"Social Justice is Access and Discussion":

Contexts for Regulatory Learning in a Dual-Language Classroom

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Abstract

Using an ethnographic, qualitative single-case study approach and a sociocultural theoretical perspective, support for self- and co-regulatory learning in an elementary Spanish and English dual-language classroom was documented. The classroom was composed of 33 dual-language learner (DLL) students acquiring their home language, Spanish, and a new language, English, at school. Ten ethnographic classroom observations and three in-depth interviews were collected over a five-month period. Inductive and deductive thematic coding analyses were used to characterize the teacher's communicative practices as they related to student self-regulatory learning of the two languages. Findings suggest that certain learning contexts coupled with communicative tasks provide DLLs with opportunities to become more regulated-language learners of English and Spanish. These results have implications for practice, informing educators about instructional methods that support self- and co-regulated learning in bilingual environments.

Objectives

College and career ready standards were created to equalize learning opportunities for students of diverse backgrounds (White & DiBenedetto, 2015). At their core, the standards encourage learners to become more active in their learning—evidenced by the standards foci with student-initiated discourse to support disciplinary learning (Lee, Quinn, & Valdés, 2013). Thus, the standards rely heavily upon language teaching and language learning (Bailey & Wolf, 2012; Hakuta, 2014). Without appropriate scaffolds, standards may be extremely challenging for any student, especially dual-language learners (DLLs), students acquiring their home language, Spanish, and a new language, English, at school. The standards guide content instruction, but do not necessarily describe the social contexts and regulatory learning strategies needed for learners to complete tasks and achieve linguistic and disciplinary competency (White & DiBenedetto, 2015). Selvester and Summers (2013) describe regulatory-learning strategies as the building blocks of academic capital for high achievement in learning settings. Therefore, affording DLLs, a historically underserved and marginalized student group (Olsen, 2014), with opportunities to practice regulated-learning strategies such as goal setting, planning, eliciting feedback, and monitoring, as academic capital, is a call to action or "socially responsible pedagogy" (Selvester & Summers, 2013).

However, little research has unified self- and co-regulatory learning theory and research with practice (White & DiBenedetto, 2015). With regard to DLL teaching and learning, some studies suggest that early self-regulation skills are important to English vocabulary development (Bohlman, Palacios, & Maier, 2015) and that teacher guidance in support of English language learning for DLLs may assist students in self-regulating their language-learning experiences (Bailey & Heritage, 2018). This study contributes to the existing self- and co-regulatory learning

literature by exploring how the classroom environment, communicative practices, and regulatory learning—together—support DLLs' bilingual development of both the home and the new language. Using sociocultural theories of language learning, the present ethnographic, qualitative single-case study explored the communicative practices an elementary school teacher employed to co-regulate (i.e., assist in) students' development of self-regulatory learning. The current study aims to answer the following question: How does an elementary school teacher incorporate regulatory-learning practices in a bilingual environment?

Perspectives/Theoretical Framework

We were interested in capturing the interplay between regulatory behaviors in context as they unfold between teacher-to-group, teacher-to-student, and peer-to-student. Thus, we used Vygotsky's sociocultural learning theory and Cobb and Yackel's (1996) Interpretive Framework to situate self- and co-regulatory practices within a classroom context. Self-regulatory learning has been traditionally described as internal cognitive processes developing within the individual and assisted by external modeling and feedback (Schunk & Usher, 2013). In contrast, co-regulated learning refers to a transitional process in which a learner is assisted in acquiring aspects of self-regulation within Vygotsky's zone of proximal development. From this perspective, through dialogue, individuals learn to engage and control their own self-regulatory strategies by observing, requesting, and experimenting with others (Hadwin, Wozney, & Pontin, 2005). Cobb and Yackel (1996) argue for a "conjectured relation between an aspect of the classroom microculture and the activity of the individuals who participate and contribute to it" (p. 177). Therefore, by applying the Interpretive Framework to our work, we argue that in a classroom microculture both self- and co-regulatory learning occur simultaneously and influence or are influenced by the ecology of the classroom.

