THE EFFECTIVENESS OF CONTRACT LEARNING STRATEGY ON SPECIAL DIPLOMA STUDENTS' ACHIEVEMENT AND ATTITUDES TOWARDS ENGLISH LANGUAGE

By

Dr Mahsoub Abdul-Sadeq Aly

Faculty of Education, Benha University EGYPT

ABSTRACT

The present study examined the effectiveness of using the contract learning strategy on special diploma students' achievement and attitudes towards English language; a strategy that has been used in the filed of education in general and teaching English language in particular. The subjects of the present study consisted of 41 graduate students (male and female, majored in different disciplines) enrolled in the special diploma (Curriculum Planning and Development Section) studying the ESP Readings Course, during the academic year 2005-2006, in the Faculty of Education, Benha University, Egypt. To achieve the study objectives, a learning contract was developed in Arabic and distributed to the subjects for signature in the first class. In the last class, an achievement test in English was applied to the subjects. In addition to that, an evaluation questionnaire and an open-ended questionnaire were developed in Arabic and administered to examine the effectiveness of the suggested contract learning strategy on the students' attitudes. The findings revealed that the subjects' seriousness and commitment to the learning contract motivated them and they, as a result, scored highly on the achievement test. Most of them (n=39 out of 41) passed the achievement test successfully. Most subjects reported positive attitudes toward English language in general and ESP Readings course in particular. Thus, the contract learning strategy was effective in the present study.

- INTROUCTION:

Contract Learning (CL) is a strategy that has been used in the filed of education in general and teaching English language in particular. *Lemieux* proved that it is an effective tool for responsibly sharing power and promoting better performance outcomes (2001). According to *Richardson* (1987), it is a teaching/learning strategy to individualize learning, promote independence and promote habits of lifelong learning and can be used with undergraduate and graduate students. *Williams* (2003) considered it as a teaching strategy.

Contract learning has also been used in the different disciplines: nursing education (*Richardson* 1987 - *Mazhindu* 1990 - *Chan, Wai-tong and Chan* 2000 - *Waddell and Stephens* 2000 - *Chien et al* 2002), care clerkship (*McDermott et al.* 1999), clinical education (*Solomon* 1992), engineering education (*Williams* 2003), language education (*Farr, Roger; Greene, Beth* 1993 - *Greenwood* 1995 - *Johnson, Wurr and Edwards* 1995 - *McGarrell* 1996), educational psychology (*Chang* 1991), training and adult education (*Knowles* 1980) and occupational training (*Knowles* 1987).

In respect of the advantages of contract learning, *Parsons and Durst* (1992) ensured that it facilitates student participation and empowerment in a manner consistent with adult learning principles. *Greenwood* (1995) discussed the importance of contracting with middle school students in study and teaching of language arts. According to *Chan, Wai-tong and Chan* (2000), contract learning was considered beneficial to students' learning **and** there was an increase in students' autonomy and motivation in learning with the use of a learning contract. *Waddell and Stephens* (2000) discussed that it supports adult responsibility for learning and was a means of identifying individual learning needs and preferences so that teaching can be tailored to individuals. *Matheson* (2003) focused on the students' perceptions of the benefit of using learning contracts to promote the integration of theory and practice within a problem-based learning course. *Lubitsh and Shaw* (2004) stated that it addresses behavioural issues.

In the field of English language education, Landschultz and Others (1983) described the use of learning contracts in a Danish university's foreign language teacher education program. The student project has four major functions: solving a particular instructional problem, working in a group, finding a method that uses the individuals' skills to their best advantage, and organizing the work to be done. According to *Davidson* (1984), present composition teaching and testing techniques do not formally capture student improvement across essays. Contract learning, a procedure in which student essays are error-analyzed for repeated mistakes, can do so. Correction of those repetitions becomes a set of goals on a written contract signed by the teacher and student, and the student works to accomplish the goals by the end of the term. Contract fulfillment may involve either remediation or self-motivation. Fulfillment is based on a slowing, stoppage, or reversal of error trends by the term's end. Contract results provide a new, individualized, criterionreferenced source of measurement information to be integrated with other criterion-referenced (task based) and norm-referenced (rank based) sources in an advancement decision using multiple references. Examples are given of this technique, based on two years of experience with the contract learning procedure.

Johnso, Wur, and Edwards (1995) described a project for selfdirected English-as-a-Second-Language learning at Kanda University of International Studies (Japan). Students planed and directed their own language learning programs, using individually designed learning contracts. Examples of three kinds of instructional materials from the bank of resources being developed at the university are presented: (1) students' use of a database of instructional materials and a collection of videotape recordings to make informed choices in planning their contracts; (2) use of popular music for language learning; and (3) an individualized, communicative reading program.

McGarrell (1996) discussed the form and use of learning contracts in second-language teaching and learning. He suggested that learning contracts are an ideal means to offer language learners greater opportunities to work toward, and achieve, individual goals.

- STUDY PROBLEM:

In the light of the previous presentation, the importance and advantages of contract learning strategy in education in general and English language teaching/learning in particular have been discussed. The present study mainly focuses on the use of this strategy with special diploma students in the Faculty of Education, Benha University, Egypt. The reasons for using this strategy are that these students are at the graduate level. Besides, they have been majored in different disciplines (Arabic language and literature, English language and literature, social studies, science education, mathematics education, home economics and social work). Moreover, they have graduated from different faculties, and have various and different English language proficiency levels. Therefore, this strategy has been considered by the study author a necessary tool for improving their attitudes towards English and developing their achievement. The present study problem can be tackled through answering the following questions:

- 1) What is the effectiveness of contract learning strategy on special diploma students' achievement in English language course (ESP Readings Course)?
- 2) What is the effectiveness of contract learning strategy on special diploma students' attitudes towards English language (ESP Readings Course) ?

- DEFINITION OF STUDY TERMS:

- Contract Learning:

Contract learning is an invaluable tool in organizational learning (*Beitler 1999*). It is based on the concept of learning contract where there is a written agreement between instructor and students. This trend, according to *Williams* (2003), has led to the shift from a teacher centered approach to a more student centered approach.

• Learning Contract:

It is a written negotiated agreement between learners and instructors to achieve a specific learning goal for university and continuing education teachers. (*Anderson et al. 1996*) In other words, students negotiate a contract with the teacher then a plan is developed by the student to fulfill the contract as well as specific criteria for assessment. It provides a mechanism for the individualization of learning. (*Williams and Williams 1999*)

In the present study, **contract learning** is used as teaching/learning organizational strategy based on the **learning contract** signed by the instructor and the special diploma students at Benha University in the academic year 2005-2006. That is to say, **learning contract** is a tool for implementing the **contract learning** and they, in this way, are not synonyms.

