# USING CONCEPT MAPS IN ENGLISH TEACHING

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#### Abstract

English teaching has been a matter of great concern among faculty especially those teaching in technical institutes. Students of such colleges do not bother much about taking care of grammar. They have their own ideas related to English as a language as also for Communicative English. In this paper the use of concept maps in teaching certain concepts of English grammar has been explored. Concept maps have been used across different subjects for betterment of student learning. They can enable teachers to shift their students from an environment of rote learning to that of meaningful learning. Students can think more analytically once they can link the different concepts.

Besides the enhancement of cognitive skills, the concept maps also encouraged learning among students based on principles of constructivism. When students construct their own knowledge, it helps to transform information from short-term memory to long-term memory.

An attempt has been made in this paper to study the response of engineering students who were taught using concept maps. Endeavour has also been made to observe the different purposes for which teachers used the concept maps. It is well known and realised by teachers now that traditional lectures will no more fit into our system once we talk of outcome based education. Therefore, it is also intended through this paper to inspire teachers to use other techniques in classroom teaching for better involvement of students.

Key Words: Concept map, active learning, constructivism.

#### Introduction

English teaching in higher education, especially to the students of Engineering at Diploma level often stands as a challenge for the teachers, the reasons being manifold. The students from different backgrounds consider English, i.e., Communicative English to be just another subject that can be taken care of for passing in the exams at the last minute. So, they just ignore the subject as a whole and those who can speak in English often become too confident not to give enough attention to the grammar part. Through this study, an effort has been made to teach some portions of English grammar using concept maps. Concept maps were used to help students construct their own meaning, hence the traditional lecture was not considered for these classes as a method of instruction.

Concept mapping is a learning strategy propounded by Novak, based on the idea of using graphical tools for organizing and representing knowledge. They include salient concepts, usually enclosed in circles or boxes, and relationships between concepts indicated by a connecting line linking two concepts. It is a diagrammatic network representation of concepts arranged in a hierarchical manner with the most general concept on the top and the specific ones downward in the spatial arrangement.

### Rationale

The commonest cause of the problems faced by a student of Communicative English as a subject by itself is the existence of the inherent structure of their first language or mother tongue with which they are born. The problems, therefore, faced by them are primarily listed here.

- Understanding the grammar structure of the new language
- Less ability to comprehend new words
- Fear of pronunciations
- Translating their views from mother tongue to English before speaking.

The challenge for the teacher is actually to create a new structure of the English grammar while trying not to dismantle the existing language structure of their mother tongue.

The students somehow do whatever is needed to get through their everyday classes and pass their exams. Teachers also seem to be using the traditional lecturing style in a class where students have to learn to speak and write in English. This means students have to be actively involved, which is not possible through lecture method. In a class where speaking is the outcome, the students have to be given a chance to speak. This is possible through active learning techniques and concept mapping is one such. There is enough evidence which indicates that active learning in the classroom provides better encounters provided through lecture (Knight and Wood, 2005).

The worst thing happening these days is students using mobile messaging and social networking activities, where they use all kinds of short forms and misspelled words and have no sense of grammar or punctuation. Moreover, the reading habit is slowly dwindling away from the present generation. The one and only method that has been now widely prescribed for learning a foreign language is by reading and reading only, besides listening and writing also. This alone would initiate them towards developing a sense of English language and its refinement.

## The Study

This study was conducted to introduce concept map in teaching certain topics in English to first year Engineering students at diploma level as also to find out the response of students who are exposed to such maps. Once the teachers found it useful in their classroom teaching, they used it in their remedial classes that they conduct for the first year students. The topics were like 'Tenses' and 'Parts of Speech', both of which are very essential for the students to be thorough with at least to speak correct English.

These teachers were trained in creating concept maps and also to utilise them as a teaching strategy. Primarily, they used it to actively involve students in learning. However, some of them later extended the technique of concept map for promoting collaborative learning.

Teacher used a step-by-step method to develop the concept of 'Parts of Speech' using examples and non-examples. This is because students already had a knowledge about the topic right from their previous learning, i.e., school education.

#### Findings & Discussion

This study was only seen for the remedial classes, where the teachers have more than often realised that students ought to know the basics of tenses and parts of speech for constructing correct sentences. The teachers, as such, were first given a hands-on training on creating concept maps in some of the topics of their subjects. Trained teachers used concept maps as a technique to teach concepts with an exploratory strategy of instruction. The concept of tenses was explored using examples and non-examples.

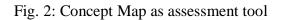
The initial reaction of students towards such classes was nothing different from their other routine traditional classes attended earlier. However, as the teacher progressed developing the class further with the concepts, linking them with connectors, and trying to build up propositions using students' opinion, it was altogether a different class, as reported by the concerned teacher.

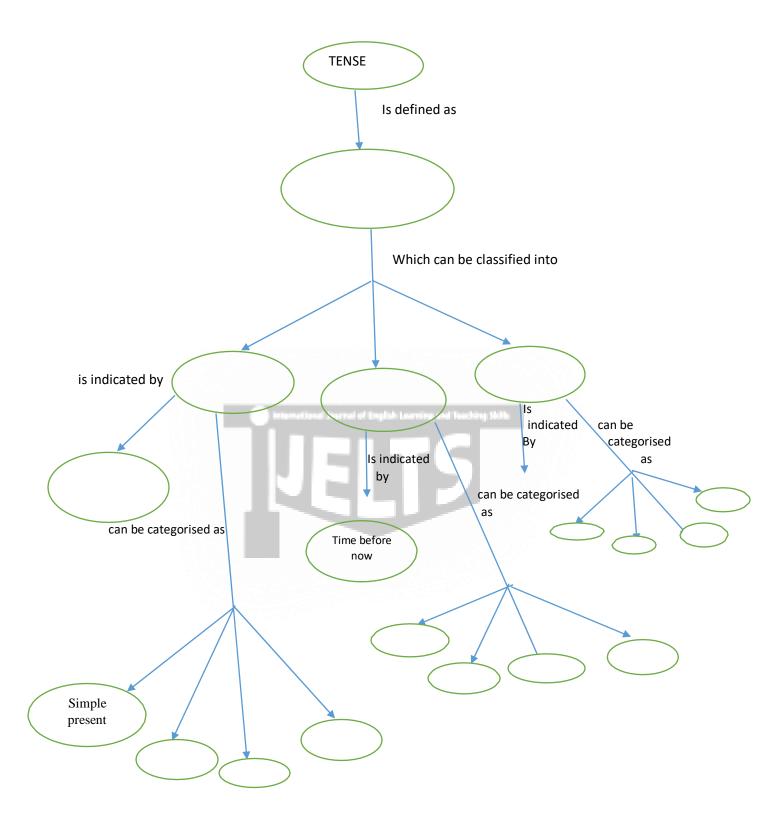
The responses of students in coming out with their own concept maps had been an eye opener for the teachers. Students liked using concept maps as they could easily correlate at a glance, the different concepts and ideas presented to them. Student who were otherwise nonperformers were found to involve themselves though the quality of such an involvement was not observed. This encouraged such students to further participate in the discussion and activity.

Here, it is interesting to note that though the teachers were only trained in developing concept maps to use them in their teaching, they tried to make use of these maps in several ways. One such utility was to develop the class step-by-step in a sequential manner. This kept the students alert as they could completely associate their prior learning with the concept being built upon. Such an effort is depicted in figure 1, where the teacher used concept map to help students classify tenses. So the focus question was, 'Classify tense'.

Teachers were noted to use the maps in formative evaluation also as can be understood from figure 2. A quick look into the concept maps filled in by the students reveals their understanding about certain concepts. Teacher also gats a clear picture about the effectiveness of teaching strategy used for explaining the topics.

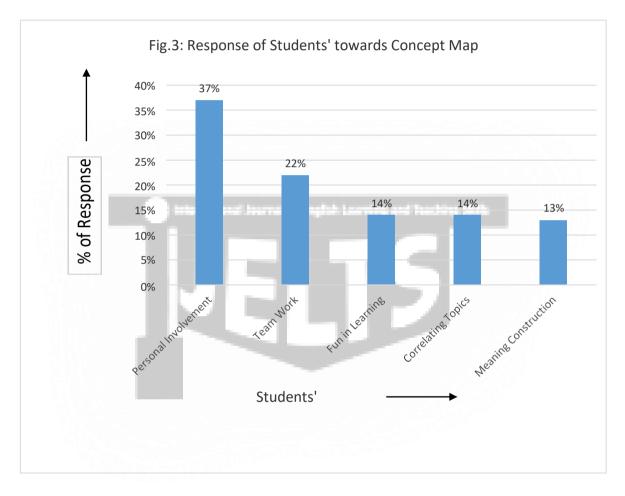
#### Fig. 1: Concept Map of Tense Tense Is linked to is part of Is defined as Verb Grammar A time expression that on codes time locations relative to other time locations Future Past Present Can be categorised as i landung Skill can be categorised as Can be categorised as Future Simple perfect future Future continuous perfect Past Future continuous Present continuous perfect means Simple present Present Simple past continuous continuous means means mean means The action is a S habit or Past Present The action will repeated now perfect means Means The action means The action perfect happen before will happen happened over something in means in the future time in the past The action is the future The action happening means started in the right now The action has The action was The action past & is ended in the happening over The action will will happen continuing till past time before over time in happen overtime The action started now means something in the the future before something in the past & has past in the future continued until now The action happened before something in the past 301





The below average students found it interesting to construct meaningful statements using links and the related concepts. Linking two or more concepts/ideas with the use of "linking words or phrases to form a meaningful statement" is an essential step in developing a concept map (Novak & Canas, 2008).

Teachers could easily sort out learning difficulties from the concept maps prepared by students. Further, the misconceptions among them could be easily identified.



The study was mainly conducted to observe students' response to the instruction done using concept maps. The results are quite encouraging. The reaction of students could be broad categorised under five broad areas as shown in figure 3. The percentage indicated in the table depicts the major response of the group of students falling in a particular category.

The personal involvement of the students undoubtedly was striking compared to the lecture classes, where they sit and listen to lectures and noting down sometimes. In this case, the students found them more involved in their learning than when they were taught conventionally. Some of the so called 'shy students' also tried to speak while developing the concept map. Such students did not have to be pushed to speak or monitored to involve in the activity, it was voluntarily done by them.

Team work was also taken up by more than 20% of the students. Though, almost the whole class was seen to be involved discussing the concepts and their relation, the students who were actively involved to initiate discussion, coordinating with others was found to be 22% of the class strength.

Students (14%) also reported to have experienced fun in learning. They were found to enjoy certain moments when they could fit in a concept in the empty circle provided to them. It also provided them with a sense of satisfaction when they could fill up the empty circles provided to them.

A part of the group took special interest in correlating various concepts and ideas. This way, they felt more confident regarding their pre-requisites to learn a concept. Teachers could also understand the misconceptions among some of these students. They could further identify the learning difficulties of the students.

Meaning construction – Students who lagged behind were given complete concept maps only to read out the propositions to others and the reason behind such a construction. This way they could see themselves how interesting it became to construct meaning by themselves. Such students also felt more confident.

#### Conclusion

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Concept maps can help in bringing about positive changes towards learning Communicative English. It is often reported that students lack employable skills, and, one such skill being the ability to communicate in English. The use of concept maps to develop strategies to improve reading comprehension in English has not been studied here. There are various scopes for further studies in this area as teachers can improve the learners' command over concept maps and their uses.

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