# Task-Based Learning (TBL) approach and assessment skills of prospective teachers

Tallungan, Jenifer Raymond R.

Nueva Vizcaya State University, Philippines (jenz2319@gmail.com)

Received: 15 January 2023 Available Online: 31 May 2023 **Revised**: 20 April 2023 **DOI**: 10.5861/ijrse.2023.2020

Accepted: 5 May 2023

International Journal of Research Studies in Education
Volume 1 Number 1 January 2012

ISSN: 2243-7703 Online ISSN: 2243-7711

OPEN ACCESS

#### Abstract

This quantitative study aimed to ascertain the effectiveness of Task-based Learning (TBL) approach as an intervention in improving assessment skills of prospective teachers of Nueva Vizcaya State University - Bambang Campus, Bambang, Nueva Vizcaya, in the academic year 2019-2020. It specifically employed the descriptive method using the quasi-experimental approach involving 30 respondents. Validated written examinations were used to gather information needed to test the null hypothesis that there is no significant difference in the levels of assessment skills of the respondents before and after the intervention, using the 0.05 level of significance. Results showed that areas in Assessment of Learning 1 needing reinforcement among the selected respondents included topics under methods of analyzing and evaluating test results, utilization and reporting test results, and development of classroom assessment for measuring knowledge and learning. The researcher hence developed a task-based intervention which was used in the experimentation. Results further showed that the respondents' level of assessment skills before exposure to the task-based intervention was high average, while after exposure was high. It was found out that there was a significant difference between the mean scores of the respondents in the pretest and posttest. This means that the respondents' assessment skills after the intervention were significantly better than their assessment skills before the intervention. The improved assessment skills of the respondents could be attributed hence to the effectiveness of the TBL approach.

*Keywords:* assessment skills, effectiveness, prospective teachers, task-based intervention, task-based learning approach

### Task-Based Learning (TBL) approach and assessment skills of prospective teachers

#### 1. Introduction

The touchstone of learning is assessment. Its substance is the learning outcomes that prepare learners in a highly technologically and scientifically compelled society. The effectual assessment brings about change through any effort of an educational entity in strengthening skills that necessitate objectives aligned with the goals of global education. The significance of learning lies hence in what is retained in the head, heart, and hands of the learners and how they can use such learning in hurdling the demands of modern life. Assessment is a systematic process of gathering and creating a full range of information through informal and formal means such as observation or verbal exchange, assignments, tests, written reports or outputs, portfolios, rubrics, essay journals, rating scales, and checklists among others. According to Garcia (2008), it looks into account how much change has occurred in the student's acquisition of knowledge, skills, and values before and after a given learning activity.

Prior to the student teaching internship, the prospective teachers are offered a laboratory where they could acquire professional skills in preparing and treating assessment tools that optimize student learning outcomes. These tools are prepared to measure the holistic development of an individual – cognitive, affective, and psychomotor learning. The teacher education curriculum offers two assessment courses namely Assessment of Learning 1 and 2. The former segment which is a prerequisite of the latter gives focus to cognitive learning wherein specific competencies are targeted for prospective teachers, namely, writing objective and subjective tests like multiple choice, matching, alternate response, completion, simple recall, and essay types. Further, the skills in preparing the blueprint of the test likewise share importance in putting emphasis on competencies needing more weight. Moreover, skills in establishing quality in assessment tools like validity, reliability, and usability prove an equal foothold in writing effective examinations. One of the processes that involve such skills is item analysis.

All these assessment skills learned in Assessment of Learning 1 are essential in carrying out tasks needed in Assessment of Learning 2 which puts a premium on learning outcomes along with performance, product and process-based assessment, affective and psychomotor assessment, portfolio assessment, grading, and reporting. It is in this light that the researcher developed a learning material that included tasks to address the weaknesses of the prospective teachers in cognitive assessment, to ensure smooth learning in topics under the latter segment of their assessment course. The learning material is anchored on the Task-based Learning (TBL) approach. David Nunan (1999) asserted that a learning strategy of one kind or another underlies every task that the educator introduces into the classroom. Nunan further elaborated that tasks, which seem on the surface to be quite different, turn out to be underpinned by the same strategy, and when they identify the strategies underlying the tasks they typically use in the classroom, educators are sometimes surprised to find that they are based on a rather limited repertoire of strategies.

