

Grammar Charts Analysis: A Tool to Promote Students' Visual
Literacy and Autonomous Learning

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As language educators, we would like our students to learn the language and to get to the point to be able to learn it by themselves. Foreign Language textbooks are designed so that students can use them autonomously as a self-reference source, and include visual representations to transmit language related information in a way that is clear for students to understand. However, most of the time, neither do students nor do we know how to fully exploit these visual aids. We do not include the interpretation of these visual aids as part of our lesson plans and, in the worst case scenario, we ignore that "the way we learn bears a strong relationship to the way our senses operate" and that "a very high proportion of all sensory learning is visual" (Avgerinou & Ericson, 1997, 287).

Among the visual aids that textbooks include are pictures, cartoons and visual organizers (VO's) like i) grammar, vocabulary and pronunciation charts, ii) mind maps and iii) flow charts. Mind maps and flow charts are commonly used in reading comprehension and pre-writing exercises. Grammar, vocabulary and pronunciation charts, on the other hand, are used to organize the language information. The ability to interpret and/or create VO's is usually referred to as *visual literacy*.

Understanding pictures and cartoons might be straightforward given their iconic character. Understanding VO's, however, might not be easy, since what they express does not transparently resemble what they represent, and that they use different kinds of symbolic visual elements (arrows, lines, colors, shapes, letter types and the like) and language.

This paper will attempt to show how we as FL teachers can help our students develop their visual literacy concerning grammar charts, which allows them to make better sense of the grammar information presented in their textbooks. First, it will briefly review the concept of visual literacy (VL), its relevance to the learning processes and its connection to EFL; an argument will also be made regarding the lack of emphasis in the literature on the training of students to interpret and use grammar charts to improve grammar learning. Second, it will explore ways in which we can teach our students the language of grammar charts. Finally, it will set some guidelines for teachers to help students make sense of and properly use the information in grammar charts to do grammar exercises.

Visual Literacy in EFL

General Concepts

The term visual literacy was coined by John Debes in 1969. He defined it as the vision-competencies that allow any visual literate individual:

"...to discriminate and interpret the visible actions, objects, symbols, natural or man-made, that he encounters in his environment (...) to communicate with others (...) and enjoy the masterworks of visual communication." (Avgerinou & Ericson, 1997, 281).

This definition has been criticized for its vagueness. First, it says what a visually literate person can do, but does not specify what visual literacy is (*ibid*). Second, it does not set a clear distinction between visual literacy and verbal literacy, which, according to Avgerinou, is necessary to define what falls within the scope of the visual and what falls within the scope of the verbal.

J. Hortin developed another definition of the term: "Visual literacy is the ability to understand (read) and use (write) and to think and learn in terms of images, i.e., to think visually." (*ibid.*, 281). This definition is similar to Wileman's (1993): "the ability to 'read', interpret and understand information

presented in pictorial or graphic images" (p.114 as cited in Stokes, 2001, p.12).

Hortin's definition includes two new aspects: thinking and learning with visual images. Wileman's, on the other hand, places more emphasis on the decoding and encoding processes. In relation to the use of FL textbooks, these definitions imply that a visually literate student would be able to understand language information charts and to create her own VO's to make sense of such information. This creation would presuppose thinking the images before creating them.

An attempt to develop a comprehensive description of visual literacy was made in The Delphi Study. The participants in this study had contributed in the International Visual Literacy Association's conferences and Journals (JVVL) between 1984 and 1988. Their definitions of VL differed in several aspects. The following two conclusions drawn from the study are pertinent to this paper. These conclusions are followed by a description of how they justify teaching students the language and the use of textbook VO's in the FL class.

First, visual literacy refers to the use of visuals for the purposes of: communicating, thought, learning, construction of meaning, creative expression and aesthetic enjoyment. In their attempt to learn new language information, students go through

thought processes (comparing, contrasting, generalizing, inferring, etc). These processes are usually conveyed through visual elements like spacing (locating an item above/ to the sides /below another one), lines, colors, symbols, etc. VO's can also be used to convey a message (e.g. students can create their own charts to show others their understanding of language topics.).

