Effect of Concept- Based Curriculum and Instruction on Motivating Learners of English as a Foreign Language

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ABSTRACT

The purpose of this study was to investigate the effect of the Concept -Based Curriculum and Instruction Model (CBI) on promoting the motivation of the Jordanian tenth graders in learning English as a foreign language. The participants of the study consisted of 56 female 10th grade students. The participants were assigned into two groups, experimental and control, and were assigned to the levels of treatment. The study employed a 34-item Course Interest Survey (CIS). It was translated into Arabic and adjusted for the 10th graders convenience. The CIS was administrated to the participants before and after the 8 week-treatment. Analysis of Covariance procedure was used to detect the significance of differences between the study groups on the CIS. The results of the study showed a statistically significant difference on the motivation measure at $P < 0.05$ between the mean scores of the two groups on the CIS measure in favor of the experimental group. The results validated the theoretical assumption that learners motivation correlates with curriculum and instruction design. The study offered a package of recommendations including a gradual transformation into concept-based curriculum and instruction.

INTRODUCTION

Study Background

In a customary English as a Foreign Language (EFL) classroom, students sit in rows and stare at their textbooks while one after another reads a paragraph or completes a *drill and kill* exercise. There are few times when students work in pairs or in groups. Quickly, teachers check students understanding of vocabulary and structure items just given and or translated into Arabic (unfamiliar items). Behind the vacant eyes, students' minds are roaming outside. Persistently, the teacher controls the scene from a podium or a stool in the front, questions the facts just read, and checks what is called *behavioral objectives or learning outcomes* one by another. By the end of the class period, all – teacher and students - know how many pages covered and how many left in a course, (Erickson, 2007).

Unfortunately, contents of lessons evaporate rather quickly. After the learners have left their classroom or the lecture hall, only a few continue to retain, transfer, and understand knowledge as well as they should – in spite of the dedicated efforts of teachers to teach and re-teach class after class and year after year.

The preceding learning scenario is not far from the English learning and teaching scenario in Jordan. English in Jordan is a compulsory school subject; it aims to enable learners "to develop native- like facility in English which will enable them to communicate spontaneously, effectively and confidently about a broad range of topics." (Jayyusi, Zughoul, Abul-Fattah, Duwaik, Al-Zubi, Abu- Sirhan and layyan, 1991:15). There seems a general notion of feebleness of EFL in general. Rababah (2003) explained that several studies conducted in Jordan concur similar findings and conclusions (e.g., Abedul Haq, 1982; Zughoul, 1998). For example, Abdul Haq (1982) stated that, "There are general outcries about the continuous deterioration of the standards of English proficiency of students, among school teachers, university instructors and all who are concerned with English language teaching."

The same thing bounced by other researchers in Jordan. Al-Azzam (2010) in her analysis of Jordanian English Language Curriculum explained that in Jordan one single textbook for each grade is used throughout the country and the teachers taught an adopted national curriculum with minimal supplemental materials or differentiation for students' differences. Al-Makhzoumi (1986:20) stressed "most (Jordanian) students are slow readers with bad reading habits"; students are unable to comprehend the facts stated or implied in an English text; they find it difficult to figure out the main ideas of texts, and to reflect on the author's purpose(s).

Additionally, Zughoul (1998) discussed some conditions that need to be met in the development of a good text book of teaching English language. One of the concerned conditions was motivating English language learners. Zughoul reported that the selection of vocabulary and structures in these textbooks is extremely not stimulating; a lot of material is basically dull, purely mechanical operations are emphasized and the typical exercises consist of a number of disconnected sentences.