- REVIEW OF RELATED STUDIES:

Chiang (1998) carried out a 6-year study to examine how metacognitive strategies could enhance learning achievement and whether the use of individual learning contracts could enhance an individual's ability to become a conscientious learner. The criteria included whether students would learn by planning, controlling, monitoring learning processes, and using study skills. Participants were 222 college students. At the beginning of the semester, the instructor explained the purpose of the Individual Learning Plan (ILP), connected students to resources, and set the time frame for planning. The instructor reviewed students' ILPs for learning objectives and strategies, self-monitoring processes, evaluation processes, expected grade, and feasibility. At the end of the semester, a summative evaluation was implemented, and an individual conference invited feedback. Students were asked about how well they used the skills and the overall effectiveness of the ILP. Data analysis involved tallying survey forms and transcripts from interviews and reflective journals. Results indicated that this process helped students become conscientious learners. The instructor found that using learning contracts, appraisals, reflective journals, and conferences helped develop a rapport with students.

Chan, Wai-tong and Chan (2000) implemented a study of the evaluation of <u>learning contracts</u> in a clinical context for a group of students who were in their third year of study in a pre-registration bachelor of nursing degree programme in Hong Kong. A learning contract was implemented as a learning tool in the students' clinical placement in mental health nursing. Data were collected from questionnaires and interviews with students and clinical instructors. Results showed that there was an increase in students' autonomy and motivation in learning with the use of a learning contract. It also increased the sharing between students and clinical instructors. Contract learning is considered beneficial to students' learning.

Lemieux (2001) described the results of a study investigated <u>learning contracts</u> as tools for empowerment and accountability. Students (N = 100) enrolled in five, graduate-level courses completed a brief instrument measuring key concepts of empowerment. In each class students' mean, final scores, based on first and final drafts of assignments were compared. Students felt they had decision-making power, and reported a sense of personal responsibility for their learning experience. They also demonstrated significant improvements in performance after revising their assignments. The findings suggested that learning contracts are an effective tool for responsibly sharing power and promoting better performance outcomes.

Whitcombe (2001) examined attitudes toward the use of <u>learning contracts</u> in occupational therapy fieldwork education. 33 undergraduate occupational therapy students and 35 field supervisors completed questionnaires. Results show that a majority of Ss supported the use of learning contracts in fieldwork settings.

Perceived advantages to the use of learning contracts included flexibility and fostering good communication between the parties. Perceived disadvantages included the amount of time required and difficulties of use. Most students reported positive attitudes toward the adult learning theories underpinning learning contracts.

Chien et al. (2002) examined the implementation of <u>learning</u> <u>contracts</u> with a cohort of undergraduate nursing students in Hong Kong during a mental health nursing clinical placement. Data collection methods included questionnaires and semi-structured interviews. Results showed that students' autonomy and motivation in clinical learning increased through the use of learning contracts. There was more sharing between students and teachers and the quality of teaching and learning was improved. The report concluded that contract learning should be integrated into the curriculum of nurse education as a learning strategy for nursing students.

Lewis (2004) assessed the effectiveness of an instructional strategy, the Independent <u>Learning Contract</u> System, designed to improve college reading skills while addressing the challenge of poor motivation in the United States. Academic motivation factors of students; Learning contract principles underlying the development and implementation of the strategy.

- COMMENT ON THE RELATED STUDIES:

In the light of the review of literature and the previously-presented related studies, the following points are extracted and concluded:

1) All the six studies assured the positive effect of learning contract at the university level either undergraduate or graduate, the same level of the present study focus. This result confirm that the learning contract is an effective tool in teaching and/or learning.

- 2) Most of them (*Chiang* 1998, *Chan, Wai-tong and Chan* 2000, *Whitcombe* 2001 and *Chien et al.* 2002) collected their data by using survey forms, questionnaires, interviews, and analysis of written assignments. In the present study, a learning contract and closed-ended evaluation questionnaire are developed. No interviews are used.
- 3) To the best of the researchers' knowledge, only two studies dealt with language education. *Chiang* (1998) tackled study skills and *Lewis* (2004) focused on reading skills. This indicated that the number of studies on the effect of learning contract is few and therefore more ones are needed in the field of TEFL.

- RESEARCH METHODOLOGY AND PROCEDURES:

(A) SUBJECTS:

The subjects of the present study consisted of 41 graduate students (male and female) enrolled in the special diploma (Curriculum Planning and Development Section) studying the ESP Readings Course, during the academic year 2005-2006.

(B) PROCEDURES:

At the beginning of the first semester, the first meeting was held on 11 October 2005. It was a session that the researcher introduced the idea of contract learning to the subjects where their questions on this topic were explained and answered. In the second week, learning contract (See Appendix 1) was developed, printed and distributed to the subjects for proof reading and signature. They are asked to keep a copy of it for later reference. Till the end of the university year, the subjects were all the time directed and reminded to keep to the contract articles when there was something not acceptable by the researcher in respect of their attendance, their behaviours and the performance of assignments and activities. In the last class, an evaluation questionnaire (See Appendix 2) was administered to examine the effectiveness of the suggested contract learning strategy from the students' points of view. In addition to that, an achievement test (See Appendix 3) was developed and applied to the subjects.

(C) DATA COLLECTION AND ANALYSIS:

In order to answer the first question: "What is the effectiveness of contract learning strategy on special diploma students' achievement in English language course (ESP Readings Course)?", an achievement test (see Appendix 3) was developed and applied to the subjects at the end of the university year 2005-2006. 41 students took the achievement test. The following table presents the frequency of subjects' scores on the test and some and some descriptive statistics.

Table (1): The Subjects' Scores on the Achievement Test in the ESP Readings Course (n=41)

Score	Frequency	Grade
43	1	failure
52	1	failure
62	1	pass
63	1	pass
66	1	pass
67	1	pass
70	1	good
73	3	good
74	1	good

75	1	good
77	1	good
78	4	good
80	9	very good
81	1	very good
82	6	very good
83	2	very good
84	2	very good
86	1	very good
88	1	very good
89	1	very good
92	1	excellent

This table shows clearly that 39 students (= 95% - average = 77), out of 41 took the test, succeeded and only two failed. Their scores included their performance on the achievement test, their year work and activities and attendance. The most surprising finding was that the highest score (92) was got by a female student majored in Arabic language although the subjects included different specializations, especially English Language. These findings indicate that their seriousness and commitment to the learning contract motivated them and they, as a result, scored highly on the achievement test.

In order to answer the second question: "What is the effectiveness of contract learning strategy on special diploma students' attitudes towards English language?", an evaluation questionnaire, derived from the learning contract, was developed and applied to the study subjects. The following table presents the instructor's responsibilities already achieved during the university year as reported by the subjects (n= 39).

	Item	Agree	Neutral	Disagree
1-	- The instructor introduced and explained the basic educational terms related to curricula and instruction at a maximum number 500 term.	20	10	9
2-	- He trained us on reading some educational texts written in English.	36	2	1
3-	- He trained us on the documentation of printed and electronic references and journals.	38	1	-
4-	- He explained the differences between the confusing terms such as: databases and search engines.	35	2	2
5-	- He trained us on making a computer search on a certain topic in our specific specializations.	19	10	10

Table (2): Instructor's Responsibilities towards the ESP CourseObjectives in the Learning Contract

In this table, it is clear that the instructor achieved the contract items concerning the course objectives. The subjects fully agreed that he achieved the objectives no. 2, 3, and 4. Their responses to item 1 indicates that they were not aware that the instructor, during the university year, introduced educational terms always written on the blackboard. In other words, he avoided the use of terms list so as not to frustrate them from the very beginning. Instead, the terms were introduced gradually and in context.