Methods and Data Source

This study employed an ethnographic, qualitative single-case study by selecting a teacher based on the following reputational sampling criteria (Schensul, Schensul, & LeCompte, 2013): (1) was a dual-language teacher; (2) was actively involved in leadership roles at the school; (3) had collaborated in different capacities with teachers, administrators and researchers; (4) was interested in presenting findings to the school. Mr. Alvaro (all participant names are pseudonyms), the fourth/fifth grade lead-teacher was recommended, observed and interviewed. Student interactions in the multi-aged classroom were observed as they related to the regulatory practices enacted by Mr. Alvaro. Institutional review board approvals from both the school and the university were first obtained.

Ten observations were made across five months. Three in-depth interviews were conducted using a semi-structured teacher interview protocol inspired from Seidman's (2013) Three Interview Series. The interviews focused on Mr. Alvaro's background, experience in context, and reflection; each interview was about 60 minutes.

Data Analysis

As we collected and wrote observation fieldnotes and transcribed Mr. Alvaro's interviews, we took note of emerging codes using ***inductive open coding*** (Merriam & Tisdell, 2015) and ***deductive coding*** using Bailey and Heritage's (2018) taxonomy (see Table 1 for definitions of taxonomy codes; see Table 2 for a map of all inductive/deductive codes), and concluded in ***theoretical coding*** to link relevant codes to central themes (Saldaña, 2016). The deductive and inductive codes used to develop these themes were not mutually exclusive. Five themes were identified: (1) Student Agency is Voice and Choice; (2) Language as a Vehicle to

Regulation; (3) Requests and Questions Help Make Meaning; (4) Honoring Student Perspectives; and (5) Nurturing a Flexible Environment.

Trustworthiness was established by (1) triangulating Mr. Alvaro's interview transcripts with the classroom observation fieldnotes; (2) keeping note of the influence of our own background, perceptions, and interests during the research process by writing in-process memos; (3) checking in with Mr. Alvaro to ensure that we accurately translated his viewpoints into the data; and (4) conducting peer examination to deepen reflexive analysis by discussing insights with impartial colleagues who have had experience with qualitative methodology (Krefting, 1991; Schensul, Schensul, & LeCompte, 2013).

Pedagogic snapshots, vignettes that describe a segment of a lesson or a narrative from the interviews (see Appendix, Pedagogic Snapshots A - D), were written after themes were established and are referenced to contextualize each theme.

Results

Student Agency is Voice and Choice

During an interview, Mr. Alvaro interpreted empowerment as having choice. He explained that for a teacher "choice is in the [writing] topic [students] are choosing…in math, the choice is in the number sets and the strategies [students] would want to use." According to Mr. Alvaro, students used "choice" to implement multiple learning strategies across tasks, also known as flexible use of strategies. At the end of a fishbowl activity (i.e., a communicative task that entails a small group of students modeling a process or a skill to the rest of the class), Mr. Alvaro instructed students to find a partner to help them revise their Spanish or English essays (Pedagogic Snapshot A). Language task choice was also illustrated in Pedagogic Snapshot B. Here, students used "choice" to self-monitor completion of a language task as well as seek help

and feedback from a peer. Additionally, these examples demonstrate how Mr. Alvaro encouraged student autonomy via discourse. To Mr. Alvaro, "social justice is access and discussion…bringing in different perspectives…being able to talk…with each other" when completing tasks. He explained that interactions are composed of rules and norms developed, discussed, and enacted by students and the teacher (Pedagogic Snapshot C). In Mr. Alvaro's classroom "the management of regulation" otherwise known as "the back and forth between students and teachers" (Heritage, 2016, p. 339) made self- and co-regulation possible.

