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**Original Research**

# Analysis of the Assessment of Vocal Performance Samples of Students of Acting from a Social-Behavioral Perspective

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***Abstract:*** The present study proposes an innovative analysis of the assessment of vocal performance samples (VPSs) from a social-behavioral perspective. The study's main purpose was to analyze the cooperative tendency of teacher-student interaction to estimate the impact of cooperation on the formative nature of VPSs' assessment experience. The latter was held in two different contexts based on the teachers' perception: as an evaluator and as a spectator. The formative nature was judged through the students' learning achievement and measured by their grades and their perceptual valuing of the assessment results provided by the teachers. The experiment was conducted at a Chilean university with twenty-two teachers and fourteen students of acting. The results indicate that no significant differences were observed in the control group (students assessed under the traditional system) between teachers who did not exhibit cooperative tendencies and those who did. However, in the experimental group (students assessed using a social-behavioral perspective system), teachers who did not exhibit cooperative tendencies were valued significantly lower than those who did. It was concluded that the presence of cooperative components in the teacher-student interaction contributes to determining the formative nature of the assessment experience in terms of how the students perceive it. The following is true as long as the structure of this experience promotes a collaborative interaction between teachers and students. This type of formative assessment can improve the assessment experience by fostering a teacher-student interaction that allows the co-construction of the theatrical phenomenon, which could potentially positively impact students' vocal expressiveness.

***Keywords:*** *Theater, Vocal Performance, Formative Assessment, Cooperation, Education*



## Introduction

Several studies have demonstrated that assessment experiences play a significant role in students' learning process (Taras 2007; Laveault and Allal 2016; Boston 2002; Hamodi, López Pastor, and López Pastor 2015; Padilla Carmona and Gil Flores 2008). This implies that assessment should aim toward a process of formative action involving all participants (López Pastor 2008; van der Vleuten et al. 2015). Notwithstanding, in the last twenty years the consequences of the common practices of assessment of learning, which aims at understanding assessment as a means of control and regulation, have not promoted assessment processes that

foster learning (Gómez and Salinas 2020). Fortunately, the concept of assessment for learning or formative assessment, is becoming increasingly clearer in the literature. This has been defined as an assessment strategy that not only aims to assess the learning acquired but also contributes to such acquisition by the student (Taras 2007; Laveault and Allal 2016; Boston 2002; Hamodi, López Pastor, and López Pastor 2015; Padilla Carmona and Gil Flores 2008). In this way, formative assessment "promotes an active process, in which students construct meanings around their learning and articulate them to their formation as professionals and as citizens" (Gómez and Salinas 2020, 112). The purpose of formative assessment is not just to assess acquired knowledge but also to contribute to the development of knowledge throughout the learning process (Taras 2007; Laveault and Allal 2016; Boston 2002; Hamodi, López Pastor, and López Pastor 2015; Padilla Carmona and Gil Flores 2008). An assessment of this nature considers the educational needs of students and teachers with the aim of benefiting both (van der Vleuten et al. 2015). This points to the phenomenon of collaborative learning, which considers the teacher as a co-learner together with the student (Lillo Zúñiga 2013). It also draws from social and constructivist perspectives, which understand learning as a socially mediated process (Lillo Zúñiga 2013; Longobardi et al. 2021) where both social interaction and human relations are key elements (Chuang 2021). From these theories it is considered that the teacher–student relationship is at the core of the teaching–learning process (Del Prette et al. 2012). When this teacher-student relationship is one of closeness, its formative value increases (Hajovsky et al. 2020) and the student's performance measured in learning outcomes through the establishment of a supportive relational context improves (Longobardi et al. 2021).

Regarding assessment in the performing arts, Amuah and Osei (2018) identified the need for a critical review of the observational assessment model. The model is based on the rating of students' artistic products by a panel of judges. This can be equated to what we will refer to as direct performance assessment in the context of this study.

An acting performance is commonly evaluated through direct observation. This type of assessment values students' live performance (Norcini and Burch 2007). Hence, the present study focuses on the vocal performance sample (VPS). A VPS is considered to be a practical acting demonstration that a student performs live in front of a teacher. This is held within the framework of a voice workshop in a university acting major. Vocal samples can be individual or group based, with the voice being the main expressive tool. Since a VPS involves performance, it can be regarded as a theatrical phenomenon, which is constructed with the help of the spectators' perspective (Cornago 2021), meaning that the performer and the spectator co-construct the vocal phenomenon. This suggests that in the VPS assessment experience, the teacher must adopt the role of spectator. If the teacher abandons their primary role as spectator and ceases to perceive the VPS, the theatrical phenomenon will be interrupted. In other words, "when the spectator stops looking at the artistic work, he/she stops hearing it or feeling it, and there will be no theatricality" (Cornago 2021, 249).

