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**The Effect of Classroom-Based  
Assessment and Language Processing  
on the Second Language Acquisition of EFL Students**

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**Abstract**

This study investigated the notions of washback and classroom-based assessment within the context of the *First Certificate of English (FCE)* examination and the students at the British Institute of Florence (BIF). A review of the literature examining classroom-based assessment revealed several limitations in previous research. This study examined the washback effects of a classroom-based assessment task on the language processing of two individual learners (i.e., one high-ability and one low-ability) studying at the BIF. The results suggested that the classroom assessment task had a differential impact on how the two learners processed the new learning point, impacting the accuracy and speed to which the new target language form was processed. The findings from the investigation suggested that there were distinct differences in student learning/processing at the individual level.

**Introduction**

Classroom-based assessments have long played a critical role in the pedagogical practices and learning processes of both second language educators and learners. Researchers (Purpura, 2004, 2006, 2007; Rea-Dickins, 2001, 2004, 2008; Shohamy, 1993b) have argued that to fully comprehend these assessment practices and the potential they have for learning, examiners need to investigate the relationship between second language acquisition and language assessment.

In considering classroom-based assessments, the relationship between teaching, learning, and the actual

assessment is central. Teachers, aiming to implement a variety of assessment strategies at key points during the class/lesson, seek to collect information that will subsequently inform their decision making. These aspects of the classroom have been referred to as *testable moments* as they play a critical part in how second language students process language points and augment their own competencies. These moments are comprised of the collection of information through observation, the confirmation of comprehension, and the recognition of learning gaps (Purpura, 2009). Subsequently, an intervention strategy (i.e., teaching) is often incorporated, followed by the collection of more

data/information to confirm or disconfirm the effect of the particular pedagogical strategies on individual language acquisition (i.e., assessment) (Purpura, 2009).

While the importance of classroom assessment on student learning has been acknowledged (Cheng, 2005; Wall, 2000), few studies have actually examined how information from classroom assessments might best be used to promote the language acquisition processes of individual learners students' understanding of language points (Purpura, 2009). Addressing this apparent limitation, the present investigation examined the impact of a classroom assessment task on the language processing of two English as a Foreign Language (EFL) adult learners (i.e., one high-ability learner and one low-ability learner) in an exam-preparation course (i.e., First Certificate of English) at a private language school in Florence, Italy. More specifically, the study investigated the extent to which a language point (i.e., embedded questions/statements) had been processed by two learners of varying language proficiencies during a variety of classroom assessment tasks.

As detailed in the research (Purpura, 2004, 2006, 2007, 2009; Rea-Dickens, 2001, 2004, 2008), an investigation of the associations between classroom-based assessment practices and language learning research might allow us to comprehend such practices more fully, while permitting us to understand more thoroughly their role in fostering students' language learning. Learning-oriented language assessment can, and should, be viewed as a way in which to engage students in their own language acquisition processes (Purpura, 2009). Such assessments provide language teachers with information regarding how much language students have learned, relative to a particular set of objectives or standards. Additionally, they may provide teachers with information regarding the learners' processing of language at a specific point in time (Purpura, 2009). By examining such assessments, a better understanding might be gained of the relationship between classroom teaching and learning and the following: (a) individual student language processing, (b) student language acquisition, and, (c) student performance on learning-oriented language assessments.

## Review of the Literature

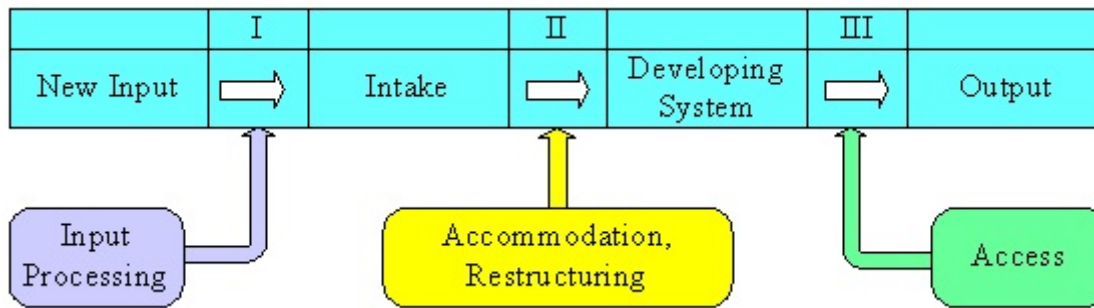
In order to comprehend more thoroughly what instructional information a learner can use for acquiring a language, sound theories of second language acquisition and language processing are needed. Such theories need to consider how learners take a string of words, construe meaning out of it, and at the same time, reorganize and restructure the data in order to develop their mental representation (Cheng, 1995). These theories would allow the language input that the learner receives in an ESL/EFL classroom to be structured in accordance with the natural processes of second language acquisition. Among the theories developed to elucidate and predict various aspects of this acquisition, VanPatten's (1996) model (see Figure 1) helped to account for the relationship between language processing and acquisition. He conceptualized the central processes in second language acquisition as a result of internal mechanisms that permit language learners to map linguistic structures onto their meanings through input, as well as input processing. As such, these structures and meanings may be assessed to produce output (Purpura, 2009). VanPatten highlighted three primary SLA processes: (a) input processing, (b) accommodation and restructuring, and, (c) access (i.e., the retrieval of new linguistic data for production).

