

Teaching English Writing in China: AES vs. MES

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Abstract

Postmodernist educators emphasize the key values of pluralism, relativism, individuality, productivity and creativity. In the educational practice in English Writing, the Chinese postmodernist educators transform the traditional teaching style in every aspect. As a typical example, the change of English writing teaching method (from MES or Manual Essay Scoring to AES or Automated Essay Scoring) shall be discussed in this article.

Keywords: English Writing, AES, MES

1. Changing Teaching Methods: AES vs. MES

Back to several decades ago, the teaching methods of modernist educators are still very traditional---chalks and blackboard will be more than enough. In teaching English writing, the most common practice is to assign some compositions for the students to write either in class or after class. Then the teachers will drown themselves into red ink---correct language errors and give comments for each student. Nowadays in China, however, almost every classroom is installed with multi-media facilities. TsingHua University, following the pace of Harvard, Yell and many other well-known universities, has produced online courses and other forms of digital learning for several decades with the goal of making educational content available to a global audience. On-line learning is not something new for Chinese students, especially for those English learners. The teachers assign homework, correct errors of the assignments and even chat with the students on line. Computer-aid teaching methodology is commonly used in Chinese universities. The students write compositions/reports on line and get to know the score provided by the computer system almost immediately, without waiting for the manual results from the teachers. English teachers upload large number of English songs, movies, video shows, test papers and etc. for their students to keep further studies after class. This is something unimaginable back to 30 years ago, when BBC and CNN were hardly accessible even to citizens of the big cities in China. When talking about evaluation, those universal, unbending and ossified evaluation systems were abandoned by post modernists. They believe that every student is the one and the only one. For post modernists, the evaluation methods can be both qualitative and quantitative. Using just one standard or criteria to judge their performance is absurd. Evaluation should be a systematic, rigorous, and meticulous application of scientific methods to assess performance and improvement of the students, using a set of standards and criteria.

MES or Manual Essay Scoring is the traditional way of composition evaluation. AES or Automated Essay Scoring is a new technology of composition evaluation and scoring. This new technology was first introduced to China in the 1980's, but it has only become mature and popular in Chinese colleges and universities since the past decade. PEG (Project Essay Grader), IEA (Intelligent Essay Assessor), E-rater (Electronic Essay Rater), IntelliMetric and Writing Roadmap are all very popular automated essay scoring systems. Starting from the previous semester, Bingo English Intelligent Essay Review System (Hereinafter referred to as BEIERS) was introduced to my college. This new essay scoring system was developed jointly by School of Foreign Languages, Zhejiang University and Hangzhou Network Technology Co., Ltd. With the aid of this new computer system, the students are able to write on line and had their compositions scored by computers.

2.1 A Survey about AES

Can Chinese college students accept AES? Can computer system completely replace the role of English teachers in English writing? What are the correlation between AES and MES ? We try to find out answers in our research. Accordingly, the following research questions are posed:

- 1) What do you think of your English writing level?
- 2) Do you think writing is important in your English learning?
- 3) How often do you writing an English composition
- 4) Do you think you can improve your English writing level within a short period of time?
- 5) Are you confident that your English writing level will be improved in college?
- 6) Do you think MES helps to improve your English level?
- 7) How often will you go out of your way to discuss your English writing with your teachers?
- 8) Do you accept AES?
- 9) How often do you use BINGO system?
- 10) Do you agree that AES helps to improve your English writing level?

The survey data on AES were initially collected from 103 participants; all of them are college freshmen, majoring in information management, marketing, logistics management, material science, and process accoutrement. AES has been adopted in their English writing for more than one semester. 78% of them are male students and the average age is 19.3 years old. The questionnaires were given to the students at the beginning of the second semester. The data of the survey are as follows (referring to appendix II).