Researchers in Jordan dealt with separate EFL problems; they discussed EFL from different angles, but the problem is still prevailing and learners of English have what would be called, English Language Phobia. Students have a pre-mindset that English language is difficult and so they are not ready or motivated to learn it. Perhaps the most significant reasons that Jordanian students are low motivated, and poor performing as well as they should academically, is that teachers are provided with intellectually shallow curriculum materials that fail to engage higher –order thinking of students (Erickson, 2001)

Motivation is an important factor in foreign language learning. When students are motivated, they are likely to make a great progress in learning and show significant improvements in their English study. It is difficult to define and measure motivation; however it may play a role in the

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success of formal learning more than in informal acquisition (Krashen 1981: 28). Gardner and Lambert (1972) claim that integrated motivation would be a greater contributor to success in learning a foreign or second language than the instrumental motivation. In other words, learners who aim to become similar or closer to the new culture and society (integrated motivation) yield more than those who learn the language instrumentally - to achieve some goal through a possibly limited use of the new language. Skehan (1997) stresses that motivation is the second most powerful factor in forecasting language learning effect and it is only after aptitude. Additionally, motivation determines the degree of effort the language learners make in learning a foreign language. The more motivation they have, the positive attitude they would adopt and more efforts they make in learning the target language.

From a revolutionary perspective, Erickson (2007:3) characterizes that the low motivation of EFL learners may be because of curriculum and instruction design. She added that "children, in general, enter school as eager, motivated learners but rather quickly they become harder to motivate as they move beyond third grade". Thus, she assumes that there is "an inverse relationship between expanding fact base of curriculum through the grade levels and engagement of the child's personal, conceptual mind." In other words, as the factual load (course coverage) increases, the conceptual intellectual engagement and consequent motivation for learning decrease. Therefore, she believes that this problem can be fixed with the concept-based model for curriculum and instruction (CBI). To discuss this concept-based curriculum further, she compares and contrasts the design of both the topic-based and the concept-based curriculum design.

Traditionally, curriculum has been more "two-dimensional in design – know (facts) and be able to do (skills) – resting on two misguided assumptions: (1) That knowing facts is evidence of deeper, conceptual understanding; (2) That the ability to carry out objectives is evidence of understanding. Specific outcomes or objectives rarely take students to the third dimension of conceptual understanding (Erickson, 2007:7).

Erickson (2001; 2007) believes that stimulating a synergy between the simpler and more complex processing centers in the brain is of course, interactive; it requires the brain to process information on two cognitive levels – the factual and the conceptual. The conceptual mind uses facts from the text as a tool to identify patterns, relate patterns into background base, and generate deeper, transferable understandings – big ideas or extensions.

Of course, the curriculum material is seldom designed to systematically set up this intellectual synergy between the factual and conceptual levels of thinking. Thus, it is the responsibility of career educators to provide teachers with specific strategies for creating this intellectual synergy. The conceptual lens strategy, for example, has lent itself as a powerful tool for teaching beyond facts and content skills. Erickson (2007) stated that this conceptual lens facilitates the integration of thinking. Typically, the conceptual lens is a generic or specific concept like food, verb, noun ...etc that serves as a bridge for helping students to link new knowledge to prior knowledge and to see patterns and connections between facts and transferable understanding (p. 129).

It is worth differentiating between facts from concepts. Facts are examples of people, places, situations, and things. Facts do not transfer; they are locked in time, place, or situation. Facts are easier to teach, but substantially harder for low-achieving students to learn, because they are communicated in dense language and must be memorized (Tindal & Nolet, 1994). Therefore, to assist in putting isolated facts into context, the curriculum is planned around concepts that share a common set of defining attributes (Tindal, & Blake, 1992).

Additionally, concepts are mental constructs that cover different topical examples and meet these criteria: timeless, universal, abstract, different examples that share common attributes (Erickson, 2007: 31). It is concept attributes that enable students to apply knowledge to new circumstances, settings, places, events, and time periods and across domains. Moreover, concept attributes can be juxtaposed to non-examples to highlight the critical distinctions (stream vs. brook, ocean vs. lake, etc.). The ability to discriminate between examples and non-examples helps students learn concepts (Merrill & Tennyson, 1971) because students can organize information into a structure that enables them to recall and generalize the information needed to solve any given problem within the specified domain (262 Bilingual Research Journal, 27: 2 Summer 2003).