Language as a Vehicle to Regulation

Mr. Alvaro used School Navigational Language (i.e., language used to communicate specific goals, directions, pacing, and sequencing of a classroom activity; SNL; Bailey & Heritage, 2008) to co-regulate goal setting and planning at the beginning of a writing lesson (Pedagogic Snapshot A). First, he stated the goal: "Let's go over the steps to the revision strategy." Second, he verbalized the revision strategies needed to accomplish the writing task: "(1) read the draft out loud; (2) identify the opinion or main idea; and (3) identify the three supporting reasons." Then, he established social norms to facilitate student solicitation of feedback when they worked with a peer: "In partnerships one of you will read your draft to your partner. Your partner's job will be to listen and identify the opinion or main idea and the three supporting reasons. After you receive feedback from your partner, you will switch roles and listen to your partner read their essay." Using language specific to the content area of writing, the teacher provided students with a goal, learning strategies, and the language they needed to provide partner feedback.

Once students began working together, each partner took on different cognitive and metacognitive tasks related to co-regulated learning. For instance, often a partner (as expert) took

a mentorship role evaluating their partner's work (a more novice peer), and then helped their partner monitor their progress (Pedagogic Snapshot B). Each student enacted regulatory strategies differently. The more expert peer Dario, evaluated Daniel's work, found an error, and then used a learning strategy to teach and improve his partner's misunderstanding. Daniel monitored his own progress as he worked with Dario to review his work.

Requests and Questions Help Make Meaning

Mr. Alvaro used requests and questions as instructional tools to gauge student understanding. For instance, during a math observation (Pedagogic Snapshot D) he requested that students self-monitor: "I would like you to think about how what you did now helped you better understand the challenge problem from yesterday." Then, he elicited evaluative discussions in partnerships: "Now share with your partner if you agree—Do these strategies help you solve yesterday's math problem?" Lastly, he drew out evaluative discussions for the whole class. The exchange above demonstrates how Mr. Alvaro used requests and questions to elicit student monitoring and evaluation of their chosen math strategies alone or collectively; and, as such develop students' mathematical conceptualizations.

Honoring Student Perspectives

Mr. Alvaro demonstrated how he supported student thinking by respecting "wait time." During an interview he explained how "wait time [may] sometimes feel awkward [for a teacher, but]...it gives students time to think, some of them may be translating, some of them may be going from one language to another, but giving them that time to think definitely makes a difference." Mr. Alvaro explained that drawing out the silence, allowed students "to collect their thoughts [so they could] express what they want[ed] to share." Mr. Alvaro's portrayal of "wait time" was further supported during an observation of the fishbowl activity (Pedagogic Snapshot

A). Mr. Alvaro asked the class two questions: “What did you want to change? Were there things you would have added?” At first students were quiet, but after a few seconds, a student shared: “Not using ‘then’ so much.” In effect, Mr. Alvaro utilized “wait time” as a co-regulation strategy, to support students with monitoring their progress, and as a means to shift the class discussion about writing strategies into opportunities for student creation and selection of personalized writing goals.

Nurturing a Flexible Environment

Mr. Alvaro encouraged students to move between activity settings—students walked to and from the rug, worked with AmeriCorps Volunteers, worked alone, in partnerships, or in groups—choosing conditions that facilitated learning or attention control. For instance, after the math lesson described in Pedagogic Snapshot D, students were asked to evaluate their understanding and choose a learning environment that helped them attend to the task at hand and afforded them with opportunities to engage with the learning process. Those who communicated misunderstanding stayed on the rug with Mr. Alvaro and those who felt they understood the lesson objective worked independently or in partnerships at their desks. Mr. Alvaro also encouraged his fifth grade students to consult and mentor the fourth grade students without losing focus. For instance, the first fifth grade group to finish the math task circled the room helping other students. One of the group members walked across the room to find his tablemate so he could borrow a math example she had written in her notebook so he could help a student. Not only did every student in this particular group mentor other students in the class, but they also modeled self-regulated and co-regulated learning by proactively seeking help and sharing their notes to mentor other students in need.