Moreover, Willis and Willis (1996) stated that task-based approaches to learning require educators to take seriously the need to examine how learners learn when doing tasks. They furthermore defined tasks as activities that have the meaning as their primary focus. Success in the task is evaluated in terms of the achievement of an outcome, and tasks generally bear some resemblance to real-life activities. Hence, task-based instruction takes a fairly strong view of teaching. Long and Crookes (1993) added that it is a task that drives the learner's system forward by engaging acquisitional processes. Skehan (1998) proposes that a task is an activity in which meaning is primary; there is a learning problem to solve, and the task is closely related to real-world activities. The above concepts hence prompted the researcher to set eye on improving the assessment skills of prospective teachers of Nueva Vizcaya State University - Bambang Campus, Bambang, Nueva Vizcaya, which served in this study as the bases in developing varied tasks that addressed their weak areas.

In this perspective, a thorough study of the effectiveness of TBL approach as an intervention in improving assessment skills of junior teacher education students was carried out with the title "Task-based Learning (TBL) Approach and Assessment Skills of Prospective Teachers." The findings of this study impelled an assurance of quality student learning as it investigated the level of assessment skills of third-year teacher education students of Nueva Vizcaya State University - Bambang Campus. It was expected that learning is optimized by offering the learners experiences they can relate to real-life situations. This was materialized by considering the TBL approach in the preparation of an intervention material that addressed the weak points of the research participants. Further, the results of this study provided a rich source of information that aided in the preparation of a task-based intervention. Specifically, it eyed on coming up with enriched learning resources in teaching assessment based on the approach tested for effectiveness.

Framework of the Study - There has been a great deal of theorizing on the use of tasks in teaching, particularly tasks which involve interaction between learners. The task-based teaching-learning process is believed to promote learning by providing learners with opportunities to make the input they receive more comprehensible, furnishing contexts in which learners need to produce output that others can understand, and making the classroom closer to real-life situations. This study is anchored on an educational theory specifically pragmatism which says that education should be about life and growth. pragmatism is a philosophical tradition that began in the United States around 1870 (Hookway, 2008). Its origins are often attributed to the philosophers Charles Sanders Peirce, William James, and John Dewey. Peirce (1878) later described it in his pragmatic maxim: "Consider the practical effects of the objects of your conception. Then, your conception of those effects is the whole of your conception of the object." Two important elements of pragmatism include practical learning, which focuses on the real-world applications of lessons, and experiential learning, which involves learning through experience, not through simple ideas.

It is in this light that this study emerged with its conceptual framework displayed in Figure 1.

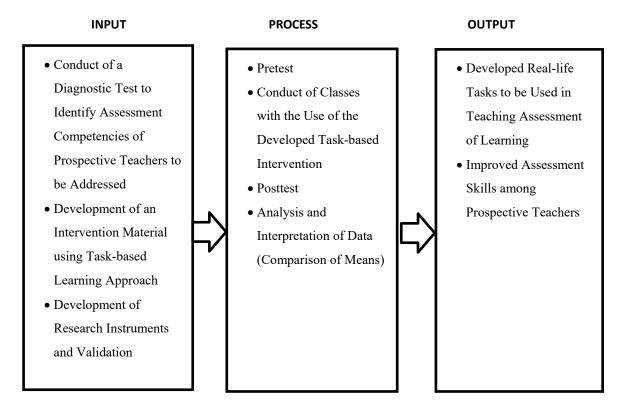


Figure 1. Conceptual Paradigm of the Study

Objectives of the Study - This study was designed to ascertain the effectiveness of the Task-based Learning (TBL) approach as an intervention in improving the assessment skills of prospective teachers of Nueva Vizcaya State University - Bambang Campus, Bambang, Nueva Vizcaya, in the academic year 2019-2020. Specifically, this study aimed to: 1. identify areas of Assessment of Learning 1 that are considered weaknesses of the third-year teacher education students of Nueva Vizcaya State University - Bambang Campus, Bambang, Nueva Vizcaya, in the academic year 2019-2020; 2. develop a task-based intervention to address the weaknesses unveiled; 3. determine the level of assessment skills of the respondents before using the Task-based Learning (TBL) approach in the instruction; 4. determine the level of assessment skills of the respondents after using the Task-based Learning (TBL) approach in the instruction; 5. find out if there is a significant difference between the levels of assessment skills of the respondents before and after the intervention. This study hence tested the null hypothesis that there is no significant difference in the levels of assessment skills of the respondents before and after the intervention.

