, didáctica, ordenada y coherente*
		***N4**: Creo que lo principal sería que se manifieste con sinceridad.*
6.2. *Specific feedback*		***N1:** Utilización de un lenguaje correcto, específico para el desempeño de quien lo recibe...*
		***N2**: ...Detallista también, con aspectos importantes y no generalizar hasta volverlo como una clase.*
		***N3**: Una buena retroalimentación escrita, te indica cuales son tus errores, te da sugerencias para solucionarlos, te motiva a seguir adquiriendo conocimientos y te guía a cómo conseguirlos de mejor forma. Además, de destacar positivamente los conocimientos que manejas muy bien.*
6.3. *Not understood*	**E1:** *Hice las consultas pertinentes al profesor para poder entender lo que requería que modificara o añadiera al trabajo.*	***N1**: Siempre pregunto, trato de no quedar con dudas, ya que eso solo perjudica el desarrollo de mi trabajo.*
	E2: *Le volvía a preguntar y le pedía algunos ejemplos para poder lograr entender*	***N2:** Pedí explicarlo de otra manera o ejemplos, preguntarle a otro profesor si es que no podía entenderlo o ir a su oficina y que me explicara con más calma según mi forma de aprender.*
		***N3**: Depende el contexto, la mayoría de las veces vuelvo a consultarle al docente para que la retroalimentación sea de otra forma.*
		***N4**: La mayoría de las veces, lo manifesté, y en esos casos la profesora lo explico de otro modo para que lo entendiera*

6.4. *Not agreed*	**E1:** *A pesar de no estar de acuerdo con alguna retroalimentación del profesor, realice los cambios pertinentes según lo que él indicaba.*	***N1**: Con respeto se lo comento, y con una excelente comunicación se puede llegar a una conclusión.*
	E2: *Le explicaba que lo que está diciendo está mal según mi punto de vista*	***N2**: Se lo comenté, pedí fundamentación, di a conocer mi comentario*
		***N3**: A veces cuando no coincido con el comentario de algún docente me guardo mi opinión, porque hay docentes que son muy fieles a sus ideas y uno como estudiante solo le queda la opción de respetarlas, aunque no concuerde con ellas.*
		***N4**: Lo manifesté, aunque de una forma respetuosa, ya que la profesora en general suele dar el espacio para ello.*

This category “characteristics of feedback” is divided into four different subcategories, which are the following: 1) Good , 2) Specific feedback , 3) Not Understood and 4) Not agreed. In this case, the objective is to identify which are the similarities and/or differences between students of both engineering and sciences in order to recognize what the students think about feedback, regarding these previously mentioned subcategories. Firstly, on the subcategory “good,” **E1** and **E2** argue that a good feedback should be as detailed as possible, covering the whole assignment as well as checking grammatical aspects and explaining what is missing in the corresponding case. Regarding sciences, **N1, N2** and **N4** tell us that a good feedback should be presented in a positive way, attractive, didactic, organized, coherent and that it should be explained sincerely. We can observe that engineering students tend to prefer formal feedback while science students prefer feedback that makes them interact, in the sense that they could find the feedback interesting and engaging.

Secondly, in the category of “specific feedback,” it is observable that none of the engineering students had a description about specific feedback, differently from science students. **N1, N2** and **N3** state that a feedback considered specific should utilize specific language, should be

detailed, not generalized, indicating what are your mistakes and giving you suggestions at the same time as well as highlighting your strengths in order to use them to improve your work.

Thirdly, the subcategory of “Not understood” tells us what students did in the moment that they did not understand the feedback received. **E1** and **E2** asked what they did not understand to their teacher, requiring examples to solve the issue. **N2, N3** and **N4** asked the teacher to explain the issues again but in a different way in order to have another point of view of the same problem that would lead them to understand and solve the doubts presented. Similarly, **N1** immediately asked the teacher for help in order to avoid staying doubtful, being that a problem for the continuity of the work.

Finally, the subcategory of “not agreed” is similar to the previous one, asking students what they did but in this case when their opinions about a certain aspect of the assignment were not the same. On one hand, **E1** just followed the instructions that the teacher gave even if he did not want to. **E2** explained the. teacher what were the aspects in which the teacher was wrong, defending his/her point of view. On the other hand, **N1** tried to reach an agreement with the teacher. **N2** asked for reasons about the teacher's feedback. **N3** prefered to stick to the opinion of the teacher, considering that it would be a waste of time discussing the situation, stating that teachers are loyal to their ideas, even if the student did not agree. **N4** told the issue to the teacher respectfully, given that the teacher tends to leave spaces for this type of discussion.

Overall, engineering students tend to have a straightforward thinking process regarding feedback and their characteristics. Science students, on a different side, tend to indirectly refer to the characteristics of feedback as well as when taking actions to discuss aspects of the same. Science students mostly consider having an interesting and engaging feedback while engineering students prefer to directly ask what is right or wrong, and solve it accordingly. Following Brookhart (2017) ideas, science students may prefer the “didactic” way as it is a way in which they will understand the feedback in a better way than before, feeling in control of what they are learning.

In the table below, we can see what are the types of feedback that students have received as well as their preferences on this ambit

Table IV.25. Category 7: Preferences of types of feedback

Category 7	**Participants**	
Subcategories	**Engineering**	**Sciences**
7.1. *Received*	**E1:** *Orden, Juicio Negativo y Sugerencias o consejos.*	***N1****: De orden, comentarios positivos, sugerencias o consejo y correctivo.*
	E2: *Orden y Juicio Negativo*	***N2:*** *Orden, Comentario Positivo, Sugerencias o consejos, preguntas y correctivo*
	E3: *He recibido casi todas, la única que por el momento no me han dicho es del tipo correctivo.*	***N3****: Orden, Comentario positivo, Juicio Negativo, Sugerencias o consejos, Preguntas, Correctivo.* *Siento que influye mucho los diferentes tipos de retroalimentación en el aprendizaje de cada persona, claramente a una mayor retroalimentación mejor será el conocimiento adquirido y mayor cantidad de dudas serán resueltas.*
		N4: *Orden, Comentario positivo, Juicio Negativo, Sugerencias o consejos, Preguntas, Correctivo.*
7.2. *Preferred*	**E1**: *De todas las anteriores, prefiero recibir Sugerencias o consejos, Juicio negativo y Comentario positivo. Porque considero que son las retroalimentaciones que más me alientan a mejorar un trabajo.*	***N1****: Las sugerencias o consejos, creo que son medidas, que en lo personal me ayudan bastante para llevar un orden en mis ideas, y dentro del escrito que voy desarrollando.*
	E2: *Comentario positivo y el de sugerencias y consejos, porque aumentaría mi autoestima y me motivará a hacer mejor las cosas*	***N2****: Las seleccionadas que he recibido. Las correcciones nos ayudan a ser más detallistas. Uno recuerda los comentarios que le hacen a sus trabajos, pruebas, etc y ayuda a no cometer el mismo error.*

	E3: *Preferiría tanto de comentario positivo como de sugerencias y consejos debido a que gracias a estas, uno sabe que lo hizo bien y aparte, te ayuda a mejorar en lo que estuviste mas débil al hacer la presentación, respuesta, etc.*	***N3**: Prefiero; comentario positivo, sugerencias o consejos, juicio negativo y correctivo. puesto que un comentario positivo me motiva e incentiva a seguir estudiando, el juicio negativo me permite conocer mis errores, pero la idea es que siempre vaya acompañado de alguna sugerencia o corrección para saber cómo arreglar el error que cometí. De lo contrario solo me quedaría con la idea de que esta malo, pero no sabría qué hacer con ese conocimiento errado.*
		***N4**: Todas. Porque me ayudan a mejorar aspectos que tal vez por mí misma no soy capaz de ver.*
7.3. *Not preferred*	**E1:** *De todas las anteriores, no prefiero recibir las preguntas. Esto es debido a que siento que este tipo de retroalimentación no me lleva a nada, por lo que siento que quedo igual de estancado que antes de la retroalimentación.*	***N1**: Un Juicio negativo, porque creo que es muy directo, y a veces se puede malinterpretar.*
	E2: *Juicio negativo, porque bajaría mis niveles de motivación*	***N2**: Considero que el juicio negativo no es malo, pero no todas las personas lo saben plantear y pueden ser crueles. Sólo por eso*
	E3: *Juicio negativo, debido a que da a entender que la información que busqué no sirve de nada para la opinión del profesor acerca de mi trabajo.*	***N3**: El orden, por sí solo no lo prefiero porque siempre que me piden mejorar algo, sin decirme muy bien cuál fue el error, al final no sé cómo mejorarlo y termino sintiéndome más perdida como estudiante.*
		***N4**: Creo que más que no preferir recibir alguna, tal vez sería tener más en cuenta la forma en que se expresa cada tipo de retroalimentación, por ej, si fuese un juicio negativo, sería preferible oirlo mas como una crítica constructiva que por ejemplo no dar una sugerencia*