In VanPatten's model, the learner passes through a set of processes in constructing her presentation of the language. VanPatten (1996) argued that not all the data to which the learner is exposed becomes available for the development of a second language system. Merely a portion is initially perceived and converted into intake, which is a subset of input that is noticed and processed by the learner. As such, at the initial stage (i.e., I), the learner is presented with new input such as the present progressive tense. The learner begins to process the new form, noticing that something is different about the input; thus, the learner makes a connection between the form and the meaning. "Intake" occurs, subsequently, when the present progressive tense is noticed and associated with actions occurring at the present moment. As such, a form-meaning mapping occurs. As

argued by VanPatten (1996), at the intake stage of the process, the form-meaning mapping might or might not be completely accurate. Regardless, once the intake has taken place, the new form is available to the learner for subsequent processing. As a result, the learner is able to

accommodate the form into her developing linguistic system. The learner may now be able to incorporate the present progressive tense in order to express events that are occurring at the present moment (Purpura, 2009).

Figure 1: VanPatten’s (1966) Model of Input Processing



At this point, the learner may have acquired merely an *understanding* of the new language form. In order for the language point to be readily accessed and retrieved, researchers (e.g., DeKeyser, 1997, 1998, 2007; Pienemann, 1998; Purpura, 2009) have argued that the learner must partake in continued practice with the learning point. Such practice has numerous benefits for the language learner, including the following: (a) it strengthens the learner's understanding of the language point; (b) it develops the learner's capacity to incorporate the learning target in meaningful, contextualized situations; (c) it strengthens the learner's capacity to incorporate the learning target automatically in interaction; and, (d) it provides the learner with opportunities to receive feedback from herself, peers, and the instructor.

Concerning the type of practice that is most beneficial for second language acquisition, several researchers (e.g., de Bot, 1996; Muranoi, 2007; Robinson, 2001; Skehan, 1998; Swain, 1985, 2005) have claimed that practice must give the learners the chance to produce output that is meaningful. In order for learners to be able to notice new language, formulate and test hypotheses regarding language,

foster automaticity and fluency, and engage in conscious reflection on their language failures and successes, output must be seen as not only the "production of forms and meanings at the sentential level", but also as the "interaction with others" (VanPatten, 2004a, p. 27). Taking both cognitive and social dimensions of learning into account, a cognitive-interactionist model of second language learning (see Figure 2) may be considered (Purpura, 2009).

While essential, practice alone is not sufficient; it must be coupled with feedback that is corrective in nature in order for learning to take place (Purpura, 2009). Through the information gained from the incorporation of descriptive feedback, learners will be in a position to reflect on their own learning gaps, with the goal of--ultimately--closing them. Through practice and feedback, learners may be able to proceduralize the learning target, thus enhancing the accuracy and speed of incorporating the new language form in order to communicate. These increases in accuracy and speed may occur in a manner that is systematic and non-linear (National Research Council, 2001).

Obviously, there are numerous chances for assessment during the learning process. These opportunities can have a considerable impact on learning. Figure 3 highlights how the learning process can incorporate assessment for individual learners, and the role that feedback can have in this process. The initial chance for learning-oriented assessment to take place is before the actual instruction. For example, an instructor may wish to ascertain her

students' strengths and limitations regarding autobiographical writing. To obtain this data, a diagnostic assessment is administered, requiring learners to engage in this form of writing. By having a clearer understanding of the learners' current level of performance, the instructor is better able to implement instruction targeted to close the learning gaps that may exist. Purpura (2009) called this "assessment for diagnosis" (p. 317).