In the assessment process of acting performances, teachers typically take notes about their perceptions of the performance. For this purpose, a written assessment instrument is provided to the teacher before they observe the students' performance. At the university where the experiment of this study was conducted, there was evidence that, for at least twenty-five years, all final assessments of acting technique, vocal performance, and physical performance had been conducted under the aforementioned assessment practice. In vocal practice, the teacher must rely on the criteria proposed in the assessment tool and write their impressions while observing the performance sample. We propose that this requires the teacher to intermittently assume the role of spectator and evaluator. That is, the teacher must observe and assess the performance unfolding before them, not only perceive it as a spectator. Therefore, we argue that this assessment practice does not promote a fluid teacher–student interaction, failing to establish a conducive context for cooperation to appear in theatrical co-construction.

Within this setting, we focus on a socio–behavioral framework, given the elements of cooperation in the theatrical phenomenon. We propose that the performer and the spectator must cooperate, jointly and simultaneously, in the construction of theatricality since vocal phenomenon is achieved only through the perception of a third party: the receiver or spectator (Cornago 2021). Therefore, the teacher's cooperation can be understood through direct reciprocity (Jensen 2016). The latter can be evidenced in behavior that promotes cooperation between individuals, where both incur costs and benefits (Trivers 1971). On this basis, we propose that the phenomenon of theatricality is underlined by cooperation as a result of direct reciprocity.

In addition, this referential framework was complemented by the observation of the five-factor personality taxonomy (John 1990) of teachers and its possible incidence in the perception and assessment of theatricality. Our study suggests that neuroticism may not foster collaborative communication between teachers and students, since this factor is just one of the five associated with negative emotional responses such as anxiety, irritability, and nervous tension (Benet-Martínez and John 1998).

We hypothesize that the presence of cooperative components in the teacher–student interaction contributes to determining the formative nature of the assessment experience. We propose that this formative character can be observed both in the learning achievement of students measured by grades and in the perceptual valuing students provide for their teachers. Additionally, we suggest that the teaching–learning process and students' vocal expressiveness can be enhanced through an assessment experience based on cooperation and co-construction of the theatrical experience. Consequently, the main purpose of the present study is to analyze the assessment experience of VPS by focusing on the cooperative tendency of teachers' interactions with students. In the latter, this tendency is analyzed in order to estimate the formative nature of the experience.

Based on the aforementioned and considering the comparison between an assessment experience that promotes cooperative teacher–student interactions and an assessment strategy with non-cooperative behavioral elements, the following research questions can be formulated:

1. Can a cooperative assessment context have a positive influence on students' knowledge achievement?
2. Can an assessment experience with cooperative behavioral elements have a positive influence on students' perceptual valuing of teachers?
3. Do students have a more positive perceptual valuing of teachers who exhibit a tendency to establish cooperative socio-behavioral interaction compared with those who do not? Furthermore, do teachers who manifest predominant traits of extroversion, agreeableness, conscientiousness, openness to experience, and low neuroticism have a more positive students' perceptual valuing compared with those who do not possess these characteristics?

## Material and Methods

### Participants

A total of twenty-two teachers (fifteen women and seven men aged 31–59, with two to thirty-five years of teaching experience) were recruited and assigned to two different groups. The control group consisted of eleven of the twenty-two teachers (eight women and three men). The experimental group consisted of the other eleven teachers (seven women and four men). Each group assessed the same fourteen students (ten women and four men aged 18–25, with one to three semesters completed). The selection criteria for teachers was having a minimum of two years of teaching experience in voice interpretation in any of the theater programs in Chilean universities. The selection criteria for students was (a) being a first-year student in the theater program of the Pontificia Universidad Católica de Chile, (b) having approved the first voice workshop in this program, and (c) being at least eighteen years old. The current study was approved by the Institutional Ethics Committee of the Pontificia Universidad Católica, Santiago, Chile. All participants were required to sign an informed consent form. To ensure the confidentiality of the subjects' data, an identifier was assigned to each teacher (D1–D22) and to each student (E1–E14).