		para que ese juicio negativo se vuelva algo positivo

The analysis shows that the most common types of feedback for both disciplines are order, suggestions or advice and negative judgment. Among all the types of feedback gathered from the answers, the order mode is constantly repeated in engineering as in science. The comparison between these two disciplines shows that in science, students tend to receive a bigger variety of feedback than in engineering. Furthermore, the students from engineering receive more negative judgment than science learners. In terms of preferences, most of the students from both disciplines prefer mainly two types of feedback, which are suggestions or advice and positive comments. The backup given by the students is that these types of feedback increase students´ motivation and enhance their self-security. It is necessary to highlight that some students choose negative judgment as a type of feedback they would prefer to receive. Finally, most of the students agree on that negative judgment in the type of feedback they do not prefer. Henceforth, the reasons given by the learners for this decision are varied. Some say that this feedback does not motivate them, others say that negative judgment does not contribute to the learning process. The answers from both science and engineering students only backs up the theory presented by Anson (2016) that states that this type of feedback is more threatening than helpful for learners.

In the following table, we can see what the opinions of engineering and science students are about the types of feedback 'Order type' and 'Question type.'

Table IV.26. Category 8: Contribution of feedback

Category 8	**Participants**	
Subcategories	**Engineering**	**Sciences**
8.1. *Order type*	**E1:** *Considero que la retroalimentación tipo orden contribuye a mejorar mi desempeño, no tanto así la retroalimentación del tipo*	**N1**: Sí, considero que es una excelente alternativa, porque estos dos tipos de retroalimentación se complementan entre sí, y puede existir buena cohesión.

	pregunta. Debido a que la de tipo orden me ayuda a corregir de manera inmediata lo que este mal dentro del trabajo...	
	E2: *La retroalimentación tipo orden no ayudarían a mejorar el desempeño ya que esta podría causar que se desmotivara un poco el estudiante*	**N2**: Orden: sí, orden físico y orden mental nos ayuda a no estresarnos, saber dónde empezar y terminar y seguir una secuencia lógica.
	E3: *Si, debido a que me hace mejorar en cuanto al análisis tanto de datos como resultados y así entender y explicar mejor al profesor*	**N3**: Por lo dicho anteriormente, encuentro que esas dos retroalimentaciones por sí sola no mejoran mi desempeño, ya que personalmente no me ayudan a enteder muy bien mis errores. Además, la retroalimentación de pregunta, a veces el docente pregunta cosas que no escucho que yo sí sabía o no vio escritas en mi informe, certamen, cual sea la evaluación. Y solo debo indicarle donde está escrito. Por lo mismo encuentro que no son retroalimentaciones tan relevantes por sí solas.
		N4: Depende de la situación, creo que en general las preguntas nos ponen en situaciones hipotéticas que es interesante tener en cuenta al momento de ejercer la profesión, al menos en el caso de mi carrera. En el caso de la retroalimentación tipo orden, aunque es importante, creo que mientras los pasos a seguir se cumplan, el orden no es tan relevante.
8.2.*Question type*	**E1:** *...la del tipo pregunta no me ayuda a avanzar.*	***N1**: Sí, considero que es una excelente alternativa, porque estos dos tipos de retroalimentación se complementan entre sí, y puede existir buena cohesión.*
	E2: *La retroalimentación tipo orden no ayudaría a mejorar el desempeño ya que esta podría*	***N2**: Retroalimentación tipo pregunta: si es oral, considero que puede ser muy lábil, podemos no escuchar bien, es más aburrido y presiona a las personas. Por ende,*

	causar que se desmotivara un poco el estudiante	*no considero que mejore mi desempeño.*
	E3: … en cuanto a la tipo pregunta, *uno debe ser capaz de manejar toda la información que uno presente, sabiendo de lo que trata y de donde buscó dicha información.*	***N3**: Por lo dicho anteriormente, encuentro que esas dos retroalimentaciones por sí sola no mejoran mi desempeño, ya que personalmente no me ayudan a enteder muy bien mis errores. Además, la retroalimentación de pregunta, a veces el docente pregunta cosas que no escucho que yo sí sabía o no vio escritas en mi informe, certamen, cual sea la evaluación. Y solo debo indicarle donde está escrito. Por lo mismo encuentro que no son retroalimentaciones tan relevantes por sí solas.*
		***N4**: Depende de la situación, creo que en general las preguntas nos ponen en situaciones hipotéticas que es interesante tener en cuenta al momento de ejercer la profesión, al menos en el caso de mi carrera. En el caso de la retroalimentación tipo orden, aunque es importante, creo que mientras los pasos a seguir se cumplan, el orden no es tan relevante.*

Table 8: Contribution of feedback provides detailed information on the perspectives of both science and engineering students. Contribution of feedback is subdivided into two different subcategories, Order type and Question type. Regarding the subcategory of Order type, students **E1** and **E3** present a similar perspective, explaining that order type contributes to the development of the learner and their skills during the learning process in the sense that makes the comprehension of the feedback easier for them. Moreover, student **E1** goes further to state that while order type is helpful for the student, question type is still more helpful. However, a contrasting perspective is presented by student **E2**, who states that order type feedback is not helpful, since it may cause the learner to get demotivated. Science students had contrasting ideas to this one, students **N1** and **N2** also consider order type as a useful

alternative of feedback that can benefit the learner. Furthermore, student **N3** states that a good combination of the two types of feedback (These being order and question type) can be effective, since, according to them, they complement each other. While student **N4** considers that the degree of usefulness of the feedback depends on the situation.

On the other hand, question type had a wider range of perspectives and opinions, Engineer students such as student **E1** consider that question type is not helpful for them, while student **E2** states that question type feedback is not convenient to improve the student's performance, since it is it may demotivate them in the process. A different perspective is presented by student **E3**, who claims that the learner must be able to manage all the information that they present in order to fully comprehend and make use of the feedback. On the other side, science students, such as **N1, consider** that question type feedback can be greatly helpful, moreover student **N1** states that question and order type work more efficiently together. Contrastingly, student **N2** claims that question type feedback is very easily efficient, especially if it is presented orally, since it puts a great degree of pressure on the learner and can be misunderstood by them. Furthermore, and similarly to student **N1,** student **N3** states that question and order work better together, however, they explain that question type feedback is very easily misunderstood by the learner, and thus not very helpful for them. Finally, student **N4** considers that the degree of usefulness of the feedback is relient on the present situation.

