

Learning nahw analytically

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Teaching with this system

How to use this system for teaching

This part is in an early development stage.

Teaching based on this system relies on active learning. For more information about this concept, please see:

- [www.youtube.com/watch?v=z0a2pKYp\\_fk](https://www.youtube.com/watch?v=z0a2pKYp_fk)
- <https://bokcenter.harvard.edu/active-learning>
- <https://tophat.com/blog/blooms-taxonomy/>
- [A taxonomy for learning, teaching, and assessing, Anderson et al.](#) ISBN: 9780321084057

Please keep in mind that I have not yet used this method for teaching Arabic. However, I *do* use the same techniques and class structure in my university courses (Computer Science). The response to and outcomes of this method is always extremely positive, both from instructors and from students, regardless of discipline, so I expect similar results here.

A. The Student version of a table

- Teaching requires two versions of this table:
- **Instructor copy** The default version of a table with the grey explanatory text.
  - **Student copy** This is without the grey text, and perhaps even without some of the hints in the small black text, and the footnotes. The actual amount of redacted hints depends on the students' proficiency level. I am yet to make these versions (perhaps 3 different levels of redaction). The easy version will look similar to below in case you want to develop it yourself.

Instructor's copy

Is the gender of عدد based on معدود ؟

1. Type 1		
Infer	Observe 1	
1, 2 follow the معدود	هذان رجلان اثنان ✓ هذا رجل واحد ✓ وهاتان امرأتان اثنتان ✓ هذه امرأة واحدة ✓	
2. Type 2		
Infer	Observe 1	
3-9 conflict with معدود	اشترت ثلاثة كتب وثلاث مجلات ✓ اشترت خمسة كتب وخمسين مجلات ✓ اشترت تسعة كتب وتسعة مجلات ✓	
3. Type 3		
Infer	Observe 2	Compare with
10 conflicts w/ معدود if it's مفرد by itself follows معدود if it's compound w/ another number	Example 1 عندي عشرة كتب ✓ عندي خمسة عشر كتاب ✓ Example 2 شهرت عشرة ليلة ✓ شهرت ثلاثة عشر ليلة ✓ Example 3 عندي عشر مجلات ✓ عندي إحدى عشرة مجلات ✓	عندي عشر كتب ✗ عندي خمسة عشر كتب ✗ شهرت عشرة ليلة ✗ شهرت ثلاثة عشر ليلة ✗ عندي إحدى عشر مجلات ✗ عندي إحدى عشرة مجلات ✗

Student's copy

Is the gender of عدد based on معدود ؟

1. Type 1		
Infer	Observe 1	
	هذان رجلان اثنان ✓ هذا رجل واحد ✓ وهاتان امرأتان اثنتان ✓ هذه امرأة واحدة ✓	
2. Type 2		
Infer	Observe 1	
	اشترت ثلاثة كتب وثلاث مجلات ✓ اشترت خمسة كتب وخمسين مجلات ✓ اشترت تسعة كتب وتسعة مجلات ✓	
3. Type 3		
Infer	Observe 2	Compare with
	Example 1 عندي عشرة كتب ✓ عندي خمسة عشر كتاب ✓ Example 2 شهرت عشرة ليلة ✓ شهرت ثلاثة عشر ليلة ✓ Example 3 عندي عشر مجلات ✓ عندي إحدى عشرة مجلات ✓	عندي عشر كتب ✗ عندي خمسة عشر كتب ✗ شهرت عشرة ليلة ✗ شهرت ثلاثة عشر ليلة ✗ عندي إحدى عشر مجلات ✗ عندي إحدى عشرة مجلات ✗

## B. Teaching a topic

### i. The structured part of the class

#### The instructor's role

- a. **Before class** Perhaps distributes the related student's copy of the table to students who are weak in إعراب so they can prepare beforehand.
- b. **In class** Very briefly introduces the topic under discussion, and distributes the student's copy to them.

A time limit for is set for each discussion to ensure sufficient material is covered in the class.

### ii. The unstructured discussion

Here’s how this part of the class may play out. Notice that the steps below are not necessarily sequential. They will occur in a manner conducive to the topic and the proficiency of the students at hand.