### VPS

The VPS that each student performed had an approximate duration of five minutes and was based on the reading of a short narrative text performed individually and consecutively. In the staging of the narrative text, the body was used creatively in the space and the voice was primarily used to express the narrative text. Each student interpreted a different narrative text and was directed by the lead author of the present study, a professional actress who possesses more than twenty years of experience in vocal pedagogy and acting. Guided rehearsals were conducted at the Pontificia Universidad Católica de Chile in the same classroom where the assessment instances took place. Two prior rehearsals were held before the performance sample was assessed. All students had previous training in staging short texts during their first semester of the theater program.

The students' VPS was performed in front of two different groups of teachers. Hence, the fourteen students performed their VPS first for the teacher's control group and then in front of a different group altogether, that is, the experimental group.

After the VPS sessions, the students perceptually rated the teachers using a pre-established assessment instrument (this occurred without knowing their names). On this basis, students actively rated through a rubric their appreciation of the assessment carried out by the teachers. This assessment occurred in a single session.

## Instruments

To measure learning achievement, each of the fourteen students was assessed perceptually with a vocal assessment rubric in word format. A modified version of the instrument proposed by Fernandez-Fresard and Acevedo (2021) was used for this purpose.

Moreover, every student answered a perceptual valuing questionnaire in word format regarding each of the twenty-two teachers. This, in order to measure the students' perception of the assessment provided by teachers. A modified version of the Bahati et al. instrument (2019) was used for this purpose.

On the other hand, to measure the cooperative tendency of the teachers, we applied in one attempt by participants a version of the game called "Prisoner's Dilemma," originally designed by Melvin Dresher and Merril Flood. The instrument analyzed in Kuhn's study (n.d.) was adapted to be applied in a two-by-two symmetrical version to make the second player fictitious (response provided by software).

Additionally, to measure the five main personality traits present in the teachers, a version of the Big Five test was performed on each of them. A modified version of the questionnaire proposed by Benet-Martinez and John (1998) was used for this experiment.

The last two instruments were adapted and applied using Millesecond's Inquisit Player 6 software (version 6.6.1). Inquisit Player 6 software is a measurement and experimentation tool. It has been used in psychological experimentation. It allows the user to work with a wide range of different experimental parameters.

In addition, the students were asked to participate in a structured voluntary interview consisting of a single question to gather their possible interpretations. The question was: When performing your VPS, did you perceive any differences between the instances when the evaluators were making rubric notations and the instances when they were just observing your performance? If you perceived differences, please explain what they were and whether they impacted your performance in any way. This question intended to collect the students' perceptions regarding their experience with the control group versus their experience with the experimental group. All students who agreed to respond (ten of fourteen students) gave their informed consent. Subsequently, a semantic analysis (Bardin 1991) of the content was undertaken on the responses obtained. The purpose of the analysis was to identify emerging categories and then triangulate the

information (Cabrera 2005), all to check whether such triangulation indicated differences in the perception of the experience between the two assessment instances.

## Procedure

### *Control Group*

The fourteen students were provided with a room adjacent to the sample room for warm-up and personal rehearsal time. Then, they were instructed to go individually to the room where the eleven evaluators of the control group were located, to carry out the performance sample.

After they had signed the informed consent form and answered the initial tests (Prisoner's Dilemma and Big Five Test), the teachers received a brief explanation of the vocal assessment rubric to be applied, and they were given space to resolve any queries.

Next, the students' VPS commenced, and at the same time, the teachers completed a draft assessment of each student. For this purpose, each one had an individual table, a pencil, and fourteen printed copies of the rubric, marked with each student's identifier and the identifier corresponding to the teacher.

Once all the fourteen students had completed their VPS, the eleven teachers of the control group were given a time limit of two hours to transfer and complete the draft assessments into an identical, but digital, format. For this purpose, each teacher was provided with an individual table and laptop with the fourteen rubrics loaded, with the corresponding identifiers.

### *Experimental Group*

With the experimental group, the fourteen students followed the same procedure as with the control group. The eleven teachers of the experimental group, after having signed the informed consent form and answered the initial tests, witnessed the students' VPS without having the rubric or being required to make notes.

Once the sample was completed, the eleven teachers of the experimental group were given a time limit of 2.5 hours to carry out the assessment. For this purpose, each teacher was provided with an individual table and a laptop, with the fourteen rubrics loaded in word format, as well as a tablet (and headphones) on which was loaded the video recording of the sample they had just witnessed, with a visual key of each student's identifier. They were told that they could watch the video of each student only once and could stop it if they considered it necessary.