#### 2. Methodology

This quantitative study which was conducted in the academic year 2019-2020 employed the descriptive design using the experimental approach in particular as the study considered experimentation to test the effectiveness of the Task-based Learning (TBL) approach as a technique in teaching assessment among prospective teachers of Nueva Vizcaya State University - Bambang Campus, Bambang, Nueva Vizcaya. This study used the quasi-experimental method as it did not involve the process of randomization but the consideration of one group of 30 respondents in Assessment 2 class during the second semester of said academic year. The group served as the experimental group bringing to indicate changes due to normal growth, or learning, during the period, with the experimental factor. According to Bueno (2016), this design provides results that cannot be provided by other research methods, provides exact and accurate results, and inspires researchers to be willing and eager to try something new in order to see how it works.

The jumpstart of this research venture was characterized by the conduct of a diagnostic test that identified the assessment skills of prospective teachers which were addressed. This was followed by the development of an intervention material using the Task-based Learning approach, and the development of research instruments and validation. After all preliminary processes had been carried out, the pretest was conducted, followed right away by the conduct of classes with the use of the developed tasks. The posttest was then administered after the intervention to measure the amount of change in the learning process. To ensure clarity, validity, reliability, and appropriateness of the research instruments used in gathering information, they were reviewed first by teacher education experts. To further ensure the reliability of the instruments, they underwent pilot testing involving 10 graduating students (Saunders, 2007) wherein responses were subjected to reliability testing using KR-20, with an index of 0.865 to indicate high internal consistency. The following matrix was used to interpret the performance of the respondents in the diagnostic exam (100 items: I=10, II=10; III=10, IV=30, V=20, and VI=20), pretest, and posttest (50 items each).

81-100 41-50 25-30 17-20 9-10		Level			
100	50	30	20	10	
81-100	41-50	25-30	17-20	9-10	Very High
61-80	31-40	19-24	13-16	7-8	High
51-60	26-30	16-18	11-12	6	High Average
41-50	21-25	13-15	9-10	5	Low Average
21-40	11-20	7-12	5-8	3-4	Low
1-20	1-10	1-6	1-4	1-2	Very Low

The data gathered from the respondents were organized, categorized, tallied, and treated statistically using frequencies and percentages, means, and dependent t-test for comparison of means. All statistical inferences were based on the 0.05 level of significance.

#### 3. Results and Discussion

After collecting information to address the concerns of this research endeavor, the results were divulged in the succeeding section with a discussion of the analytical and triangulation processes undertaken.

3.1 Areas of Assessment of Learning 1 considered weaknesses of the third-year teacher education students of Nueva Vizcaya State University - Bambang Campus, Bambang, Nueva Vizcaya, in the academic year 2019-2020

To ascertain the areas of Assessment of Learning 1 in which the respondents were considered weakest, a 100-item diagnostic examination was administered covering six areas of learning in the subject based on the approved syllabus. The results of the examination are disclosed in Table 1.

**Table 1**Areas of Weaknesses in Assessment of Learning 1 among Respondents

Area of Assessment 1	Mean Score/ Number of Items	Level
Basic Concepts in Assessment	8.4/10	Very High
Roles of Assessment in Making Instructional Decision	7.5/10	High
Principle of High-Quality Assessment	7.2/10	High
Development of Classroom Assessment for Measuring Knowledge and Learning	17.7/30	High Average
Methods of Analyzing and Evaluating Test Results	9.1/20	Low Average
Utilization and Reporting Test Results	10.2/20	Low Average
Mean Score	60.1/100	High Average

It could be seen in the table that the mean of 60.1 describes the overall performance of the respondents in Assessment of Learning 1. This means that their performance in the subject is high average. To address the information needed to answer the first research question, an analysis of their performance was carried out. Such a process consequently revealed areas of learning loci.

**Basic Concepts in Assessment.** This area of the subject got a mean score of 8.4 or qualitatively described as very high level of achievement in the subject area. This part of the diagnosis covered learning outcomes inclined to discussing measurement, evaluation, and assessment as part and parcel of the teaching-learning process and its application in the improvement of classroom instruction, as well as differentiating authentic assessment from traditional assessment.

**Roles of Assessment in Making Instructional Decisions.** This area evolved around the concepts of learning outcomes, and principles of assessment along placement, formative, diagnostic, and summative purposes. Hence, the learners were expected to write learning outcomes along cognitive, affective, and psychomotor learning, and discuss the principles of evaluation and how these principles could enhance the achievement of students. This area got a mean of 7.5 which is qualitatively interpreted as high.

