Classroom currency as a means of formative feedback, reflection, and assessment in the World Language classroom

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Abstract

This study examines the formative aspects of teaching in the World Language community college classroom: formative feedback, reflection, and assessment, and then recommends a new educational technique that applies the aforementioned formative elements into the classroom. To this end, in the fall semester of 2015, three sections of Spanish I at the community college level were introduced to a system in which the students were to reward the instructor with play money (or "tip" him) when they perceived that they had met the daily "I can" statements thanks to the lesson and subsequent activities. "Tip" record keeping and quantitative evidence from the instructor rubric suggested that the play money encouraged students to reflect on their own learning, provided the instructor with immediate feedback from students, allowed for critical reflection of activity types, and enabled the instructor to measure whether perceptions (the "tips") matched his formative assessment of how students actually performed in small groups and class activities. This paper also provides insight into which activity types students perceived as the most effective in the World Language classroom.

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The more formative aspects of classroom learning (formative feedback, reflection, and assessment, as defined below) are considered key to enhancing knowledge and student skills (Corbett & Anderson, 1989; Moreno, 2004; Pridemore & Klein, 1995). These formative elements not only enrich student knowledge, but also motivate student learning (Narciss & Huth, 2004). These truths are evident not just in the areas of English, math, and science, but in the World Language classroom as well. As educational accreditors and supervisors are moving toward data-driven results and outcomes, it is the educator who is tasked with finding ways of providing evidence for his or her formative means of assessment and feedback as well as student success.

What are formative feedback, formative reflection, and formative assessment? How are they different from each other, and how can educators implement them? As outlined below, the classroom currency technique will be explored in this study as an effective technique of integrating all of these elements at the community college level, while collecting valuable data for stakeholders, students, and accrediting agencies. This study is also applicable to secondary and four-year university instructors of any subject.

Background

According to Shute (2007), "formative feedback represents information communicated to the learner that is intended to modify the learner's thinking or behavior for the purpose of improving learning … [T]he teacher may also receive formative feedback and use it as the basis for altering instruction" (p. 1). For the purpose of this article, the focus will be on the latter in that the students will be the ones providing the instructor with feedback, via play money, which he then uses to assess and reflect upon his own instruction. Formative feedback is presently defined as information communicated to the teacher by the students that alters his or her teaching.

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Formative reflection stems from the idea that "honest self-appraisal is the starting point for the process of cultivating the skills of … teaching" (Emerson, 2007, p. 297). Emerson (2007) explains that one way for formative reflection to occur is through some form of instructor journaling that incorporates "personal reflection and thoughts about the exercises provided" and records "teaching stories" (p. 297). According to Westberg and Jason (2001), this process is meant to incite critical reflection on experiences and to identify student learning needs. More broadly, formative reflection ensues when the teacher asks him or herself questions, such as "what happened?", "so what?", and "now what?," while "summative reflection focuses more on what can be improved or done differently" (Emerson, 2007, p. 297). It is important to note that journaling is not a required component of formative reflection, as it often takes place while in the classroom. "Reflection strategies can support either reflection-in-action (formative reflection) or reflection-on-action (summative reflection)" (Selber, 2004, p. 159). This "honest self-appraisal" of learning should also be conducted by the students (Emerson, 2007, p. 297), who must consider how well they are mastering the learning targets.

Classroom currency—formative feedback, reflection, and assessment

According to Selber (2004), "reflection-in-action is potentially more potent because it produces contextualized experiments in which professional practices can be reconsidered, adjusted, and enhanced in real time" (p. 159). Likewise, it should be noted that student reflection may occur in a very similar manner in regard to the content that they learn in class, their perceived value of it, and its applicability to their lives, especially when they are prompted to do so. For both the student and the instructor, "reflection [is] … the consideration of the larger context, the meaning, and the implications of an experience and action [and] … allows the assimilation and reordering of concepts, skills, knowledge, and values into pre-existing knowledge structures. When used well, reflection will promote the growth of the individual" (Branch & Paranjape, 2002, p. 1185).