After the vocal sample sessions, the fourteen students valued the results of the assessments of the teachers of the control and experimental groups jointly, that is, a total of twenty-two teachers. For this purpose, each student had at their disposal the set of twenty-two rubrics corresponding to their individual performance (i.e., the rubrics completed by the twenty-two teachers), in printed format. This was in addition to the twenty-two printed copies of the perceptual valuing form, marked with the identifier for each teacher and the identifier corresponding to each student.

Finally, the students were asked to voluntarily submit an answer to the single-question interview. As noted, this interview consisted of a question that intended to collect the students' perceptions regarding their experience with the control group versus their experience with the experimental group. The question was: When performing your VPS, did you perceive any differences between the instances when the evaluators were making rubric notations and the instances when they were just observing your performance? If you perceived differences, please explain what they were and whether they impacted your performance in any way.

## Statistical Analysis

The data was analyzed using SPSS statistical software. All statistical tests were performed using the general linear model. The *p*-values were considered significant with values less than 0.05, considering 95 percent confidence intervals.

According to the hypothesis of the study, the following predictions were stated:

1. Students may exhibit greater learning achievement in a cooperative assessment context than in a non-cooperative one.
2. Students may have a better perceptual valuing of teachers who engage in cooperative interactions than those who do not.
3. Students may have a more positive perceptual valuing of teachers who exhibit a tendency to establish cooperative socio-behavioral interaction. Furthermore, teachers who manifest predominant traits of extroversion, agreeableness, conscientiousness, openness to performance, and low neuroticism would have more positive students' valuing.

According to prediction 1, to test the effect of the treatment on learning achievement, the dependent variable "grade" (grade obtained by the students) was considered, comparing the values of the control group (treatment 0) with the values of the experimental group (treatment 1).

As stated in prediction 2, to test the effect of the treatment on the formative nature of the assessment experience, the dependent variable "valuing" (students' perceptual valuing of the assessment result) was considered, comparing the values of the control group with the values of the experimental group.

As per prediction 3, in order to test the effect of the cooperative tendency of teachers on the formative nature of the assessment experience, the "cooperation" variable was included in the previous model. This was to estimate whether the teacher's tendency to cooperate or not to cooperate had any effect on the students' perceptual valuing of the assessment provided by teachers. In this way, it was possible to assess the effect of teacher cooperation on the formative nature of the assessment experience in the control and experimental groups. Furthermore, in accordance with the said prediction, the five dependent variables of the Big Five test (extroversion, agreeableness, conscientiousness, openness to experience, and neuroticism) were used to assess

the impact of the teachers' personality factors on the formative nature of the assessment experience, comparing the values of the control group with those of the experimental group.

## Results

Regarding the effect of treatment on learning achievement, no significant difference was obtained for the comparison between the two groups ($p = .126$; $F = 2.548$). The average grade of the control group was 5.498 (out of a maximum of 7.0), with a standard error of the mean of 0.110. The average rating of the experimental group was 5.745, with a standard error of the mean of 0.110.

In terms of the effect of the treatment (control and experimental group) on students' perceptual valuing of their teachers' assessments, no statistical significance was obtained for the comparison between the two groups ($p = 0.151$; $F = 2.235$). In the control group, the average was 3.510 (from a maximum value of 5.0), with a standard error of the mean of 0.075. In the experimental group, the average was 3.228, with a standard error of the mean of 0.081.

In the analysis of the effect of teachers' cooperative tendencies on students' perceptual valuing of teacher assessments, no statistical significance was obtained ($p = .117$; $F = 2.694$) for the comparison between cooperative teachers (fifteen teachers who showed cooperative tendency in the applied instrument) and non-cooperative teachers (seven teachers who showed non-cooperative tendency in the applied instrument). In the control group (with seven cooperative teachers and four non-cooperative teachers) the average was 3.255 (out of a maximum value of 5.0), with a standard error of the mean of 0.091. The average in the experimental group (with eight cooperating teachers and three non-cooperating teachers) was 3.483, with a standard error of the mean of 0.062.

The incidence of the teachers' personality factors on the students' perceptual valuing of the assessment carried out by the teachers showed that no statistical significance was obtained in any of the five dependent variables. In extroversion, a $p$-value = .986 and an $F$-value = 0 were obtained. In agreeableness, a $p$-value = .945 and an $F$-value = 0.005 were obtained. In conscientiousness, a $p$-value = .746 and an $F$-value = 0.109 were obtained. In neuroticism, a $p$-value = .178 and an $F$-value = 2.014 were obtained. In openness to experience, a $p$-value = .610 and an $F$-value = 0.273 were obtained.