The table below shows what the feelings of both engineering and science students are regarding feedback, separately stating their opinions

Table IV.27. Category 9: Feelings

Category 9	**Participants**	
Feelings	**Engineering**	**Sciences**
	E1: *Creo que las retroalimentaciones del profesor podrían haber sido más detalladas y no tan estándar, a veces parecía que respondía con las mismas palabras a cada uno de los grupos de trabajo.*	***N1****: Siempre es bueno recibir retroalimentación, se generan nuevos aprendizajes y se van desarrollando habilidades, y conocimientos nuevos.*

	E2: *La experiencia que recibí fue buena ya que siempre daban comentarios positivos y nos intentaban de motivar.*	***N2**: Considero que las técnicas recibidas para mi fueron las óptimas, ya que son mi forma de aprender, por lo que fue grato para mi.*
	E3: *Sinceramente la retroalimentación que se me entregó en el curso de electrónica fue demasiado genérica, ya que estaba al tanto de otras retroalimentaciones que le enviaban a mis compañeros y no habían diferencias prácticamente, siento que se debió de poner mas esfuerzo y dedicación para saber básicamente en que estaba fallando y como poder hacerlo mejor en cuanto a la entrega de ese informe.*	***N3**: En el curso de manejo nutricional de la persona mayor, los conocimientos son muy variados y se debe tener muy presente el criterio de cada alumno. Por lo mismo la docente supo manejar muy bien las diferentes retroalimentaciones que debía hacer, puesto que a pesar de que las respuestas que yo daba eran diferentes a las de mi compañera. Ambas eran buenas. Y la docente fue muy hábil en saber escuchar, corregir cuando fuese necesario y felicitar a cada estudiante. Por todo lo anteriormente dicho, me sentí bastante cómoda.*
		***N4**: Fue una buena experiencia, ya me ayudó a mejorar mi conocimiento y la seguridad de que he aprendido lo que necesito aprender.*

Referring to this last category named “feelings,” there is a similarity to be noticed, and that is that both engineer and sciences students received and understood the feedback provided by their respective teachers. Nonetheless, the feelings about feedback regarding sciences students is received and felt in a more positive way than the feedback received by the engineering students. Specifically, **E1** tells how the feedback received could have been better as well as **E3,** agreeing on that same fact. On the contrary, **N1, N2,** and **N4** agreed with the feedback, feeling positively about that experience and **N3** even gives a detailed process in the sense of expressing how he/she actively remembers the feedback and in the way that it was given. According to Anson (2017), there is still much information we do not know about the nature of the students' response in the field of feedback. Still, acknowledging that the feedback was either positive or negative, remembering it on that level of detail states how much the student (as in **E3** and **N3**) kept that experience as meaningful.

V. Discussion

In this section we will answer the research questions proposed. Besides we will state how these results are supported and how they differ from other studies. Further research recommendations and the limitations for our own study are included in this chapter.

1. **Is there any difference in the dispositions of science and engineering students?**

There are some differences that can be observed among the answers presented by both groups, the two of them agreed in most of the topics presented. However, there are aspects in which there were differences in their perspectives. Some of these divergences, for example, can be found in their perception of the teacher through feedback. Engineering students use feedback to recognize the level of exigency, while Science students use feedback to analyze the whole style of teaching. Moreover, Science students use feedback to prioritize what the teacher asks and focus mainly on those aspects. A major contrast between the responses of the two groups is the idea that they have good feedback, Engineering students need to give answers that are as detailed as possible, focusing on aspects such as grammar and what their answer is missing so that that answer is as complete as possible. On the other hand, Science students consider that a good feedback is presented in a positive manner, moreover, they believe that a good feedback is attractive, didactic, coherent, ordered and presented to the student as honestly as possible. These ideas contrast with the ones of Engineering students, who think of feedback in a less positive way than science students.

2.What are science students' dispositions towards written feedback?

The dispositions of science students towards feedback tend to be standing on a positive point of view, agreeing on most aspects that feedback delivers to them. They consider that feedback is a tool that influences the learning process of the students positively, given that

for example, it helps them to improve their level of proficiency based on the comments received on different aspects of the course. Consequently, this relates directly with Hattie and Timperley's (2007) declaration concerning the influence that given feedback may have on the learners.

Regarding the process, science students consider that the way in which feedback should be given must include participation of both teacher and students, as well as maintaining the process with a considerable grade of respect between both agents. In the same line as Brookhart (2017) feedback is necessary to improve both, teaching and learning. Since the objective of feedback is not only to correct mistakes, but also to make students become active learners by letting them know how to analyze their own work so they do not become dependent on peer feedback or teacher's feedback, the feedback should be motivating, adapted to each student differently. This last feature follows the claimings concerning the affective nature of feedback and its indistinguishable influence on a student's motivation as it impacts the individual's disposition in the first place (McLeods, 1987; Piazza and Siebert, 2012).

At the moment of reading the written feedback, science students ask the teacher to explain in a different way if they did not understand. At the moment of not agreeing with the feedback, most of the students of this discipline respectfully talked to the teacher in order to reach an agreement. Additionally, most of them prefer suggestions and positive comments as their type of feedback, and do not prefer negative comments, based on the implications it could have on their emotional dimension, which is generally positive throughout the whole process as mentioned before.

3.What are engineering students' dispositions towards written feedback?

As an overall, and in relation to students dispositions, it was primarily found that the impact that a teacher has on students will depend on the way this agent delivers the feedback and what he or she addresses in this process; participants admitted that as long as it is clearly transmitted, the contents will be understood more effectively, following the same line of thought that Hattie and Timperley (2007), as the authors consider understanding the feedback

as the crucial point in order to be able to act on it during the learning process. For the students that underwent the interview, understanding seemed to be a pretty recurrent and crucial feature in this context, and consequently allow us to consider that reducing the gap between agents -teacher and students-, as Sadler (1989) and Hattie and Timperley (2007) considered, is also an objective for them as learners. Moreover, positive feedback has a similar positive effect on the learning process. As Anson et al.(2016) stated, if the teacher's identity is revealed through the feedback process can turn out to be more beneficial for the learner, however, a poorly communicated feedback can certainly create confusion and restrict the students' freedom instead of helping them, resulting in a harmful process as Hyland (1990) claimed. Similarly, Engineering students agree on the importance of participation, approval and autonomy, as they are directly related to feedback, because of its impact on the learning process, along the same line of thought that Anson et al. (2016) established in his research highlighting the higher impact on the learner's process of learning if these three features are present all together.

It was also found that a good feedback should be detailed (Meaning that it should give the student insight about orthography, what's missing specifically, etc.) and cover most of the work, as this would mean that the teacher did an exhaustive revision. However, when the feedback was not understood, the dispel of doubts and a further clarification were needed elements that should be considered equally important, mainly because it is necessary to remember that one of the key points of the process of feedback is that students need to understand it properly in order to produce favorable results. (Brookhart, 2007). Among the types of feedback preferences, the main ones were suggestions or advice and positive comments.

In relation to the contribution of feedback, it was found that order type contributes to the learner's development because it produces an immediate effect, furthermore, it helps with the data analysis and results for a particular task, whereas question type feedback not so much, despite that it encourages the student to look for information on their own. On the contrary, it was also claimed that neither order nor question type are good for motivation. Nonetheless, participants may have perceived this as they did not identify how much room was intended to

be given by the teacher in the first place in order for them to improve their work (Straub and Lunsford, 1995), and as it is a recurrent issue in this research, understanding what it is actually expected from learners is essential. Lastly, participants did not perceive a significant difference among the feedback they received, as it was totally plain, and they considered that it should have been more detailed and specific, but simultaneously, it was admitted that it had an impact on motivation despite its plainness. In conclusion, Engineering students clarified the importance of receiving detailed and specific feedback as it is a sign that a teacher actually revises a written draft or works cautiously, suggesting that that teacher worries about their individual learning development.

4. **How are the results supported by other studies? How do the results support other studies?**

In relation to the research question that covers the students' dispositions in the context of written feedback and how this data is supported by other studies, as well as how these results support other researches, it is worth to mention that one of the important features described in this research was understanding. Firstly, feedback allows a learner to understand how demanding a teacher can be, and secondly, that feedback is the most important characteristic of the main agent because it will define how well a student can learn, thus depending on how accurate the teacher is at the minute of communicating his expectations during the process, it may have a beneficial impact on the learners as well. This line of thought is supported directly by Sadler's (1989) theory on how effective this instance be, particularly if the gap between the main agents in this context can be actually spanned, and consequently emerges as a very important aspect of the research because considering this research context and having a wider look too, it can be stated that it is an important aspect to consider in order to get to know the learners and make them feel part of the learning process actively. Additionally, understanding also comes into view in the data as one of the most important features in relation to feedback, as it was declared not only by the participants but also for some authors suchlike Brookhart (2017), Anson et al. (2016), Hattie and Timperley (2017); they all support, directly or indirectly the importance of processing the information and eventually understanding the feedback properly, as this will allow any learner to move forward in the

learning process and improve his/her development too due to its direct impact on motivation (McLeod, 1987) and eventually, their disposition towards the task, which consequently relates to Mack's (2009) findings where the author exposed that feedback corresponds to any given information with the intention of improving a learner's performance. In this context, learner's disposition rather determines how the intellectual traits are applied after being properly understood, as Reid (2010) stated. That being so, aspects such as the teacher's identity revelation during the feedback process through his/her clear communication (Anson et al, 2016), as it was previously mentioned could enhance a student's performance of any type, not without understanding and acquiring the message regarding their development first (Hattie and Timperley, 2007). However, among the main results, if the feedback is unclear, it could end up affecting a learner's development as it will confuse them in a harmful way instead, as Hyland (2006) declared, which constitutes another important aspect to keep in mind within this educational context, since there is always a chance that the feedback process could end up being an unpleasant experience for learners, rather than a helpful one, and as the data indicated students can feel that their freedom is restricted. For this reason, in order to conceive more conclusions regarding the participants' dispositions and Engineering agreed on the importance of participation, approval and autonomy as important features that any learner should manifest due to its direct link with the learning process, as well as its relevance within the context, just as participants in Anson et al. (2016) also manifested, declaring and reinforcing the theory that when the three strategies are present in the feedback as a process, there is a higher chance that it will yield more positive and beneficial effects on the learners, and eventually on their development.