The subjects' responses to item 5 indicates that the instructor did not spend much time to train them on computer searching. That is because no enough time was assigned to this objective.

In the next table, the instructor's other responsibilities agreed to in the learning contract are presented.

	Item	Agree	Neutral	Disagree
6-	- The instructor suggested different and various types of activities.	23	7	9
7-	- He provided us with handouts and materials before the start of each class.	38	-	1
8-	- He allowed the delayed students to enter the classroom during the first fifteen minutes of each class, considering their travel and work circumstances and difficulties.	31	1	7
9-	- He gave us enough time to express our opinions and questions during class.	32	3	4
10-	- He kept to the exact timing of the class start and end.	37	1	1
11-	- He all the time considered the different and various specific specializations during the class when explaining, asking questions or discussing.	27	7	5
12-	- He, to meet our needs, did not hold an oral examination at the end of the university year.	36	-	3
13-	- He developed a multiple choice examination suitable to our different language levels.	30	5	4
14-	- He did not prohibit the absent students during the university year from taking the final written examination.	37	1	1
15-	- He attended all the classes during the university year.	38	-	1

Table (3): Instructor's Responsibilities towards the ESPCourse in the Learning Contract

This table shows that all the responsibilities, assigned to the instructor and agreed to in the learning contract signed by the instructor and the subjects, were highly achieved.

The next tables present the students' responsibilities agreed to in the learning contract by them and the instructor. These responsibilities were divided into three sections: Attendance (table 3), Activities (table 4) and Discipline inside the classroom (table 5).

	Item	Agree	Neutral	Disagree
16	- The students attended all the classes because the ESP Readings Course is useful and important.	33	5	1
17	- Every student signed in the attendance record by himself.	36	2	1
18	- Every student kept the rule not to sign after the first fifteen minutes when he is late.	28	6	5

 Table (4): Students' Responsibilities towards the ESP Course in the Learning Contract (Attendance)

This table shows that all the students did follow the rules agreed to in the learning contract in respect of the attendance of the ESP Readings Course.

Table (5): Students' Responsibilities towards the ESP Course in the Learning Contract (Activities)

	Item	Agree	Neutral	Disagree
19	- Each student carried out the required activities.	27	4	8
20	- Some students suggested additional activities.	23	8	8

This table shows that the students almost agreed to the activities items. What they did not know was that all of them carried out and submitted their activities file to the instructor. Only few number of them suggested extra activities to do perhaps because they were busy at their work or because they had no ones in mind to suggest. Therefore, they done the required activities only.

	Item	Agree	Neutral	Disagree
21	- The students kept the separation rule between male and female inside the classroom.	39	-	-
22	- The students kept quiet inside the classroom during the classes.	33	4	2
23	- The students did not involve in side talks during the classes.	32	4	3
24	- All the students turned their mobile phones off during the classes.	16	12	10
25	- Each specific major students elected a leader and a spokesman.	31	3	5
26	-The students reported any problems to their leader first and then the instructor.	28	5	6
27	- Every student respected others' opinions inside the classroom.	37	2	-
28	- Every student did not interrupt others when asking questions or suggesting notes.	35	3	1
29	- The students did not ask questions outside the classroom as agreed to in the learning contract.	27	5	7
30	- No student was punished by the instructor because all the students followed the rules of the learning contract.	32	3	4

Table (6): Students' Responsibilities towards the ESP Coursein the Learning Contract (Classroom Discipline)

This table shows clearly that the subjects respected all the items in the learning contract concerning the disciple inside the classroom, except no. 24 and 29. In no. 24, most of the students did not turn their mobile phones off as agreed to in the contract. Instead, some of them put the phones in the silent or vibration mode. In no. 29, the instructor and the students agreed to a rule not to asking questions outside the classroom because the latter already left time inside the classroom for this activity so that the questions and discussions were useful to all the students at the same time and to avoid the repetition of them. In spite of that, some broke the rule.

Another procedure followed by the present study author was the application of an open-ended questionnaire to the subjects (n=39) at the end of the university year. They were asked to freely express the advantages and disadvantages of the learning contract experience from their points of view. The following table presents their opinions.

Table (7): The advantages and disadvantages of learning contract from
the subjects' points of view

	** Advantages of Learning Contract	F
1	- The learning contract led to full commitment and	23
	seriousness by the instructor and the students.	
2	- The instructor's and the students' responsibilities and tasks	22
	were clear for both from the very beginning.	
3	- The learning contract made the students active.	4
	** Disadvantages of Learning Contract	
4	- The learning contract was an inflexible and merciless tool.	19
5	- The exact commitment of the classes time was too tough.	12
6	- There were many required tasks and activities from the	9
	students.	
7	- The learning contract hindered establishing a close	5
	relationship between the instructor and the students because	
	of the elected group leader.	
8	- The learning contract was a shock for the students because	3
	it was not familiar for them.	

This table shows that most of the subjects (f=23 - 59%) were aware that the learning contract led to full commitment and seriousness. That was because the instructor's and the students' responsibilities and tasks were clear for both from the very beginning (f=22 - 56%). Very few number (=4) reported that the learning contract made the students active. In respect of the disadvantages of learning contract, 19 students (= 48 %) stated that it was an inflexible and merciless tool. Besides, the exact commitment of the classes time was too tough (f= 12). Only nine stated that there were many required tasks and activities from the students. Five students reported that it hindered establishing a close relationship between the instructor and the students because of the elected group leader. Three students stated that the learning contract was a shock for the students. The reasons for these negative responses are that some students did not like the seriousness followed according the learning contract which was not familiar for them. They wanted to feel some freedom in the attendance and carrying out the activities, which gradually and usually turns to become a mess. Overcoming that mess was one of the learning contracts strategic objectives.

- STUDY CONCLUSION:

The present study focused on the use of learning contract as a tool to shift from teacher-centered to student-centered. The contract tackled the classroom learning environment and the discipline which are important for seriousness. According to *lewis* (1998), "classroom discipline is one of the most significant of all the activities which comprise the role of a teacher. It not only provides the opportunity for teachers to instruct students in their traditional school subjects, but it is also integrally related to the issue of inculcating a sense of responsibility in students".

The present study proved that most subjects reported positive attitudes toward English language in general and ESP Readings course in particular because of using the contract learning strategy. Moreover, it helped and motivated most of them (n=39) to pass the achievement test

successfully. Thus, the contract learning strategy was effective in the present study, a result matched with that of *Richardson* (1987), *Parsons and Durst* (1992), *Greenwood* (1995), *McGarrell* (1996), *Chan, Waitong and Chan* (2000), *Waddell and Stephens* (2000), *Lemieux* (2001) and *Matheson* (2003).

