

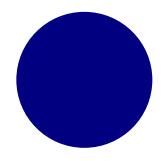
Teaching Medical Terminology with Mind-mapping Software

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Context

 In Saudi Arabia, Arabic is the medium of instruction in humanities colleges, whereas English is the medium of instruction in colleges of medicine and engineering.
 Premedical students take English for medical purposes and foundation courses such as biology and biochemistry in English.



Difficulties with Medical Terminology

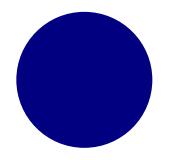
- They encounter too many technical terms with which they are unfamiliar;
- Difficulty in pronouncing;
- Recognizing the component parts of terms;
- What each part means;
- Recognizing and distinguishing derivatives of a term;
- Singular and plural forms.
- Medical abbreviations and acronyms;

Aims of Study

- To show how mind-mapping software can be used to help premedical students learn, retain and connect medical terminology.
- To show how the mind-mapping software can be used to combine prefixes, suffixes, roots.
- Classify & group terms according to prefixes, roots or suffixes, some category.

What is a mind-map?

- A mind-map is a graphic organizer.
- It begins with placing a target concept or category in the middle of the screen.
- Nodes and branches radiate from the central concept.
- Sub-categories, examples and words are grouped into sub-categories and placed radiating out from the central concept/category.

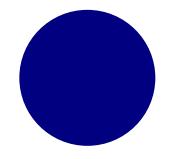


Curriculum, Tasks & Materials

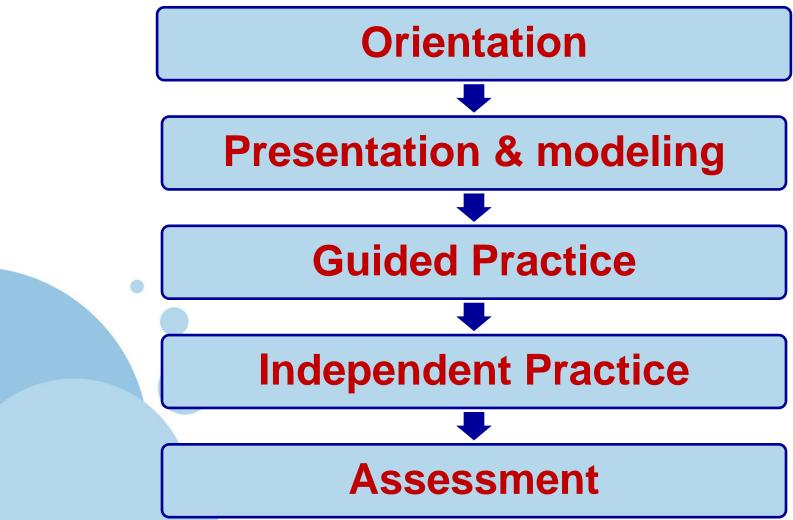
- English for medical purposes course = 8 hrs per week
- Reading, grammar and medical terminology.
- Materials developed in-house,
- Few chapters selected from published books on medical terminology.
- Amount of medical terms covered is too limited.

Skills Emphasized

- Basic structure of medical terms.
- Prefixes and Suffixes added to Latin bases
- Affixes referring to quantity.
- Negative prefixes
- Derivatives sharing the same base.
- Opposites such as: interior ≠ exterior;.
- Latin singular and plural forms.
- Medical acronyms and abbreviations.



Instructional Strategy with FreeMind

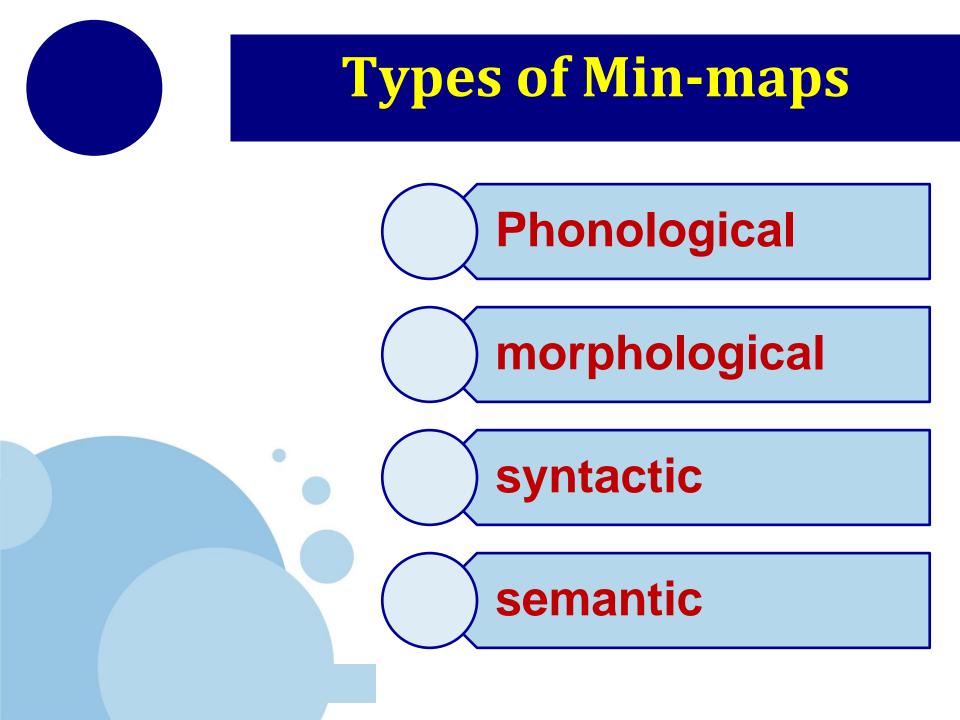


Orientation

- Students are introduced to the mind-mapping software and purposes of using it.
- They download FreeMind 0.8.1 from the internet free of charge.
 - Explain components of the FreeMind 0.8.1

Presentation and Modeling

- The instructor trains students to use the Free Mind Software using an LCD projector.
- The software is used to create mind maps for the medical terms to be covered or those that have been covered.

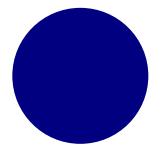


Guided Practice

- Students practice connecting new medical terms studied in class with medical terms they already know.
- They keep their phonological, morphological, syntactic, and semantic mind maps and continue to add sub-categories and terms to each map.
 They make terminology lists and add terms related to each mind map.

Independent Practice

- The students continue to use Free Mind at home and continue to add terms related to each.
- The students are handed out questions that require them to group, classify or connect medical terms on their own based on new semantic, syntactic, phonic, phonological or morphological categories.



- Students keep their medical terminology mind maps.
- Mind maps can be also posted in an online course.
- Students can exchange mind maps and can work on mind maps individually, in pairs, or in small groups.
- Extra credit is given for created mind maps.



<u>Assessment</u>

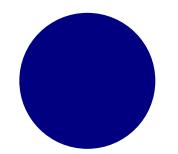
- Mind maps with a central focus and blank nodes, branches and sub-branches can be given to the student.
- The students are asked to fill in nodes, branches and sub-branches.

Recommendations

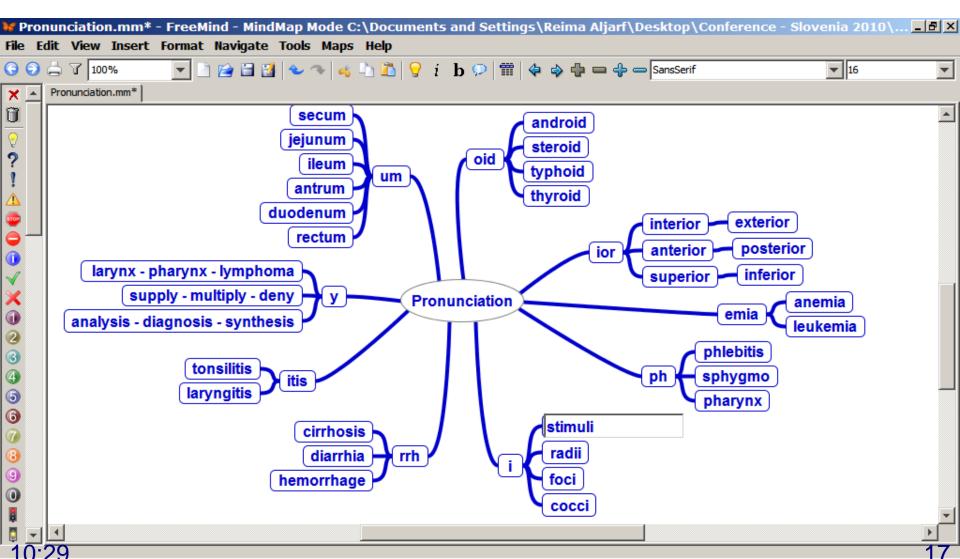
• Mind mapping strategies have been reported to improve word and concept knowledge across grade levels, in a variety of subjects and a variety of learners.

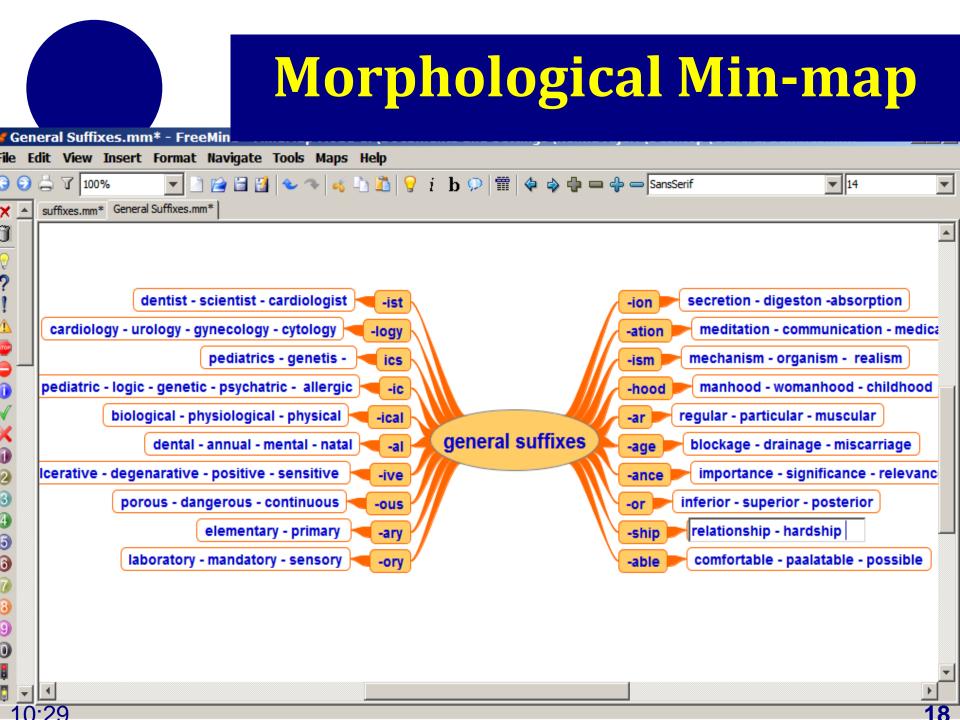
• The aim of the mind mapping activity is not to teach the students how to apply the details of the *Free Mind*.

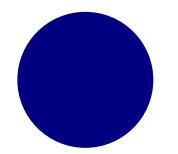
 Focus should be on placing a category in the center, adding branches, pictures and changing font color, size and case.



Pronunciation Mindmap







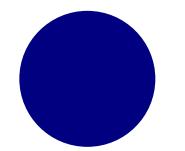
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Morphological mind-map

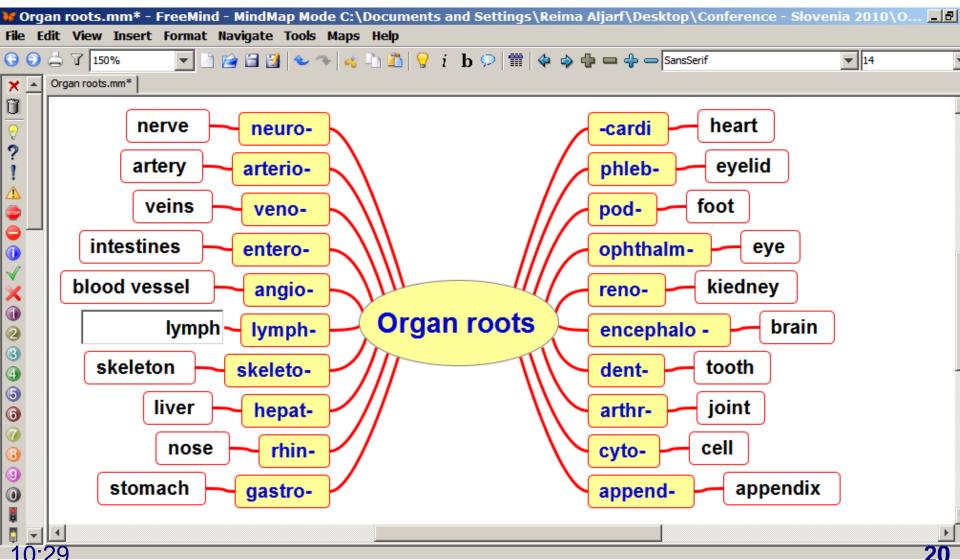
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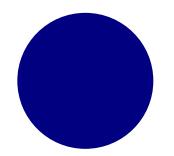
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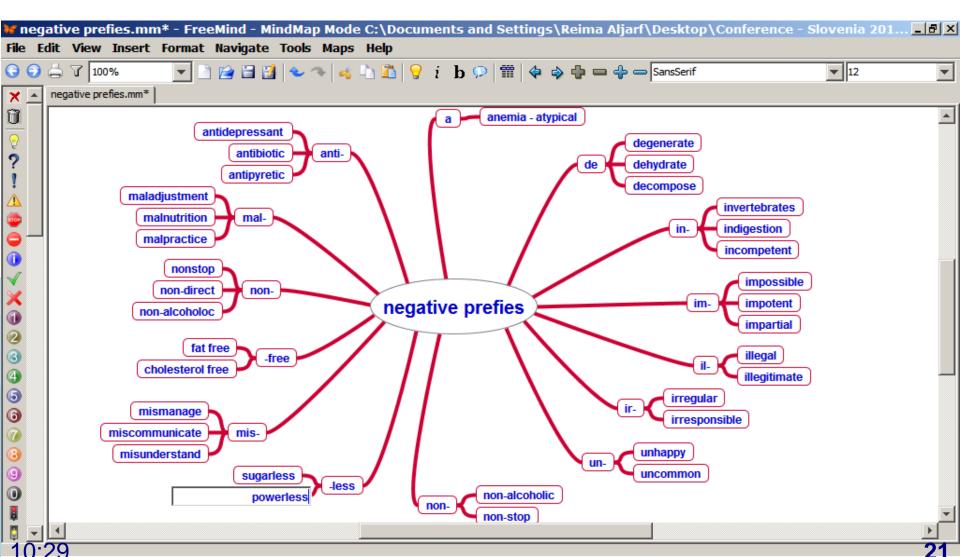
morphological mind-map

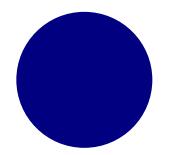
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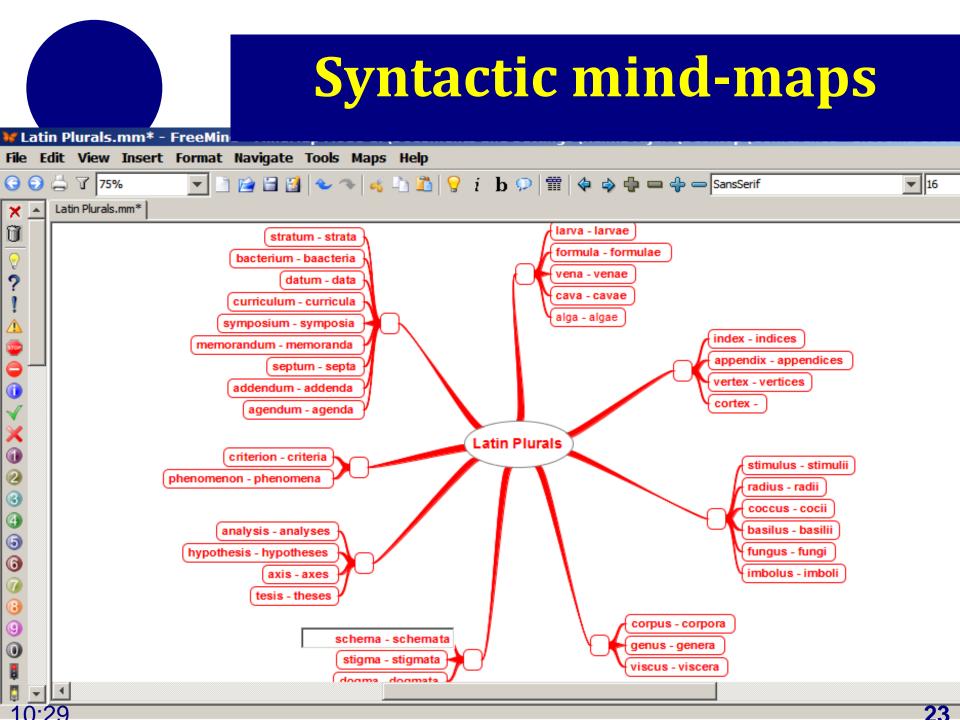
Morphological min-map



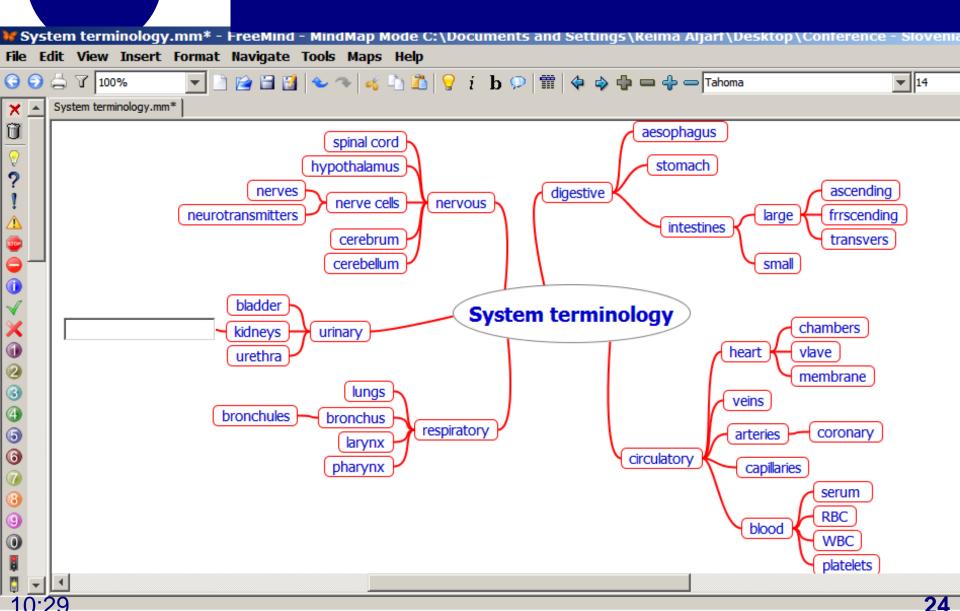


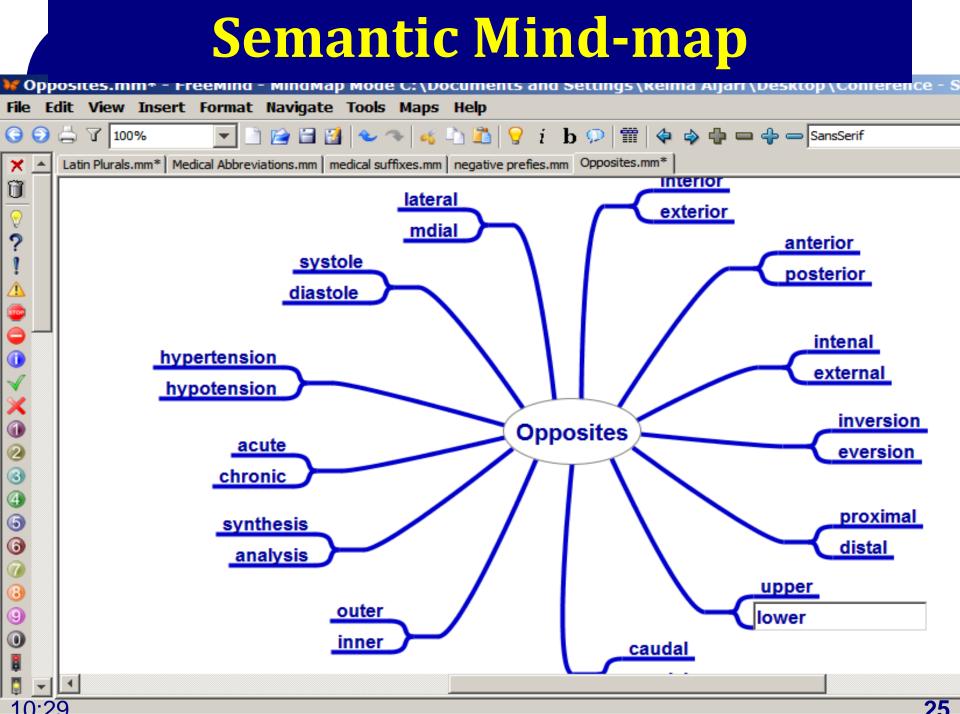
Syntactic mind-map

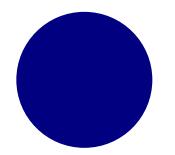
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Semantic mind-map





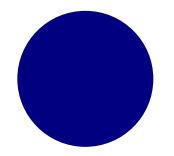


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Semantic Mind-map

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Thanks

for your attention!