Second, a VO may include icons, non-verbal symbols and written words. Icons resemble what they represent in one or several aspects. An example of this is the icon of the garbage bin on the desktop of a PC. Icons are not common in grammar charts. They can be found more often in vocabulary charts in the form of pictures and cartoons. Symbols, on the other hand, do not resemble what they represent. They are arbitrary in nature: a person has to learn what they mean to use them. The symbol of an arrow is an example of that. Arrows do not represent real arrows but other aspects like direction, transformation or inclusion. The meaning of symbols is not always straightforward and may vary depending on the purpose of the visual organizer in which these symbols are used. In a grammar chart, for example, an arrow might mean the transformation of a verb into its past form (*play* → *played*). In another grammar chart, it could mean the relationship between a subject pronoun and its corresponding possessive adjective (*I* → *my*). Words are an important element of

the visual organizers. Words can be part of the units of analysis (structures, grammar forms) or of the explanations about them. The meaning of the visual organizers, of which words are one part, depends on their articulation with symbols. If symbols, icons and words are used for students to understand grammar, then students have to learn what they mean in isolation and when used in tandem.

Use of visual organizers in EFL

A review of some works on the relationship between foreign language learning and visual literacy allows us to draw two conclusions:

First, visual literacy in FL learning focuses more on the facilitation of comprehension processes. Recent studies on visual literacy in language learning and use mainly aim at understanding students' comprehension in reading (Asim & Gulcan, 2005) and listening (Gruba, 2006). They have also focused on the role of VO's as tools to reduce the cognitive load, defined as the amount of mental effort a task imposes on a learner's cognitive system (Huifen and Tsuiping, 2006). Little emphasis has been placed on the use of VO's to learn language-related information like pronunciation, vocabulary or grammar.

Second, when used for learning language information, more emphasis has been given to the use of VO's as a tool for

teachers to be included in their practice or for students' vocabulary learning. Kang (2004), for example, suggests that teachers can use them to prepare the class (before instruction), present contents to students and to prepare students to approach new information (during instruction), and to assess one's lesson (after instruction). In relation to language information management by students, he presents some ideas on how diagrams could be used to classify verbs according to some grammar features as a way to organize them in a logical structure. Unfortunately, Kang, like other authors, does not study or give recommendations on how to use the diagram to memorize the studied material or to later retrieve and use what was learned. Although he suggests that VO's can be used in grammar learning, he does not give ideas on what kinds of VO's can be used or how to learn grammar with VO's.

A simple search on the Internet, of a data base or at a library will show this gap in the literature on visual literacy and FL learning. The following section of this paper will attempt to give ideas on how to teach students the language of grammar charts, how to use grammar charts to help them discover the L2 grammar and how to use grammar charts to complete grammar exercises in their books.

Teaching the language of grammar charts to students.

For students to be able to learn grammar more effectively, they have to be taught how grammar charts in their English textbooks organize information. As any system to organize and communicate ideas, grammar charts in textbooks have their own vocabulary and syntax. The following chart illustrates this point.

Verb TO BE in Statements and Questions; Pronouns <i>She</i> , <i>He</i> and <i>They</i>			Title
Affirmative Statements	Negative Statements	Questions and Short Answers	
John is generous. He's generous.	John is not cheap. He's not cheap.	Is John generous? Yes, he is . / No, he's not .	
Camila's lazy. She's lazy	Camila's not hard-working. She's not hard-working.	Is Camila hard-working? Yes, she is . / No, she's not	bold type
Carlos and Lina are interesting. They're interesting.	Carlos and Lina are not dull. They're not dull.	Are Carlos and Lina dull? Yes, they are . / No, they're not .	
<i>Camila's = Camila is</i> <i>She's = She is</i>	<i>He's = He is</i> <i>They're not = They are not</i>	Dividing Lines	

Diagram annotations:

- Spaces**: Points to the space between 'She's' and 'lazy' in the affirmative column.
- bold type**: Points to the bolded words 'is' and 'not' in the question and answer of the second row.
- Dividing Lines**: Points to the horizontal line separating the main content from the symbols/italics section.
- Symbols**: Points to the equals signs (=) in the symbols section.
- Italics**: Points to the italicized text in the symbols section.