Nonetheless, feedback should always be detailed, specific and broad as it should cover the whole work, avoiding plainness as students described it, after being exposed to this process, for this reason, processing and understanding information received as Brookhart (2007) explained is an essential feature for participants and researchers, which similarly consider that a learner's nature must be taken into account (Sadler, 1989), and for this, a teacher's feedback should be communicated accurately, avoiding misunderstandings (Anson, 2016), otherwise it would not produce favorable results, as the participants suggested, similar to

what Brookhart's (2017) research concluded. Moreover, among the types of feedback, learners tend to prefer suggestions or positive comments, advice and negative comments, despite this last one's duality in terms of effect, but still, even when it is negative, it can enhance motivation as well. When considering dispositions, as it was mentioned beforehand in the previous chapters, motivation stands as a priority, and according to Brookhart (2017) and Schulze (2003) feedback is a main reinforcer of it, because it allows a student to take control over his/her learning process and move forward; due to this, most students do not prefer any negative type of feedback since it affects them directly, and if it affects motivation it also has an effect on their disposition. In the particular case of order and question type, the first one was considered to be more damaging as a motivational factor than questions, mostly due to its imperative nature, as students can misunderstand it too.

5.**How do the results differ from other studies?**

Regarding our result differing from other studies, for the most part, and considering the context of this research, one of the main features that was not present, but not necessarily differs from other studies is the focus on what the teachers respond to and how they do it, in other words, . As it was described beforehand in the analysis chapter, Engineering and Science participants agreed on the importance of feedback clearly communicated by the teacher, but the experiences regarding the feedback they underwent, as well as, the different aspects they focused on at the minute of manifesting their perception about the teachers, and about the feedback as a process were different. Curiously, the context itself it is an important feature within the feedback context as it relates to the nature of each discipline, as well as the nature of the types of written assignments (Santos and Pintos, 2008; Gardner, 2008), that in this case were not covered, therefore, one major point that differs from other studies here is the fact that the feedback itself that students received, thus the types of written assignments they went through were not analyzed in order to establish a further comparison among the different major's participants and their full perception on both, the feedback as a process and their written works in detail, as Anson et al. (2016), and Hyland (2006) did.

Conclusions

Specific objective 1

In relation to objective I, which had as a central focus to study the dispositions of engineering students regarding the use of feedback in the form of question and order mode in the context of written tasks, the findings are summarized as follows:

Initially, Engineering students manifested that the way a teacher behaves, and particularly communicates through feedback clearly what is wanted from a learner will cause a positive impact on the learner, and they also agreed that the feedback from a teacher would help them to understand contents in a better way. Similarly, these participants also agreed that feedback does influence a learner's learning process in a positive way, as it enhances it and directs it toward the dimension that the teacher considers best for the learner. The students also manifested that positive feedback can help to understand what was previously taught in a better way, whereas that negative feedback might confuse the learners. Consequently, Engineering participants declare that a learner's freedom can be restricted if the feedback is bad; if it is totally positive, negative or if it does not exist, it could have different outcomes, plus, if the teacher is not clear while manifesting what is wanted from the learner, same results will be observed.

Additionally, engineering students agreed that throughout participation, the learner might solve part of his/her doubts, as the teacher would probably make corrections during the interaction, and they also considered that participation must be enhanced by good feedback. Thus, participation along with approval and autonomy are equally important as they have repercussions in the learning process. Moreover, approval was connected to the permission granted by a teacher, and they consider that participation, approval and autonomy have a direct relation to feedback, mainly because approval refers to the way of handling the learning process and gaining more autonomy. Participants also considered that the main function of feedback is reviewing the previous contents, so if a learner wants to know more about the

issue, he/she should be autonomous, but also, this strategy should always be enhanced by good feedback. Going further into the characteristics of feedback, participants openly manifested that feedback should cover the whole work, and it should be detailed in order to allow a learner to understand properly what the teacher requests, as this would also prove that the teacher did an exhaustive revision of the work. In consequence, it was declared that among the characteristics of a good feedback the focus should be on the orthography, a few positive comments or communicating what is missing in a specific topic. Along the same lines, students pointed out that when the feedback received was not understood they asked the teacher to clarify it and required extra examples. However, when the participants did not agree with the feedback received half of them moved on without questioning the teacher, whereas the other half manifested that what the teacher asked was wrong from their POV (Point Of View). Among the preferences of types of feedback, Engineering participants declared that they prefer to receive suggestions or advice and positive commentaries, mainly because these motivate them to keep on working, but they also stated that negative judgement is interesting, as all these types together can enhance motivation as well. In relation to the main topic of this research, participants admitted, as an overall that order type contributes to development as a learner due to its immediate effect on it, thus it helps to improve data analysis as well as results and this allows to understand the content. On the contrary, question type was not very highly considered, but it was declared that this type actually encourages to know all the necessary information.

Finally, Engineering students concluded that the feedback process they underwent could have been more detailed, effective and specific; they also claimed that there was not a significant difference in the feedback they received, due to the fact that it was plain and not personalized, but still, there was an individual vision that motivation was improved.

Specific objective 2

The findings in this section starts with an agreement of students that consider the feedback provided by the teacher as a tool that shows the teaching style of the teacher, so depending on the form a teacher provides feedback, some characteristics of how the educator teaches can be observed. Some of these characteristics can be how demanding the teacher is in the

course or the teacher's style of teaching. Another finding is that science students agreed that feedback has a positive effect on the learning process by improving the students´ knowledge and the capacity to highlight and solve mistakes. Besides, in order for feedback to be effective, there must be participation between the teacher and the students; consequently, if the teacher provides feedback and the students do not analyze and use it, feedback is not effective. Apart from the participation between students and the tacher, science students acknowledge that respect is another important feature to take into account when receiving feedback. Same as participation, respect must be bilateral, so the two entities can afford the same level.

In addition, students from science mention that feedback in order to be effective should motivate students to work on their own. In other words, if students just stay with the feedback received by the teacher, they will not be able to improve their learning process to reach its full potential. Besides, according to the preferences of the students, feedback must not only be positive and adapted for each student, but also it must be didactic, ordered and coherent. About how students react to feedback, we find out that when they did not understand the feedback provided they asked the teacher to explain in a different way. Besides, when they did not agree with the feedback provided, they decided to speak directly with the teacher. In the same line of students´ preferences, science students claim to prefer “friendlier” types of feedback in mode of suggestions and tips rather than “negative” feedback of observations and orders.

Finally, all science students agreed that the experience of receiving feedback was highly positive. Furthermore, most of them claimed that the process they went through resulted in a new set of techniques, knowledge and in improving their confidence.