When observing the statistical results obtained from the interaction between the groups (control and experimental) and the cooperative tendencies of the teachers (cooperative and non-cooperative), no statistically significant difference was found in the control group with respect to the perceptual valuing assigned by the students to the assessment carried out by the teachers who showed cooperative and non-cooperative tendencies. However, a statistically significant result was obtained for the comparison of the students' perceptual valuing of the result of the assessment between the teachers who displayed cooperative and non-cooperative tendencies in the experimental group ($p = .017$; $F = 6.903$). This, as can be observed in Figure 1, implies that the students valued equally the assessment they received from the cooperative

and non-cooperative teachers (i.e., with no significant difference in the scores) who were part of the control group. However, the students gave a statistically significant lower valuing to the non-cooperative teachers compared with the cooperative ones in the experimental group.

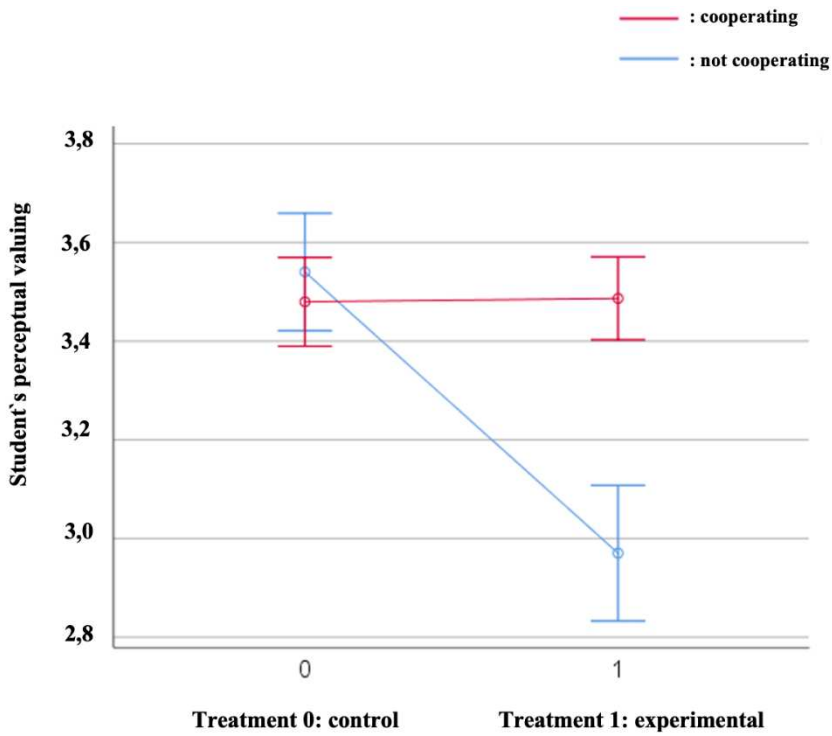


Figure 1: Analysis of Variance Graph

Note: This graph shows the results of the analysis of variance regarding the students' perceptual valuing of the assessment they received from teachers according to their cooperative tendency (cooperative and non-cooperative), in interaction with the teacher groups (control and experimental).

Regarding the structured interview, ten out of the fourteen students agreed to answer it (71.4% of the sample). All the interviewees indicated that they perceived differences in their perception of the control and experimental groups during the assessment experience. The analysis of the interviews followed Smith and Fieldsend's (2021) interpretative phenomenological analysis model from the hermeneutic phenomenological perspective, which aims at capturing the lived experience (Pacheco and Fossa 2022). Four categories emerged from the corpus:

1. Emotional reactions: This refers to the corporeal and gestural correlation from which the student can notice an emotional reaction of the teacher, as a response to the student's interpretation. Seven out of ten interviewees indicated that they perceived the experimental group teachers to have a much higher number of emotional reactions compared with the control group.

