An Analysis on In-Service Secondary School Teacher' Efficacy Beliefs

Yangsuk Kang
(Bongseo Middle School)

ABSTRACT

The purpose of this study is to investigate the current degree of Korean secondary teachers. Also it attempted to know any underlying factors to affect their belief on teaching according to their external status including gender, teaching experience, and the period of getting in-service training courses toward teaching English as Foreign language. In order to accomplish the purpose of this study, 140 secondary school teachers responded to the revised ETSES(English Teachers' Self Efficacy Scale) questionnaire which consists of expected four categories (student engagement in learning, employment of instructional strategies, classroom management, and collective efficacy). SPSS 18.0 and Rasch measurement was used to analyze the data. On the result of the questionnaire, it was assumed that in-service teachers' efficacy beliefs were relatively high and there were slight differences according to the teachers' demographic variables, especially in gender, working periods and attending group projects. However, The analysis of item responses through Winstep program displayed that the revised ETSES questionnaire needed to be taken into account to reconstruct for the better result.

Keywords: Teachers' self efficacy, efficacy scale, secondary school, Rasch model, Winstep

I. Introduction

As a non-native English teacher in Korea, there are two ongoing goals to fulfill. One is to seek the way to teach English in an effective and interesting way. The other goal is to keep improving our own level of English. Furthermore, teachers have to keep up with the new national curriculums and policies for English education such as differentiated class teaching, team-teaching with native teachers, newly-revised textbooks, parents' high expectations about English education not to mention teachers' own linguistic concerns.

One of the teacher beliefs that impact teachers' pedagogical practices as well as student achievements is teacher efficacy. Teachers' sense of efficacy, also referred as "teacher efficacy," is defined as "the teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a sepcific teaching task in a particular context"(Tchannen-Moran &Woolfolk Hoy, 2011, p.223).

A significant amount of researches have been conducted on teacher efficacy and relationship with other variables of English teachers in the Korean contexts (Kim, & Oh 2011, Park, Choi & Lee 2009, Lee 2009). However, not so much attention has been paid to in-service secondary school teachers' feelings of being capable for teaching English in the classroom, let alone in-service English teachers' efficacy beliefs.

The present study aims to investigate the level of in-service secondary school teachers' efficacy beliefs toward teaching English as a Foreign Language. The study also examines secondary teachers' perceived underlying factors and their relationship toward English teaching. The following is research questions.

1. What are the current levels of the self-efficacy for teaching English among selected Korean secondary teachers?

2. What is the relationship between the demographic variables and the teachers' sense of efficacy in teaching English?

II. Literature Review

2.1 Self Efficacy Beliefs

Bandura(1986), in his book about self-efficacy, defined self efficacy as 'people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances"(recited from Henson 2001).

Comerchero(2008) compared the relationship between gender, tenure status, teacher efficacy, perfectionism and teacher burnout in teachers' emotional exhaustion, depersonalization, and personal accomplishment. According to her 285 subjects, correlational analyses revealed teacher efficacy, adaptive perfectionism and maladaptive perfectionism produced the most significant changes in variance with gender and tenure showing less influence.

2.2 Teacher Self-efficacy

Consistent with the general formulation of self-efficacy, Tschannen-Moran and Woolfolk Hoy (2001) defined teacher efficacy as a teacher's "judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated."

With in-service elementary teachers, Lee(2009) conducted two mixed methods to figure out their efficacy level and corelation between their efficacy and expected English proficiency. Her experiment showed that efficacy for oral English language use was an additional dimension of teacher efficacy indicating teachers' current level of English proficiency and EIL(English as an International Language) attitude toward the English language were the significant predictors for teachers' English teaching-specific efficacy beliefs or confidence.

III. Method

3.1 Participants

For this study, 122 secondary(middle and high) school teachers who are teaching in Jeollabukdo, and 18 secondary teachers from other regions(6 from Gyoenggido middle school, 12 from Gyeongnam high school) responded to the survey. The participants of the study were all non-native English teachers.