Specific objective 3

To begin with, engineering students tend to recognize the level of demand of the teacher based on their feedback while science students analyze the whole style of teaching based on

the same aspect. However, both disciplines prefer feedback in which teachers summarize what they taught. Besides, science students stated that (based on their feedback) they are able to prioritize what is required by the teacher and concentrate on that specific aspect. Engineering students did not pronounce themselves on that aspect. In relation to the perception of students regarding feedback, engineering students expressed that feedback helps them to conduct their ideas in a way in which they would learn better, while science students express that by receiving feedback they can be guided for the correct path in order to obtain the required knowledge. In addition, engineering students agree on the same level as science students that feedback is a positive feature in the learning process. However, Regarding their negative opinions about feedback, engineering students state that it is difficult as a teacher to give feedback, given that if it is positive the students may feel that the exigency level is low, and if it is negative it would affect the relationship between teacher-student, mainly because of the difference of opinions. Differently, science students highlight that feedback does not allow the students to work as they want. Furthermore, overall, engineering students focus on a deep analysis of the feedback (just finding there a negative aspect) while science students make a simpler observation.

In relation to students´ participation, engineering students pronounced themselves less than science students while considering that students should participate in the feedback process. All of the science students agreed that students should participate in the feedback process, having as one of the main arguments that participating makes the feedback a complete process. However, Neither engineering nor science students considered that students should not participate in the feedback process. Still, more than agreeing or disagreeing, engineering students recognized that all if the feedback process possesses more aspects it is better. In other popular common language words “the more the merrier.” About students´ approval, engineering students report that students do need to approve the feedback given as well as science students, arguing that communication is crucial in this process between the two parts. Besides, neither science nor engineering students reported disagreement towards disagreeing with students approving the feedback. And as previously mentioned, some engineering students agreed on the three aspects proposed; students’ participation, students’

approval and students' autonomy. Not specifying details for each of them separately. Science students did not mention themselves in this subcategory.

Regarding Feedback on students' autonomy, It is observable that in the subcategory of Agreement, both engineering and science students agree on students' autonomy regarding feedback. The main argument presented in both parts is that a student must also be autonomous, not dependent on the teacher most of the time. While in the subcategory of Disagreement Engineering and science students did not disagree about this subcategory of students' autonomy towards feedback. With this, we have a unanimous record of not disagreeing on all of the three aspects previously mentioned (students' autonomy, students' approval and students participation.). Finally, the subcategory of Other, as mentioned above, engineering students agreed on all of the three aspects as a whole. However, in this case a science student added that students must not be limited with what the teacher said only, instead, that a student should go beyond that, in order to overcome oneself.

Furthermore, in Characteristics of feedback, the subcategory Good suggests that Engineering students reported that a good feedback should be as detailed as possible, focusing on aspects such as grammar and on what is missing. While for Science students, a good feedback should be positively presented, be attractive, didactic, coherent, ordered and to be honestly given. Moreover, the subcategory of Specific Feedback proposes that Engineering students did not give details on what a specific feedback should be constructed on. On the contrary, science students reported as specific feedback the fact of utilizing a specific language, being detailed (not generalized), as well as informing the student what the mistakes are, motivating the student to solve them and to improve his/her learning process. On the other hand, the subcategory of Not understood indicates that when an engineering student did not understand, he/she would ask the teacher what is wrong in order to correct it, asking for some examples when needed. Differently, science students asked the teacher to explain again in a different way in order to understand the feedback with another point of view. Finally, the subcategory of Not agreed suggests that when engineering students did not agree with the teacher's feedback, they would argue with the teacher about the mistakes that he/she(the

teacher is making). When this occurred with science students, they would comment that trying to reach an agreement respectfully. And on some occasions, both engineering and science students would just accept what the teacher said and make the corresponding changes even if they did not agree, in order to avoid discussions.

The category of Preferences of types of feedback indicates a number of things in its subcategories. The subcategory of Received feedback suggests that engineering students have received Order type, Negative judgement type and suggestion or advice type feedback. While Science students have received: Order type, positive comments type, corrective type, suggestion or advice type a question type feedback. A science student argues that the type of feedback does influence the learning process of each person. The subcategory of Preferred feedback indicates that Engineering students would rather receive: Positive comment type, suggestions or advice type feedback. Furthermore, an engineering student prefered negative judgement as well, stating that those types would help him/her to improve the assignment. Nevertheless, Science students prefer: Suggestions or advice type, positive comment type and corrective type feedback. Furthermore, One science student prefered all types of feedback, arguing that the more the types are the more the student will improve.
On the other hand, referring to a not preferred feedback, most of the engineering students do not prefer the negative judgement type. The minority chosen was a corrective type while science students declare almost the same, negative judgement type as their main kind of not prefered feedback, having half of the students opinion on this side. The other half did not prefered the order type feedback.One of them; however, declared that instead of not preferring one of them, he/she considered that the way in which the feedback is expressed is more important than the type of feedback itself.

Next, corresponding to order type feedback, engineering students' opinion is that it helps to improve both the learning process and the better understanding of the feedback. As a minority in the same discipline, a student argued that it does not help to improve the students' proficiency as this type demotivates the student.

Regarding science students', half of them agree that order type feedback does help them to improve their learning process. The other half reported that both order and question type are not enough and/or that they may support the students situationally.

In relation to question type feedback, on one hand, engineering students argue that this type of feedback does not help as much as the order type. On the other hand, most of the science students declared that sometimes may help and sometimes may not, depending on the context/assignment.

In terms of feelings, both engineering and science students felt that the feedback received helped them to understand in a better way. Engineering students; however, felt feedback in a less positive way than science students. Finally, students from the former discipline mentioned before reported that the feedback could have been better while students of the latter discipline agreed with the feedback in general and felt positive about the whole experience.

VI. Limitations and future research

On behalf the limitations for our study, the main limitations identified as this research was carried out are classified as it follows:

a) Psychosocial and affective: In terms of psychological and social limitations, surely the main difficulty that we experienced was the pandemic which affected the last months of this study, and which also had a particular effect on the number of interviewees that took part in the interview; since the worldwide conditions had an obvious effect in our region, and the educational institution closed, the programmed interviews had to be modified in terms of conditions too, and the only possible via to get in touch with participants was through emails, however, we infer that due to the severity of the content load in each of the disciplines, it was extremely difficult to contact the students, and most of them did not even answer back, despite the interview compromise that had been set months before.

b) Academic: In terms of academic limitations, one important aspect due to its main role in this research in relation to dispositions is the fact that despite the topic has been studied, there are not many empirical studies on it. As it was previously discussed, Anson (2016) claimed that there is so much information which has not been acknowledged in the field of feedback concerning the nature of students' response, which is another feature that was not included in this study, and could be helpful in order to establish further comparison and analysis regarding students' dispositions.

Further Research

Notwithstanding, since it is the central aspect of this research, further investigation could be done in the field of dispositions, considering not only students from several other disciplines, as this research only establishes a comparison between Engineering and Science participants, but also, including teachers in order to go beyond and promote helpful resources for the educational field, and educators as well; a future analysis of the main agents' perceptions concerning this matter could be useful, thus going further into the students' response, where written analysis can take part and eventually promote investigation on what the teachers comment, as well as how they do it could also open a new field to be discovered in depth. Along the same lines, in relation to the affective features, this research did not cover the affective needs in relation to the academic tasks nor how they genuinely feel during the feedback process despite the feelings category covered generalized impressions on the issue. Accordingly, as it was formerly stated, there is an open field for further research on dispositions and particularly on the motivational aspects that involve students' needs in the context of written feedback, which could also be explored due to its importance for the impact it has on the learning process.

Moreover, with this process of modifications, a new-branded way of developing the learning process has been implemented, this time, with the use of technology inside classrooms.

Furthermore, the most important tool that helped these changes become a reality have been the concept of feedback.

This research may be carried out with the two types of feedback, this time we preferred to use written feedback. Still, a similar research with oral feedback may have different results.

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VIII. Appendix

- **1-Engineering students task**

UCSC

Electrónica Industrial y Automatización
Facultad de Ingeniería
Informe de laboratorio
parte I
Instrumentación, Diodo y Transistor,
Fuente de poder

Perez J; Freire M; Ramos T

1. Teoría.

Los semiconductores utilizados en electrónica pueden ser de silicio o germanio [1]

(Máximo 500 caractéres)
1.1 Modelos teóricos

2. Materiales y metodología

(Máximo 500 caracteres)

3. Planos del circuitos.

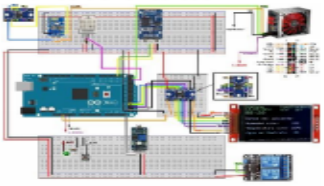


Figura 1: Fuente de poder

3.1 Variables y descripción de imágenes.

En la **figura 1**, se presenta....