**Principle of High-Quality Assessment.** The respondents obtained a mean score of 7.2 in this domain of learning, qualitatively interpreted as high. Competencies in this area included identifying and defining clearly the qualities of good measuring instruments, determining the factors that affect validity, reliability, and usability, discussing the different methods of establishing the validity and reliability of a test, and explaining the importance of constructing a valid and reliable test in enhancing the achievement of students.

Development of Classroom Assessment for Measuring Knowledge and Learning. The respondents incurred a mean score of 17.7 in this area which is qualitatively categorized as high average, which means that the score falls under the level of average but above the middle score of 15. This learning area included discussions of topics like tests and their functions, classifications of tests, planning for tests- writing objectives

and constructing the table of specifications, and construction of objective tests (multiple choice type, matching type, alternate response type, completion type, simple recall type) and essay test.

Methods of Analyzing and Evaluating Test Results. The respondents garnered a mean score of 9.1 in this subject matter, qualitatively described as low average, which means that their average score fell within the lower bracket along the middle score. This result characterized their level of competency in analyzing data collected from examinations through the use of correlational procedures, Kuder-Richardson Formula 20, and item analysis.

*Utilization and Reporting Test Results.* Lastly, the respondents' recorded mean in this area of learning is 10.25 or qualitatively classified as low average. This result described their proficiency in topics that involved measures of central tendency, measures of variability, grading and reporting, norm and criterion-referenced grading.

With the above-presented results to address the first research question, it could be deduced that areas of the subject Assessment of Learning 1 needing reinforcement among the selected respondents before proceeding with the learning requisites of Assessment of Learning 2, included topics under methods of analyzing and evaluating test results, utilization and reporting test results, and development of classroom assessment for measuring knowledge and learning.

#### 3.2 Developed task-based intervention to address the weaknesses unveiled

Specific subject matters that transpired which the respondents considered being most challenging include tests and their functions, classifications of tests, planning for tests (writing objectives and constructing the table of specifications), construction of objective tests (multiple choice type, matching type, alternate response type, completion type, simple recall type) and essay test. Likewise, correlational procedures, Kuder-Richardson Formula 20, and item analysis, measures of central tendency, measures of variability, grading and reporting, norm and criterion-referenced grading, are areas needing reinforcement. With these, the researcher developed a task-based intervention, to hone the respondents' skills in identified areas. The most striking features of the designed tasks factored in the concepts of independent learning (the teacher as the facilitator of the tasks), collaborative learning (wherein learners were grouped heterogeneously to give the challenged students an opportunity to learn from the fast learners), and pragmatic learning (wherein the classroom was made more enjoyable and closer to real-life situations).

The effort to come up with this learning resource is in response to the perspective of Jane Willis and Dave Willis (1996) who stated that task-based approaches to learning require teachers to take seriously the need to examine how learners learn when doing tasks. They furthermore defined tasks as activities that have the meaning as their primary focus. Success in the task is evaluated in terms of the achievement of an outcome, and tasks generally bear some resemblance to real-life situations. The learning material was subjected to review and validation by teacher education experts before it was used for experimentation. The material was designed based on the characterization of Nunan (1991) that task-based approach to teaching gives an emphasis on learning to communicate through interaction, the introduction of authentic texts into the learning situation, the provision of opportunities for learners to focus on the learning process itself, an enhancement of the learner's own personal experiences as important contributing elements to classroom learning, and an attempt to link classroom learning with activities outside the classroom. Further, tasks were designed based on what HD Brown (1994) suggested as authentic sources like conversations, media extracts, poems, songs, public announcements, games, puzzles, diaries, and the like. These tasks make the learning of difficult subject matters an activity with a lot of fun.

3.3 Level of assessment skills of the respondents before using Task-based Learning (TBL) approach in the instruction

To determine the respondents' level of assessment skills before the intervention, a pretest was administered.

Means were computed and tallied to figure out corresponding frequencies and percentages that describe the quality of the respondents along the said construct as disclosed in Table 2.