BIBLIOGRAPHY

- Anderson, Geoff et al. (1996): Learning Contracts. A Practical Guide. (An Online ERIC Database Abstract No. ED408918).
- 2- Beitler, Michael A. (1999): Contract Learning in Organizational Learning & Management Development. Paper presented at the International Symposium on Self-Directed Learning (Phoenix, AZ, February 25-28).
- 3- Chan, Sally; Wai-chi; Wai-tong, Chien and Chan, Sally (2000): Implementing contract learning in a clinical context: report on a study. *Journal of Advanced Nursing*, Vol. 31, No. 2, pp. 298-305.
- 4- Chang, Hsiu-hsiung (1991): The relationships among contract learning, self-directed learning readiness and learning preferences of undergraduate students at National Taiwan Normal University. *Dissertation Abstracts International,* Vol. 51(10-A), p. 3302.
- 5- Chiang, Linda H. (1998): Enhancing Metacognitive Skills through Learning Contracts. Paper presented at the Annual

Meeting of the Mid-Western *Educational Research Association* (Chicago, IL, October 14-17, 1998).

- 6- Chien, Wai-tong Chan, Sally Wai-chi and Morrissey, Jean (2002): The use of learning contracts in mental health nursing clinical placement: an action research. *International Journal of Nursing Studies*, Vol. 39, No. 7, pp. 685-694.
- 7- Davidson, Fred (1984): Teaching and Testing ESL Composition through Contract Learning. (An ERIC Database Abstract No. ED245560)
- 8- Farr, Roger and Greene, Beth (1993): Managing the Integrated Language Arts Classroom: Twenty-Five Suggestions for Finding Time for Portfolio Conferences. (A Full-Text Paper on ERIC Database No. ED357393)
- 9- Goodnight, R.; Randolph, G. and Ziekel, T. (1998): Using learning contracts for improved teaching and student involvement. Proceedings of IEEE Computer Society Symposium Frontiers in Education. Tempe, AZ, USA, 4-7 Nov.
- 10- Greenwood, Scott C. (1995): Learning contracts and transaction:
 A natural marriage in the middle. *Language Arts*, Vol. 72, No. 2, pp. 88-96.
- 11- Johnson, Francis C.; Wurr, Adrian and Edwards, Jeffery (1995): The Learner as Course Planner and Director. (A Full-Text Paper on ERIC Database No. ED421012)
- 12- Knowles, Malcolm S. (1980): Malcom Knowles on the magic of contract learning. *Training & Development Journal*, Vol. 34, No. 6, pp. 76-78.

- 13- Knowles, Malcolm S. (1987): Enhancing HRD with Contract Learning. *Training & Development Journal*, Vol. 41 Issue 3, pp. 62-63.
- 14- Matheson, Ruth (2003): Promoting the integration of theory and practice by the use of a learning contract. *International Journal of Therapy & Rehabilitation*, Vol. 10, No. 6, pp. 264-270.
- 15- Mazhindu, Godfrey N. (1990): Contract learning reconsidered: a critical examination of implications for application in nurse education. *Journal of Advanced Nursing*, Vol. 15, No.1, p101-109.
- 16- McDermott, Mary McGrae; Curry, Raymond H; Stille, F. Conrad and Martin, Gary J. (1999): Use of learning contracts in an office-based primary care clerkship. *Medical Education*, Vol. 33, No. 5, pp. 374-381.
- McGarrell, Hedy M. (1996): Self-Directed Learning Contracts to Individualize Language Learning in the Classroom. *Foreign Language Annals*, Vol. 29, No. 3, pp. 495-508.
- 18- Landschultz, Karen and Others (1983): Learning Contracts in Language Teacher Training. Francais dans le Monde, no.
 180, pp. 57-62. (An ERIC Database Abstract No. EJ293367)
- Lemieux, Catherine M. (2001): Learning contracts in the classroom: tools for empowerment and accountability. *Social Work Education*, Vol. 20, No. 2, pp. 263-276.
- 20- Lewis, Jerry J. (2004): The independent learning contract system: motivating students enrolled in college reading courses. *Reading Improvement*, vol. 41, No. 3, pp. 188-194.

- 21- Lewis, Ramon (1998): Classroom Discipline: Is a desire to empower students a health hazard for teachers? A Full-Text Paper Available Online at: http://www.aare. edu.au/98pap/bur98098.htm.
- 22- Lubitsh, Guy and Shaw, Rory J. (2004): The learning contract: a behavioural approach to managing poor performance by consultants and preventing disciplinary action. *Clinician in Management*, Vol. 12, No. 4, pp. 181-186,
- 23- Parsons, Janice E. and Durst, Douglas (1992): Learning contracts: Misunderstood and underutilized. *Clinical Supervisor*, Vol. 10, No. 1, pp. 145-156.
- 24- Richardson, Sharon (1987): Implementing contract learning in a senior nursing practicum. *Journal of Advanced Nursing*, Vol. 12, No. 2, pp. 201-206.
- 25- Solomon, Patricia (1992): Learning contracts in clinical education.*Medical Teacher*, Vol. 14, No. 2/3, pp. 205-210.
- 26- Waddell, Donna L. and Stephens, Stephanie (2000): Use of Learning Contracts in a RN-to-BSN Leadership Course. *Journal of Continuing Education in Nursing*, Vol. 31, No. 4, pp. 179-84.
- 27- Whitcombe, Steven W. (2001): Using learning contracts in fieldwork education: The views of occupational therapy students and those responsible for their supervision. *British Journal of Occupational Therapy*, Vol. 64, No. 11, pp. 552-558.
- 28- Williams, A.P. (2003): The outcome of the application of learning contracts. Paper presented at Third Conference on Engineering Education - Access, Retention and Standards. Southampton, UK, 6-7 Jan.

29- Williams, Anthony and Williams, P. John (1999): The Effects of the Use of Learning Contracts on Student Performance in Technology. *Research in Science & Technological Education*, Vol. 17, No. 2, pp. 193-201

APPENDIX (1)

عقد تعلم

LEARNING CONTRACT

إنه في يوم الموافق أكتوبر 2005 م، تحرر هذا العقد بين كل من: - الطرف الأول: الدكتور/محسوب عبد الصادق على - قسم المناهج وطرق التدريس ، كلية التربية - بنها. (طرف أول: مدرس مادة قراءات في التخصص باللغة الأجنبية)

- الطرف الثاني:

طلاب الدبلوم الخاص (تخصص مناهج وطرق تدريس – للعام الجامعي 2005-2006) (طرف ثاني: دارسين)

> بعد أن أقر الطرفان بأهليتهما للتصرف والتعاقد اتفقا على ما يلي: أولا: واجبات ومسئوليات الطرف الأول (المدرس)

- البند رقم (1): يلتزم الطرف الأول (مدرس المادة) بتحقيق أهداف المقرر كما يلى:
 1- أن يقدم ويشرح للطلاب المصطلحات التربوية الأساسية المرتبطة بالمناهج وطرق التدريس ، بحد أقصى 500 مصطلح على مدار العام الدراسى.
 - 2- أن يعلم الطلاب ويدربهم على قراءة وفهم النصوص التربوية المكتوبة باللغة الإنجليزية.
 - 3- أن يعلم الطلاب ويدربهم على توثيق المراجع والمصادر الأجنبية الورقية والإلكترونية.
 - 4- أن يعلم الطلاب الفروق بين المصطلحات المتداخلة مثل: قواعد البيانات ومحركات البحث ، على سبيل المثال.
- 5- أن يعلم الطلاب ويدربهم من خلال الأنشطة على إجراء مسح بالكمبيوتر عن موضوع ما فى مجال تخصص الطالب.
- 6- أن يعلم الطلاب ويدربهم من خلال الأنشطة على أشكال الاتصال التحريرى بالهيئات العلمية الأجنبية والأساتذة المتخصصين بالخارج.
- البند رقم (2): يلتزم الطرف الأول (المدرس) بتحديد أنشطة متنوعة للطلاب ومرتبطة بالمقرر ، منها ما هو إجباري (لأهميته للطالب) ومنه ما هو إختياري (حسب اهتمامات

الطلاب وتخصصاتهم وظروفهم المالية والاجتماعية) ، ومنها ما هو إضافي (Extra) للطلاب المبدعين.