[TABLE 1] Demographics of Participants

Demographics	Categories	N	%	total (N/%)
Gender	Male	47	33.6	140 (100%)
	Female	93	66.4	
Age	20s	9	6.4	140 (100%)
	30s	43	30.7	
	40s	53	37.9	
	50s	35	25.0	
school	middle	68	48.6	140 (100%)
	high	72	51.4	
Working Area	rural area	39	27.9	140 (100%)
	urban area	101	72.1	

3.2 Materials and Procedures

3.2.1 English Teachers' Self Efficacy Scale (ETSES)

The ETSES was developed based on the TSES and modified to reflect in-service teachers' efficacy beliefs in teaching English as a foreign language in the Korean secondary school classrooms.

3.2.2 Procedures

In this study, a questionnaire with 20 questions was done. The questionnaire required teachers to respond to questions using a Likert-type scale from '1 strongly disagree' to 6 'strongly agree'.

3.2.3 Research Methodology

The result of the questionnaire was analyzed by SPSS 18.0. a descriptive analysis, an Anova and factor analyses were used to find out the response of the questionnaire. Finally, a Rasch model, Winstep was done to know the reliability of item responses. The results indicated that the revised ETSES questionnaires needed to be reconstructed, especially on inverted items and scale.

IV. Results and Discussions

4.1 Descriptive statistics

The data set gathered through the ETSES were submitted to the descriptive statistics in order to discover the response patterns in the relationships among the 20 statements or variables.

The mean score is mostly more than 4 which indicates 'slightly agree', 'agree' and 'strongly agree' on the survey scale. Only two items' score is less than 4 (item 13. I can assist parents to help their children learn English and 20. I feel difficult to teach English through English). The highest score of all items is shown as 4.80 in item 1 (I can control disruptive behavior in my class).

4.2. Teachers' Efficacy Beliefs for Teaching English

4.2.1. Anova analysis

The level of teachers' efficacy is slightly correlated to gender and age. Especially, in gender, male teachers have s higher score than female teachers which is significant (p=.001<0.05) in classroom management category. It is remarkable that the third group which attended group-work for Education offices more than 5 times has a higher score than that of other groups in every factor. One of them, the scores of the instructional strategies are statistically significant. (p=0.007<0.05).

4.2.2 Factor analysis

The first factor seems to combine two efficacy categories; 'efficacy for student engagement', and 'efficacy for instructional strategies', and the second factor is 'efficacy for classroom management'. The next factor is for collective efficacy. However, there were several items that were not loaded properly on any of the expected factors. Therefore, it was necessary to be checked the possible reasons by the third measurement, the initial Rasch model; Winstep analysis.

4.2.3 Rasch measurement

The Rasch reliability indices computed. the Rasch analogue to Cronbach's alpha is called person separation reliability(Wright & Masters, 1982, recited from Hong, Sehee, Kim, B. S. K., & Wolfe, M. M. 2005), which refers to the ability to differentiate persons on the measured variable and the replicability of person placement across other items measuring the same construct.