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The final formative aspect focuses on the instructor. Brown (2004) explains that formative assessment is achieved in "evaluating students in the process of 'forming' their competencies and skills with the goal of helping them to continue that growth process" (p. 6). The author makes clear that "the key to such formation is the delivery (by the teacher) and internalization (by the student) of appropriate feedback on performance, with an eye toward the future continuation (or formation) of learning" (p. 6). Formative assessment most often draws upon qualitative classroom elements rather than scores, which principally focus on student performance. For example, the instructor of the current study formatively assessed students during the experiment by walking around the classroom and listening in on student activities and discussions. As further explained below, the instructor filled out a rubric based on his formative assessment of how well he perceived student learning during the interactive classroom activities.

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In summary, *formative feedback* is the information communicated to the teacher by the students that alters his or her teaching; *formative reflection* is an honest self-appraisal by the teacher and the student in asking him or herself "what happened?", "so what?", and "now what?"; and *formative assessment* by the teacher monitors student learning in real time and is not necessarily tied to a score or grade. Often interrelated, these separate concepts all work together in the classroom to provide students with the best possible learning experience. It should be noted that all of these elements contribute in allowing students to learn from faculty and in allowing faculty to learn from students. This formative process is critical, as "students should know that their faculty want to grow, [just] as do they ... Excellence in ... education is found in faculty and students working and learning together, listening to one another" (Emerson, 2007, p. 299).

Classroom Currency

Many educators in the past have incorporated play money into their classrooms for various purposes. The Internet contains a plethora of qualitative information from teachers across the country who have rewarded their students with classroom money for achievement and proper behavior. Smith, Smith, and

De Lisi (2001) integrated classroom money in a different manner from the current study. The authors explained how one high school biology teacher rewarded his students with "biology bucks" when they met daily objectives or contributed greatly in class, and found that student participation and grades improved. Similarly, Godinez (2012) used classroom currency to teach her students economic skills and to successfully manage behavioral problems. Apart from these two studies, very little qualitative or quantitative data on the effectiveness of this technique is documented in peer-reviewed journals.

For the purpose of this article, classroom currency is still play money that students receive in the classroom. However, the technique used is very different from the previous studies and from stories found in blogs in that it is the teacher who receives the "money" and not the students. While the design of this experiment is explained in the methodology section, it should be noted that students were given classroom currency at the beginning of a class session and were told to reward their college instructor with "tips" for a job well done, based on how well class activities aided them in meeting the daily "I can" statement. In the students doing so, the instructor received immediate feedback from students. He was also able to critically reflect on the activity types that contributed to student learning based on student perceptions and was able to measure whether student perceptions matched his formative assessment of how students actually performed in small groups and class activities. Thereby, the instructor was able to alter plans for the next class session to best meet student needs.

Definition of Activities

Following is an explanation of the activities that were employed during the study, all of which were carried out in the target language:

Circle chat activity. A circle chat activity is an activity in which two circles of students rotate after a designated amount of time as to constantly change partners (Robertson, 2014).

Information gap activity. An activity in which student A has the information that student B needs to complete a task and vice versa; students must negotiate meaning to fill in each other's gaps (Richards, 2006).

Information gathering activity: "Student-conducted surveys, interviews, and searches in which students are required to use their linguistic resources to collect information" (Richards, 2006, p. 19).

Information transfer activity: This requires "learners to take information that is presented in one form, and represent it in a different form" (Richards, 2006, p. 19).

Input activity: Activity in which students recognize language use but do not produce it (Richards, 2006).

Opinion sharing activity: "Activities in which students compare values, opinions, or beliefs, such as a ranking task in which students list six qualities in order of importance that they might consider in choosing a date or spouse" (Richards, 2006, p. 19).

Pair-share: Discussing a topic or answers with partner; conclusions are often drawn to solve a problem (Robertson, 2014).

Picture-description: Describing pictures or images to a partner (Mitchell & Myles, 2013).

Role-play: "Activities in which students are assigned roles and improvise a scene or exchange based on given information or clues" (Richards, 2006, p. 20).