- البند رقم (3): يلتزم الطرف الأول (المدرس) بتوفير المادة العلمية الخاصة بالمقرر للطلاب في صورة مذكرة أو أوراق توزع قبل المحاضرات.
- البند رقم (4) : يُترك للمدرس حرية توزيع درجات أعمال السنة (25 درجة) على
 الحضور والأنشطة مع مراعاة مصلحة الطالب عند التوزيع.
- البند رقم (5): مراعاة لظروف الطلاب من عمل أو سفر وتلبية لرغبتهم ، يمنح الطرف الأول (المدرس) الطرف الثاني (الطلاب) فترة سماح مدتها خمسة عشر دقيقة فقط (حد أقصى) من بدء المحاضرة للدخول إلى قاعة الدرس ، والتوقيع في كشف الحضور.
- البند رقم (6): يلتزم الطرف الأول بإعطاء الحرية للطلاب فى طرح الأسئلة التعبير عن آرائهم أثناء المحاضرة.
 - البند رقم (7): يلتزم المدرس بميعاد بدء ونهاية المحاضرة.
- البند رقم (8): يلتزم المدرس بمراعاة التخصصات المختلفة عند الشرح وطرح
 الأسئلة والمناقشة .
- البند رقم (9): يلتزم المدرس بعدم عقد امتحان شفهى فى نهاية العام الجامعى والاكتفاء بالأنشطة الخارجية تلبية لرغبة الطلاب.
- البند رقم (10): يلتزم الطرف الأول (المدرس) بوضع امتحان فى نهاية العام الدراسى يتناسب مع مستوى الطلاب ومختلف التخصصات ومن محتويات المحاضرات والمقرر معا ، وله الحرية فى اختيار شكل الامتحان سواء كان مقال أو متعدد الاختيارات أو الاثنين معا أو أى شكل أخر يتناسب مع طبيعة المقرر.

ثانيا: واجبات ومسئوليات الطرف الثانى (الطلاب)

البند رقم (1): فيما يختص بالحضور:

 1- نظرا لأن الحضور ضرورى للطالب من أجل الاستفادة والحوار والتواصل مع مدرس المادة ، يلتزم الطالب بحضور نسبة 75% من إجمالى عدد المحاضرات المنعقدة طوال العام حتى لا يُحرم من دخول الامتحان النهائى ، طبقا للائحة الكلية.

- يلتزم الطالب بالحضور في الميعاد المحدد للمحاضرة ، و هو تمام الساعة
 الثانية بعد ظهر يوم الثلاثاء من كل أسبوع ، بالدور الخامس (قاعة 504).
- 3- يلتزم الطالب بالتوقيع بنفسه بكتابة أسمه ثلاثيا فى استمارة الحضور فى كل محاضرة.
- 4- يلتزم الطالب بالحضور في الميعاد المحدد للمحاضرة ولا يتعدى فترة السماح وهي مدة خمسة عشر دقيقة كحد أقصى من بدء المحاضرة .
 - 5- يلتزم الطالب بعدم دخول قاعة الدرس بعد الوقت المسموح به وهو الثانية والربع من يوم الثلاثاء من كل أسبوع.
 - 6- لا يحق للطالب بأى حال من الأحوال طلب التوقيع فى كشف الحضور بعد
 الميعاد المسموح به والمتفق عليه.
- البند رقم (2): <u>الأنشطة :</u> 1- يلتزم الطالب بتنفيذ الأنشطة التي تحددها الطرف الأول (المدرس) له ، سواء كانت إجبارية أو اختيارية.
- 2- تتمثل الأنشطة الإجبارية التى يلزم الطالب بتنفيذها وإتمامها على أكمل وجه الأتى:
 أ- دورة فى استخدام الإنترنت من جهة رسمية معتمدة يوافق عليها المدرس
 كتابة قبل التنفيذ.
 - ب- إعداد قائمة بالدوريات المرتبطة بالمناهج وطرق التدريس بشكل عام
 والتخصص النوعي بشكل خاص.
- ت- إجراء مسح Computer Search باللغة الإنجليزية في محركات البحث على الإنترنت (مثل: ... Yahoo, Google) عن موضوع في تخصصه النوعي يحدده الطالب بنفسه ويعرضه على المدرس للموافقة
 - ث- إجراء مسح Computer Search باللغة الإنجليزية في قواعد البيانات المتخصصة (مثل ... Eric, Digital dissertations, PsychInfo) على الإنترنت عن موضوع في تخصصه النوعي يحدده الطالب بنفسه ويعرضه على المدرس للموافقة.
 - 3- تتمثل الأنشطة الاختيارية فيما يلى:

- أ- مسح محلى فى المكتبات على مستوى الجمهورية عن الرسائل الحديثة فى مجال التخصص.
 - ب- مسح محلى في المكتبات على مستوى الجمهورية عن الدوريات العربية
 والأجنبية في مجال المناهج بشكل عام.

ت- أى نشاط أخر يقترحه الطرف الأول (المدرس) ويقبله الطالب.

- 4- يمكن للطالب الانتقاء من الأنشطة الاختيارية حسب رغبته وميوله وظروفه.
- 5- يمكن للطالب التقدم بمقترحات لأنشطة إضافية إبداعية مرتبطة بالمقرر ، ويشترط لقبولها وتخصيص درجات لها أن يقوم الطالب بعرضها على المدرس وقبوله لها كتابة وإتمام الطالب لها وتقديمها في نهاية العام.
- 6- يلتزم الطالب بتقديم كل الأنشطة التى أتمها للمدرس شخصيا فى الميعاد الذى يحدده الأخير فى نهاية العام الدراسى ، وأن تكون الأنشطة مرتبة حسب ورودها فى رقم ورقم 3 أعلاه ، وموضوعة فى حقيبة بلاستيكية شفافة My Clear Bag ، ومكتوب على كل الأنشطة الاسم ورقم المسلسل ورقم الجلوس (إن وُجد).