Another important point is the correlation between the intelligence and the motivation of learners towards the specific content knowledge and skills within a discipline. The greater the chance for the learners to engage their brains in a topic, the higher their motivation will be. Not only this, but, according to Erickson (2007:3), "the inverse relationship between the expanding fact base and the engagement of the learners' personal, conceptual mind ..." is attributed to the way the traditional curriculum and instruction are designed.

In other words, Erickson believes that ill-designed curriculum and instruction – lack of synergy – is the major reason behind the fact that students gradually lose their motivation beyond the third grade, though they enter school as eager, motivated learners. The early grades curriculum is based on concepts rather than facts as the advanced grade curriculum is; children at earlier stages are invited to learn concepts like colors, weather, family ...etc. They love to learn because they use their own minds! However, the case is not so as they grow up and are offered curricula designed with greater amounts of facts. She claims that "as the factual load of curriculum increases, the conceptual intellectual engagement and consequent motivation for learning decreases" (p. 3).

Figures 1 and 2 (Appendix 1) illustrate the inverse relationship between the increasing factual coverage and the decline in conceptual thinking. The figures also show how this problem can be rectified.

In her study which aimed to examine the scholarly written literature of CBI, Koren (2010) explained that concept-based instruction and curriculum should include a certain number of elements: capacity to offer deep understanding, motivation and engagement, mastery of content standards. Koren also added that this instructional model increases student deep understanding, motivation and engagement, mastery of content knowledge and skills needed for the new conceptual age we live in. Al-Qatawneh (2009) study concluded with the result that concept-based curriculum

affected the performance of the writers in EFL, and provided a springboard to what the students have to write.

Using Kellers' Course Interest Survey (CIS), Halat & Aydin (2008) compared motivation of sixth-grade students engaged in instruction using reform-based curriculum with sixth-grade students engaged in instruction using a traditional curriculum. The researchers indicated that the reform-based curricula compared to a traditional one, had more positive effects on students' overall motivation in learning geometry at the sixth grade level.

Alwan (2006), in a qualitative study of English language female secondary school teachers' perceptions of curriculum change in the United Arab Emirates, aimed at understanding curriculum change from the teachers' perspectives. He collected data by repeated recorded face-to-face semi-structured interviews, member-checking group, interviews and document reviews. Interpretation of the data revealed that according to the research participants, curriculum was synonymous with the materials. Participants agreed that nothing else had changed other than the books. Teachers had contradictory affective reactions to curriculum change since they approved of some aspects of change but were disturbed by other aspects. Their feelings evolved with time to become more positive with familiarity.

In another study, Twyman (2003) found out that textbooks do not representatively sample instruction, do not employ production responses, and do not provide enough information to make instructional decisions. This study indicated that (1) weak basic skills inhibit communication not understanding of content; (2) multiple opportunities to practice manipulating information in problem-solving and other complex tasks increases achievement.

In conclusion, it is clear that conceptualization is a basis for learning in the new millennium. The better concepts one builds, the better his/her learning will be. The findings of previous research indicated clearly that the CBI is very effective and yielded positive effects on learners' conceptualization and motivation. It was also displayed that the CBI is a great tool for curriculum alignment- bringing together the basic elements of curriculum, design, classroom offerings, and assessment. Further, the previous research showed that motivation correlates with curriculum design in various school subjects and at different levels. Therefore, the current study aimed to validate the assumed relationship between concept-based instructional material design and learners' motivation toward English as a foreign language. The issue of motivation, though important in learning, it has extra importance in learning a foreign language due to the nature of motivation that learners of a foreign language usually have.

Statement of the problem

A closer look to the table of contents of the English curriculum used in Jordan's public schools will determine with great certainty that the foundation on which curriculum are designed is topics rather than concepts i.e. facts and skills are the most two elements that are supplied, graded and taught from one lower level to another upper level. Mainstream teachers are often trained on how to derive behavioral objectives from generic ones and lead teaching in view of those objectives; they likely to check

objectives listed one by one by the end of the year as an indication of their are successful coverage of the course. Course coverage, unluckily, is not an indication of enduring understanding. Students leave classrooms with artificial instructions. They are rarely taught concepts that engage their minds. Therefore, they often leave their classrooms with shallow understanding of the items they learned in school and their motivation to language learning gets lower and lower and it may evaporate rather quickly. According to Erickson (2007), students' motivation to learning curriculum may be maintained and increased when educators cater for the missing dimension of learning, concepts, and when teachers are trained on leading their instruction by concepts rather than objectives. Therefore, the current study aimed to test whether motivation correlates with curriculum when designed based on concepts rather than topics.