Conclusions and Scholarly Significance

In recent years, scholars have described the classroom-learning context and regulatory-learning behaviors as they relate to pedagogy (Meyer & Turner, 2002; White & DiBenedetto, 2015), language learning (Bailey & Heritage, 2018), and formative assessments (Heritage, 2016). Less research, however, has explored how regulatory behaviors are used and supported in bilingual learning environments. To address this gap, our study explored the interplay between a bilingual classroom environment, communicative practices, and regulatory learning as they support DLLs' development of both the home and the new language using a qualitative single-case study design and ethnographic methods. We found that during regulatory interactions DLLs have opportunities to practice language while co-regulating each other's learning, suggesting both teacher and peer support of self-regulatory development may prove valuable in the effective education of DLLs. Our findings have implications for research and practice. We suggest that ethnographic methodology could be a fruitful avenue to examine complex regulatory interactions in bilingual-learning environments and recommend further exploration. We also argue that our pedagogic snapshots might provide educators with vivid examples of how to incorporate regulatory interactions in bilingual settings.

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Appendix: Pedagogic Snapshots A - D

Pedagogic Snapshot A: A Lesson on Revising Persuasive Writing, Role Playing using the Fishbowl Method

Mr. Alvaro walked to the rug, pulled three students aside, asked them if they were interested in taking part in a fishbowl activity, and demonstrated how to use the strategy revision learned in class. The students agreed to participate and quickly gathered their essays and notebooks, found their seats in the middle of the rug, sat down cross-legged and waited for the class to join them. As the class sat down, Mr. Alvaro encouraged the class to form a tighter circle around the volunteers. The circle represented the fishbowl and the student volunteers inside the circle were the fish. One of the volunteers began to read his essay. Sitting across from him were the other two volunteers, who were tasked to identify the opinion and supporting details of the essay. The rest of the class quietly observed and listened. Mr. Alvaro carefully drew the graphic organizer that he had used to model the strategy on the board (see Figure 1). The student reader finished reading and looked to Mr. Alvaro. Mr. Alvaro turned to the listeners (volunteers) and asked them to help him complete the graphic organizer (see Figure 2). One of the volunteers stated the opinion "Universal Studios is a good place to have fun." The other student shared the three reasons why: "…because there are a lot of rides…because there are a lot of shows…because there is lots of stuff to buy." Mr. Alvaro addressed the class: "What would you want to change? Were there things you would have added?" At first, students were quiet, but after a few seconds a student shared: "Not using 'there are a lot of' so much." Others chimed in. Soon after, they were instructed to go back to their seats. As they found their partners, the teacher reminded them that they had the choice to either revise their Spanish or English persuasive essay.

Pedagogic Snapshot B: Observing Multi-Aged, Language Partnerships

Multi-Aged, Language Partners. After the fishbowl activity, Mr. Alvaro asked me to work with a partnership--Daniel and Dario. Before beginning the activity, Daniel explained that he had two persuasive essays written and that he would like to read the Spanish essay first. Daniel read his persuasive essay and then Dario and I helped him identify the opinion, reasons why, and details. Dario was able to identify Daniel's opinion and reasons why with ease. However, Dario and I noticed that Daniel's details did not relate to his reasons why, so Dario and I asked him questions in Spanish to try to understand what he was trying to convey. It was during this inquiry that Dario noticed Daniel had trouble writing details that supported his reasons why. Dario explained in Spanish (translated to English): "Daniel, imagine that your paragraph is the goal and the soccer balls you kick into the goal are your details. The [essay] opinion is the game." Daniel seemed to understand. Then they reviewed each paragraph and made sure the details matched the reasons. By the time they had finished editing Daniel's essay, it was time to wrap up. Daniel finished constructing the graphic organizer modeled by the teacher. Unfortunately, Dario did not have the opportunity to receive feedback from Daniel, although he did get to quickly read his essay out loud in Spanish.

Multi-Aged English Writing Partners. A fifth grader wrote down a list of tips for his fourth grade partner to use as a reference. Once he finished his list, he supported his partner by helping him write a concluding paragraph. The fifth grader explained to his partner that after writing the first concluding paragraph together, the fourth grader would have to write the second concluding paragraph on his own. As the fourth grader wrote down sentences, the fifth grader sat close to him, hovering over his shoulder, with his palm under his chin, attentively reading out loud his partner's conclusion. Afterwards he suggested a different concluding sentence. The

boys discussed whether the new suggestion would add to the paragraph and the overall main idea of the story. When it was time to start on the third paragraph, the fourth grade student struggled and stated: “I don’t know.” The fifth grade student referred to his list of tips. His partner attempted to write once again. The fifth grader leaned in and cupped his chin with his palm, and closely read what his partner had written and commented: “That’s pretty good.” As his partner wrote, the fourth grader wrote down more sample sentences in his sheet of tips. As the fourth grader finished writing his sentence, the fifth grader read it: “That’s why my brother is my best friend.” The fifth grader smiled and shared: “I also have an older brother and he is the best in the world.”