#### The students' role

The students' task is to infer the rules from the given table. Group based work is recommended for reasons mentioned below (likely 2-4 students per group), but this can be done individually too.

These are the typical activities students do, not necessarily in this order:

	Activities	Note
If working as a group	<ul style="list-style-type: none"><li>Remind each other about background knowledge that one of them does not recall.</li></ul>	This immensely eases the burden on the instructor as they don’t have to individually address the knowledge deficiency of every student. Students are generally more comfortable asking each other for help rather than the instructor.
Analyze examples of correct usage	<ul style="list-style-type: none"><li>Deduce and write down all the patterns that they judge to be the cause of the rule.</li></ul> <p>This will require them to grammatically parse the إعراب of the key parts under discussion.</p> <ul style="list-style-type: none"><li>Based on their deductions, develop a theory on what the rule might be</li><li>Compare similar examples and verify that their theory fits all examples.</li></ul>	Students may not infer all the rules, perhaps due to the system's limitations, or more likely due to a deficiency in their background knowledge. Depending on these variables, the instructor may have to spend more time on background content. Either way, students will be compelled to fill gaps in their understanding as they learn new material.
Compare and contrast correct and incorrect usages	<ul style="list-style-type: none"><li>Using a similar process of grammatical analysis, determine why the incorrect usage is so.</li><li>Does their theory fit all correct usages and exclude all incorrect ones?</li></ul>	Less experienced students may struggle to parse a sentence in the textbook fashion. However, I project that this will not be a problem so long as they can identify the concepts.

#### The instructor's role

The instructor generally walks around and assesses how the groups are progressing and:

- Provides a hint or two to a group if they are stuck on a certain deduction.
- Resolves lack of background knowledge if none in the group can do so for each other.
- Take note of common mistakes that groups make.

### iii. The unstructured review

Once the time limit for an activity has expired, it's time to review what the groups have come up with.

#### The instructor's role

Activities	Note
<ul style="list-style-type: none"><li>Use polls and other formative assessments to gauge student understanding.</li><li>Ask some groups to present their conclusions to the class, and to question their findings.</li></ul>	Having students working in groups has its benefits here too. It is less stressful for them when the instructors asks "Why did your group decide on this deduction?" as it is directed to the group even if a single student is picked out.
	It is the same case when volunteering to express their findings when

representing a group rather than just themselves.

This consequentially improves student participation.

- To address common mistakes that the instructor came across during discussion time

### C. Expected outcomes

I use a similar approach when designing the courses I teach at my university. Based on these experiences, I expect these outcomes:

- |   |   |
|---|---|
| ✓ A more engaging discussion-based class    | At every step, the student is expected to analyze the examples and explain the rule to the best of their ability using their student copy that doesn't have the answers. The teacher thus becomes a guide rather than a talking-head. This is far more rewarding and lot more fun, both for the teacher and the student.  |
|   | For those who haven't taught in a student-centric manner, this experience may at first be unnerving because the content delivery is not as rigidly structured as in a lecture and you feel loss of control of the class. However, once you get the hang of it, it is immensely satisfying. The research proving the positive impact of student centric learning on learning is copious.   |
| ✓ Hone in on the student's weakness quicker | Asking the student to analyze the examples and detect the pattern causes any mistake in their grammatical parsing to stand out very quickly. As such, this system is a far better mechanism to identify student weaknesses and to address them, whether by the instructor or by their group peers. When done frequently, I expect these drills will lead to much better retention of concepts than when using a lecture format. |
| ✓ Increased student participation           | The group discussion creates a much lower bar for students to participate, especially the shy and passive ones. Students find it less stressful when asked as a part of a group rather than individually.   |
| ✓ Less draining                             | Due to the increased student participation and unstructured learning, the teacher is not required to speak continuously, as compared to a lecture.  |

### D. Implementing online group discussions and collaboration

Class group discussions and collaboration are naturally easier if they are in-person. It may be easier to have online students work individually. However, if you are interested in implementing group work online, please [email me at 3n4lw9o10@mozmail.com](mailto:3n4lw9o10@mozmail.com) as this topic is out of scope for this document.