2. Visual connection: This refers to the visual contact that the teacher establishes, or does not, with the student during the interpretation in the VPS. This contact favors the student's perception of the teacher's attention and involvement with the interpretation. Eight out of ten interviewees indicated that they perceived constant eye contact with the teachers in the experimental group and intermittent eye contact with the teachers in the control group.
3. Energy and desire to narrate: This refers to the student's motivation, or lack thereof, to transmit to the teacher the content of the text the student is interpreting. Six out of ten interviewees indicated that they felt much more energy and desire to narrate for the experimental group than for the control group.
4. Reception perspective: This refers to the way in which the teacher is prepared to perceive the student's interpretation, either from the role of evaluator or spectator. Out of ten, five interviewees referred to the reception perspective of the teachers. They valued much more positively the performance they carried out in front of teachers whose role was that of spectator (i.e., teachers of the experimental group) rather than evaluator (i.e., teachers of the control group).

## Discussion

As previously mentioned, for the current study it was hypothesized that the presence of cooperative components shared by teachers in the teacher–student interaction contributes to determining the formative nature of the assessment experience (expressed both in the students' learning achievement and in their perceptual valuing of the assessment). Complementarily, it was hypothesized that an assessment experience that fosters a context of cooperative teacher–student interaction and the co-construction of the theatrical experience can enhance the teaching–learning process and the vocal expressiveness of the students.

Regarding this hypothesis, it was predicted that students would exhibit a higher learning achievement and would have a better perceptual valuing of the assessment made by teachers under an assessment experience that promoted a context of cooperative interaction. This is in comparison with the students exposed to an assessment experience with non-cooperative behavioral elements.

It was also predicted that students would have a better perceptual valuing of the assessment of teachers who exhibited a tendency to establish cooperative social–behavioral interactions, as well as those with predominant traits of extroversion, agreeableness, responsibility, openness to experience, and low level of neuroticism.

Based on these facts and the initial prediction, no significant statistical difference was found between the control and experimental groups in terms of learning achievement, which was measured by each student's grade. However, a favorable numerical difference can be identified for the average achievement in the experimental group (5,745) versus the control

group (5,498). Increasing the number of teachers in a future study could bring about a significant difference in the results. This idea can be supported by the semantic content analysis of the structured interview applied to students, which is discussed next.

As a result of the triangulation process, in the first level of content analysis observations showed that the experimental group's students felt much more energetic and eager to narrate. Additionally, they attributed it to the continuous eye contact and the greater level of emotional reactions they observed in the teachers of that group. Moreover, they ascribed this to the teachers' perspective adopted in the experimental group, which they associated with an audience or a spectator role (as opposed to an evaluator role in the control group). This is highlighted in the following excerpts from the interviews regarding the experience in the experimental group:

> There were more emotions, more connection through the eyes (E11).
>
> While they were looking at me, they kind of reacted…so I did feel the difference in terms of connection (E9).
>
> The evaluators who only observed…I felt that they enjoyed it much more (E13).
>
> They were constantly watching your work and connecting with what you were doing. You could also see that they responded much more to the stimuli you gave them (E8).
>
> There was this kind of complicity [between student and teacher]. I am telling them a story and they are reacting (E1).
>
> I definitely perceived their attention in a much more direct and closer way (E14).
>
> When they were not looking at me [control group] I felt that I was really just telling a story for myself, not for others (E4). (Students' personal communication, August 29, 2022).

From a general perspective, at a second level of analysis, it can be said that students refer to a teacher–student interaction that enables better acting performance, with greater awareness of communication with the spectator and better emotional feedback between performer and spectator. This may be related to an earlier study by Sun et al. (2023), who measured interpersonal synchrony between performers and audience in a live theatrical experience. Interpersonal synchrony is related to the temporal coordination of actions between two or more individuals that positively affects prosocial behavior and cooperation between adults (Sun et al. 2023). The same authors found that spectators demonstrated interpersonal synchrony in their interaction with the actors (even if they were not physically participating in the theatrical performance), which had an impact on the emotional response of the audience (Sun et al. 2023). In this sense, in the context of the present study, the active interaction with the audience in the experimental group can be connected to the concept of

interpersonal synchrony revealed by Sun et al. (2023). This, since the emotional response of the spectator (the teacher, in this case) would be motivated by the performance (of the student), is a cooperative interaction. Some students' expressions can be related to this active interaction with the public in the experimental group:

> That helps a lot with the performer's awareness of telling his story (E11).
>
> I felt that energy of communicating with someone rather than just being evaluated,…when they smiled there was a certain desire to say it, to transmit it,…a feeling of much more dedication when they were watching, observing as an audience (E6).
>
> I felt a great difference…with the enjoyment and pleasure…both in them and in the one who makes the show (E13).
>
> Being able to look them in the eyes…gave me more energy to continue and at the same time, I felt I could play more with the text (E4).
>
> It felt more human (E8). (Students' personal communication, August 29, 2022).