Pedagogic Snapshot C: Student-Created Protocols for Discourse Etiquette

In Mr. Alvaro’s classroom, it is “okay [for students] to argue, disagree, and agree with each other.” These norms created a space that elicited class dialogue about topics that were important to students. The following excerpt from an interview with Mr. Alvaro nicely illustrated how the social relationship he described above organically unfolds in an environment that supports “access to content and thinking”:

> Last year, during math time, my students and I were having a class discussion on the number zero and what it represents. This conversation stemmed from a larger class discussion about positive and negative integers. Some students said, ‘Well I think this,’ ‘I think that,’ ‘But I think,’ ‘I’m not really sure,’ ‘I think it’s positive,’ or ‘I think it’s negative.’ And I kid you not they literally split the room in three. They said: ‘All the people over there, on the left, are people who agree, the people in the middle are people who are not sure where to go, and the people over to the right, they disagree.’ And they then began to have a deeper conversation about zero as a class while in these recently

> formulated groups. Because of this discussion, students created a protocol. Whenever they felt the class was having a difficult or animated conversation, they knew to separate themselves into these groups. At another time, when discussing water properties, using their protocol, one of the boys stood up and said: 'They changed my mind.' He gracefully walked across the room to join an opposing group, then the class continued to bounce ideas off each other.

As portrayed in the excerpt above, allowing students to discover and practice discourse etiquette using protocols that engage others in conversations about topics that lead to disagreement can provide students with life skills. To Mr. Alvaro, although the classroom is only "one social environment," it has the potential "to help transform," students' lives, that is, as "these kids grow up, they will take these learning experiences with them and apply them to whatever careers they will pursue." To summarize, Mr. Alvaro considered classroom discourse to be a practice of social justice.

Pedagogic Snapshot D: Observing a Lesson about Fractions

Mr. Alvaro prepped the class for self-assessment: "I would like you to think about how what you did now helped you better understand the challenge problem from yesterday." Mr. Alvaro checked-in: "How many feel like it did help? How many are unsure? How many feel like it did not help?" "How did it help?" Students shared the strategies they liked, such as labeling how many kids ate a ¾ sandwich slice (See Figure 3) or skip counting by ¾ and converting an improper fraction to a mixed number (See Figure 4). Mr. Alvaro added: "Now share with your partner if you agree—Do these strategies help you solve yesterday's math problem?" After a few minutes, Mr. Alvaro counted down: "3, 2, 1. Okay, raise your hands if you are still unsure about what strategy you can use to solve yesterday's math problem?" About six students raised their

hands. Mr. Alvaro responded: “How many of those students who raised their hand, feel that they have a better understanding of the word problem after talking to their partner?” A student who had vocalized confusion about the topic previously now shared her understanding to the class. Mr. Alvaro proceeded to draw the strategies students had shared on the board. Mr. Alvaro explained each strategy: “We usually do not say we have 24/4 sandwiches for 8 people to share. We say we have 6 whole sandwiches for 8 people to share.” Students looked at the board and nodded as they listened to Mr. Alvaro’s explanation. Mr. Alvaro said: “Let’s count using mixed numbers.” The class counted in unison. After a few seconds, their voices trailed off. Mr. Alvaro exclaimed: “Let’s begin from the beginning. Let’s find a rhythm.”