En la **tabla 1**, se presenta la descripción de variables..

Tabla 1: Variables medidas con el tester.

V	: Voltaje fuente
R	: Resistencia eléctrica

4. Mediciones y resultados.

Indicar mediciones, imágenes que respalden sus resultados.

5. Conclusiones

(Comparar la teoría con las experiencias de laboratorio, máximo 500 caracteres).

6. Referencias

[1] Arriagada E, Semiconductores, pag 2-3, apuntes de clases, electrónica industrial y automatización.

7. Equipo de trabajo (máximo 6 personas)

Nombre Apellido, Carrera.

UCSC

Instrucciones

Informe de laboratorio

Máximo 3 personas

El informe de laboratorio debe contener:

a) Nombre de los laboratorios indicados por informe referencia, b) Teoría, c) Material y metodología, d) Planos del circuito, e) Mediciones y resultados, f) Conclusiones, g) Referencias, h) Equipo de trabajo.

No se aceptarán imágenes o fotografías iguales en distintos informes, es responsabilidad de cada estudiante tomar sus propias imágenes. La evaluación de ambos informes es nota 1.0, en caso de poseer mismas fotos e imágenes o copia de informe.

No se aceptan informes por correo, solo por EVA. Es responsabilidad del estudiante enviar de forma anticipada su trabajo en caso de detectar fallas técnicas como mala conexión a internet o caída de plataforma. (No enviar minutos antes del cierre de la fecha). En caso de recibir informes por correo serán calificados con nota 1.0

Todo estudiante que no envié su informe queda calificado con nota 1.0 y NCR hasta que presente certificado validado por DAE.

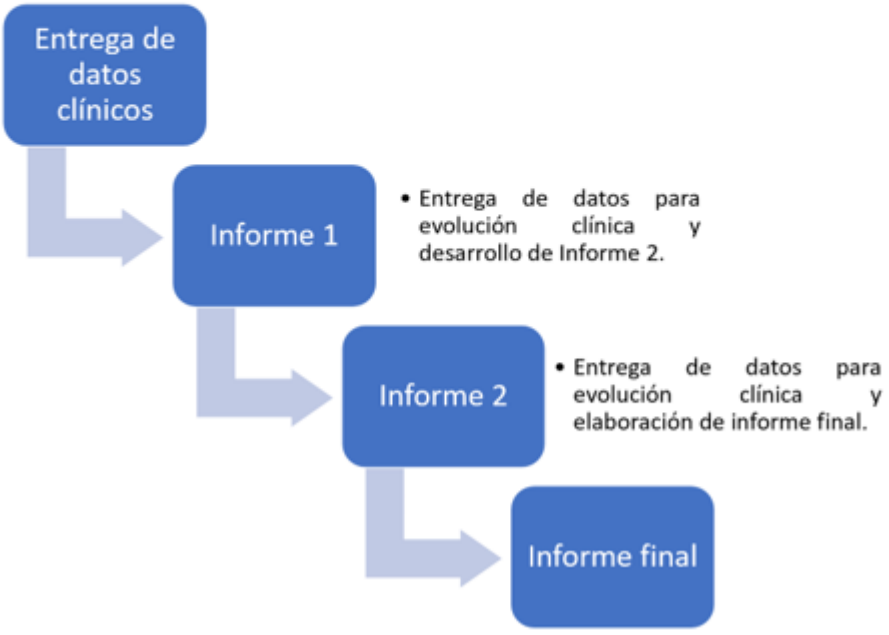
Solo se evaluará la rúbrica, por lo que el único criterio valido es ese instrumento de evaluación.

- **2-Science students task**

Actividades a desarrollar

La imagen 1 presenta un esquema general de la actividad a realizar por Ud. para la actividad curricular.

Imagen 1: Esquema de realización de estrategia didáctica "estudio de caso"



requerimientos solicitados para informe 1.

Informe 1

Aspectos a incluir en el texto del informe 1:

- Identificación del título del caso.
- Elaboración de anamnesis social (*mínimo 300 caracteres y máximo 600 caracteres con espacio)*. Como es ambiente recreado, Ud. puede incorporar más información que complemente la información entregada en el caso estudio.
  Nota: Se puede incluir más información que Ud. considere necesaria (datos hipotéticos asignados por Ud. Ej.: nombre usuario, nombre (s) de padre(s) (en lactantes), referencia de localidad geográfica, etc.), pero no puede omitir los antecedentes consignados por la docente en su caso estudio.
- Elaboración de anamnesis clínica. Debe considerar la condición clínica actual e histórica de la persona atendida (o), además de una fundamentación teórica obtenidas de bases de datos científicos de la o las patologías o condición fisiopatológica de base del caso estudiado (*mínimo 900 caracteres y máximo 1500 caracteres con espacio*). Para la fundamentación teórica, puede utilizar en su registro las Normas Vancouver o APA en el texto y referencias (*mínimo 3, máximo 5*). Sobre la bibliografía, estas deben ser registradas en la sección final del manuscrito.
- Determinación de Diagnóstico Nutricional Integrado (DNI). Utilice para esta actividad, la declaración de los métodos antropométrico, bioquímico, clínico y dietario o la que corresponde al respectivo grupo etario asignado.
- Determinación de requerimientos de energía y nutrientes. Mencione fuentes de obtención de energía, peso utilizado y el Rango de Distribución Aceptada de Macronutrientes (RDAM) para el caso estudio; kcal/Kg/día; g/día de macro0nutrienyes y recomendaciones de micronutrientes.
- Registro de prescripción dietoterapéutica (PD).
- Elaboración de plan de manejo nutricional. Para esta acción, realice:

a. Esquema o figura del manejo nutricional que
b. Descripción o explicación de la imagen (*mínimo 300 caracteres y máximo 600 caracteres con espacio*).

- Indicaciones dietoterapéuticas que responda a las necesidades nutricionales del caso estudio.

Informe 2

Antes de iniciar el desarrollo del informe 2, debe leer, analizar y modificar el texto de acuerdo con las acotaciones entregadas por la docente en el informe 1.

De acuerdo a las actuaciones clínicas que la docente le entrega, Ud. debe completar su caso estudio. Para esto, incorpore la siguiente información a su informe escrito:

- Análisis del balance calórico-proteico de ingesta de la evolución del usuario o usuaria atendida (o) en el respectivo servicio clínico (*mínimo 900 caracteres y máximo 1500 caracteres con espacio*). Esta reflexión debe considerar los siguientes aspectos:

a. Estudio de las adecuaciones que presenta el balance calórico-proteico de ingesta de la o el usuario asignado.
b. Implicancias para la evolución clínica que conlleva el actual balance calórico-proteico de ingesta. Esta instancia debe ser acompañada por fundamento teórico (uso de distintas fuentes de información). Para esto último, su registro debe responder a las Normas Vancouver o APA en el texto y referencias (*mínimo 3, máximo 5*). Sobre la bibliografía, estas deben ser registradas en la sección final del manuscrito, a continuación de las ya explicitadas en el informe 1.
c. Registro de PD (mantención o posible modificación de esta, según análisis realizado del balance calórico-proteico de ingesta.

- Respuesta formal a solicitud entregada por la directiva del establecimiento hospitalario a través de una carta (situación en ambiente recreado). Para la respuesta de esta misiva, debe estimar lo siguiente:

a. Importancia del uso de FP o FL en la asistencia nutricional (use fundamento teórico referenciado (*mínimo 300 caracteres y máximo 600 caracteres con espacio)*.
b. Aportes nutritivos de energía, macronutrientes y micronutrientes (a lo menos, los más críticos) en la dilución más clásica al grupo etario correspondiente del producto a incorporar y del que ya se utiliza en la actualidad en el centro hospitalario.
c. Costo económico del posible cambio de producto.
d. Su recomendación final (debe definir explícitamente si es necesario usarla o no).
e. Debe recordar que le escribe a su jefe directo, por lo que debe considerar uso de vocabulario técnico y formal; fundamento disciplinar y orden visual del texto de su respuesta.
f. Entrega de carta. Esta debe estar consignada como anexo en el informe a entregar a la docente.