Task completion activity: Puzzles, games, map-reading, and other kinds of classroom tasks in which the focus is on using one's language resources to complete a task (Richards, 2006, p. 19).

Methodology

The research was completed during the fall of 2015 over a seven-week time frame. A community college in the midwest of the United States agreed to participate in this study. In three sections of Elementary Spanish I, 57 students chose to participate. For this community college, 75 students were enrolled in Elementary Spanish I in the fall, 2015 semester, constituting 76% of the available population represented in the sample. The demographics for this community college include the following, as reported directly by the institution in question (2014): 5,286 students enrolled, 23% minority enrollment, 33% first generation student enrollment, 32% of students received financial aid, average student age of 24, and 16:1 student to teacher ratio.

During the weeks of the study, the classroom instructor taught three units to the students while completing a formative rubric at the end of each class session based on his perception of students' meeting the daily target. The instructor would briefly leave the classroom to complete the rubric while the students were leaving "tips." The teacher began each unit by issuing $3.00 worth of classroom currency to each student. Students were informed that they were to "tip" their instructor at the end of the class session based on the following criteria:

$3: I feel that I completely met the daily learning target thanks to today's learning activities.

$2: I feel that I mostly met the daily learning target thanks to today's learning activities.

$1: I feel that I somewhat met the daily learning target thanks to today's learning activities.

$0: I feel that I did not meet the daily learning target, regardless of the learning activities.

During activities, the instructor was tasked with circling the room and formatively assessing student performance, based on the daily "I can" statement, on a scale of 1-4, with 1 indicating that the "I can" statement was not achieved and 4 indicating that it was fully achieved (See Appendix for instructor rubric). For the purpose of this study, a wide variety of activities were employed during data collection, and a "tip jar" was passed around the room after the measured class period. The range of activities that took place during the study is included in the previous section.

At the start of each class period, the instructor wrote an "I can" statement on the board, derived from the American Council on the Teaching of Foreign Languages' *NCSSFL-ACTFL Can-Do Statements* (ACTFL, 2015). Each statement serves as a self-assessment "used by language learners to assess what they 'can do' with language in the Interpersonal, Interpretive, and Presentational modes of communication" (p. 1). These statements are aligned with the ACTFL Proficiency Guidelines and the ACTFL Performance Descriptors for Language Learners for reporting performance in each mode of communication. The following are "I can" statements provided by ACTFL from which daily statements for this present study were derived:

1. I can describe myself and others as well as express likes and dislikes.
2. I can describe people, places, and things.
3. I can express origin, express emotions and conditions, and can describe what someone or something is like.
4. I can express ownership and can express likes and dislikes.
5. I can discuss free-time activities, plans, and food.
6. I can state what and whom I know and can express intention, means, movement, and duration.
7. I can identify family members and can describe daily activities.
8. I can express opinions, plans, preferences, and feelings.
9. I can discuss my daily routine and can express obligation.
10. I can express how long something has been going on.

The aforementioned design was used to collect and analyze data for the following research questions:

Research Question One: What perceptions do first-year World Language students have of classroom activities in relation to the learning target?

Research Question Two: What perceptions does the instructor have of student performance of classroom activities in relation to the learning target?

Research Question Three: How do student perceptions of classroom activities correlate with the instructor's perceptions of student performance in relation to the learning target?

The two researchers requested and received approval from the college's Institutional Review Board to complete this study. After meeting the students in the fall of 2015, the researchers explained the study and asked for the students to sign a research study consent form. The classroom instructor personally controlled all aspects of the study, including data collection and storage procedures.

A Pearson Correlation Coefficient was performed to compare the "tip" amounts from students with the formative assessment observations by the instructor. In this particular case, this procedure illustrates a quantitative measure to determine a statistical relationship between two or more observed data values (Lighter, 2011). This procedure was employed for each of the ten class sessions.

Minimal risks existed for the participants of this study. The students were treated the same as in any other school year or with any other instructor, using similar methodology, using the same text book, and following all institutional

rules and procedures. None of the departmental goals or outcomes for Spanish I were altered.