Table 1.
Regulatory Strategies and Related Behaviors and Dispositions Taxonomy

Strategy	**Behaviors and dispositions**
Goal setting	Basing short-term goals for learning on evidence and feedback; setting and prioritizing individual and/or group goals and subgoals
Planning	Establishing strategies for achieving individual and/or group (two or more students) goals; determining how much time and resources are needed to achieve the goals
Motivation	Independently (i.e., without external rewards) using one or more strategies to keep their own and/or their peers learning on track to meeting the goals
Attention control	Attending to tasks and removing distractions from the environment; choosing conditions that make independent and/or group learning easier
Flexible use of strategies	Implementing multiple learning strategies across tasks and adjusting those strategies when needed to secure progress independently or with a group; using evidence to adapt and invent learning strategies independently or with a group
Monitoring	Monitoring their own and/or their peers progress toward learning goals and making adaptations to secure progress
Help-seeking and feedback	Seeking advice and support from adults and peers; seeking information (e.g., libraries, internet, contacts); soliciting progress feedback from teachers and peers
Evaluation	Evaluating their own and/or their peers learning, independent of teachers, and making adjustments for similar tasks in the future

Source: Adapted from A. L. Bailey and M. Heritage, *Self-regulation in learning: The role of language and formative assessment.* (Cambridge, MA: Harvard Education Press, 2018)

Table 2.
Deductive and Inductive Code Map

Language learning	**Communicative activity**	**Fishbowl activity****	
		Whole-class interaction**	
		Small group interaction**	
		Partnership interaction**	**Turn, pair, share****
			Mixed-aged mentorship**
			Language partners**
		Questioning*, Heritage, 2016	
		"Wait Time"**	
	Academic language	**School Navigational Language*,** Bailey & Heritage, 2008	
		Disciplinary Language**	
Regulated learning	**Regulatory strategies*,** Bailey & Heritage, 2018	**Goal setting***	
		Planning*	
		Motivation*	
		Attention Control*	
		Flexible use of strategies*	
		Monitoring*	
		Help-seeking and feedback*	
		Evaluation *(self-assessment)**	
Classroom	**Context**	**Environment of focus****	
		Flexible environment**	
		Classroom norms**	
		"Management of regulation*," Heritage, 2016	

Note. * = Deductive codes, ** = Inductive codes; Regulatory strategies used by individual students were identified as self-regulatory strategies and regulatory strategies used in a group (e.g., more than two students) to support self-regulatory behaviors were identified as co-regulatory strategies. Considering the activity setting, task, and interaction, the eight regulatory strategies listed in this code map may be applied to self- or co-regulatory learning behaviors.

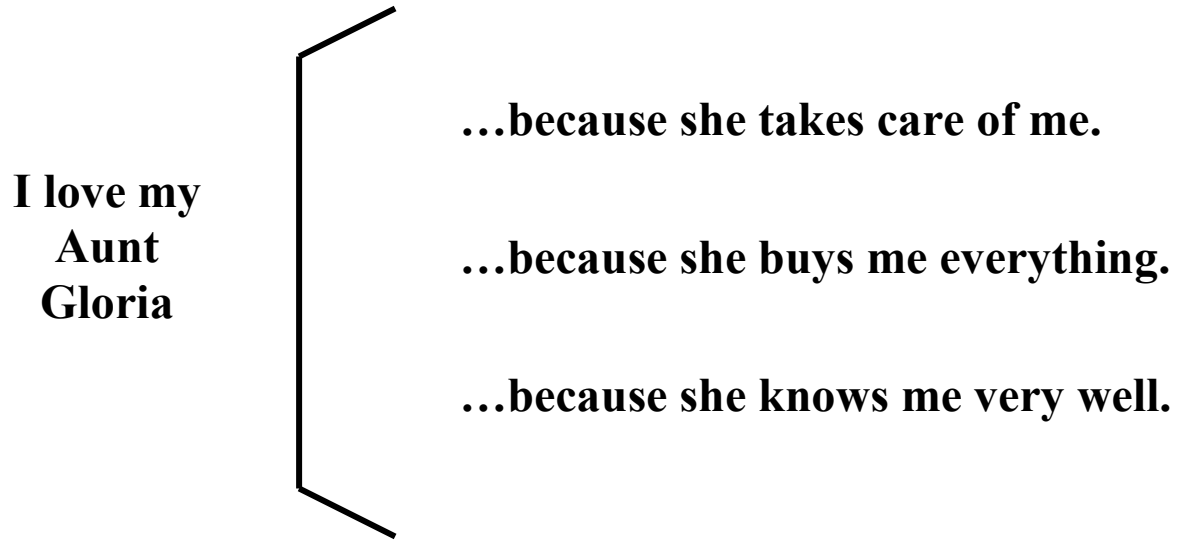
I love my Aunt Gloria
…because she takes care of me.
…because she buys me everything.
…because she knows me very well.