The vocabulary of the language of grammar charts

Type Face: In English textbooks, type face is a variation in which a letter is written. Type faces may vary in size, shape and color intensity. The most common types used in charts are **bold**, *italics* and colors. *Italics* are normally used to present examples of phrases and sentences that represent the grammar point being studied. **Bold** or color types are used to highlight

the most important aspects: word order in statements or questions, contrast between word forms (regular-irregular verbs, count-non count nouns, etc.) adverbs of frequency use and position and the like. In the sample chart above, the bold type is used to highlight the affirmative and negative forms of the verb **to be** in statements and questions. *Italics* are used to present the contracted and complete forms of noun/pronouns and forms of the verb **to be**.

Spaces and dividing lines: these are used to arrange sentences or formulas in groups. Charts normally have from two to six groups. If there are six, this means that the grouped items share a similar characteristic, but might differ in several aspects. Letter types usually highlight those similarities and differences. In the sample chart, the dividing lines separate affirmative and negative statements from questions. These dividing lines create three groups. In every group, there are two spaces dividing statements that have third person singular statements from third person plural statements. Another space creates a group that has the contracted forms.

Symbols: Parentheses, slashes, equal signs and arrows are the most common ones. They might mean optional, alternative, equivalent (or the same) and transformation correspondingly. In the chart, an equal symbol expresses that *Camila is* and *Camila's* are equivalent grammar forms.

Title and subtitles: Although titles are verbal in nature, their position in the chart, their being written with a different letter type and their inclusion of symbols like the punctuation marks are visual aspects to consider and that students should know. They frequently include the linguistic names of the grammar forms and structures.

The syntax of the language of grammar charts

For students to understand what a grammar chart expresses, they have to understand the meaning of the simple components (spaces, types, titles and symbols) and how they are put together to convey messages more effectively than they would be if expressed only through words. They are expected to be aware that...

"... the visual and verbal organizational structure of ... [the chart] ...consolidates information into a meaningful whole so that students do not have the impression that they are being taught a series of unrelated facts and concepts" (Cyrus, 1997, p.28).

Tips to help your students learn how grammar charts organize information

These tips are the result of my own practice at a bicultural language center in Bogotá, Colombia (Centro Colombo Americano). The center places a heavy emphasis on students training to achieve high levels of autonomy, and these ideas were adopted as they were coherent with the center's learner training philosophy. The tips may be implemented either in a (section of a) lesson that is devoted to teaching students understand the grammar charts as visual organizers, or in a normal grammar lesson in which teachers use these tips embedded as part of the chart exploration process. Whatever the case, the idea is that students understand this visual language and start to interpret it. Like any other tips, they are not carved in stone; therefore, they might be modified in any way to fit the needs of your class.

Have students find out where the grammar charts in their books are:

This could be done by having students answer these questions:

1. Where is grammar studied in the book?
2. What is the name of the section?
3. Do the grammar charts have a specific name?

This might sound obvious, but to some students it is not. Knowing where grammar lessons and grammar charts are will allow students to prepare in advance for when grammar is studied. We usually take for granted that our students know exactly what they are studying in a lesson, but that is not always the case. They might not have a clue because of our not being specific or their getting distracted. Knowing where grammar lessons and charts are, and their names, could prevent this from happening.

Have them explore the parts of grammar charts:

i) *Start with the title.* Point out that the title presents the names of the grammar forms that they have to study. Explain to your students that knowing these names could help them remember the grammar forms. Contrary to common belief, this technical vocabulary would not hinder the learning process, but rather, it would facilitate it.

You could use these questions to help your students with this part of the chart exploration. Here I will use the questions I would ask if I was presenting the sample grammar chart. Some questions would be the same from chart to chart. Others would have to be modified depending on what is studied or the specific layout of the chart.

1. What is the title of the grammar chart?
2. What are the forms that you have to study?

Having students underline or circle the specific words that express the grammar to be studied is a good idea. In future lessons, you might recycle these names to remind your students of what they studied or when new related topics are introduced.

ii) *Have them analyze how many groups the chart has.* The number of groups usually defines how many aspects of the grammar chart have to be studied. In the case of the sample chart, there are three groups. Each group contains a different structure in which the verb **to be** is used. The groups are also divided into subgroups. Lines and spaces are used to create the divisions. You decide how far you go in the analysis of groups. It might depend on several factors such as the level of your students, the distinctions that must be made, or the activities that will be done with the grammar information. Assuming that this chart was presented to beginner students, these would be the questions to ask:

1. How many groups do you see in the chart?
2. What are the names of the groups?
3. How many parts are in each group?

The second question can be asked if the chart has subtitles; not all of them do.

iii) *Analyze letter types and their functions:* This feature usually varies from textbook to textbook. So when a new textbook or new material is included in the grammar lesson, students

should be aware of the differences. These questions can be asked in the analysis:

1. What letter types are used in the chart?
2. What letter type is used to highlight important information (e.g. the forms of the verb **to be**)?
3. Which one is used to present equivalent forms? (e.g. italics)

The grammar topic will define the type of information presented, and this will determine the letter types being used. Remember that, at this point, grammar is not being studied, only how the chart displays information.

iv) *Analyze the types of symbols the chart uses and their meaning.* We often take for granted the meanings of equal signs, parentheses, arrows, lines, asterisks, slashes and other symbols. We tend to think they are universal, but they are not; their meaning may vary, even within the same textbook. This is the case with the parentheses, which can be used to express that something can be used or not as in: *Is there (any) flour?*, or to present an equivalent form *she might (may) see you tomorrow.* Have your students discover their meaning or explain it to them. If you choose to have them discover it, ask questions like this.

1. What does the equal sign express?
2. Does it mean x is optional? A substitute?
3. How do you know?

If you decide to present it, but in a guided way in which your students actively participate in your explanation, then ask:

1. How do you know you can use either *Camila is*, or *Camila's*?
2. What symbols tell you so?

Following these steps regularly and systematically will make your students aware of how charts display information and give them more confidence when new analysis are done. Doing so should also lead to more control and analysis on their part, and less on yours.

Summary of the steps:

1. Learning where the grammar charts are. Learning the name of the section and the names of charts.
2. Exploring the parts
 - a. Title: to learn the names of the grammar forms
 - b. Groups: to know how many important aspects have to be studied
 - c. Letter types: to know what the most important information is or what the examples are
 - d. Symbols: to know relationships among elements, transformations, possibilities, and the like

Using charts to facilitate grammar learning in class

Once students know how the information is organized in the chart, you can help them analyze and understand the grammar

information in these charts. This stage builds on the previous one since visual elements highlight the most important aspects of the new grammar information. Here it is assumed that you will be approaching the study of grammar in an inductive-constructivist fashion; that is, students will discover the new grammar information based on your guiding them with questions. You will activate previous knowledge which will be implemented to understand what you are presenting them with.

Tips to teach grammar based on charts

These tips are divided into two stages: what you can do before actually studying the grammar chart and what you can do while going over the chart.

Present grammar in its natural occurring context (before)

Grammar forms are usually embedded in texts such as conversations, articles, surveys or the like. Once you have finished the exercises these texts are meant to direct your students' attention towards the new grammar form or structure. Check that students first understand the meaning of the structure from the context. This can be done by asking specific comprehension questions that elicit the new structure. (e.g. *George is fun. What about Laura? What's she like?*)

Direct students' attention to new grammar forms or structures

Have students highlight, underline, or circle them so they focus their attention on them. Highlighting the new form serves to avoid distractions when they have to refer back to them. It will also create the habit and skill of focusing and highlighting important information.

Have students create their own explanation

To do this, first have them think whether the new form is similar to any others they have studied. For example, the sample grammar chart presupposes that the forms of the verb **to be** were previously introduced for the pronouns **I** and **you**. Once this similarity has been set, ask them to tell you what is new. In this case, they could be expected to answer that the pronouns **he** and **they** take other forms.

These explanations are valuable since they are attempts to make sense of the new information. It does not matter whether they are right or wrong; instead, have them write them or write them yourself on the board for them to later confirm them in the exploration of the chart.

Have students see how the chart organizes the information

(during)

Here I am assuming that students already know that grammar charts have a special language (the previous section of this

paper). So the strategy is to follow the chart exploration in the order suggested. At this point they know:

- a. Title: Verb **to be** for statements and questions with Pronouns she, he and they
- b. Groups: there are three
- c. Letter types: **Bold** to highlight the forms of the verb and *italics* to show contracted and complete forms of the verb **to be** and nouns/pronouns...
- d. The equal sign: show that **He is** and **he's** can be used interchangeably.