Results

Asking students to use classroom currency in correlation with daily learning targets encouraged students to reflect on their own learning and provided the instructor with immediate formative feedback in relation to both student learning and to the success or lack thereof of his classroom activities.

The activity types represented during the most "tipped" class session out of the ten sessions in this study were input activities, information gathering activities, and information transfer activities. An average of $2.62 out of $3.00 was received, and the instructor rated this class session 4/4.

The activity types from the least "tipped" class period were input activities, information gathering activities, opinion sharing activities, information gap activities, and role-plays. However, even the least "tipped" day received $2.06/$3 and an instructor rating of 3.67/4, suggesting that students felt that they "mostly met the daily learning target," which is still quite remarkable. In fact, a couple of the activities from the least "tipped" day coincide with activities from the most "tipped" day, suggesting that students meet "I can" statements as long as active learning strategies are employed, as none of the activities that students were exposed to during data collection were mechanical, and all of them complied with communicative teaching method standards.

In terms of the formative assessment of student performance of the learning activities, the instructor revealed that his assessments highly correlated with the student perception "tips." There were six class sessions in which the instructor formatively rated students a perfect 4/4 and consequently, five out of six of those class sessions were the highest tipped. The days in which the instructor gave between a 3-3.64/4 rating represent four class sessions, and three of those four sessions represent the least "tipped" days.

Statistically, when comparing the student "tips" with the instructor ratings, the Pearson Correlation Coefficient for the value of R is 0.6168. This is a moderate positive correlation, which means there is a tendency for high X variable scores to coincide with high Y variable scores (and vice versa). In other words, the perceptions of the students based on tipping moderately correlated with the formative assessment of the instructor. The data for this correlation were derived from Table 1 and Figure 1 on the next two pages, in which average daily student tip amounts were increased by $1 each to provide for a clear correlation with the instructor rating, given that the instructor rubric scaled from 1-4.

Limitations, Conclusions, and Pedagogical Implications

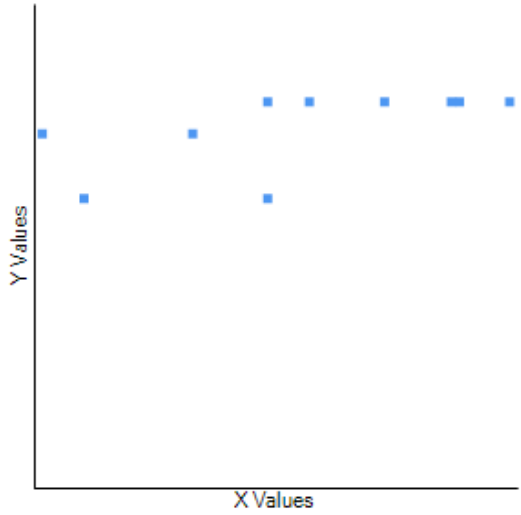
As with any study, some limitations exist. First, students who had prior knowledge of the learning target were not taken into consideration. This was not addressed in the current design so that students were not allowed a neutral option in their tipping. The researchers recognize that the data may have been different had students with prior knowledge of the daily learning targets been excluded.

Another limitation was that tipping occurred for an entire class session instead of after each activity type, making it more difficult to discern which specific activities contributed to mastering the learning target. However, it must be noted here that

Table 1. Daily Activity Types, Student Tip Amount Averages, and Instructor Ratings

Days and activity types	X- Avg. Student tips	Y- Avg. Instructor ratings
1. Input activities, information gathering activity, picture-description, pair-share	3.33	3
2. Input activities, task completion activity, role-play, information gap activity	3.55	4
3. Input activities, information gathering activity, task completion activity, picture description, opinion sharing activity, information gap activity	3.24	3.67
4. Input activities, information gathering activity, role-play	3.56	4
5. Input activities, information gathering activity, opinion sharing activity, information gap activity, role-play	3.06	3.67
6. Input activities, information gathering activity, role-play	3.11	3
7. Input activities, information gathering activity, information transfer activity	3.62	4
8. Input activities, information gathering activity, role-play, circle chat	3.33	4
9. Input activities, information gathering activity, information gap activity, role-play	3.38	4
10. Input activities, information gathering activity, information transfer activity, role-play	3.47	4

Figure 1. Student tips (X) versus instructor ratings (Y) correlation.



the specific learning activities were not as important to the instructor as understanding the formative process each educator should understand and implement. This study may possibly be improved with a follow-up investigation that triangulates data (including qualitative) to support and further describe the results from the quantitative measures.