Figure 2: Cognitive-Interactionist Model of SLA

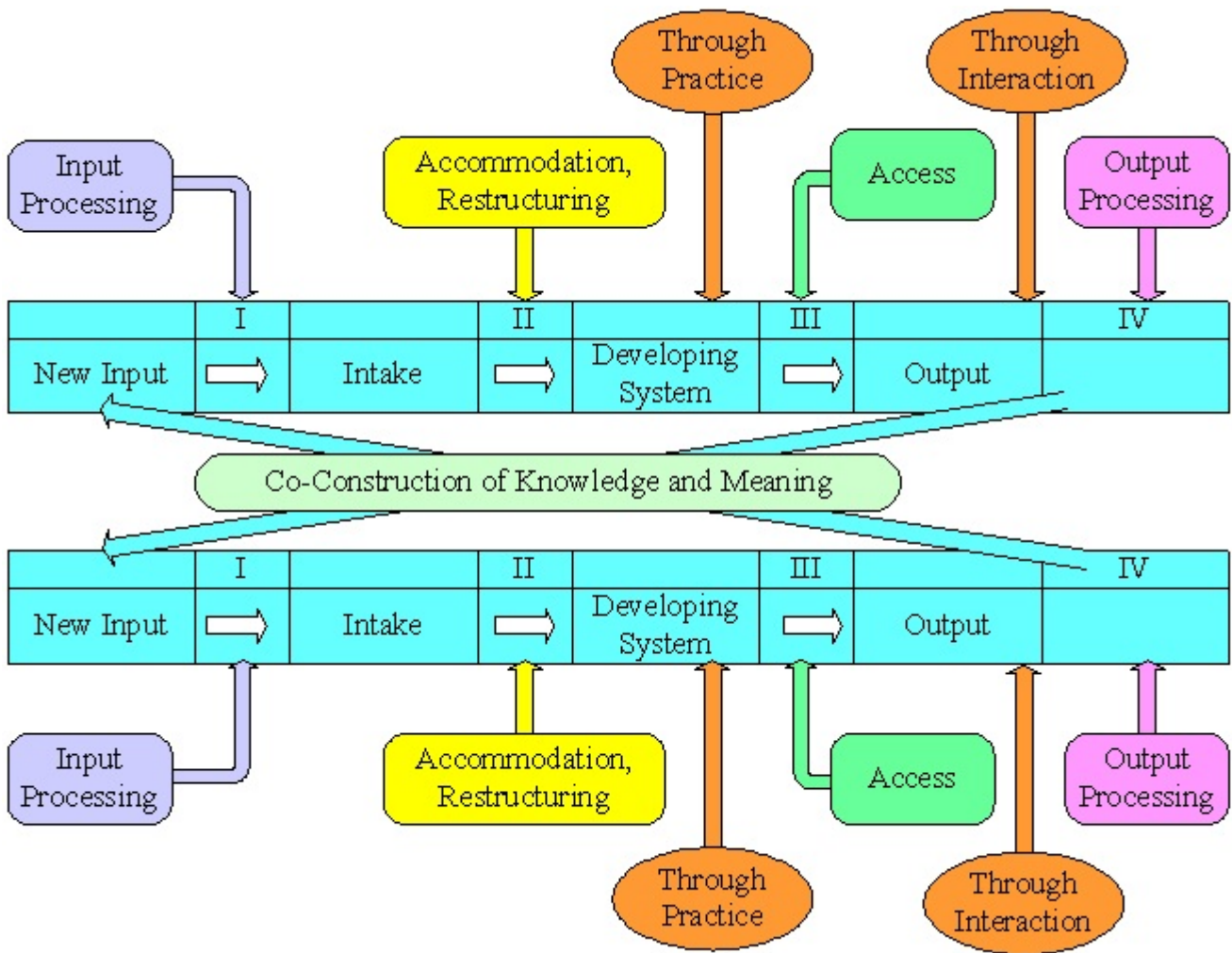
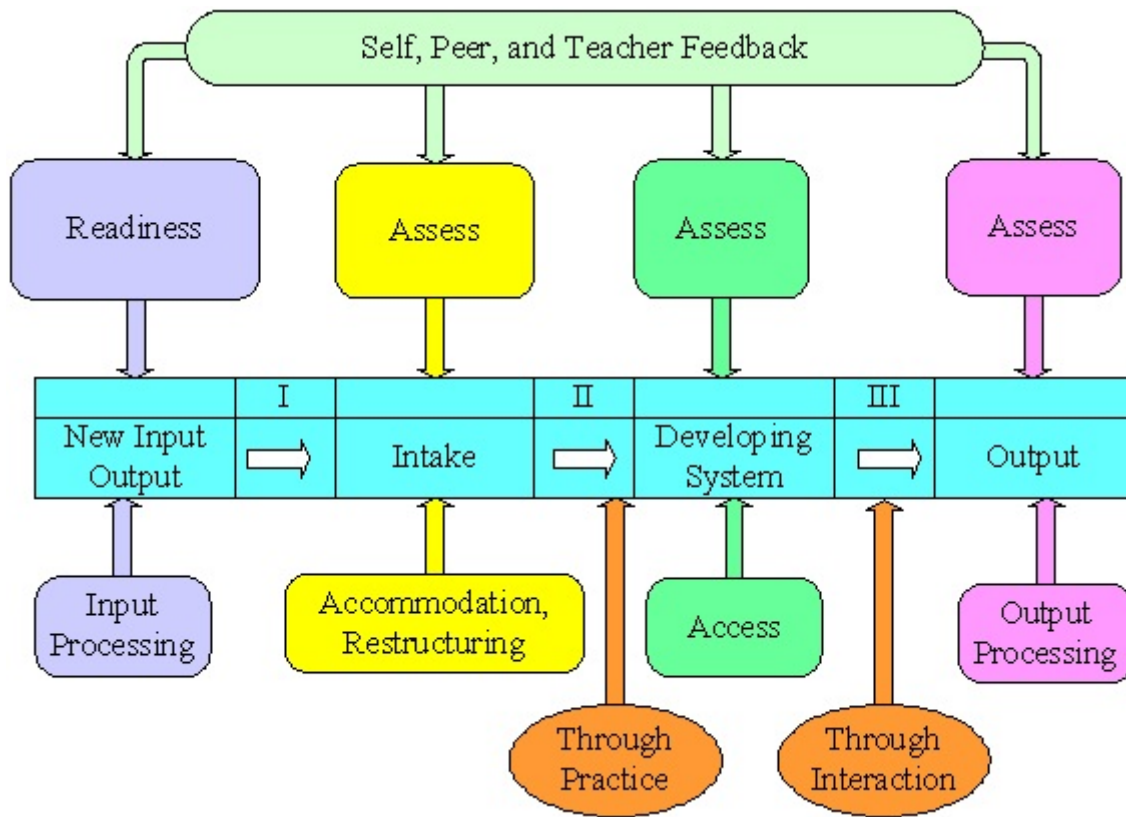


Figure 3: Learning-Oriented Model of Language Assessment



Post-instruction provides an additional chance for learning-oriented assessment. This takes place after learners have processed--theoretically--the new learning target by incorporating it into their evolving linguistic system. Such assessment can also occur when learners have developed the capacity to incorporate the new language feature in interaction that is meaningful. This, according to Purpura (2009) can be referred to as "assessing for output" (p. 318).