 Table 2

 Level of Assessment Skills of the Respondents before Intervention

Range	Frequency	Percentage	Level
41-50	0	0.00	Very High
31-40	5	16.67	High
26-30	10	33.33	High Average
21-25	11	36.67	Low Average
11-20	4	13.33	Low
1-10	0	0.00	Very Low
Total	30	100.00	•
Mean	26.00	(SD=5.04)	High Average

Analysis of the assessment skills of the respondents yielded a mean score of 26 out of 50 items with a standard deviation of 5.04, qualitatively described as high average. This means that their level of assessment skills before the intervention was high average with a mean score a little higher than the middle score of 25. The mean score could be attributed to most respondents falling under the average level – 11 or 36.67 % under low average with mean scores between 21-25 and 10 or 33.33% under high average with mean scores between 26-30. Furthermore, 5, or 16.67% obtained scores between 31-40 or high level, while only 4, or 13.33% with scores between 11-20 or low level. None of the respondents however recorded very high and very low levels of assessment skills.

## 3.4 Level of assessment skills of the respondents after using Task-based Learning (TBL) approach in the instruction

After having been exposed to the task-based intervention, the respondents' level of assessment skills was ascertained through a posttest which was developed in parallel with the pretest. Both of which were validated by teacher education experts. Means were computed and tallied to figure out frequencies and percentages that describe the quality of the respondents along the said construct as unveiled in Table 3.

 Table 3

 Level of Assessment Skills of the Respondents after Intervention

Range	Frequency	Percentage	Level
41-50	1	3.33	Very High
31-40	13	43.33	High
26-30	10	33.33	High Average
21-25	4	13.33	Low Average
11-20	2	6.67	Low
1-10	0	0.00	Very Low
Total	30	100.00	
Mean	31	(SD=5.76)	High

Analysis of the performance of the respondents in the posttest generated a mean score of 31 out of 50 items with a standard deviation of 5.76, qualitatively described as high. This means that their level of assessment skills after the intervention was high with a mean score higher by 5 points than their mean score during the pretest. The mean score in the post-test could be attributed to most respondents falling under the high and high average level, 13 or 43.33% under high level with mean scores between 31-40 and 10 or 33.33% under high average level with mean scores between 26-30. Moreover, 4 or 13.33% of the respondents got scores between 21-25 classifying them under the low average level, and 2, or 6.67% garnered scores between 11-20 or low level. This time, 1 or 16.67% garnered a score between 41-50, or very high level unlike during the pretest which showed no respondents under such level.

3.5 Analysis of difference between the levels of assessment skills of the respondents before and after intervention

To find out if the task-based intervention is effective or not, the means of the pretest and posttest were analyzed as to their difference. In this problem, dependent t-test was employed to come up with the statistic that will determine an action to be taken toward the null hypothesis of the study, that there is no significant difference between the respondents' mean scores before and after the intervention. The analysis involved figures ascribing to the assessment skills of the respondents before the intervention which is represented by the mean score of 26 and after the intervention which is 31 out of fifty items. The respondents' level of assessment skills in the pretest is high average while in the posttest, high. The difference between the means is five (5) but the figure could not be used as the basis for deducing if the difference is significant.

**Table 4**Analysis of the Difference between the Means of the Pretest and Posttest

Variables Compared	Mean	Difference	Computed t-value	P-value	Remark
Pretest Scores	26.00	5	-3.619	0.001	Significant
Posttest Scores	31.00				
D 0 00 G 1 0 0 0 1 5					

Df=29; Crit-t=2.045

Comparing the means using the dependent t-test, the computed t-value is -3.619 which is greater than the critical t-value of (+/-) 2.405 with the degree of freedom of 29 and a corresponding P-value of 0.001 which is lower than the set level of significance of 0.05. These figures mean that the null hypothesis is rejected in this domain. This finding hence showed that there is a significant difference between the mean scores of the respondents in the pretest and posttest. The negative sign affixed before the t-value implies that the respondents' assessment skills after the intervention were significantly better than their assessment skills before the intervention.

The improved assessment skills hence could be attributed to the effectiveness of the Task-based Learning (TBL) approach which was integrated with the task-based intervention as used in the experimentation. This finding is supported by the contention of Prabhu (1987) who stands as the first significant person in the development of TBL, and defines a task as "an activity which require learners to arrive at an outcome from given information through some process of thought, and which allow teachers to control and regulate that process." In the study of Ruso (2007), he revealed that the student's thoughts about TBL were quite positive indicating acceptance and efficacy of the approach. They indicated that more emphasis was shown on interaction in class. This interaction was encouraged not individually but within group work as well. The students stated that their teacher presented various tasks in class and they made use of practice opportunities. They also indicated that an enjoyable classroom atmosphere developed as a result of the tasks and the nature of this enjoyable classroom learning situation affected their learning.