Figure 1.

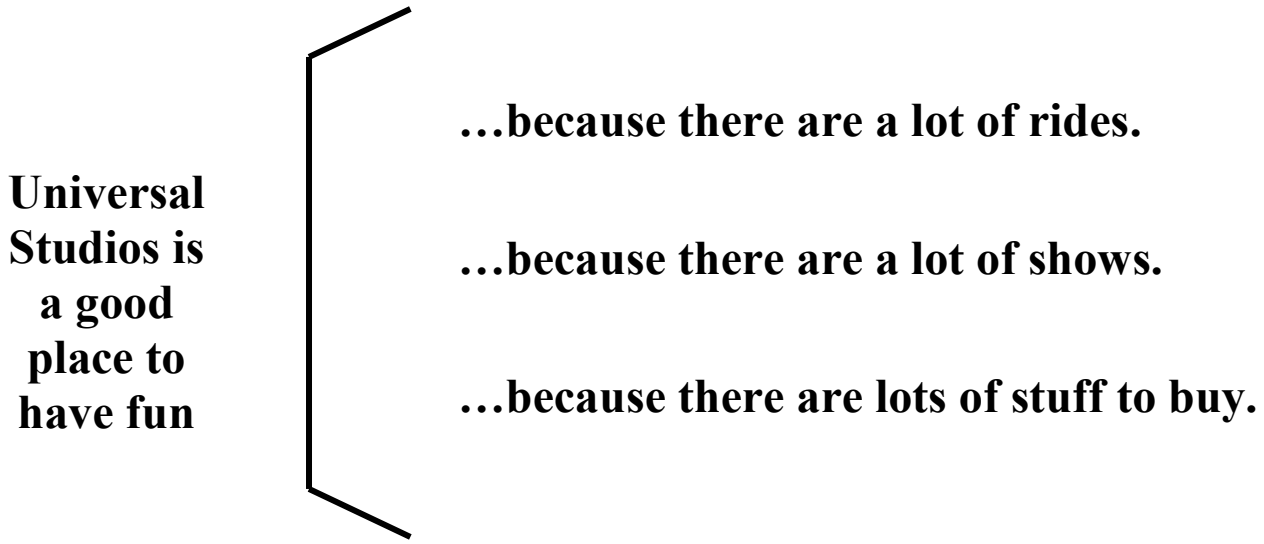
Universal Studios is a good place to have fun
…because there are a lot of rides.
…because there are a lot of shows.
…because there are lots of stuff to buy.

Figure 2.

1. $^{3}/_{4}$	2. $^{6}/_{4}$	3. $^{9}/_{4}$	4. $^{12}/_{4}$
5. $^{15}/_{4}$	6. $^{18}/_{4}$	7. $^{21}/_{4}$	8. $^{24}/_{4}$
$^{27}/_{4}$	$^{30}/_{4}$	$^{33}/_{4}$	$^{36}/_{4}$

Figure 3. Strategy 1, Labeling people who ate a $^{3}/_{4}$ sandwich slice

$^{3}/_{4}$	$^{6}/_{4} = 1^{2}/_{4}$	$^{9}/_{4} = 2^{1}/_{4}$	$^{12}/_{4} = 3$
$^{15}/_{4} = 3^{2}/_{4}$	$^{18}/_{4} = 4^{2}/_{4}$	$^{21}/_{4} = 5^{1}/_{4}$	$^{24}/_{4} = 6$
$^{27}/_{4}$	$^{30}/_{4}$	$^{33}/_{4}$	$^{36}/_{4}$

Figure 4. Strategy 2, Skip counting and converting an improper fraction to a mixed number