To conclude, the relationship between classroom-based assessment and individual learning in classroom contexts is one with important methodological and theoretical implications. Unfortunately, to date, little empirical research has explored this relationship. As argued by Purpura (2009), such research should begin with an examination of the learning process in view of

how assessment can be incorporated for a variety of purposes with different learners as they proceed towards second language acquisition. In order to understand these notions more thoroughly, a greater initial emphasis needs to be placed on learning. In addition, there must be a greater focus on how teachers can implement learning-oriented assessment and how the data from these assessments can be used to help inform and guide the learning process (Purpura, 2009).

In order to address the limitations in the research, the current study investigated the following research questions:

1. How do individual EFL learners studying at a private language center process a new learning point (i.e., embedded questions/

statements) on a classroom-based, learning-oriented language assessment?

2. How and to what degree do high-and low-ability language learners differ in their capacity to process this new learning point?

## Methodology

### Research Design

The current inquiry, a case study, investigated the language processing of two EFL learners studying at a private language center (i.e., the British Institute of Florence), as evidenced by their performance on a classroom-based assessment task (i.e., embedded questions/statements). In order to comprehend, describe, and conceptualize the complexity of classroom assessments and language processing more fully, the inquiry incorporated a mixed-methods design, with the researchers collecting and analyzing both qualitative and quantitative data on a classroom-based assessment.

### Study Participants

The present investigation examined the language processing of two students (i.e., a high-ability learner and a low-ability learner) studying in a *First Certificate in English* (FCE) preparation course at the British Institute of Florence (BIF). To select the participants for this phase of the inquiry, a purposive sampling method was employed; the two learners were chosen based on their score differences on the *FCE* examination.

Anna, an L1 Italian speaker, was a 32 year old female who had studied English for three years, including eight months at the BIF. For the purposes of the current study, she was considered a high-ability learner as she performed well on her overall *FCE* examination taken at the end of the academic year, receiving a mark of 187 (out of 200). Additionally, she did well on the *Use of English* final exam in her

BIF class, achieving a mark of 39 (out of 40). Paolo, also an L1 Italian speaker, was a 35-year-old male, who had studied English for four years, including eight months at the BIF. He was a low-ability learner as evidenced by his low marks on the overall *FCE* examination (132 out of 200) and *Use of English* test (18 marks out of 40). These data are summarized in Table 1.

Table 1: Learner Background Characteristics

Source	High-ability	Low-ability
L1	Italian	Italian
Years of English	3	4
BIF Course	FCE Prep	FCE Prep
BIF Teacher	Teacher 1	Teacher 1
Final FCE exam score	187 (200)	132 (200)
Use of English score	39 (40)	18 (40)

### Classroom Assessment Task and Data Collection

The present study investigated a classroom lesson focused on embedded questions/statements, a grammatical point that had been introduced during the previous class and that is considered to be within the content domain of the *FCE* examination. The lesson was comprised of one principal task with several distinct activities. At the beginning of the class, the teacher distributed to the students a two-page, type-written story, comprised of approximately 500 words of prose. The story, written for the intermediate level and focusing on the theme of friendship, contained a total of 14 embedded sentences. At the beginning of the lesson, the teacher provided instructions to the learners. She told them to read the passage quickly yet carefully and to underline all the embedded questions and statements that were located within the story. The teacher informed the learners that there were 14 such examples in the passage. She also told them to work independently and put their pens down when they completed the task.

Next, the teacher explained the purpose of the classroom task to the students. She stated that the grammatical point (i.e., embedded statements/questions) is tested on the *FCE* examination and, as such, is important to know. In addition, she stated that the task would help the learners learn to work quickly but carefully, a skill, she emphasized, that was critical for success on the *FCE* test. Prior to beginning, the teacher asked the students if they had any questions. No one responded. The teacher provided no assistance to the learners during the task.

After finishing the task, the teacher told the students to review their answers working in pairs. That is, students were asked to score their answers together and, subsequently, talk about each item. The teacher instructed the learners to discuss the following points with their partners: (a) the answers they had chosen, (b) the reasons for choosing these answers, (c) the perceived level of ease or difficulty of the task, (d) the aspects of the previous instruction that may have helped or hindered task completion and/or comprehension, and, (e) how the lesson may help prepare them for the upcoming *FCE* examination.

### **Data Collection and Transcription**

The observed lesson was videotaped by two Cambridge ESOL-based researchers; one of the researchers controlled the camera while the other handled the microphone. During the lesson, the researchers were positioned at the rear of the classroom. They did not participate in the class. Prior to the videotaping, the students were reminded of the purpose of recording and were asked to ignore the presence of the researchers. The lesson was videotaped for a total of 62 minutes. Of the total recording time, the first 21 minutes (33.9%) of recording time was spent videotaping Anna and Paolo. No other actions/dialogues of the others in the class were recorded. This 21-minute segment was used for the current analysis since this was the only example in the data that focused on the learners' language processing of embedded questions and statements.

The video camera was not stopped during any part of the recording; no time compression alterations occurred while making the final DVD. Once completed, the video recording from this phase of the study was digitized and stored in a multimedia database. The videotape number and digital time display were then placed onto the actual recording, thus permitting for fast and reliable indexing and time references. Time codes were set to correspond to each clip. The recording was then transferred to DVDs in order to make viewing more accessible.