4.2.4.1 Summery Statistics

The result of Winstep output, summary of statistics of 140 measured persons and 20 items on the table 21. The infit and outfit scores are within the good fit statistics by 1.07 and 1.05 for persons, and 0.99 and 1.05 for items.
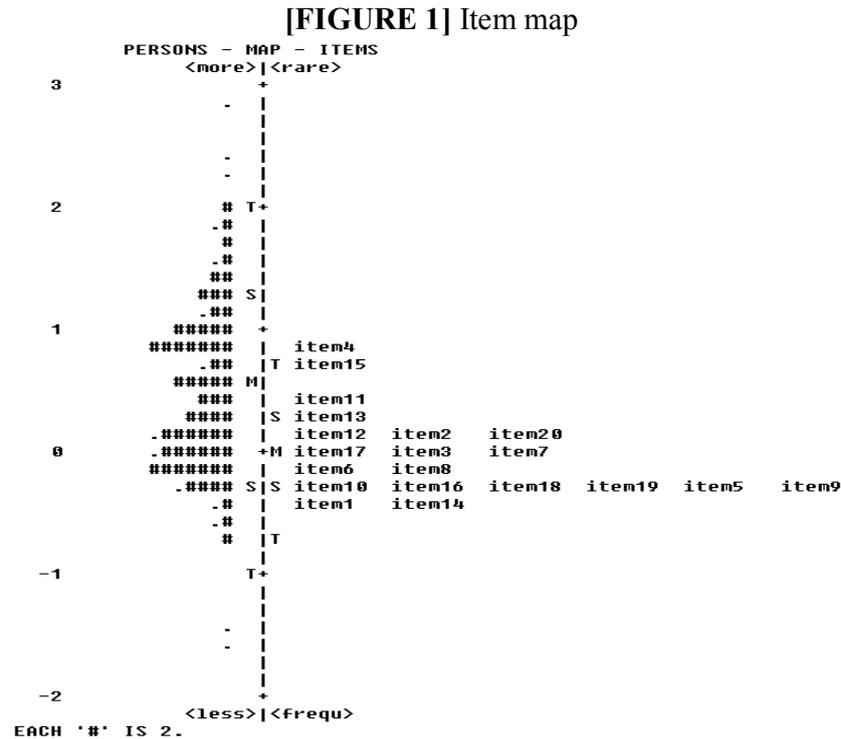
[TABLE 2] Fit Statistics

```
-------------------------------------------------------------------------------
| PERSONS    140 INPUT    140 MEASURED           INFIT       OUTFIT    |
|           SCORE    COUNT    MEASURE    ERROR    IMNSQ  ZSTD  OMNSQ  ZSTD|
| MEAN      85.4     20.0       .50      .31     1.07   -.1   1.05   -.1|
| S.D.       9.6      .0       .74      .07      .74   1.9    .75   1.9|
| REAL RMSE   .32 ADJ.SD      .66 SEPARATION 2.09 PERSON RELIABILITY  .81|
|------------------------------------------------------------------------|
| ITEMS     20 INPUT     20 MEASURED            INFIT       OUTFIT    |
| MEAN     597.6    140.0       .00      .11      .99   -.1   1.05    .2|
| S.D.      30.0      .0       .34      .01      .26   1.9    .38   2.6|
| REAL RMSE   .11 ADJ.SD      .32 SEPARATION 2.91 ITEM   RELIABILITY  .89|
-------------------------------------------------------------------------------
```

4.2.4.2 Item statistics

Looking at the table 22, item statistics display item misfit order. Among 20 items, items 18, 3, 10, 16 were found to be misfits, based on the criteria that 2.infit Mnsq values in 0.6 and 1.4 and inft ZSTD values between -2.0 and +2.0 are acceptable.

Item map in the table 23 indicates that participants regarded items 1 and 14 as very positive ones, on the other hand, item 4 was regarded as the most unwilling to answer easily. The intemperateness of the four items(18, 3, 10, 16) are also shown in this Item map.

[FIGURE 1] Item map

```
              PERSONS - MAP - ITEMS
                  <more>|<rare>
       3              +
              -       |
                      |
                      |
              -       |
              -       |
                      |
       2          #  T+
                 .#   |
                  #   |
                 .#   |
                 ##   |
                ###  S|
                -##   |
       1       #####  +
              #######  |   item4
                -##   |T  item15
              #####  M|
                ###   |   item11
               ####   |S  item13
              .###### |   item12  item2   item20
       0      .###### +M  item17  item3   item7
              #######  |   item6   item8
               .#### S|S  item10  item16  item18  item19  item5   item9
                -#    |   item1   item14
                -#    |
                 #    |T
                      |
      -1             T+
                      |
                      |
              -       |
              -       |
                      |
                      |
      -2              +
                  <less>|<frequ>
       EACH '#' IS 2.
```

V. Conclusion

The present study, by adapting the notion of teachers' sense of efficacy (Tschnannen-Moran & Woolfolk Hoy, 2001) as the theoretical framework, has explored Korean elementary school teachers' efficacy belief in teaching English.