Question

This study raised the question, "what is the main effect of the concept - based instruction on the motivation of Jordanian tenth graders in learning English as a foreign language?"

Operational definitions

The following concepts and terminologies are used in this study as operationally defined below: -

– Concept-Based Instruction - CBI - is a three-dimensional curriculum and instruction model which help create an intellectual synergy between the lower, factual level and the upper, conceptual level of students' thinking. It emphasizes students' involvement in the learning and helping students t o use subject or content-based facts through concepts/skills, relating them to their background knowledge base and developing global and enduring understandings. For the purpose of this study, the CBI program refers to the model which uses concepts instead of facts and topics, employs concepts and big ideas instead of behavioral objectives. It aims to bring a set of curriculum elements arrangement- design, assessment, and teaching procedures- together in a way that engages students to think.

– Motivation naturally has to do with students' desire to participate in the learning process. But it also concerns with the reasons or goals that underlie student's involvement or detachment of academic activities. Although students may be equally motivated to perform a task, the sources of their motivation may differ. For the purpose of this study, motivation was represented as the total scores that the tenth grade students in the experimental and control groups obtained on the Course Interest Survey- CIS.

Significance

The present study introduced an instructional model for EFL teaching and learning for Jordanian students in view of the

brain-based research. The CBI model aligns curriculum material design, teaching, and assessment strategies for promoting students' intellectual abilities. The study introduced teachers of EFL to valid strategies for developing students' conceptual mind and for living in a complex and interrelated world. The valid and reliable instruments, action procedures, and experimental findings may be of benefit to other researchers and practitioners. The study should encourage educational decision-makers and local educational supervisors, as well as faculties of qualifying and preparing prospective teachers to make use of and promote a variety of procedures to facilitate the CBI of their students learning. It may gear further research towards the CBI and its actual effectiveness on students' engagement, achievement, and problem solving in other subjects, as well as towards the teachers' satisfactions with the CBI or any of its variation.

METHOD AND PROCEDURE

Participants In this study the researcher followed the "convenience" sampling procedure defined by McMillan (2000), where a group of participants is selected because of availability. Participants in the study were tenth-grade students enrolled in Khelda Secondary School for Girls, during the scholastic year 2011/2012. In this school, there were two sections of the 10th grade students. By coin flip, section A comprising 30 students was assigned to the experimental group and the other section B of 26 students served as the control group. The experimental group was taught by the CBI teaching model, and the control group was taught by the traditional method of teaching.

Instrument

The Course Interest Survey - CIS - of Keller (1999) was adopted. The purpose of the CIS was to investigate how students are motivated, or expected to be, by a particular setting. The CIS was translated into Arabic to the advantage of the 10th grade students; experts suggested an Arabic version of the instrument for eliminating the language effect among participants. In this study, CIS was applied to measure the motivation of the two groups of the study towards learning English as a foreign language. This CIS - Arabic version - was administered to the participants during a single class period by the researcher before and after the eight-week treatment period. The CIS consisted of 34 statements categorized into four parts: (1) attention, included 8 items; (2) relevance included 9 items; (3) confidence, included 8 items, and (4) satisfaction with 9 items. Using a 5-Likert-type rating scale including 34 statements, this questionnaire was administered for 15 minutes. To validate the Arabic version of the (CIS) Questionnaire, it was solicited from 15 college professors and education experts. Keller`s original CIS was presented to them along with the Arabic version. Each was asked to comment on the correctness of the language, item affiliation, suitability and exhaustiveness of the items in the four subscales of the instrument. The Arabic version of the instrument was regulated to the reviewers` feedback. The researcher completed the instrument and an example was given before hand for guiding the participants in how to fill in the questionnaire. This CIS in its Arabic version was tried

out on a group of 30 students. This group was selected from the population, but outside the participants of the study. The purposes of piloting were to estimate the time needed for completing the instrument, and to measure the instrument reliability. The reliability of the questionnaire was established by calculating Cronbach Alpha, 0.87. Reliability estimates for each subscale were as follows: attention: .84, confidence:.81, relevance: .84, satisfaction: .88.