Upon digitizing the video, the interaction was transcribed by the researcher using CDC-EX Text (Centers for Disease Control, 2009). The students' conversation was transcribed for content but not for conversational features (e.g., small talk, repetitions, or false starts) (Mackey & Gass, 2005). Additionally, non-linguistic features such as laughter were not included in the transcript. In order to aid with content segmentation when reviewing the transcripts, the following notations were incorporated (adopted from Krohn, 2008; Mackey & Gass, 2005; McLellan, MacQueen, & Neidig, 2003; Poland, 2001):

- (a) Each utterance started with capital letters and ended with a period.
- (b) Three dashes marked inter- and intra-sentential pauses.
- (c) Words or phrases the transcriber was not sure about were enclosed in parentheses and a question mark was placed before and after the parentheses.
- (d) Utterances that were not audible were marked with the phrase "inaudible information" in parentheses.
- (f) Italics were used for phrases or words that were spoken in an emphatic tone by the participants.

### **Student Scoring Procedures**

After all the students had completed the classroom



assessment task, the teacher gave each learner a copy of the story containing the correct answers. That is, the embedded questions/statements had been underlined by the instructor. The learners were told to work in pairs to determine how many had been correctly underlined. The students gave themselves one point for each question/statement that had been correctly underlined. Anna (i.e., the high-ability learner) and Paolo (i.e., the low-ability learner) reviewed and scored their answers together. At the end of the collaboration, they reported the number of correct answers that they each had.

### **Data Analysis**

In the present inquiry, the analysis included the reduction of the classroom data through coding (Wiersma, 1995). The aim was to create categories that were exhaustive and mutually exclusive. In the current study, the broad, pre-existing coding categories were based on language processing models (Purpura, 2009; VanPatten, 1996). These categories were: (a) noticing, (b) accommodation, (c) developing system (through practice), and, (d) feedback.

The coding procedures mirrored the iterative process suggested by Gillham (2000b). First, in the transcriptions, substantive remarks were located and highlighted. Then, upon subsequent readings of the transcripts, each of the remarks that had been highlighted was designated for one of the categories (e.g., feedback). After initial coding, the remarks were reviewed to determine if they had been categorized accurately. This coding served as a basis for the description, interpretation, and reporting of the classroom language processing data (Krohn, 2008).

In order to augment the overall reliability of the codings, the observed lesson was viewed three times by the principal coder and the same analysis of the video recording was conducted each time. Repeat viewings allowed the coder to describe the participants' (i.e., Anna and Paolo) classroom behavior extensively, thus augmenting the level of provision in the analyses.

To enhance the reliability of data collection and foster consistency in the units of analysis, two inter-coders recoded the videotaped classroom observations. This approach has been used in previous language assessment research (Cheng, 2005). Recoding encompassed reviewing the videotaped classroom and recoding a lesson that had been previously analyzed. In the present inquiry, inter-coders consisted of the primary researcher, as well as an Applied Linguistics Ed.D. student with experience in coding classroom observation data. At first, the primary researcher coded all of the classroom observation video. Following this, the doctoral student watched all 21 minutes of the classroom video. Greater than 95% agreement was reached between the coders. The nature of the slight disagreement between the coders focused, primarily, on the coding of input processing.

### **Overview of Statistical Procedures**

In the present inquiry, the statistical procedures investigated the following features: (a) accuracy of noticing, (b) accuracy of noticing with repeated practice, (c) speed of noticing, and, (d) speed of noticing with repeated practice. In order to determine students' accuracy of noticing, the number of correct responses (i.e., the number of embedded questions/statements underlined correctly) was divided by the total number of items (i.e., 14) in the passage. Both the raw scores and percentages were reported. Second, in order to determine the students' accuracy of noticing with repeated practice, the total number of items on the test (i.e., 14) was first divided into two distinct sections: Section 1 (Items 1-7), and Section 2 (Items 8-14). The number of correct responses and percentage of items correct for the first seven items (i.e., Items 1-7) were calculated and compared to the total number of correct responses and percentage of items correct for the next seven items (i.e., 8-14).

Third, with regard to the speed of noticing, the length of time each learner took to finish the classroom assessment task (i.e., to underline all 14



items) was tabulated and converted to minutes and seconds (e.g., 7:32). Intra- and inter-learner differences were then noted. Finally, in order to determine the students' speed of noticing with repeated practice, the assessment task was again divided into two distinct sections: Section 1 (Items 1-7) and Section 2 (Items 8-14). The length of time it took each learner to underline the first seven items was calculated and compared to the length of time it took to complete the next seven items (i.e., 8-14). Intra-and inter-student differences were again noted.

## Results and Discussion

The results are presented according to the various components of the previously described language processing, namely: (a) noticing, (b) accommodation, (c) developing system (through practice), and, (d) feedback.

### Noticing

In the previous lesson, the two learners had been presented with new input (i.e., embedded questions/statements). Noticing that there was something different about this input, the learners began to process it. The following section highlights several of the comments made by the learners regarding their capacity to notice the new input and make the connection between the form and the meaning (i.e., intake) (Purpura, 2009).

In discussing the item with an embedded question, "*Do you think he is here?*", Anna stated:

#### **Excerpt 5.1/Anna/1**

Remember, the teacher told us about this one.

We studied this yesterday. This is an embedded question. It is comprised of a noun clause, a question word, a verb, and a subject.