#### 4. Conclusions and Recommendations

After carefully handling data that addressed the research questions posed in this study, the researcher came up with the following conclusions which can prove beneficial to the instruction of assessment and other related professional education courses.

- 1. Areas of the subject Assessment of Learning 1 needing reinforcement among the selected respondents included topics under methods of analyzing and evaluating test results, utilization and reporting test results, and development of classroom assessment for measuring knowledge and learning.
- 2. The researcher developed a task-based intervention, to hone the respondents' skills along identified areas, with the most striking features of which included concepts of independent learning, collaborative learning, and pragmatic learning.
  - 3. The respondents' level of assessment skills before having been exposed to the task-based intervention was

high average.

- 4. The respondents' level of assessment skills after having been exposed to the task-based intervention was high.
- 5. There was a significant difference between the mean scores of the respondents in the pretest and posttest. Further, it means that the respondents' assessment skills after the intervention were significantly better than their assessment skills before the intervention. The improved assessment skills of the respondents hence could be attributed to the effectiveness of the Task-based Learning (TBL) approach.

Dovetailed from the findings of this study, the following recommendations were derived:

- 1. The teachers of Assessment of Learning Outcomes are urged to be more skillful and cautious in the selection of learning materials which can raise the level of motivation of the learners and eventually improve their academic achievement. A diagnostic activity may be administered to disclose learning needs as bases for the construction or preparation of learning materials.
- 2. Task-based learning approach may be utilized not only in professional education subjects but also in the instruction of other subjects under the general education and major courses.
- 3. Assessment skills of students involved in this study may be improved by designing some other strategies that may address their weaknesses, especially along methods of analyzing and evaluating test results, utilization and reporting test results, and development of classroom assessment for measuring knowledge and learning.
- 4. Since students in this study were quite receptive to the TBL framework, assessment teachers may provide their students with a variety of enjoyable tasks. Carrying out a variety of tasks influences students' progress and attitudes toward the lesson.
- 5. Task-based interventions may take the form which is applicable in the learning platform amid this pandemic. Tasks may be digitized or transformed into courseware which is even more palatable to the learners of the 21st century.
- 6. Other research may be conducted to test the effectiveness of the TBL approach in an online learning platform and to test the effectiveness of the TBL approach in the instruction of other subjects aside from the Assessment of Learning.

#### 5. Bibliography

Astin, A. W. (1993). An empirical typology of college students. Journal of College Student Development.

Brown, H. D. (1994). Principles of language learning and teaching. Prentice Hall Regents.

Brown, H.D. (2001). *Teaching by principles. an interactive approach to language pedagogy*. 2nd Ed. NY: Addison Wesley Longman, Inc.

Bueno, D. C. (2016). Practical Quantitative Research Writing. GBT Great Books Trading.

Garcia, C. (2008). Measuring and Evaluating Learning Outcomes: A Textbook in Assessment of Learning 1 and 2. Books Atbp. Publishing Corp.

Harris, T. L., & Hodges, R. E. (1995). The Literacy Dictionary: The Vocabulary of Reading and Writing.

Hookway, C. (2008). Pragmatism. In Zalta, Edward N. (ed.). Stanford Encyclopedia of Philosophy.

Lightbown, P. M., & Spada, N. (1993). How languages are learned. Oxford: Oxford University Press.

Long, M. H., & G. Crookes. (1992). Three approaches to task-based syllabus design. TESOL Quarterly.

Nunan, D. (1999). Second language teaching & learning. Boston: Heinle and Heinle Publishers.

Peirce, C. S. (1878), How to Make Our Ideas Clear, *Popular Science Monthly, 12*, 286–302. Reprinted often, including Collected Papers v. 5, paragraphs 388–410 and Essential Peirce v. 1.

Prabhu, N. S. (1987). Second language pedagogy. Oxford: Oxford University Press.

Ruso, N. (2007). *The Influence of Task Based Learning on EFL Classrooms Eastern Mediterranean University*. Turkish Republic of Northern Cyprus.

Saunders, M. N. (2007). Research methods for business.

Skehan, P. (1998). A Cognitive Approach to Learning Language. OUP.

Willis, D., & J. Willis. (2001). Task-based language learning. In Carter, R. & D. Nunan (eds), *The Cambridge Guide to Teaching English to Speakers of Other Languages*. Cambridge: Cambridge University Press. Willis, J. (1996). *A framework for task-based learning*. Harlow: Longman.