Instructional Materials

The purpose of the CBI teaching material was to teach students beyond facts and develop student's intellectual disposition. It comprised of additional requirements for material design, classroom delivery and assessment. The following additional procedures were required from the conceptual teacher when planning her teaching materials; she made sure that her students differentiate a topic from a concept. A topic is locked in time, place and person, but concepts transfer to other situations because it is abstract. For example, the Arab Great Revolutionary is a topic, but a revolution is a concept. Then, she listed all concepts in a lesson, a unit, or a topic. Each discipline has its own concepts. And, she moved to identify a conceptual lens-central topic, to attract students' attention. Central topics are like extinction, wildlife, peace ... etc. Additionally, she worked on changing the behavioral objectives set forth in the unit into big ideas, generalizations and principles. Composing generalizations is an indication of enduring understanding (Erickson, 2007). Then, she adapted classroom activities into performance-based assessments; content-based skills were changed into transferable skills. Finally, she encouraged students to write big ideas, two to three each class time, using concepts taught in the lesson. Additionally, she allowed for differentiation. Because students usually come from different backgrounds, they tended to provide big ideas, statements and principles, different from each others, using the same concepts learned. From time to time, she rated students' engagement in learning the unit. Because students used their minds when dealing with abstract concepts, and involved their emotions - stands from the case under discussion, and their surrounding environments, students showed higher engagement in conceptual teaching than traditional teaching was. The texts were selected from the current 10th secondary school text book (Action Pack 10), units 5 and 6 were assigned to apply to the CBI. The selection of the two units of the materials covered the main theme of "Free time"; it included two topics: Sports and Special Zoo.

Teacher training

A qualified teacher of English, with a B.A. in English language and six years of experience in teaching, carried out the experiment. She was a teacher of English at Khelda School for girls. She was co-operative and willing to teach according to the CBI requirements. She was given intensive training before the treatment. She participated in the development of the lesson plan and she selected the specific big ideas for the instructional material. She took part in validating the instructional lessons based on the CBI model and helped in administrating the CIS questionnaire. The teacher was trained on the CBI procedures as outlined in the preceding

section as well as she was encouraged to apply CBI model to her teaching habits.

Study group equivalency

Before the inception of the treatment, the CIS was administered for both groups to determine whether the two groups of the study started the treatment with equivalent interests to the English subject. Thus, mean scores on the pretest for both groups were computed and tabulated as shown in Table 1 (See appendix 2). The experimental group scored 3.54 and the control group scored 3.59. The experimental group outperformed the control group on the pre-test. Thus, to determine if this difference was significant at alpha = 0.05, T-test was performed. The T-value of .354 was insignificant at P < .05. This meant that the experimental group started out the experiment with the same interest towards the English subject course; both groups were equivalent before the inception of the treatment.

Study design and data analysis

In this study, the procedure of quasi-experimental design was used. With this design, the researcher had a control group compared with an experimental group. In this design model, the school was selected without random assignment; however, the levels of treatment were taken by the coin flip procedure. Both groups took a pretest and a posttest, and only the experimental group received the treatment. The data were responses from participants on the (CIS) measure. Means and standard deviations were computed to compare means for the two groups on the posttest. Analysis of Covariance (ANCOVA), using pretest scores as the covariates, was performed to detect any significant differences between the two groups on the posttest, the (CIS) measure.