Conversely, in describing the same item, Paolo declared:

#### **Excerpt 5.2/Paolo/1**

I remember that we studied this [the grammar] in class, but I don't understand it too good. It

is still a little difficult for me.

In discussing another item, ("*Do you know how he is feeling?*"), Anna commented:

#### **Excerpt 5.3/Anna/2**

Remember when the teacher was explaining this to us? She said that these questions normally follow the statement order. The subject [pointing to he] goes before the verb [pointing to is]. It has everything the teacher said it should have.

Paolo responded to these statements, remarking:

#### **Excerpt 5.4/Paolo/2**

I remember the teacher's lesson. I understood a little the lesson, but not too much. I still do not have comfort with this.

He later added:

#### **Excerpt 5.5/Paolo/3**

I know we studied it, but I don't understand it too good.

Anna's comments suggested that the embedded question/statement instruction that she previously received appeared to aid her capacity to concentrate on and notice the examined language forms. The learner appeared to process the previous instruction, thus fostering her capacity to internalize the structures that were presented in class. She appeared to be able to make the connection between the form and its meaning. Additionally, the remarks suggested that Anna was aware of the performance that was expected by the teacher for this activity. Because of this apparent understanding, it is more likely that she will be able to engage in the processes of closing the learning gaps and focused repair (VanPatten, 1996). Conversely, Paolo did not appear to have internalized the lesson presented in class. As such, for him, instruction did not appear to help him focus (i.e., notice) his attention on the new target language forms. This may have been due, in part, to the learner not being developmentally ready for the new forms (VanPatten, 1996).

The apparent differences in the learners' capacity to notice the language forms was indicative in their accuracy and speed in this classroom task. There

appeared to be distinct differences in the degree to which Anna accurately noticed the linguistic form (i.e., the embedded questions/statements), relative to Paolo. Out of a possible 14 embedded statements/questions contained in the passage, Anna, the high-ability student, was able to correctly underline 12 of them. That is, she accurately noticed 85.7% of the statements/questions in the prose. These data suggested that the high-ability learner, as highlighted by Schmidt (1995), may have consciously noticed the input. In contrast, the low-ability student, Paolo, appeared to have difficulty in noticing the correct answers in the input; he did not appear to consciously notice the input. He was only able to notice seven out of the 14 (50%) statements/questions. Thus, the low-ability learner did not appear to have internalized the targeted language form.

In addition to the difference in the accuracy of the noticing between the high-and low-ability learner, there also appeared to be distinct differences in the speed with which the two learners noticed the targeted forms. Anna needed 7 minutes and 32 seconds to underline all 14 items. However, Paolo needed 12 minutes and 18 seconds to complete the activity, a considerable difference of 4 minutes and 46 seconds between the two learners. Because of her apparent ability to map form and meaning, she was able to complete the task more accurately and quickly, relative to Paolo.

### **Accommodation/Restructuring**

Once intake has taken place, the new language form is available for more processing, and may be accommodated into the learner's language system (VanPatten, 1996). Several comments made by the two learners highlighted the differences in their abilities to accommodate and restructure their language.

Concerning the item with an embedded question, "Do you know where the store is?", Anna commented:

#### **Excerpt 5.6 /Anna/3**

Before I never said, "Do you know where the

store is?" I said, "Do you know where is the store?" Now, I think I understand the difference. I am happy.

In response to this comment, the low-ability student, Paolo, remarked:

#### **Excerpt 5.7/Paolo/4**

For me, it is still a little confusing. I am not sure if I understand 100%. I cannot use good. I don't think I improve.

Anna's comment suggested that she was able to compare her post-practice proficiency with her proficiency prior to the practice. That is, she appeared to be able to accommodate the new language structures. She was able to notice the gaps in her learning, while comparing her observed input and typical output that are rooted in her current interlanguage system. By doing so, she was better able to reflect on what she has noticed and understand its impact on her learning (Cross, 2002). Paolo, however, had difficulty noticing these gaps. Due to his lack of understanding, full engagement in process-focused repair may have been more difficult for him.

### **Developing System (Through Practice)**

Anna's previous comments suggested that she had acquired an understanding of the new grammatical form. However, in order for the learning point to be readily accessed by the learners, they must engage in repeated practice with the target language form (VanPatten, 1996). The following section highlights the impact of repeated practice on the learners' capacity to strengthen their understanding of the learning point.

Anna appeared to benefit greatly from the repeated exposures to the target language form. Pointing to item 7 ("*Do you know what a true friend is?*"), she commented,

#### **Excerpt 5.9 /Anna/4**

This is when I really began to understand. The activity was easy here. I got all of these correct.

The repeated practice with the structures allowed her

to process and internalize the learning point. She later remarked:

**Excerpt 5.10 /Anna/5**

I was able to do these quickly because many of the examples were similar.

She then added:

**Excerpt 5.11 /Anna/6**

There is a structure to the answers. It is like a game with solutions.

In turn, Paolo did not appear to benefit from the repeated exposure to the target language form.

He declared:

**Excerpt 5.12 /Paolo/5**

I think the more examples just make me more confuse.

He later questioned:

**Excerpt 5.13 /Paolo/6**

Why we have to study so many of the same?