Only 1.9% of the participants consider their English writing level is “very good”, while the majority of them are on average (55.3%) or below average (28.1% and 14.5%). The participants almost unanimously think English writing is important (only 0.9% of them disagree that writing is important in your English learning). Yet, 50.4% of them will not write English compositions until the teachers ask them to. 33.0% of them write English compositions occasionally and 1.9% of them never write at all. 10.6% and 32% of the participants think they are very possible or possible to improve your English writing level within a short period of time. Only 22.3% and 9.7% of the participants are very confident and confident that they can improve their English writing in college. 32% and 43.6% of the participants think manual scoring very important or important in helping them improve their English writing level. However, only 0.9% and 3.8% of the participants will go out of their way to discuss their English writing with their teachers very often or often. Although 9.7% and 58.2% of the participants completely accept or accept AES, only 7.7% of the participants very agree that AES helps to improve their English writing level. The results of the survey are as follows:

- 1) The students are aware that their English writing levels are far from satisfactory. (Q1)
- 2) The students recognize the importance of writing in English learning. (Q2)
- 3) The students are not voluntary in practicing English writing. (Q3&4)
- 4) Psychologically, the students are not so confident in improving their English writing capacity. (Q5&6)
- 5) The students believe manual essay scoring will be able to help them in their English wring. (Q7)
- 6) The majority of the students can accept AES, yet they are not so sure that AES can be helpful in improving their English writing level. (Q8, 9&10)

The results of the survey arouse the discussion about whether computer system can completely replace the role of English teachers in English writing. The majority of the participants in this survey can accept AES, but they still believe in manual scoring. They are not so confident that AES can be helpful in improving their English writing level. When interviewing the participants, they express their concern about the reliability and accuracy of AES. The logic errors can hardly spotted by the computer system and the comments are not always accurate and reliable, according to the students surveyed. What is more, the errors in format of certain types of writing are seldom found out by computer system. Therefore, AES should only be used as a complementary means besides manual essay scoring in the education of English writing.

2.2 Correlations between AES and MES

Since the computer system cannot completely replace the role of the teachers and AES does have disadvantages as well as advantages, it is inevitable that MES is used together with AES in real teaching practice.

What are the correlations between AES and MES? We collected big data by comparing the results of AES and MES, and made the following data analysis.

The first pair of samples statistics results from a Campus Essay Writing Competition, in which the title assigned by the teachers is “Is Advert Needed?” 70 students participated in the competition. They come from different grade and major, which means their English writing levels differ sharply. The results of the comparison between AES and MES are as follows (Table 1, 2 & 3):

		mean	N	Std. Deviation	Std. Error Mean
Pair 1	AES	53.2357	70	12.58514	1.50421
	MES	55.4286	70	13.23541	1.58193

		N	Correlation	Sig.
Pair 1	AES & MES	70	.953	.000

		Paired Difference					t	df	Sig.(two tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					lower	upper			
Pair 1	AES-MES	-2.19286	4.02511	.48109	-3.15261	-1.23310	-4.558	69	.000

The second pair of samples statistics are the scoring results of 76 senior students, who are supposed to write something about “drunken driving”. The participants are from Economic Management Department, Mechanical Science Department and Humanity & Social Science Department. They have learned English writing for 4 semesters and their English level is about national College English Test Band four (CET4). The results of the comparison between AES and MES are as follows (Table 4, 5 & 6):

		Mean	N	Std. Deviation	Std. Error Mean
Pair 2	AES	8.9421	76	1.77112	.20316
	MES	9.3421	76	1.90825	.21889

		N	Correlation	Sig.
Pair 2	AES & MES	76	.826	.000

		Paired Difference					t	df	Sig.(two tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					lower	upper			
Pair 2	AES- MES	-.40000	1.09276	.12535	-.64971	-.15029	-3.191	75	.002

$P_1 = 0.000$ $P_2 = 0.002$ ($p < 0.05$). Correlation of pair 1 = 0.953 Correlation of pair 2 = 0.826 The data of the comparison show that the results of AES and MES are highly correlated. Why, then, the students are so reluctant to trust AES according to the results of the survey about AES? Let's take Lin FENG, a senior student's composition as an example to discuss this issue. The computer scored her composition 71.9 and gave the following comments, “A good piece of work. The machine says, ‘Need more words to compute.’ In other words, write a bit longer please? The language in your writing is generally clear but with some errors.