Finally, in a third level of analysis, it is possible to say that the assessment context of the experimental group could benefit the learning achievement and vocal expressiveness of the students. This is because, in a vocal workshop in a theater program, the student is expected to achieve an improvement in their acting performance. This would be transmitted mainly through the vocal work of the interpreter, as the main expressive tool in this case is a sample of vocal performance that the interpreter develops.

Regarding the second prediction, it could not be proved that students have a better perceptual assessment of teachers under an assessment experience that favors a context of interaction in a cooperative sense. However, one of the most interesting results comes from the statistical analysis of the perceptual valuing by students according to the cooperative tendency of teachers (cooperators and non-cooperators), in interaction with the groups formed by such teachers (control and experimental). Teachers with cooperative and non-cooperative tendencies were equally valued in the control group, but in the experimental group, cooperative teachers were significantly better rated than non-cooperative ones. This result may be associated with the fact that, in the assessment context of the control group, the teacher was participating in the theatrical experience from an "evaluator's perspective" (as we have called it for the purposes of this study). In other words, they are not free to participate in the theatrical experience, since they must fulfill their as an evaluator in parallel to watching the VPS. This prevented both teacher and student from interacting in a fluid way, what Munro (2018) calls simultaneous bodily engagement, as part of embodied learning. This implies a continuous teacher–student dialogue with the internal and external environment, that is, with the physical and emotional correlate of the learning experience. In this sense, the fact that the teacher partially participates

in the theatrical experience, having to exercise their role as an evaluator in addition to that of a spectator, implies that they adopt a non-cooperative behavior in the teacher–student interaction, interrupting the mutual commitment in the context of the theatrical phenomenon they are experiencing. Therefore, in the control group, the teacher's own cooperative tendency is not relevant, since the context is not supporting cooperation.

Consequently, it is understandable that the students do not distinguish between the assessment of the cooperative and non-cooperative teachers in this group. However, in the assessment context of the experimental group, the teacher is participating in the theatrical experience from a "spectator's perspective" (as we have called it for the purposes of this study). In other words, they are free to participate, and their only task is to watch the VPS. Hence, collaboration among teachers and students is crucial for effective teaching and a positive learning experience and for the co-construction of the experience altogether.

Given this, with regard to the third prediction, it is not possible to prove that students always have a better perceptual valuing of the assessment of cooperative teachers than of non-cooperative teachers, since this only occurs in what we have called the spectator's perspective. It should be noted that the assessment of cooperative teachers in the experimental group was not statistically different from the assessment of cooperative and non-cooperative teachers in the control group. It could be thought that in the case of a group of evaluators consisting solely of cooperating teachers, the assessment perspective (either the evaluator's or spectator's) would not influence the students' perceptual valuing of the assessment. However, it is highly improbable that in a random group of evaluators, all teachers are cooperators since it is not a variable that is considered for the creation of such groups. Furthermore, considering the theoretical framework that has been proposed for this study, it is possible to assert that the phenomenon of theatricality can be fully developed only in assessment contexts that consider the spectator's perspective, in which the cooperative tendency of teachers is relevant.

As part of the third prediction, it becomes crucial to verify that the findings related to the teacher's personality factors do not influence the results of students' perceptual valuing of the assessment. The results indicate that none of the five factors measured show a statistically significant incidence in the valuing of the assessment result. This could support the relevance of the selection criteria for the sample of teachers and contribute to their validation as experts. Therefore, according to our results, they can perform the assessment exercise without letting their personal characteristics influence the outcome of this process. It should be noted that this does not make them impartial but rather reinforces the reliability of the teacher's observation (Bulterman-Bos et al. 2002). This reliability enables them to carry out a conscious observation in which they are involved as a spectator, as well as to carry out an assessment adjusted to the expected criteria.

Within the framework of this study, it was considered that a teacher is better valued according to the result of the assessment they perform when they provide clear feedback, pertinent to the criteria that the assessment instrument establishes, and that serves as a guide for the student's

learning. In addition, it assigns a congruent grade to such feedback. Thus, it gives formative power to the assessment experience, that is, it transforms it into a learning instance. The teacher can generate this type of assessment, among other things, thanks to its cooperative nature, which allows the teacher to have a participating role in the performance sample. This is because of the act of intellectual synthesis (Stolz 2015), which allows the teacher to perceive the experience as a coherent whole, through a cognitive, emotional, and aesthetic commitment.