These comments suggested that the differences in the degree to which the two learners processed the language were considerable. For Anna, this additional practice time appeared to strengthen her understanding of the examined learning point (VanPatten, 1996). She was able to produce meaningful output, while noticing the new grammatical form. It appeared that, at least theoretically, the new learning target had been processed by the learner.

Anna appeared to be able to accommodate the new information into her developing system and restructure how it was represented. Conversely, Paolo was not able to accommodate the learning points into his developing system. At this time, it is unlikely that he would be able to access and retrieve the learning point automatically; he would not, most likely, be able to use the learning target meaningfully in context (VanPatten, 1996).

There were distinct differences in how repeated exposure to the target language form affected students' accuracy and speed in noticing the forms (National Research Council, 2001). With regard to accuracy, the high-ability learner accurately noticed five of the first seven items (71.4%). However, she

accurately noticed 100% of items 8-14. Thus, through repeated practice with the target language form, she appeared to notice the form with more accuracy. Conversely, the low-ability learner accurately noticed four of the first seven items (57.1%). However, for items 8-14, he accurately noticed only three of the seven items (42.9%). Thus, the successive attempts with increased exposure to the target language form did not appear to aid the low-ability students in accurately noticing the new language form, since he had never fully mapped form into meaning.

Differences were also noted in the speed with which the learners noticed the items, with repeated exposure to the forms. To underline the language forms (i.e., embedded statements/questions) in items 1-7, the high-ability students needed 4 minutes and 49 seconds. However, to notice the language forms in items 8-14, she needed only 2 minutes and 43 seconds. Thus, she completed items 8-14 in 2 minutes and 7 seconds less time than it took her to complete items 1-7. As such, as has been noted in the research (Schmidt, 1990), it appeared that with more exposure to the new language form, the high-ability learner noticed the forms more quickly. Through practice, she appeared to have been able to proceduralize the learning target (VanPatten, 1996).

In contrast, the low-level learner completed items 1-7 in 6 minutes and 12 seconds. Items 8-14, in turn, were completed in 6 minutes and 6 seconds, a difference of only 6 seconds. Thus, the low-ability learner did not appear to notice the new language form more quickly with repeated exposures to and practice with that form; the additional practice did not appear to aid the low-ability learner in noticing the new language form.

## **Feedback**

Practice must be accompanied by descriptive feedback in order for learners to have opportunities to consider the learning gaps (VanPatten, 1996). Several comments made by the learners highlighted this important notion. With regard to the item, "*Do you*

know what time the game will begin?," Anna stated:

**Excerpt 5.14/Anna/7**

You see, here [slowly pointing to various parts of the sentence] is the main question, this one is the interrogative, here is the subject, verb, and object. You show me. Which is the verb?

In response to this, Paolo remarked:

**Excerpt 5.15 /Paolo/7**

So, this one [pointing] is the verb and here is the subject, right? I understand those, but I don't understand the others. OK. I think I comprehend. But, I know now, this one is the subject and this one is the verb. I need to practice with the others.

Anna then responded:

**Excerpt 5.16/Anna/8**

That's right. You understand. You selected the subject and the verb correct. Now, let's practice the objects and the interrogative.

While the feedback provided by the high-ability learner was not extensive, it was descriptive in nature. Such feedback provided Paolo with an opportunity to reflect on the learning gap. Ultimately, this reflection can lead him to close the learning gap. In addition, Anna provided her classmate with specific information on how to improve. Such information is vital for learners to enhance overall learning gains, if it is used to map form onto meaning (VanPatten, 1996).

### **Conclusion and Implications**

The present inquiry examining the impact of a classroom assessment on the language processing of high-and low-ability language learners yielded several interesting findings. The two learners appeared to process language differently. The high-ability learner was able to notice the new language form (i.e., embedded questions/statements) more quickly and accurately, relative to the low-ability learner. Repeated practice with the new form appeared to help her to proceduralize the new form and 'notice the gap' between her current proficiency level and the target

level. Conversely, the repeated exposures to the new language form seemed to have a limited effect on the low-ability learner in noticing the gap and in accommodating the new learning point into his interlanguage. Although small scale in nature, the initial findings from this phase of the current study suggest that the learning-oriented classroom-based assessment had an differential effect on the two students' language processing, and subsequently, their language acquisition. The results suggest that the high-and low-ability learners processed language differently, leading to different levels of proceduralization of the new target language form.

The present inquiry has several theoretical, methodological, and pedagogical implications for the fields of education and applied linguistics. To begin, models of language processing (Ellis, 1997; Purpura, 2009; VanPatten, 1996) have been proposed. These models have accounted for some of the most important factors in language learners' processing of new target language structures, including noticing, intake, input processing, accommodation/restructuring, developing system, and feedback. Few empirical studies, however, have examined the impact of a classroom assessment task on the language processing of individual EFL learners. By investigating this relationship, the current inquiry may contribute to the field's understanding of how these different assessments can be implemented in distinct ways in order to aid individual language learners on their paths towards second language acquisition (Purpura, 2009). Through such a focus, viable inferences regarding the relationship between classroom assessment on individual language learners' second language acquisition may be made.

Additionally, the present study also incorporated a mixed-methods design in order to examine the relationship between a classroom-based assessment task meant to be representative of *FCE* content and the language processing of individual students at the BIF. By doing so, the current inquiry was able to investigate the classroom behaviors of the two learners as they pertained to language processing, in

addition to measuring their performance on a classroom-oriented, language processing task. Such a methodological approach allowed for the focus to be on the actual learning process of the individual students. This approach is critical for a more thorough understanding of the impact of classroom assessment on individuals (Purpura, 2009).