As previously stated, the study design allowed the instructor to receive immediate feedback from students, to critically reflect on the activity types that contribute to student learning based on student perceptions, and to measure whether student perceptions match the instructor's formative assessment of how students actually performed in small groups and during class activities. It is noted here, that the instructor journal notes delineated which activities during each class session were perceived as successful or unsuccessful in relation to the daily learning target. Integrating all of these formative aspects into the classroom enhances knowledge and student skills while motivating student learning (Corbett & Anderson, 1989; Moreno, 2004; Narciss & Huth, 2004; Pridemore & Klein, 1995).

The instructor of the course was able to keep track of what activity types were most successful in his classroom, as well as record whether or not a large percentage of students successfully carried out daily "I can" statements. In keeping a log of successes and rating each class session, the instructor was able to provide qualitative evidence as to whether or not course and program outcomes were met. While this qualitative evidence was not the exclusive form of data collection at this community college to demonstrate student success and outcome compliance, the data from this study satisfied the administration's thirst for formative data. Additionally, the data will be included in the program review report that will be provided to accreditors in the future. The instructor also used the data for self-

reflection of his own teaching and will modify activity types before the next semester based on the data. For example, the instructor noted on one occasion that a certain activity type did not work well for that day's learning target. The instructor noted this so that a different activity type will be implemented for the following semester. Further, certain activity types perceived as highly effective by the instructor will be continued or even used more frequently.

The "tip-based" data that the instructor tracked, as well as his instructor rubric, suggests that students prefer active, communicative activities such as role-plays, pair interviews and peer or group work, information transfer activities, information gap activities, task-completion activities, and information-gathering activities comprised of searches around the classroom. The instructor also found that students not only "tipped" well after performing these activities, but that they also performed well based on his formative assessment of their performance. Therefore, World Language educators should seek to include more active classroom activities that give students opportunities to use the language in meaningful ways, as students not only prefer these activities but meet daily learning targets thanks to them.

Additionally, students are very aware of their own learning when instructors facilitate opportunities for reflection. As demonstrated in Figure 1, student perceptions ("tip" amounts) and instructor ratings correlate and demonstrate the importance of the combination of formative class elements: feedback, reflection, and assessment.

College instructors and secondary teachers alike should consider the classroom currency format, as described in this study, as a means of self-reflection through feedback, and as a means of comparison between formative assessment and student perceptions. These elements are easily trackable if the instructor keeps a log of the "tips" he or she receives and can use this information to demonstrate student success in the classroom. As these formative elements enhance knowledge and student skills, inform teacher instruction, and aid in providing data on course or program success, the classroom currency technique is one that World Language educators and general pedagogues alike should implement.

"...the more learners are engaged in their own learning process, the more intrinsically motivated they become."

As ACTFL (2015) explains, "the more learners are engaged in their own learning process, the more intrinsically motivated they become. Research shows that the ability of language learners" to clearly understand specific learning targets "is linked to increased student motivation, language achievement, and growth in proficiency" (p. 1).

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Appendix

Instructor Log

DATE: _____

Student Learning Target: I can _____
_____.

Learning Activity Types: _____
_____
_____

Number of Students present: _____ _____ _____

Dollar amount of tips given: _____ _____ _____

Total amount of three sections divided by Total number of Students present represents the Average Tip per student for that lesson:

_____ / _____ = _____

Instructor Rubric (Complete for each class section)

4	3	2	1
The instructor feels that almost all students completely met the daily learning target	The instructor feels that many students met the learning target but that several did not OR that most students somewhat met the learning target	The instructor feels that several students met the daily learning target but that many students did not	The instructor feels that most students did not meet the daily learning target