Informe final

Antes de iniciar el desarrollo del informe final, debe leer, analizar y modificar el texto de acuerdo con las acotaciones entregadas por la docente en el informe 2.

- La persona atendida es finalmente dada de alta. Ud. debe planificar pauta de educación al alta, con indicaciones que den respuestas a las necesidades nutricionales de esta persona. Este instrumento debe incluir:

a. Datos generales (no sociales) de la persona atendida.
b. DNI al alta.
c. Necesidad de energía (kcal/día).
d. Entrega de información nutricional o indicaciones dietarias (Ej. En lactantes, leche materna o tipo de FL, con alimentos y medidas caseras; indicaciones de preparación para la FL de los lactantes; en adultos, utilizar medidas caseras).
e. Tiempos y horarios de alimentación.
f. Otras indicaciones generales.
g. Fundamente teóricamente las indicaciones que ha entregado al alta *(mínimo 300 caracteres y máximo 600 caracteres con espacio; mínimo 3 y máximo 5 referencias)*. Sobre la bibliografía, estas deben ser registradas en la sección final del manuscrito, a continuación de las ya explicitadas en el informe 2.

Incluya en aparatado, su reflexión sobre esta actividad, con opinión de fortalezas y aspectos a mejorar del desarrollo de este informe.

- **3-Interview**

Estimadas(os) Estudiantes,

En el marco del proyecto Fondecyt 1180586 y como apoyo a la tesis **"Students' dispositions on behalf of written feedback.** Solicitamos a usted contestar la siguiente entrevista la cual es completamente anónima. Esta información será utilizada sólo por los estudiantes investigadores, resguardando su identidad. Se agradece el tiempo invertido y su valiosa cooperación.

El objetivo general de esta investigación es:

Analizar las disposiciones de estudiantes de diferentes disciplinas respecto al uso de la retroalimentación en forma de pregunta y orden en el contexto de actividades escritas.

Los objetivos específicos de esta investigación son:

A) Estudiar las disposiciones de los estudiantes de ingeniería respecto al uso de la retroalimentación en forma de pregunta y orden en el contexto de actividades escritas.
B) Estudiar las disposiciones de los estudiantes de humanidades respecto al uso de la retroalimentación en forma de pregunta y orden en el contexto de actividades escritas.
C) Comparar las disposiciones de estudiantes de ingeniería y humanidades en el contexto de actividades escritas.

1. ¿Cómo te sentiste al recibir retroalimentación escrita?
2. ¿De qué manera crees tú que la retroalimentación recibida hizo que el proceso de evaluación sea más claro?
3. ¿Cómo entiendes la siguiente afirmación? Explica:

   "La retroalimentación me permite entender el estilo de enseñanza del profesor"
4. ¿Influye la retroalimentación en tu opinión sobre el profesor? Explica
5. ¿Qué opinas de la siguiente idea?: "La retroalimentación restringe la libertad del estudiante"
6. ¿Crees que los siguientes conceptos tienen relación con la retroalimentación? ¿Por qué?

*Nota: Esta entrevista está basada en la investigación **"Students' Perceptions of Oral Screencast Responses to their Writing: Exploring digitally Mediated Identities"** de Chris M. Anson, Deanna P. Dannels, Johanne I. Laboy, and Larissa Carneiro, (2016).*

A) Participación
(apunta a la necesidad del estudiante de sentirse parte del proceso evaluativo).

SI __ NO __

B) Aprobación (apunta a la necesidad del estudiante de sentirse respetado durante el proceso).

SI __ NO __

C) Autonomía (apunta a la necesidad de autonomía del estudiante).

SI __ NO __

7. ¿Cuáles de los siguientes comentarios te parece más detallado? ¿Por qué? Dígalo en voz alta.

Ej 1 **H.** : *¿Cómo se vincula eso con lo anteriormente planteado?*

Ej 2 **H.** : *Especifique.*

Ej 1 **I.** : *¿Qué otros proyectos similares existen y cuáles son las ventajas y desventajas de su propuesta?*

Ej 2 **I.** : *No se sabe cómo utilizará los materiales.*

7a. ¿Qué considera como un comentario específico?

8. ¿Qué tipo de retroalimentación has recibido anteriormente de las que se listan a continuación? (En el periodo universitario y en la clase con el profesor)

I) Orden
Ejemplo: *Mejora el análisis.*
II) Comentario positivo
Ejemplo: *¡Buena introducción!*
III) Juicio negativo
Ejemplo: *Esta idea es irrelevante.*
IV) Sugerencias o consejos
Ejemplo: *Intente actualizar la bibliografía y ordenarla*
V) Preguntas
Ejemplo: *¿Quién dijo esta cita?*
VI) Correctivo

Nota: Esta entrevista está basada en la investigación ***"Students' Perceptions of Oral Screencast Responses to their Writing: Exploring digitally Mediated Identities"*** *de Chris M. Anson, Deanna P. Dannels, Johanne I. Laboy, and Larissa Carneiro, (2016).*

Facultad de Educación
Universidad Católica de la Santísima Concepción

PAUTA PARA EVALUAR SEMINARIO DE INVESTIGACIÓN

NOMBRE DEL EVALUADOR	Mónica Tapia Ladino
TÍTULO DEL SEMINARIO EVALUADO:	"Students dispositions on behalf of written feedback"Thesis to obtain the degree of Bachelor in Education. Proyecto Fondecyt 1180586"
ESTUDIANTE (S) AUTOR (ES) DEL SEMINARIO	Sebastian Beiley Jara Max Contreras Rodríguez Julio Galan Retamal Orietta Gutiérrez Herrera Felipe Rubilar Sepúlveda
CARRERA	Pedagogía en Educación Media en Inglés
PROFESOR GUÍA	Roxanna Correa

Nota: Evalúe de 1.0 a 7.0 cada uno de los indicadores que se presentan esta pauta.

A. De La Formulación del Problema (25%)

INDICADORES	**Nota**
1. Construcción del objeto de estudio a partir de la presentación de antecedentes empíricos, contextuales y teóricos.	7
2. Supuestos o hipótesis de trabajo en correspondencia con el objeto de estudio.	7
3. Objetivos formulados con claridad y coherentes con el problema y el objeto de estudio.	7
4. Relevancia del problema de investigación en el contexto de las disciplinas pedagógicas.	7
5. Adecuada identificación y/o definición operacional de variables y/o categorías de análisis.	7
6. Fundamentación y justificación del problema basado en antecedentes bibliográficos y de trabajos de investigación relevantes en el campo de estudio.	7
Promedio	**7**

B. DEL MARCO TEÓRICO REFERENCIAL (20%)

INDICADORES	**Nota**
1. Pertinencia y relevancia de la bibliografía (si corresponde a las disciplinas pedagógicas, actualizadas).	6,5
2. Uso del lenguaje técnico coherente con la temática estudiada.	7
3. Calidad y precisión del marco teórico/ Conceptual.	7
Promedio	**6,83**

C. Del Diseño Metodológico del Problema (20%)

INDICADORES	**Nota**

1. Precisión del enfoque o modelo de investigación.	7
2. Presentación del método de investigación y su diseño.	7
3. Coherencia entre el enfoque investigativo, las fuentes de recogida de datos y el problema estudiado.	7
4. Precisión en la descripción de la población objetivo o de los participantes, su rol y función que cumplen en la investigación.	7
5. Precisión de las estrategias y técnicas de recogida de datos.	7
6 Descripción del procedimiento investigativo y/o escenarios donde se realiza la investigación.	7
7. Control de validez y confiabilidad y/o de credibilidad y consistencia interna de la información.	6.5
8 Consistencia entre unidad de análisis, fuentes y técnicas de análisis de la información.	7
Promedio	**6,93**

D. DEL CONTENIDO TEMÁTICO Y LOS RESULTADOS DE LA INVESTIGACIÓN (25%)

INDICADORES	**Nota**
1. Procesamiento, análisis e interpretación pertinentes de los resultados o hallazgos de investigación .	6
2. Presentación de los hallazgos o resultados de forma clara y sintética.	6
3. Discusión de los resultados de la investigación.	7
4. Conclusiones sustentadas en los resultados o hallazgos.	7
5. Explicitación de las proyecciones y de las limitaciones del estudio.	7
6. Congruencia entre conclusiones, discusión y sugerencias que se realiza a partir de los resultados o hallazgos de la investigación.	7
Promedio	**6.66**