Have students analyze the grammar

This is where we can prove if the analysis of visual features actually contributes to the understanding of grammar.

i) *Have them notice what aspects will be studied and their names:* To do this refer them back to the title. Focus their attention on punctuation marks, subtitles and key words. They inform those aspects. You can ask these questions:

1. What is the title?
2. What will we study here?
3. What are the subtitles?

Again, it does not matter if they give wrong answers, as long as you guide them and provide them with the expected answers.

Sometimes, just realizing that their explanation was wrong becomes a perfect link for learning to take place. Hackbarth (1996, 24) proposes that "... students learn more effectively when they are actively involved in the learning process, and explore rich environments that the media can bring about" (Kang, 2004, 60). Being wrong in this case implies being involved.

ii) *Have them notice where each aspect is located in the chart.* This builds on the previous step and on their knowledge of groups and letter types. Ask these questions:

1. What do you see in group 1? (affirmative statements) How do you know? (the subtitle)
2. What do you see in group 2? How do you know?
3. What do you see in group 3? How do you know?
4. What is the form of the verb **to be** that you have to use with **she**? How do you know? (the bold type)

iii) *Have them discover the specific grammar aspects they need to learn.* Here, continuing with the example of the grammar chart presented above, I assume that students would be expected to learn: i) the forms of the verb to be that go with the given pronouns, ii) the order of the words in the four given structures (affirmatives, negatives, questions and short answers), iii) the possibility of using contracted and complete

forms of (pro)nouns and verb **to be**, iv) that the verb to be in short affirmative answers is not contracted, but it is in negatives, v) that I can use the verb **to be** with adjectives to refer to people's personality, vi) that contracted forms are more likely to be used in an informal register, etc. The first four aspects have to do with form, the fifth with communicative functions, and the sixth with pragmatic aspects. You decide how far you go with the analysis. These would be the kinds of questions to ask:

1. Look at x part of the groups, what is the form of the verb that goes with y?
2. What is the order of an X statement?
3. What happens when you contract the forms? What do you take out? What do you include?
4. What is the structure of short answers? Is it possible to contract the affirmative? How about the negative?
5. In previous units you studied how to use the verb **to be** to give personal information? What is it used for in this unit?
6. What form of the verb do you use in a casual conversation? How about a formal letter?

Depending on the stage of the training on the use of grammar charts, you could opt to have your students answer these

questions by themselves, in groups or as a class with your guidance.

Have students contrast their own explanation to the one offered in the chart

After the questions in the previous stage have been answered and concerns have been dealt with, direct your students' attention towards the explanations they originally made. Have them realize whether they were similar or different. Make them identify exactly what the differences were. Doing this will allow them to consolidate or restructure their explanations.

Summary of the steps:

Before going over the grammar chart:

1. Present grammar in its natural occurring context
 - i) Direct students' attention to new grammar forms or structures
 - ii) Have them create their own explanation

During the analysis of grammar charts

2. Have them see how the chart organizes the information
3. Have them analyze the grammar
 - i) Have them notice what aspects will be studied and their names.

ii) Have them notice where each aspect is located in the chart.

iii) Have them discover the specific grammar aspects they need to learn.

4. Have them contrast their own explanation to the one offered in the chart.

Using charts to do grammar exercises

Understanding grammar in the charts is an important initial step for students to learn the grammar of a language. Grammar exercises are meant to reinforce this initial contact and to give students extra contact and practice with new grammar forms and structures. Exercises might also place some demands on students' understanding. This section attempts to propose a methodology with which you can guide your students in the process of doing grammar exercises. It builds on the previous stages: grammar charts language and content analysis.

Tips to help students do grammar exercises

These tips imply three stages: understanding the instructions, understanding the exercises and finding information in the charts. Again, the explanations are based on the sample chart presented above. Take the following exercises as reference:

Exercise A

Complete the following statements.

1. Mary is smart.
2. They _____ bad-tempered
3. Jenny and Laura _____ cool
4. He _____ timid.
5. Pete and Hee Jin _____ annoying.

Exercise B

Circle the word that best complete the statements and questions.

1. **She** they is intelligent.
2. **They/She** are not annoying.
3. Peter and Carol **is/are** not very strict.
4. **Is/are** Juana outgoing?
5. **Are/is** Mary and Danny fun?