Research Question 1. What are the current levels of the self-efficacy for teaching English among selected Korean secondary teachers?

The 20-item English Teachers Self Efficacy Scale was developed by modifying the 12-item Teachers'Sense of Efficacy Scale(TSES) of Tschannen-Moran and Woolfolk Hoy(2001), conferring Lee's revised items(Lee, 2009) and Choi's ETES(Choi, 2008). The current study's analysis of 20 item scale identified four factors of English Teachers Self Efficacy Scale: Instructional Strategies, Classroom Management, Student Engagement, and Collective efficacy.

The survey participants rated their self-efficacy in teaching English at a relatively higher level in the four dimensions. The teachers responded that they felt more confident in this order : classroom management(M=4.44), collective efficacy(M=4.35), instructional Strategies(M=4.20) and student Engagement(M=4.11). In relation to the teacher efficacy levels, it is important to note that English teachers' self efficacy levels in the present study were found to be higher than those in the previous studies adopting the TSES.

Research Question 2. What is the relationship between the demographic variables and the teachers' sense of efficacy in teaching English?

The result of analyzing the 20 items with demographic variables showed that there is slightly significant difference among 12 categorized groups.

In the groups of gender, age, teaching years, cooperation of group work, there are a few significant correlation showing P value less than 0.05. For example, the male teachers have a little higher mean scores than the female teachers in classroom management(p=0.001<0.05). Another factor of student engagement is statistically significant in age groups showing 50's teachers are slightly higher(0.025<0.05). The third significant difference between groups according to their cooperation levels was shown(0.007<0.05).

Finally, the new ETSES were the analyzed by the initial Rasch model, Winstep in order to find out the validity of questionnaire items and scales. The summary of statistics seems to be reliable in general but there are four misfitting items. The analysis using Winstep suggested more skillful design of ETSES needs to be revised as well as in-depth interview for the better refined result of English teachers' efficacy belief.

REFERENCES

장소영&신동일.(2009). *언어교육평가 연구를 위한 FACETS 프로그램*. 글로벌 컨텐츠, 서울

Ahn and Kim. (2011). A study on Korean language teachers' sense of efficacy. *Bilingual Research* 45, 109-132.

Bond & Trevor, G. & Fox & Christine, M. (2007). *Applying the Rasch Model: Fundermental Measurement in the Human Sciences*. 2nd Edition. Lawrence Eribaum Assoc Inc. New Jersey.

Chacón, C. T. (2002). *Teachers' sense of efficacy and selected characteristics of selected English as a foreign language Venezuelan middle school teachers*. doctoral Dissertation. The Ohio State University, Columbus, Ohio.

Chacón, C. (2005). Teachers' perceived efficacy among English as a foreign
language teachers in Venezuela. *Teaching and Teacher Education, 21*, pp.257-272.

Choi, S, K. (2011). The Calibration of Writing Apprehension Scale Using Rasch Rating Scale Model. *Saegueogyoyuk*. Vol. 87. Seoul.

Choi, Sunhee. (2008) Preservice Elementary School Teachers' Efficacy Beliefs Towards Teaching English. *English Language and Linguistics* 26, p. 129-156.

Comerchero, V. (2008). *Gender, Tenure State, Teacher Efficacy, Perfectionism and Teacher Burnout.* doctoral dissertation. Fordham University. New York.

Han and Shim, (2009). Study on the relationships between Learners' confidence in their non-native English and affective variables. *The Linguistic Association of Korea Journal* 17(4) 159-179.