Finally, with regard to the pedagogical implications, the present study may provide valuable insights concerning the relationship between classroom-based assessments and the language processing of individual learners. By investigating the language learning of students, the influence of assessments on such learning may be better understood. The information gathered from the current inquiry may provide teachers and learners with formative data, which may, in turn, help them guide their own instructional practices and learning. Lastly, this data may allow teachers to alter their instructional methods and materials. By doing so, they may be better able to meet the evolving capabilities, needs, and interests of their learners (Bachman & Palmer, 1996).

## References

- Bachman, L.F., & Palmer, A. (1996). *Language testing in practice*, Oxford: Oxford University Press.
- Cheng, L. (1997). How does washback influence teaching? Implications for Hong Kong, *Language and Education*, 11, 38-54.
- de Bot, K. (1996). The psycholinguistics of the output hypothesis. *Language Learning* 46(3), 529-55.
- DeKeyser, R. M. (1997). Beyond explicit rule learning: Automatizing second language morphosyntax. *Studies in Second Language Acquisition*, 19, 195-221.
- DeKeyser, R. M. (1998). Beyond focus on form: Cognitive perspectives on learning and practicing second language grammar. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 42-63). Cambridge: Cambridge University Press.
- DeKeyser, R. M. (Ed.) (2007). *Practice in a second language: Perspectives from applied linguistics and cognitive psychology*. Cambridge: Cambridge University Press.
- Ellis, R. (1997). *SLA research and language teaching*. Oxford: Oxford University Press.
- Gillham, B. (2000b). *The research interview*. London: Continuum.
- Krohn, N. (2008). *The Hebrew language needs of Rabbinical students in the conservation movement*. Unpublished doctoral dissertation, Teachers College, Columbia University, New York, New York.
- Mackey, A., & Gass, S. M. (2005). *Second language research: Methodology and design*. Mahwah, NJ: Erlbaum.
- McLellan, E., MacQueen, K. M., & Neidig, J. (2003). Beyond the qualitative interview: Data preparation and transcription. *Field Methods*, 15(1), 63-84.
- Muranoi, H. (2000). Focus on form through input enhancement: Integrating formal instruction into a communicative task in EFL classrooms. *Language Learning*, 50(4), 617-673.
- Pienemann, M. (1998). Is language teachable? Psycholinguistic experiments and hypotheses. *Applied Linguistics*, 10, 52-79.
- Poland, B. D. (2001). Transcription quality. In J. F. Gubrium & J. A. Holstein (Eds.), *Handbook of interview research* (pp. 629-649). Thousand Oaks, CA: Sage.
- Purpura, J.E. (2004). *Assessing grammar*. Cambridge: Cambridge University Press.
- Purpura, J.E. (2006). *Issues and challenges in measuring SLA*. Colloquial presentation: Towards theoretically meaningful L2 assessments for SLA research. American Association for Applied Linguistics Conference, June 2006.
- Purpura, J.E. (2007). *Conceptualizing and measuring meaning in SLA research*. Presented at the Second Language Research Forum, University of Illinois, Champaign-Urbana ](Keynote Address).
- Purpura, J.E. (2009). *The impact of language*

- assessment on the individual*, Association of Language Testers of Europe (ALTE). 3rd International Conference, Cambridge University, Cambridge, UK.
- Rea-Dickens, P. (2001). Mirror, mirror on the wall: Identifying processes of language assessment. *Language Testing*, 18(4), 429-262.
- Rea-Dickens, P. (2004). Understanding teachers as agents of assessment. *Language Testing*, 21(31), 249-258.
- Rea-Dickens, P. (2008). Classroom-based assessment. In E. Shohamy & N. Hornberger (Eds.), *Encyclopedia of Language and Education, 2nd Edition, Volume 7: Language Testing and Assessment* (pp. 257-271). New York: Springer.
- Robinson, P. (2001). Task complexity, cognitive resources, and syllabus design: A triadic theory of task influences on SLA. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 284-318). New York: Cambridge University Press.
- Shohamy, E. (1993b). A collaborative/diagnostic feedback model for testing foreign languages. In D. Douglas & C. Chapelle (Eds.), *A new decade of language testing research* (pp. 185-202). Alexandria, VA: TESOL Publications.
- Skehan, P. (1998a). *A cognitive approach to language learning*. Oxford: Oxford University Press.
- Swain, M. (1985). Large-scale communicative language testing: A case study. In Y.P. Lee, C.Y.Y., Fok, R. Lord, & G. Low (Eds.), *New directions in language testing* (pp. 35-46). Oxford: Pergamon Press.
- VanPatten, B. (1996). *Input processing and grammar instruction in second language acquisition*. Norwood, NJ: Ablex.
- VanPatten, B. (2004a). Input processing in second language acquisition. In B. VanPatten (Eds.), *Processing instruction: Theory, research, and commentary* (pp. 5-31). Mahwah, NJ: Lawrence Erlbaum Associates.
- Wall, D. (1997). Impact and washback in language testing. In C. Clapham & D. Corson (Eds.), *Encyclopedia of language and education: Vol. 7. Language testing and Assessment* (pp. 291-302). Dordrecht: Kluwer Academic.
- Wiersma, W. (1995). *Research methods in education* (6th ed.). Boston: Allyn and Bacon.
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