E. DE LOS ASPECTOS FORMALES (10%)

INDICADORES	**Nota**
1. Títulos pertinentes y sintéticos .	7
2. Estructura organizada de los contenidos atendiendo al enfoque y método investigativo.	7
3. Correcto uso de ortografía.	5
4. Coherencia en la redacción.	7
5. Sistematización en la formulación de citas y referencias bibliográficas.	7
6. Uso del sistema de citas bibliográficas, de acuerdo a normas APA.	7
Promedio	**6,66**

2. RESUMEN DE LA EVALUACIÓN

Aspectos	**Ponderación**	**Nota**	**Puntaje porcentual**

A. De la Formulación del problema	25%	1,75	
B. Del Marco Teórico referencial	20%	1,36	
C. Del Diseño Metodológico de la investigación	20%	1,38	
D. Del Contenido Temático y los Resultados	25%	1,66	
E. De los aspectos formales	10%	0,66	
Nota promedio final	**6,81**		

3. OBSERVACIONES O COMENTARIO DE SÍNTESIS.

Resuma su opinión global en un comentario, que a su juicio, revele los aspectos más sobresalientes, tanto en lo referido a las fortalezas, como a las debilidades de este Seminario de Investigación, o indique las modificaciones que a su juicio deben realizarse a este trabajo para proceder a su calificación final.

El seminario de investigación se ajusta a los requerimientos formativos de un trabajo de investigación para optar al grado de licenciado. La investigación está adecuadamente articulada al plantear una hipótesis y objetivos sustentados en un marco referencial que aborda los temas de las variables en estudio. La metodología cuenta con la suficiente descripción como para asegurar la replicabilidad. Solo eché de menos la aplicación de algún sistema de confiabilidad en los análisis de las categorías. Los resultados son el apartado más extenso de la investigación. Se ajusta al orden de los objetivos específicos, es suficientemente analítico al conectar interpretación de los datos con estudios empíricos previos. Sin embargo, en varias oportunidades resultó redundante la explicación con palabras de lo que se presentaba en tablas. Solicito además corregir varios aspectos de forma en el texto y la ortografía de las citas en español de los textos de los participantes de la investigación.

Aprobada en Consejo de Facultad / abril de 2011

MONICA IRMA TAPIA LADINO

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FIRMA PROF. EVALUADOR

Fecha: 25 de marzo de 2021

Facultad de Educación
Universidad Católica de la Santísima Concepción

PAUTA PARA EVALUAR SEMINARIO DE INVESTIGACIÓN

NOMBRE DEL EVALUADOR	Dra. Beatriz Arancibia Gutierrez
TÍTULO DEL SEMINARIO EVALUADO:	Students dispositions on behalf of written feedback
ESTUDIANTE (S) AUTOR (ES) DEL SEMINARIO	Sebastian Beiley J Max Contreras Julio Galán R Orietta Gutiérrez H Felipe Rubilar S
CARRERA	Pedagogía en Educación Media en Inglés
PROFESOR GUÍA	Mg .Roxanna Correa Pérez

Nota: Evalúe de 1.0 a 7.0 cada uno de los indicadores que se presentan esta pauta.

A. De La Formulación del Problema (25%)

INDICADORES	**Nota**
1. Construcción del objeto de estudio a partir de la presentación de antecedentes empíricos, contextuales y teóricos.	7
2. Supuestos o hipótesis de trabajo en correspondencia con el objeto de estudio.	6,0
3. Objetivos formulados con claridad y coherentes con el problema y el objeto de estudio.	6,0
4. Relevancia del problema de investigación en el contexto de las disciplinas pedagógicas.	7
5. Adecuada identificación y/o definición operacional de variables y/o categorías de análisis.	7
6. Fundamentación y justificación del problema basado en antecedentes bibliográficos y de trabajos de investigación relevantes en el campo de estudio.	6,7
Promedio	**6,61**

B. Del Marco Teórico Referencial (20%)

INDICADORES	**Nota**
1. Pertinencia y relevancia de la bibliografía (si corresponde a las disciplinas pedagógicas, actualizadas).	6,2
2. Uso del lenguaje técnico coherente con la temática estudiada.	7
3. Calidad y precisión del marco teórico/ Conceptual.	7
Promedio	**6,73**

C. Del Diseño Metodológico del Problema (20%)

INDICADORES	**Nota**

1. Precisión del enfoque o modelo de investigación.	6,7
2. Presentación del método de investigación y su diseño.	6,7
3. Coherencia entre el enfoque investigativo, las fuentes de recogida de datos y el problema estudiado.	7
4. Precisión en la descripción de la población objetivo o de los participantes, su rol y función que cumplen en la investigación.	7
5. Precisión de las estrategias y técnicas de recogida de datos.	7
6 Descripción del procedimiento investigativo y/o escenarios donde se realiza la investigación.	7
7. Control de validez y confiabilidad y/o de credibilidad y consistencia interna de la información.	6,6
8 Consistencia entre unidad de análisis, fuentes y técnicas de análisis de la información.	7
Promedio	**6,87**

D. DEL CONTENIDO TEMÁTICO Y LOS RESULTADOS DE LA INVESTIGACIÓN (25%)

INDICADORES	**Nota**
1. Procesamiento, análisis e interpretación pertinentes de los resultados o hallazgos de investigación .	7
2. Presentación de los hallazgos o resultados de forma clara y sintética.	6,5
3. Discusión de los resultados de la investigación.	6,5
4. Conclusiones sustentadas en los resultados o hallazgos.	6,5
5. Explicitación de las proyecciones y de las limitaciones del estudio.	7
6. Congruencia entre conclusiones, discusión y sugerencias que se realiza a partir de los resultados o hallazgos de la investigación.	6,7
Promedio	**6,7**

E. DE LOS ASPECTOS FORMALES (10%)

INDICADORES	**Nota**
1. Títulos pertinentes y sintéticos .	6,8
2. Estructura organizada de los contenidos atendiendo al enfoque y método investigativo.	7
3. Correcto uso de ortografía.	7
4. Coherencia en la redacción.	6,6
5. Sistematización en la formulación de citas y referencias bibliográficas.	6,5
6. Uso del sistema de citas bibliográficas, de acuerdo a normas APA.	6,0
Promedio	**6,65**

2. RESUMEN DE LA EVALUACIÓN

Aspectos	Ponderación	Nota	Puntaje porcentual
A. De la Formulación del problema	25%	6,61	1,65
B. Del Marco Teórico referencial	20%	6,73	1,34
C. Del Diseño Metodológico de la investigación	20%	6,87	1,37
D. Del Contenido Temático y los Resultados	25%	6,7	1,67
E. De los aspectos formales	10%	**6,65**	0,66
Nota promedio final			**6,69**

3. OBSERVACIONES O COMENTARIO DE SÍNTESIS.

Resuma su opinión global en un comentario, que a su juicio, revele los aspectos más sobresalientes, tanto en lo referido a las fortalezas, como a las debilidades de este Seminario de Investigación, o indique las modificaciones que a su juicio deben realizarse a este trabajo para proceder a su calificación final.

El estudio de las disposiciones de los estudiantes hacia la retroalimentación es un campo de investigación muy relevante y con proyecciones reales que pueden aportar a mejorar las prácticas de enseñanza y aprendizaje de la escritura en la universidad. Se observa una buena justificación teórica y un marco metodológico adecuado al objeto de estudio. De los comentarios de los resultados se pueden extraer muy buenas ideas para estudios futuros.

Se sugiere precisar en el título el contexto del estudio. También se sugiere incorporar algunas precisiones metodológicas y revisar la correspondencia entre preguntas/objetivos, pues estos incorporan el modo de los comentarios como objeto de interés del estudio sobre las percepciones, pero no está eso reflejado en las preguntas ni se refleja mucho en la discusión, que está guiada por las preguntas de investigación.

Se sugiere también revisar la consistencia en el uso de Norma APA en referencias bibliográficas.

Aprobada en Consejo de Facultad / abril de 2011

FIRMA PROF. EVALUADOR

Fecha: