

Research on the Empirical Study of Graded Teaching of Reading of College English on the Basis of Idealized Cognitive Models—On Discussion with Prof. Wei Zaijiang

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Abstract. Idealized Cognitive Models (ICM) has been widely used in foreign language teaching as cognitive linguistics. This study applies the ICM to English reading teaching of Graded Teaching of College English. By a contrast CET4 model tests experiment based on the ICM teaching on Class C of Textile Engineering majors, with the SPSS quantitative analysis, it endeavors to check whether the models are effective, and explores the ways and expected result of Graded Teaching of College English reform. The result shows that the construction of ICM will help students with not good foundation to improve their reading abilities and learning strategies.

Introduction

Professor Wei Zijiang in 2009 in the "foreign language circles" that do a good job reading teaching must understand the psychological process of reading activities. The development of reading teaching depends on the basic research of reading psychology. Cognitive linguistic theory is not suitable for foreign language teaching, which requires cognitive linguistics theory applied to foreign language teaching through practice to test. I agree with this view, which in September 2016 implementation of the University of English grading teaching reform fit, this reform is the concept of successful quality education in our school began to implement. Professor Wei believes that conceptual metonymy theory is very helpful for English reading teaching. Students understand the conceptual metonymy theory and help understand the cognitive attributes of conceptual metonymy and reduce their sense of anxiety in the reading process (Wei in Jiang, 2009). I believe that reading comprehension teaching is more of a kind of intention - the structure of the structure. We read the article is to build a text of the intention - schema structure. The discourse world is the interrelated and complete conceptual network constructed around the subject of the discourse, and the formation of the conceptual structure depends on the ideal cognitive model (ICM) in the human brain.

In order to get the relationship between the ideal cognitive model of ICM and the achievement of the four levels of college English in the graded teaching class, we have successfully constructed the cognitive model of English reading and learning of science and engineering college students and applied it to class teaching. Test results determine the specific scores and the students are divided into three levels: the general requirements, higher requirements and high demand, that is, C, B, A three levels. We use the ICM model (ideal cognitive model), from the cognitive process to explain the language, with reference to cognitive domain, category, schema, script, cognitive patterns and other descriptive parameters, the combination of psychology and linguistics knowledge, Trying to construct the cognitive structure of college English reading comprehension. And the college English reading as a starting point, this study from the Hunan Institute of Engineering Textile Engineering Class C class 39 students of the ICM idealized cognitive model training and four simulation test combination of teaching experiments.

The Theoretical Basis

ICM Idealized Cognitive Model. Lakoff proposed the Idealized Cognitive Models (ICs) to explain the intrinsic structure and prototype effects of the prototype categories, emphasizing the subjective cognitive ability and imagination in the process of categorization. As a schema mapping, ICM is the structure of knowledge that can be organized. It is the way in which knowledge of human cognitive results is stored in the brain. It is the ideal result of cognitive framework. ICM is the basic way of constructing knowledge. ICM as a knowledge of the structure and characterization model, category structure and prototype effect is only a by-product of this structure. ICM contains four structural principles or cognitive models: propositional structure, intention-schema structure, metaphor mapping and metonymic mapping (Lakoff, 1987: 68). The application of ICM cognitive linguistic theory to foreign language teaching has become a new trend in linguistic research. This coincides with the framework theory proposed by Fillmore (1985). The knowledge described in this framework is itself a conceptualization of experience, and Lakoff calls this framework an idealized cognitive model (Lakoff, 1987: 68; Ungerer & Schmid, 2001). In the ICM Intent - Schema structure, the small constituent components are seen as "building blocks" (building block), built into some of the larger components, therefore, in the idealized cognitive model theory under the influence of many Linguists regard morphological and syntactic structures as a result of synthesis (Langacker, 1999: 151). The way we read the idealized cognitive model of teaching ICM is to follow this principle.

ICM Idealized Cognitive Model Construction and Learner Training. In the process of constructing the reading model, we will use Lakoff's metaphorical cognitive model to establish a connection between tense, vocabularies and non-predicate verbs, vocabularies and clauses. 1) The analysis of vocabulary comes from the prototype category theory, according to the prototype with more features and its function of the distribution of the advantages of the definition of the word class, other non-prototype members to the prototype is the reference point, which forms the fuzzy category of the word class; 2) The analysis of the syntax is mainly based on the graphic - background theory, not the subject, object, predicate, but in accordance with the different parts of the prominent part of the understanding - Background, and background - to select different expressions, where the subject is the graphic, the object is the background, the verb is the link to connect the different parts; 3) The discourse analysis mainly uses the blue discecks of the CDS space theory (Current Discourse Space) To analyze discourse. We take the first part of college English to read the first part of the choice of words as an example, to see the words fill in the construction of the ICM cognitive model. We can put a word as a "typical event model". When a typical event is written in unmarked form, the central word of the sentence is a verb, which indicates the interaction between the act and the subject, and the subject and object are encoded by the noun. Liu Chen gave birth to a small sentence was explained. In the sentence In the garden, Eve sliced an apple for Adam in the garden rather than acting Eve occupies the sentence at the beginning, because the speaker conceptualization of this typical event model into its scene, thus constructing a corresponding To express it (Liu Chen birthday, 2008: 65). The ICM cognitive model of the collation of words is mainly embodied in the construction of vocabulary and syntactic patterns. We chose the December 2013 four Zhenti to analysis:

When Roberto Feliz came to the USA from the Dominican Republic, he knew only a few words of English .Education soon became a __47__. "I couldn't understand anything," he said. He __48__ from his teachers, came home in tears , and thought about dropping out.

Then Mrs. Malave , a bilingual educator, began to work with him while teaching him math and science in his __49__Spanish."She helped me stay smart while teaching me English ,"he said .Given the chance to demonstrate his ability, he __50__ confidence and began to succeed in school.

Today, he is a __51__ doctor, runs his own clinic ,and works with several hospitals .Every day ,he uses the language and academic skills he __52__ through bilingual education to treat his patients.

Roberto's story is just one of __53__ success stories. Research has shown that bilingual education is the most __54__ way both to teach children English and ensure that they succeed academically. In Arizona and Texas, bilingual students __55__ outperform their peers in monolingual programs. Calexico, Calif. , implemented bilingual education, and now has dropout rates that are less than half the state average and college __56__ rates of more than 90%.In E1 Paso ,bilingual education programs have helped raise student scores from the lowest in Texas to among the highest in the nation.

A)wonder	B) acquired	C) consistently	D) regained
E) nightmare	F) native	G) acceptance	H) effective
I)hid	J)prominent	K)decent	L)countless
M)recalled	N)breakthrough	O)automatically	

We will be 15 alternative words marked on the part of speech, become as follows:

A)wonder	n.	B) acquired	v.	C) consistently	adv.	D) regained	v.
E) nightmare	n.	F) native	adj.	G) acceptance	n.	H) effective	adj.
I)hid	v.	J)prominent	adj.	K)decent	adj.	L)countless	adj.
M)recalled	v.	N)breakthrough	n.	O)automatically	adv.		

J, L; adverbs include: C ... We borrow Figure 1 Sander & Rice's ideal semantic network model map will be the above four types of words correspond to the ②③④ in the figure, and the resulting network pattern of the vocabulary is obtained.

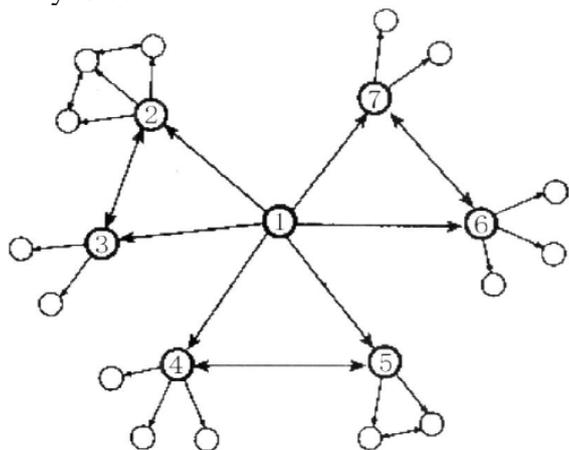


Figure 1 (Sander & Rice, 1995: 96)

Looking at the full text, we think that the whole conceptual model of the model is "When Roberto Feliz came to the USA from the Dominican Republic, he only only a few words of English", obviously, the contents of the later chapter and Roberto Feliz to the United States to learn English story related. With this scenario presupposition, we solve the problem is to construct a vocabulary of the cognitive model, to determine each space should have the part of speech. Compare the same word of the alternative words, the use of context clues, word praise and color, parallel structure, singular and plural, tense and other criteria in a few alternative words to choose the only correct. Example: Q47: through the front article "a" to determine the Department should be a noun, and countable. From the following clue "I could not understand anything," to judge, the background of this sentence is the English learning experience of the plight of the scene, here should highlight the derogatory color of the term. In the nouns, only E) nightmare meets the requirements. Q48: The sentence by the sentence structure to judge, should be predicate verb, through the parallel structure can be seen as the past tense, and "came home in tears, and thought about dropping out." We have to build a Roberto mood depressed scenes, in order to highlight this meaning, the three verbs only hid have this function. In the verb alternative, only I) hid meet the requirements. Through two examples of the analysis, we found that the solution is difficult to grasp

the title and the other eight small questions can be followed by analogy.

Research Design

Experimental Purposes. One of the test standards for the development of graded teaching in the school is the passing rate of the CET-4 examination, which stipulates that the passing rate of Grade A is 80%, B class to 60%, C class to 40%. In order to achieve this goal, we apply the ICM ideal cognitive model to the college English grading teaching. By comparing the teaching experiment methods, we test the C-class of the textile engineering with ICM ideal cognitive teaching by taking the CET-4 SPSS quantitative analysis of experimental methods to test the teaching model of college English reading comprehension validity and impact.

Experimental Subjects. The survey is to participate in the experiment of the school's textile engineering professional class C class 39 students.

Experimental Tools. This experiment is a related experiment. The experimenter has designed the questionnaire and the test questions by referring to the theory and method of the test method and the teaching research method of Prof. Du Shichuan and Professor Liu Runqing. The experiment results are obtained through the four-level Zhenti test in college English, and then SPSS repeat measurement variance analysis is carried out. The purpose of the repeated measurement of variance analysis is to test the significance of the differences. In the study, we often need to compare the mean difference between two or more samples to infer whether there is a significant difference between the overall mean of the respective representations (Wen Qiufang et al., 2004).

The Role of Researchers. Researchers are responsible for imparting the knowledge and the use of Lakoff's ideal cognitive model to experimental participants and collectors of materials.

Experimental Steps. The third step is to establish the ideal model of college English reading through research and demonstration. And apply it to college English teaching. The second step, in the case of case study and test paper test, the use of ICM ideal cognitive teaching method of the object, through a semester of contrast teaching, three times in college English four exam questions, beginning, end, end of the test, and Get the test data. The third step, the test data using spss22.0 software for data analysis, analysis report results. According to the results of the analysis report summarizes the ICM cognitive teaching model of the results and experience.

Table 1 Textile Engineering grading teaching C class English test scores table

Textiles grading teaching C class English test scores (710 points system)															
Name	Writing			Listening			Reading			Translation			Total score		
	Begin	Period	End	Begin	Period	End	Begin	Period	End	Begin	Period	End	Begin	Period	End
A	63	67.5	62.5	154	126.5	150	122.5	152	139.5	63	52.5	60.5	402.5	398.5	412.5
B	58.5	58.5	56	133	126	115.5	136.5	122.5	132.5	63	0	60.5	391	307	364.5
C	63	67.5	53.5	126	119	121.5	122.5	115.5	160.5	72	90	65	383.5	392	398.5
D	58.5	67.5	71.5	119	136.5	149.5	127	140	150	72	58.5	47	376.5	402.5	418
E	58.5	63	80.5	136.5	119	146.5	118	140	181.5	67.5	0	48	380.5	322	456.5
F	58.5	72	62.5	112	147	110	142	129.5	137	48.5	49.5	60.5	371	398	370
G	67.5	76.5	77	126	126	121.5	129.5	141.5	155	58.5	81	0	369.5	425	363.5
H	72	58.5	76	119	122.5	143	112	126	146.5	72	72	65	375	379	430.5
I	0	55.5	62.5	12129.5	126	160.5	119	154	150	76.5	72	51.5	325	407.5	424.5
J	72	55.5	62.5	122.5	126	150	114	129.5	163.5	63	0	75	371.5	311	431

The data collected the textiles grading teaching class C class 1-39 39 students early, mid, period of college English four simulation test results, for the sake of convenience, as shown above Figure 1-1 we intercepted the student number 1 to 10 students The results. This measurement analysis is a repeat measurement, so the use of repeated measurement of variance analysis, the Mauchly spherical wear test.

Experimental Results and Comparative Analysis. We use the multivariate analysis of variance of SPSS's general linear model to obtain the following results:

Table 2 Main body factors

MEASURE_1	
factor 1	Dependent variable
1	Read at the beginning
2	Read during the period
3	Read at the end of the period

Table 3 Mauchly's Spherical Test

MEASURE_1						
Subjective effect	Mauchly's W	like chi	df	Sig.	Epsilon ^a	
					Greenhouse-Geisser	Huynh-Feldt Lower limit
factor1	.992	.308	2	.857	.992	.500

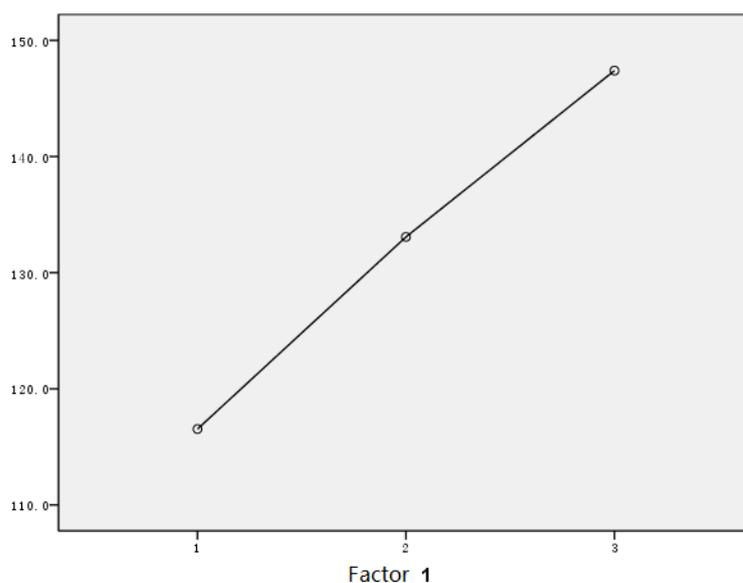
For the reading of the Mauchly spherical degree test, $\chi^2 = 0.308$, $p = 0.857 > 0.05$, the data meet the spherical symmetry hypothesis, no need to correct the F value. Sig value less than 0.01, indicating the beginning of the period, the end of the period and the results of the two variables there is a correlation.

Table 4 Analysis of Grade C Test in Textile Engineering Grade C Test

Item	n	Begin $\bar{x} \pm s$	Period $\bar{x} \pm s$	End $\bar{x} \pm s$	F	P	F linearity	P
Writing	39	40.79 ± 28.44	61.54 ± 7.44	66.59 ± 15.81	25.098	0.000	36.605	0.000
Listening	39	119.18 ± 21.83	127.78 ± 9.24	133.67 ± 29.92	6.683	0.002	18.215	0.000
Reading	39	116.54 ± 20.94	133.08 ± 18.97	147.40 ± 30.32	17.367	0.000	33.258	0.000
Translation	39	51.00 ± 25.41	44.35 ± 33.25	50.27 ± 21.66	0.786	0.459	0.022	0.882
Total score	39	330.53 ± 56.18	366.85 ± 45.90	396.28 ± 81.21	12.772	0.000	21.356	0.000

Note: Repeated measurement of variance analysis

Table 5 Summary file diagram



Conclusion and Revelation

This data collection of textile engineering grading teaching C class at the beginning of the period,

the end of the end of each student's English grades, are repeated measurements, so the use of repeated measurement of variance analysis, the Mauchly spherical test, $\chi^2 = 0.308$, $p = 0.857 > 0.05$, the data satisfies the spherical symmetry hypothesis, do not need to correct the F value; Mauchly spherical degree test, $\chi^2 = 3.809$, $p = 0.149 > 0.05$, the data meet the spherical symmetry hypothesis, no need to correct F value. Repeated measurement of variance analysis shows that there is a significant difference in reading and total score, but only that there are differences in the overall, and cannot explain the specific two periods are different, need to be further compared. From the table 5 can be seen: 1) analysis of variance, can be understood as the F value is greater, the difference is more significant, but still have to look at the value of sig is significant, if sig did not achieve significant results, even F also makes no sense; 2) Multiple test is used to test whether there is a difference in the same level of the same factor. We will find that p (sig) < 0.05 , this shows that this group of data is not normal distribution, there is a significant difference. In the reading grade, the period was significantly higher than the beginning of the period, significantly higher than the beginning of the period, significantly higher than the end of junior high school, three in any two significant differences. In the total score, the period was significantly higher than the beginning of the period, significantly higher than the beginning of the period, significantly higher than the end of junior high school, 3 in any two significant differences. It is not difficult to see that the various explanations that seemingly unrelated in the traditional teaching are related to the ICM cognitive model in the new analysis, and this analysis makes The emergence of the righteousness has a cognitive rationale, revealing the form of the psychological organization of the lexical and syntactic in the deep level, helping the students to establish the conceptual structure containing the various items, and avoiding the simplification of the atomism in the traditional teaching. According to the results of SPSS analysis, it is shown that the construction of college English reading mode through ICM cognitive model can help the students with poor English learning ability to improve their English ability, and then effectively improve their English achievement.

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