- يلتزم الطالب بالجلوس المخصص سواء للطلاب أو الطالبات ، وعدم الاختلاط داخل قاعة الدرس.
 - 3- يلتزم الطالب بالهدوء التام داخل قاعة الدرس.
 - 4- يلتزم الطالب بعدم المشاركة في أحاديث جانبية في قاعة الدرس أثناء انعقاد المحاضرة.
 - 5- يلتزم الطالب بغلق المحمول طوال مدة انعقاد المحاضرة أو الدرس.
 - 6- يلتزم الطالب بتبليغ المتحدث الرسمى للتخصص النوعى بأى شكوى أو ملاحظات.
- 7- يختار طلاب التخصص النوعى متحدث رسمى لهم ، والذى بدوره يقوم بحل المشكلات والتنسيق بين أفراد التخصص الواحد ومع التخصصات الأخرى ، و تبليغ الأمر (إذا فشل فى هذه المهمة) لمدرس المادة.
 - 8- أن يحترم الطالب آراء الأخرين فى قاعة الدرس.

- 9- يلتزم الطالب بعدم مقاطعة زميله أو المدرس أثناء الحوار والنقاش ، وأن يلتزم بطرح التساؤلات في الوقت الذي يحدده المدرس لذلك.
- 10- يلتزم الطالب بعدم طرح أسئلة خارج المدرج ، لأن المكان المناسب لذلك هو قاعة الدرس وفي حضور الطلاب.
- العقوبات: يقوم المدرس بتطبيق العقوبات المنصوص عليها فى قانون تنظيم الجامعات واللائحة الداخلية للكلية ، فيما يصدر من الطالب مخالفا للقانون والأخلاقيات والسلوكيات العامة ، ويمكن للمدرس حرمان الطالب من حضور المحاضرة لبعض الوقت أو لعدة أسابيع ، أو حرمانه من بعض درجات أعمال السنة حسب درجة وطبيعة الخطأ.
 - پحتوی هذا العقد علی أربعة صفحات و تحرر من نسختین وبید کل طرف (المدرس وکل طالب) صورة منه للعلم و العمل به.

APPENDIX (2)

Evaluation Questionnaire

استمارة تقويم فاعلية إستراتيجية عقد التعلم

أولا: واجبات ومسئوليات الطرف الأول (المدرس)

لا أوافق	محايد	أوافق	العبارة	
-	-	-	البند رقم (1): تحقيق أهداف المقرر :	•
			 أقدم وشرح المدرس للطلاب المصطلحات 	
			التربوية الأساسية المرتبطة بالمناهج وطرق	
			التدريس ، بحد أقصى 500 مصطلح على مدار العام	
			الدراسى.	
			 درب المدرس الطلاب على قراءة وفهم بعض 	
			النصوص التربوية المكتوبة باللغة الإنجليزية.	
			3- درب المدرس الطلاب على توثيق المراجع	
			والمصادر الأجنبية الورقية والإلكترونية.	
			4- شرح المدرس للطلاب الفروق بين المصطلحات	
			المتداخلة مثل: قواعد البيانات ومحركات البحث ،	
			على سبيل المثال.	
			5- درب المدرس الطلاب على إجراء مسح بالكمبيوتر	
			عن موضوع ما في مجال تخصص الطالب.	
			6- درب المدرس الطلاب على أشكال الاتصال	
			التحريري بالهيئات العلمية الأجنبية والأساتذة	
			المتخصصين بالخارج.	
			البند رقم (2): حدد المدرس أنشطة متنوعة للطلاب ،	•
			منها ما هو إجباري (لأهميته للطالب) ومنه ما هو إختياري	
			(حسب اهتمامات الطلاب وتخصصاتهم وظروفهم المالية	
			والاجتماعية) ، ومنها ما هو إضافي (Extra) للطلاب	
			المبدعين.	
			البند رقم (3): وفر المدرس للطلاب المادة العلمية	•
			الخاصة بالمقرر للطلاب في صورة أوراق توزع قبل	
			المحاضرات.	
			البند رقم (4): راعى المدرس ظروف الطلاب من عمل	•
			أو سفر وتلبية لرغبتهم ، ومنح الطلاب فترة سماح مدتها	
			خمسة عشر دقيقة فقط (حد أقصى) من بدء المحاضرة	
			للدخول إلى قاعة الدرس ، والتوقيع في كشف الحضور.	
			البندرقم (5): أعطى المدرس الحرية للطلاب في طرح	•
			الأسئلة التعبير عن آرائهم أثناء المحاضرة.	
			البندرقم (6): الترم المدرس بميعاد بدء ونهاية	•
			المحاضرة.	
			البندرقم (7): التزم المدرس بمراعاة التخصصات	•
			المختلفة عند الشرح وطرح الأسئلة والمناقشة.	

البند رقم (8): تلبية لرغبة الطلاب ، وعد المدرس بعدم عقد امتحان شفهى فى نهاية العام الجامعى والاكتفاء بالأنشطة الخارجية.	•
البند رقم (9): وعد المدرس بوضع امتحان متعدد الاختيارات فى نهاية العام الدراسى يتناسب مع مستوى الطلاب ومختلف التخصصات ومن محتويات المحاضرات والمقرر معا.	•
البند رقم (10) : التزم المعلم بعدم حرمان الطلاب المتغيبين من الامتحان رغم مخالفة ذلك للقانون.	•
البند رقم (11) : التزم المدرس بالحضور كل المحاضرات	•

	. 1		se (
لا أوافق	محايد	أوافق	العبارة
-	-	-	البند رقم (1): فيما يختص بالحضور:
			7- نظرا لأن الحضور ضرورى للطالب من أجل الاستفادة
			والحوار والتواصل مع مدرس المادة ، التزم
			الطلاب بالانتظام في الحضور.
			8- التزم كل طالب بالتوقيع بنفسه بكتابة أسمه ثلاثيا فى
			استمارة الحضور في كل محاضرة.
			9- التزم كل طالب بعدم طلب التوقيع في كشف الحضور
			بعد الميعاد المسموح به والمتفق عليه.
-	-	-	البند رقم (2): الأنشطة :
			10- نفذ كل طالب الأنشطة التي حددها المدرس .
			11- قام كل طالب بالانتقاء من الأنشطة الاختيارية
			حسب رغبته وميوله وظروفه
			12- تقدم بعض الطلاب بمقترحات لأنشطة إضافية.
-	-	-	البند رقم (3) : النظام داخل قاعة الدرس
			13- التزم الطلاب بعدم الاختلاط داخل قاعة الدرس.
			14- التزم الطلاب بالهدوء التام داخل قاعة الدرس.
			15- التزم الطلاب بعدم المشاركة في أحاديث جانبية في
			قاعةُ الدرس أثناءُ انعقاد المحاضرة.
			16- التزم الطلاب بغلق المحمول طوال مدة انعقاد
			المحاضرة أو الدرس.
			17- اختار طلاب التخصص النوعي متحدث رسمي لهم ،
			والذي بدوره كان يقوم بحل المشكلات والتنسيق
			بين أفراد التخصص الواحد ومع التخصصات
			الأخرى ، و تبليغ الأمر (إذا فشل في هذه المهمة)
			لمدرس المادة.
			18- التزم الطلاب بتبليغ المتحدث الرسمى للتخصص
			النوعي بأي شكوي أو ملاحظات.

ثانيا: واجبات ومسئوليات الطرف الثانى (الطلاب)

19- احترم كل طالب آراء الآخرين في قاعة الدرس.
20- التزم كل طالب بعدم مقاطعة زميله أو المدرس أثناء
الحوار والنقاش ، والتزم بطرح التساؤلات في
الوقت الذي يحدده المدرس لذلك.
21- التزم كل طالب بعدم طرح أسئلة خارج المدرج ·
لأن المكان المناسب لذلك هو قاعة الدرس وفي
حضور الطلاب.
22- لم ينفذ المعلم أى عقوبات منصوص عليها في العقد
بسبب الالتزام التام من قبل الطلاب.

النهاية

APPENDIX (3)

Achievement Test



BENHA UNIVERSITY FACULTY OF EDUCATION DEPARTMENT OF CURRICULUM AND INSTRUCTION

Year: Special Diploma
 Course: ESP READINGS

- June 2006 - Time: 3 hours

SECTION 1

- CHOOSE THE CORRECT ANSWER:
- 1. If you want to buy English books from America on the Internet, you need:
 - A) Green Card B) playing card.
 - C) Master Card D) Visa Card
 - E) All of these answers are right. F) All of these answers are wrong.
- 2. ERIC documents which have an accession number starts with these two letters are not available in full text.
 - A) SE B) EJ C) JE D) DE
- **3.** All free ERIC Full text documents always have an accession number starts with these two letters:
 - A) SE B) EJ C) JE D) DE
 - E) All of these answers are right. F) All of these answers are wrong.
- 4. In order to read ERIC Full text documents, you must have this program on your computer:
 - A) Microsoft Word. B) Microsoft Excel.
 - C) Microsoft Winzip. D) Microsoft Access.
 - E) All of these answers are right. F) All of these answers are wrong.
 - E) All of these answers are right. F) All of these answers are wrong.

5. Commercial publications are called		
A) books B) periodicals C) magazines D) journals		
E) All of these answers are right. F) All of these answers are wrong.		
6 are placed at the bottom of the page on which the cited source occurs.		
A) Endnotes B) footnotes C) bibliography D) index		
E) All these answers are right. F) All of these answers are wrong.		
7. A often represents twelve months. Each one is divided into issues.		
A) volume B) issue C) study D) paper		
E) All these answers are right. F) All of these answers are wrong.		
8. The should be alphabetically arranged.		
A) endnotes B) footnotes C) appendix D) bibliography		
E) All these answers are right. F) All of these answers are wrong		
9. Academic publications are often called		
A) newspapers B) journals C) paper D) publishers		
E) All these answers are right. F) All of these answers are wrong.		
10. The must not have a volume number and an issue number.		
A) books B) newspapers C) stories D) ERIC documents		
E) All these answers are right. F) All of these answers are wrong		
11. "Quarterly" periodicals appear one issue every months.		
A) four B) three C) two D) one		
E) All these answers are right. F) All of these answers are wrong.		
12. ERIC digests are		
A) about 7 pages long. B) journal articles.		
C) Conference papers D) Theses and dissertations.		
E) All these answers are right. F) All of these answers are wrong.		
13. The education researcher should use		
A) Yahoo website. B) Google database.		
C) ERIC database D) UMI Dissertations database		
E) Both A and B are right E) Both C and D are right		

E) Both A and B are right. F) Both C and D are right.

SECTION 2

- CHOOSE THE CORRECT BIBLIOGRAPHIC DOCUMENTATION OF THE FOLLOWING TITLES OF BOOKS, PERIODICALS AND ERIC ABSTRACTS:

 A) Frances Luttikhuizen (1995): <u>The World of Science and Technology</u>: A Theme-Based, Study-Skills Approach. Ann Arbor: The University of Michigan press.

B) Luttikhuizen, Frances (1995): <u>The World of Science and Technology</u>: A Theme-Based, Study-Skills Approach. Ann Arbor: The University of Michigan press.

C) Luttikhuizen, Frances (1995): <u>The World of Science and Technology: A</u> <u>Theme-Based, Study-Skills Approach</u>.: The University of Michigan press: Ann Arbor.

D) Luttikhuizen, Frances (1995): <u>The World of Science and Technology: A</u> <u>Theme-Based, Study-Skills Approach</u>. Ann Arbor: The University of Michigan press.

E) All these answers are wrong.

 A) Anne Convery, Michael Evans, Simon Green, Ernesto Macaro and Janet Mellor (1997): <u>Pupils' Perceptions of Europe: Identity and Education</u>. London: Cassell.

B) Convery, Anne; Michael Evans; Simon Green; Ernesto Macaro and Janet Mellor (1997): <u>Pupils' Perceptions of Europe: Identity and</u> <u>Education</u>. Cassell: London.

C) Convery, Anne et al (1997): <u>Pupils' Perceptions of Europe: Identity</u> <u>and Education</u>. London: Cassell.

D) Convery, Anne; Evans, Michael; Green, Simon; Macaro, Ernesto and Mellor, Janet (1997): <u>Pupils' Perceptions of Europe: Identity and</u> <u>Education</u>. London: Cassell.

- 16. A) Brandt, Ronald S. (1988): <u>Content of the Curriculum</u>. USA: The Association for Supervision and Curriculum Development.
 - B) Brandt, Ronald S. (1988): <u>Content of the Curriculum</u>. Virginia, USA: The Association for Supervision and Curriculum Development.

- C) Ronald S. Brandt 1988): <u>Content of the Curriculum</u>. USA: The Association for Supervision and Curriculum Development.
- D) Brandt, Ronald S. (1988): <u>Content of the Curriculum</u>. The Association for Supervision and Curriculum Development: USA.
- E) All these answers are wrong.
- 17. A) Lin Hua Chen (1983): Teaching English in China. <u>TESL TALK</u>, Vol. 14, No. 3, PP. 42-47.
 P) Chen Lin Hua (1983): Teaching English in China. <u>TESL TALK</u>, Vol. 14, No. 3, PP. 42-47.

B)) Chen, Lin Hua (1983): <u>Teaching English in China</u>. TESL TALK, Vol. 14, No. 3, PP. 42-47.

C) Chen, Lin Hua (1983): Teaching English in China. <u>TESL TALK</u>, Vol. 14, No. 3, PP. 42-47.

D) Chen, Lin Hua (1983): <u>Teaching English in China</u>. TESL TALK, 14/3, PP. 42-47.

- F) All these answers are wrong.
- A) Foster, Stuart J ; Yeager, Elizabeth A. (1999): "You've Got to Put Together

.... Historical Evidences. (An ERIC Database Abstract No. EJ589397).

B) Foster, Stuart J ; Yeager, Elizabeth A. (1999): "You've Got to Put

Together Historical Evidences. (An ERIC Database Abstract No. EJ589397).

C) Foster, Stuart J and Yeager, Elizabeth A. (1999): "You've Got to Put

Together Historical Evidences. Journal of Curriculum and Supervision, Vol.

14, No.4, pp. 286-317.. (An Online ERIC Database Abstract No. EJ589397).

D) All these answers are wrong.

- means: "مقرر دراسی" means:
 - A) syllabus B) curriculum C) unit D) program
 - E) All these answers are right.
 - F) All of these answers are wrong.

20. The term "تدريس الرياضيات" means:

- A) mathematics learning B) mathematics comprehension
- C) mathematics education D) mathematics concepts
- E) All these answers are right.
- F) All of these answers are wrong.
- 21. The term "مدرسة ثانوية" means:
 - A) secondary school B) preparatory school

C) middle school	D) high school	
E) Both A and D are right.	F) Both B and C are right.	
mea "مقياس الاتجاه" mea	ns:	
A) attitude scale	B) direction scale	
C) questionnaire	D) orientation scale	
E) All these answers are right.	F) All of these answers are wrong	
"وسائل سمعية وبصرية" 23. The term	means:	
A) audio-visual ways	B) audio-visual directions	
C) audio-visual centres	D) audio-visual means	
E) All these answers are right. F) All of these answers are wrong		
means: ''مهارة إدارة الفصل''		
A) classroom technique skill.	B) classroom organization skill.	
C) classroom enrichment skill.	D) classroom management skill.	
E) All these answers are right.	F) All of these answers are wrong.	
"تصميم مذهج دراسى" (25. The term	means:	
A) curriculum organization	B) curriculum design	
C) curriculum sequence	D) curriculum content	
E) All these answers are right.	F) All of these answers are wrong	
26. The term "منهج تجريبى" means:		
A) experimental group	B) experimental sample	
C) experimental curriculum	D) experimental design	
E) All these answers are right.	F) All of these answers are wrong.	
means: ''الوعى التكنولوجى''		
A) technological knowledge	B) technological awareness	
C) technological information	D) technological data	
E) All these answers are right.		
F) All of these answers are wron	ng.	
ر "مشرف على الرسالة" (28. The term	means:	
A) supervisor	B) advisor	
C) chairman	D) both C and A	
E) All these answers are right. F) All of these answers are wrong		
29. The term "مراكز مصادر التعلم" means:		
A) teaching source centres	B) teaching resource centres	
C) learning source centres	D) learning resource centres	

E) All these answers are right. F) All of these answers are wrong.

30. The term "صعوبات التعلم" means:

- A) teaching disabilities B) teaching problems
- C) learning disabilities D) learning process
- E) All these answers are right.
- F) All of these answers are wrong.

SECTION 3

- READ THE FOLLOWING TEXT CAREFULLY AND CHOOSE THE RIGHT

ANSWER FOR THE QUESTIONS BELOW:

THE RELATIONSHIP OF THE METHODS FOR TEACHING SCIENCE TO THE ATTITUDES AND ACHIEVEMENT OF ELEMENTARY PRESERVICE TEACHERS Order No. 8021126

PUGH, AVA FAY, ED.D Mississippi State University, 1980. 96 pp. Director: Dr. Wayne Shelton

The purpose of the study was to determine the relationship of the methods for teaching science to the attitudes and achievement of elementary pre-service teachers. The population of the study consisted of 57 pre-service teachers enrolled in the class *EDE 5443 Science for Children*. The study was conducted during the fall semester 1979.

From the computer assigned class rolls for each section, the investigator randomly assigned the intact groups to be taught either by the inquiry method or by the lecture-demonstration method for the first six weeks. After the first six weeks, the investigator reversed the groups. By reversing the treatment for the two groups, each group served as its own control.

The subjects of the study were administered *The Attitudes Toward Science Inventory* and Criterion-Referenced tests at the beginning and end of each six weeks period. For the *Attitudes Toward Science Inventory*, 45 of the 78 items were scored, as the identical method had been used when the split-half reliability was gained in 1970. The split-half reliability was .72. This instrument also had face validity and had established content validity.

The criterion-referenced tests used in the study consisted of 50 multiple-choice test items. Each of these tests covered eight chapters from the textbook *Teaching Elementary Science* (second edition) by William K. Esler.

By gearing these test items to the textbook objectives, the researcher was able to establish content validity. After these two tests were constructed, the researcher submitted these tests to two individuals having an expertise in science education and test construction. After these two individuals critiqued and evaluated these items, corrections were made before administering the tests.

In order for the validity to be established, an alpha coefficient, equivalent to the Kuder-Richardson 20, was run on the pretest scores. The reliability for the test on the biological sciences was .78. The reliability for the test on the physical sciences was .86.

Conclusions For this study, two main hypotheses were tested using four analyses of covariance models. In the first analysis, a comparison of attitudes toward science was investigated for the students taught by the inquiry method and those taught by the lecture-demonstration method. Both groups were studying the biological sciences. No significant difference in attitudes toward science was indicated at the .05 level.

In the second analysis, a comparison of attitudes toward science was investigated for students taught by the inquiry method and the lecture-demonstration method. These two groups both studied the physical sciences. The F value of 4.6S was higher than the critical F value of 4.00 that indicated a significant difference at the .05 level. Gains in attitudes toward science for the group taught physical sciences by the inquiry method were 91 significantly higher than were gains in attitudes measured for the lecture-demonstration group.

In the third analysis, the achievement scores in the biological sciences were analyzed There was no significant difference in achievement between the two groups. The achievement in the inquiry group was just as high as the achievement of the group taught by lecture-demonstration.

In the fourth analysis, the achievement gains in the physical sciences were analyzed. The subjects taught by the inquiry method showed no significant difference from the subjects taught by the lecture-demonstration method. No significant difference in achievement between groups was indicated at the .05 level.

- Source: Dissertation Abstracts International 41-3, September 1980, p. 935-A

31. The correct documentation of this abstract is: a. Pugh, Avafay (1980): The relationship ... Preservice Teachers. Dissertations Abstracts international, Vol. 41, No. 3, P. 935. b. Avafay Pugh (1980): The relationship ... Preservice Teachers. Dissertations Abstracts international, Vol. 41, No. 3, P. 935. c. Pugh, Avafay (1981): The relationship ... Preservice Teachers. Dissertations Abstracts international, Vol. 41, No. 3, P. 935. d. Pugh, Avafay (1980): The relationship ... Preservice Teachers. Dissertations Abstracts international, No. 3, Vol. 41, P. 935. e. Pugh, Avafay (1980): The relationship ... Preservice Teachers. Dissertations Abstracts international, Mississippi State University, Vol. 41, No. 3, P. 935. f. . Shelton, Wayne (1980): The relationship ... Preservice Teachers. Dissertations Abstracts international, Vol. 41, No. 3, P. 935. g. All these answers are correct. 32. The advisor of this dissertation was: a. Wavne Shelton. b. Avafay Pugh. c. Kuder-Richardson. d. Williarn K. Esler. 33. How was the inventory reliability measured ? By using: a. test-retest technique b. split-half technique c. criterion-referenced tests d. none of these 34. When was this study published ? a. 1979 **b. 1981** c. 1980 d. a and b are correct 35. How was the content validity of the criterion-referenced tests measured ? a. The two tests were administered as pilot study. b. The two tests were submitted to two experts in the field. c. By using Kuder-Richardson 20. d. both a and b are correct. 36. How many chapters from the textbook the tests covered ? c. 6 **b.** 12 d. 18 a. 8 **37.** How was the reliability of the test on the biological sciences was measured? a. split- half technique b. content validity c. Alpha Coefficient c. both b and c are correct. *****