Understanding the instructions

Different grammar exercises have different instructions. The most common types of exercises are: selection, unscrambling, completion, matching and personalization. This implies that there are verbs in their instructions that have to stand for the action to be done: *select, choose, unscramble, put in order, match, connect, write your own information*, etc. Hence, for a student to do a grammar exercise, they should be able to

understand the instructions, which implies knowing the vocabulary the instructions use. In your class, you can include the vocabulary of instructions as part of student training.

Another aspect of understanding the instructions is knowing how many actions have to be done. The sample exercises include simple instructions in which only one action has to be done. However, an instruction like *complete the questions and match them to a short answer* would imply two actions. Knowing the order of the actions is also part of understanding the instructions. You can use these questions as part of this stage:

1. How many actions do you have to do?
2. Which one is first? Which is second?

Understanding the exercises

This stage implies several steps. Following them in order might guarantee a good performance in the exercises.

i) *Have your students look at the examples in the exercises.*

There is always one exercise that is done as an example. This is meant to reinforce what was set in the instructions in a more visual way. When analyzing the example students should pay attention to: 1) what symbols stand for the actions they have to do, 2) the actions they have to do and 3) the meaning of the sample statement. These are the questions to ask:

1. You have to choose the correct word, so what symbols tell you that you have to do so? (circle/slash and bold type)
2. What word do you have to select in the second statement? (a pronoun)
3. Do you know what **smart** means?

Grammar exercises also include a set of symbols that stand for the (aspects of the) actions that are required from students: slashes (options), circles (selection), bold type (words to select), italics (hand writing), lines (match), parentheses (information clues), etc. Students should also learn this language.

ii) *Have students understand the statements and phrases in the exercise.* Students might feel tempted to start to do the exercise once they know what they have to do. However, it is important that they first understand the statements or questions they have to work with since these exercises usually require that students understand the general sense of the statement to choose the right grammar form.

iii) *Have students identify the kind of grammar form or structure they have to do in each item.* Knowing this will define the action that the students have to do. For example, in an unscramble exercise, students should know whether the structure they have to organize is a question or a statement. To know it is a question they have to look for question marks. In exercise

A (completion) they have to know what kind of pronoun or noun is used for them to select the best form of the verb **to be**. The same happens with exercise B. These are questions that can be asked with that purpose.

1. In number 1 you have to complete the statement with **is**,

Why? Look at the example. (**She** takes **is**)

2. What do you have to write in the space for number 2?

(another verb) Why?

At this point, many students would be able to do the exercise. This would depend on how much they have learned or how much they already know about the grammar point. However, in new complex grammar explanations, this might not be the case. Hence, checking the models in the grammar chart to find similar structures would be necessary.

Identification of similar structures or forms in the grammar charts

This step relies heavily on groups and letter type identification, and on the previous step. These operations may vary depending on the nature of the exercise. For example, to do the second item in exercise B (**They/She** are not annoying), students would have to: i) know that they have to select a pronoun, ii) look for any sample statements in the chart that have the same items (pronouns **they** and **she**), and iii) choose one

that has the verb **are** and one of the pronouns. These are the questions:

1. What are the options to select? (**they** or **she**)
2. Look at the chart. What statements have these words?
(*They`re interesting / she`s jealous?*)
3. Which statement has **are**? (*They`re interesting*)
4. So what word do you select in number 2? (*they*)

The guiding questions would necessarily change depending on the kind of exercise.

Summary of the steps:

1. Understanding the instructions
2. Understanding the exercises
 - i) look at the examples in the exercises.
 - ii) understand the statements and phrases in the exercise.
 - iii) identify the kind of grammar form or structure they have to do in each item.
3. Identification of similar structures or forms in the grammar charts.

Conclusion

By teaching our students how to make sense of and use the information presented in language charts, we FL teachers can help them develop their visual literacy skills. This, however, is a practical area that unfortunately remains almost unexplored

in the FL classroom. Doing so implies the teachers' broadening the scope of the traditional grammar lesson and including aspects like images analysis and a lot of reflection and involvement on the students' part. With this approach, students will not only learn grammar in a meaningful (highly rewarding) way, but will also develop cognitive skills that are easily transferable to other domains beyond the language learning.

This approach gives the language teacher a more important role, since language teaching would imply making sure students learn and use the target language, and also creating the conditions for specific visual-cognitive processes to happen. In other words, we language teachers would be contributing to our students' development of a more orderly thinking processes.

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