Hong, Sehee, Kim, B. S. K., & Wolfe, M. M. (2005). A psychometric revision of the European American Values Scale for Asian Americans using the Rasch model. *Measurement and Evaluation in Counseling and Development*, 37, 194-207.

Ji, E I & Chae, S H (2000). *Rasch Model's Theory and Practice* (translated from Korean title). Gyoyukgwahaksa. Seoul.

Ji Yeon Jung. (2010). *The Relationship Between Secondary School English Teachers' Perfectionism and Foreign Language Teaching Anxiety* : The Mediated Effect by Teacher-Efficacy. master thesis. Ewha Womans University.

Kim and Kim. (2008). An analysis of the factorial validity of Bandura's teacher self-efficacy scale. *The Journal of Yua Education* 28(2) 169-191

Kim & Oh. (2011) Teaching Practicum of Pre-Service Secondary English Teachers; Reflective Learning. The Journal of Linguistic Science 56, 1-28.

McNamara, T, F. (1996). *Measuring Second Language Performance*. Longman, London.

Miran Yang. (2011). A case study of Native English Speaking Teacher Efficacy in Korean Elementary Schools Master thesis TESOL Graduate School Dankook University. Seoul.

Moon, S, Y.(2005). A Study on the Relationship Among Teacher's Self-Efficacy, Students' Contentment for the Teacher and Studies accomplishment. Master thesis. Graduate School Education. Jeonbuk National University.

Park and Choi and Lee. (2009). The Effects of English teachers' career and their cognitive-affective factors on implementing the differentiated English curriculum in elementary school. *The Journal of Yeolin Education* 17, 23-46.

Park, J, I. & Park, Y, M. (2011). The Analysis of the Korean Language Teacher's Scoring Consistence Change Using Rasch Measurement Model. *UriEomunYeongu* Vol.39 p.301-335

Park & Jeon. (2007). The effect of Student, Teacher, and School Characteristics on Middle School Students' Korean, English, and Mathematics Achievement Outcomes. *The Korean Journal of Educational Psychology*. Vol 21. 145-168.

Shim, J-W.(2001). *The efficacy beliefs of Korean teachers of English as a foreign language.* doctoral dissertation. The Ohio State University, Columbus, Ohio.

Shim. (2002) A study of teacher efficacy belief of Korean teachers of English: A discriminant analysis. *Foreign Languages Education*, 9(2) 125-152.

Shim. (2003) Teacher Efficacy Belief and Language Skills of Preservice Elementary Teachers of English. *The Journal of English and Literature*, 29(3) 231-244.

Shim, J-W.(2006). Validation of dimensions of teacher efficacy beliefs specific to non-native Korean teachers of English. *Yeongeoyoengmunhak[Studies on English Language and Literature],* 32, 207-224

Jeong-Ah Lee. 2009. Teachers' sense of efficacy in teaching English, perceived English language proficiency, and attitudes toward the English language; A case of Korean Public Elementary school teachers. doctoral dissertation. The Ohio State University, Columbus, Ohio.

Robin K. Henson. (2001). Teacher Self-Efficacy: Substantive Implications and Measurement Dilemmas. *Educational Research Exchange*. January 1-18. Texas A&M University, College Station, Texas.

Tschannen-Moran, M. and A. Woolfolk-Hoy. (2001) Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education 17.7, 783-805.*

Woolfolk-Hoy, A. and R. Spero. (2005) Changes in teacher efficacy beliefs during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education* 21.4, 343-356.

Wright, B.D., & Stone, M.H. (1979). *Best Test Design*. IL:MESA Press. Chicago.

About the Presenter

Yangsuk Kang received an MA in 2008 from Jeonju University, specializing in English Education as EFL in Korea. She has taught for over 18 years at the secondary school level. Her professional interests include teacher efficacy and rater bios using Rasch Model. Currently, she is an English teacher at the Bongseo Middle school and a graduate student at Chonbuk National University. Email: pumpp89@yahoo.co.kr