In this sense, the present study demonstrates that, in assessment contexts that favor cooperative teacher–student interaction, the cooperative tendency of teachers can positively influence the formative nature of the experience. Notwithstanding, the study was not able to prove that such tendencies, even in cooperative contexts, favor student learning achievement. However, it does provide support for future studies in this direction with increased sample size, based on the characteristics of the experiment conducted.

Given this, we propose that the teachers' own cooperative tendency is relevant to the learning process. This is due to the formative value of the assessment experiences involved in this process. In this sense, it is considered that this formative value can be expressed largely in the perceptive assessment that students can assign to the assessment provided by the teacher. It is also regarded necessary that these assessment experiences be developed from a perspective that promotes cooperative interaction between teacher and student. This is what we have called the spectator's perspective.

## Limitations and Projections

As mentioned, the limited sample size in the case of teachers who responded to our selection criteria significantly reduced the number of experts available. In the case of students, it was due to the level of complexity in the production of the experiment (i.e., the size and capacity of the spaces available and the time required for tests and performances). Consequently, the entire sample entailed substantial logistical effort from the research team. Therefore, increasing it would require other specialists and study centers. However, working groups in vocal performance teaching and learning processes are usually small, given the importance of individualized work versus the amount of time spent in the classroom. This could support, in part, the representativeness that the small sample size of the experiment has with regard to the chosen study universe, in which classroom interaction usually takes place among a reduced number of individuals.

On the other hand, it should be noted that the impossibility of the exact replicability of the theatrical experience adds an extra difficulty to the experimental context. Actors and actresses are trained to replicate the same theatrical piece in multiple presentations with a similar level of performance in order to maintain the quality of the piece. Notwithstanding, the small acting variations that may occur between the VPS performed in the control group versus the experimental group could affect the results. This is due to the precision required by the experimental context. In the experiment carried out in the present study, this variable

of complex management was observed, but it was considered part of the inherent characteristics of the theatrical phenomenon. Therefore, its possible incidence on the results was incorporated as part of the variability of the observed phenomenon. For future studies, it would be relevant to incorporate in the methodological design the notion of the not replicable nature of theater, whatever decision is made in this regard.

Furthermore, the present research proposes a pioneering study of teachers' cooperative tendencies during their interaction with students in assessment experiences. Moreover, our research can also be considered a pioneering study since it is the first to analyze and estimate teachers' cooperative tendencies during formative assessments. Therefore, perception-based assessment and valuing instruments modified from previous studies did not necessarily obey the variables of interest. The latter could have influenced the collection of accurate data and resulted in less conclusive results. Hence, we consider it necessary to conduct further studies along the same lines, aimed at validating perceptual assessment and valuing tools. Future studies should focus on improving and adjusting those tools to the characteristics of the assessment instances.

Based on the findings presented, we consider it relevant to propose a model of assessment strategies for VPSs that promotes formative assessment instances. To validate this theoretical model, further research can be performed using samples that promote cooperative interactions between students and teachers.

Additionally, the knowledge bestowed by future studies in this line of investigation could be used to prepare students for future interactions like the ones evaluated in the present study and that will be present on their professional path, akin to the interactions between artist–spectator and therapist–patient, among others. On the other hand, the results obtained in our research support the necessity to innovate in the assessment processes of performing arts samples.

## Conclusion

We conclude that the presence of cooperative components in the teacher–student interaction contributes to determining the formative character of the assessment experience. This can be achieved if the structure of the assessment instance promotes cooperative behavior between the participants involved. Accordingly, the formative power that these elements bestow upon the assessment experience can enhance the teaching–learning process and students' vocal expression, although their learning achievement is not necessarily affected.

It can be affirmed that the findings expressed in this article have the possibility of being applicable in different assessment and performance experiences, being able to benefit diverse contexts. The results could be transferred to school, university, and adult education, but also to professional environments in which the principles of cooperative interaction between speaker and listener are considered relevant to the impact that the performance of the former has on the outcome of such interaction. This is directly related to the hypothesis of the present study. Professionals who could benefit from the practical guidelines derived from this study are political managers, therapists, lawyers, social leaders, and health workers, among others.

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## Informed Consent

The authors have obtained informed consent from all participants.

## Conflict of Interest

The authors declare that there is no conflict of interest.

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