You've successfully attempted at more sophisticated language and good control of complex structures. You have covered the points required and showed sufficient details". From the automated comments, we find that the machine prefers comparatively long article with more esoteric vocabulary. According to the teachers, Lin, FENG's essay, though far from perfect, is concise and fluent in expression. It is not necessarily to be long and obscure. The machine can only read people's language, not people's mind. Thus, esoteric words, complex structures and a long essay do not necessarily mean a good essay.

The case of AES is a typical example of the application of the philosophy of post modernist education. The research results support that computer system has immense speed in carrying out certain low-level tasks and increased the amount of writing. But more writing does not mean better writing and long essays do not mean good essays. The value of the teachers is irreplaceable. What is more, writing on line and AES do not involve the sustained patterns of arguments with the teachers or peer discussion that students always do in MES. Despite the correlations between AES and MES, it still in lack of conclusive evidence that AES alone can effectively improve writing. Therefore, the philosophy of post modernism would have gone to extreme if excessive use of computers could not be avoided in teaching English writing.

IV. Conclusion

In conclusion, College English writing classes in China are the practical applications of modernist and postmodernist philosophies in field of education. Postmodernist educators break through the limitations of modernist education theories in the past several decades. In the postmodern educational models, English writing teaching practice deconstructs teacher-centered principles and hegemonic language rights of the teachers, emphasizing the harmonious relationship between teachers and students through equal dialogues and negotiations. Postmodernist educators attach great importance to the fusion of multiple teaching contents, encouraging learners in critical reflection, paying attention to the training of the students' practical ability, and promoting diverse, dynamic and formative assessments. Of course, the postmodernist education theories inevitably have some limitations as going to extremes frequently, excessive use of machines, over-relying on computers/internet and so on and so forth. In the case of AES, the computer-aid teaching practice can be a two-edged sword. On the one hand, the computer system relieves the teachers form tedious hard work of revising students' compositions. The students get to know the results of their writing more instantly. On the other hand, the computer can never completely replace the role of the teachers. The scores/comments provided by the computer system are not always reliable. Some logic language errors, for instance, can hardly be found out by the computer system. Although we have made some efforts on the study of English writing education in China, the depth and range of the research are still in need of improvement. The opportunities for researchers to contribute to this issue are many.

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Appendix

I. A Survey about English Writing Under automated essay scoring systems

1. What do you think of your English writing level?

Very good	1.9%
Good	
Average	55.3%
Bad	28.1%
Very bad	14.5%

2. Do you think writing is important in your English learning?

Strongly agree	27.1%
Agree	57.2%
Average	14.5%
Disagree	
Strongly disagree	0.9%

3. How often do you writing a English composition?

Every week	3.8%
Every 2 weeks	10.6%
Occasionally	33.0%
Only when my teacher asks	50.4%
Never	1.9%

4. Do you think you can improve your English writing level within a short period of time?

Very possible	10.6%
Possible	32.0%
Don't know	22.3%
Impossible	29.1%
Very impossible	5.8%

5. Are you confident that your English writing level will be improved in college?

Very confident	22.3%
Confident	9.7%
Average	55.3%
Not confident	10.6%
Completely not confident	1.9%

6. How do you think manual scoring helps to improve your English writing level?

Very important	32.0%
Important	43.6%
Average	24.2%
Unimportant	
Completely unimportant	

7. How often will you go out of your way to discuss your English writing with your teachers?

Very often	0.9%
Often	3.8%
Average	26.2%
Seldom	47.5%
Never	21.3%

8. Do you accept AES?

Accept completely	9.7%
Accept	58.2%
Don't care	24.2%
Refuse to accept	6.7%
Completely refuse to accept	0.9%

9. How often do you use BINGO system?

Very often	5.8%
Often	82.5%
Average	2.9%
Seldom	5.8%
Never	2.9%

10. Do you agree that AES helps to improve your English writing level?

Strongly agree	7.7%
Agree	7.7%
Average	50.4%
Disagree	5.8%
Strongly disagree	0.9%