Study procedures

At the time the researcher noted the specific procedures related to the way participants were selected, the way the instrument was developed, the way the teacher was trained on lesson delivery, and the way data were collected and analyzed in the preceding sections of the "methodology and procedures" section, the procedures in which the study was executed in conducting the study are worthy outlining. The researcher reviewed literature on the CBI and the relationship between the CBI design and students' motivation toward the CBI-based course. Then, the participants of the study were selected on convenient grounds. Permissions were warranted in advance. Also, the CIS was translated into Arabic, adapted to the learners' level abilities, and backgrounds; The validity and reliability of the instrument were established as appropriate. A group of experts were invited to contribute to the validity of the Arabic version of the instrument and the instructional material used in the treatment group; they were introduced to the philosophy of the CBI and the way it should be offered in classroom. The pilot study was administered on a group of students outside the setting and time of CIS administrations and time for classroom delivery were established on the basis of the piloting. The preceding procedure was introductory i.e. it took place before the

inception of the treatment, and followed by a set of specific procedures for the execution of treatment and data analysis. This procedure began with a coin-flip assignment of the participants into the levels of treatment; one group served as control and the other worked as the experimental. The experimental group studied the same units that the control group did. However, the basic difference was in the way the teaching material was designed, delivered in classroom, and assessed. The material given to the experimental group was in view of the concept-based curriculum and instruction paradigm as introduced by H. Lynn Erickson in 2001, 2003 and 2007. But, the control group continued to study the same material in the same way they did in the preceding units and perhaps previous year. The same teacher taught both groups. Of course, the teacher went through intensive training on the CBI model. She did not start teaching the treatment group until she felt that she was comfortable with the new classroom offering arrangements of the CBI. To collect data, the instrument- the Arabic completed version of the CIS - was administered shortly before the treatment started and immediately after the treatment ended. Students' scores on the pretest were collected and analyzed for detecting any prior differences between the two groups of the study. The treatment took 8 weeks. As soon as the treatment was completed, the CIS was administered and data was collected, analyzed and discussed as appropriate.

RESULTS

To recall, this study aimed to investigate the effect of the concept - based instruction on the motivation of Jordanian tenth graders in learning English as a foreign language. To answer the question of the study, two sections of the 10th grade students of Khelda Secondary School for Girls in Capital Amman, were randomly selected. Section A, consisted of 30 students and 26 students were in section B. Section A represented the experimental group while section B served as a control group. For the purpose of this study, students' motivation was measured on the Course Interest Survey, including four subscales: attention, relevance, confidence and satisfaction. The CIS was administered on the two groups of the study before the inception of the treatment for detecting any significant differences between the two groups. Both groups started the experiment with the same interest towards the English subject as per the results of the T-test. One Way-Analysis of Covariance was used for detecting any significant differences attributed to the methods of teaching on the post test. Mean scores and standard deviations of both groups on the posttest were tabulated as shown in Table 2 (See Appendix 2). The experimental group (No. 31) had 3.91 mean with 0.40 SD and the control group had 3.10 mean and 0.38 SD. The results showed that there appeared a difference between the mean scores of the experimental group and the mean scores of the control group on the posttest in favor of the experimental group. To test the significance of this difference between the two groups, the ANCOVA test was performed using the pretest scores as the covariate. The results of Table 2 showed that the F value of 58.286 was significant at P< 0.05. This meant that the students' interests in the English language course on the posttest were impacted by the treatment in favor of the experimental group, which was taught by the CBI model. In conclusion,

the treatment showed that the experimental group- which was taught by the CBI model - outperformed the control group- which was taught by the traditional method of teaching - on the motivation scale- CIS.

DISCUSSION

Before presenting a potentially noteworthy discussion of the findings obtained by this study, it is important to acknowledge delimitations and limitations of the study, including both internal and external threats to validity. Note that, although the instructional plans received comments and criticisms from a number of experts during validation and piloting, they may have been a threat to internal validity. Other threats that would limit the generalization of the results are: (1) the female students who participated in this experiment may have had experiences and expectations not reflecting the typical students enrolled in the Jordanian public educational system, or other parts of the Kingdom. In addition to the crowded classrooms in the selected school, the refined skills and higher qualifications of the experiment's teacher may not reflect the typical educational situation in other parts of the country or the private school settings. The ANOVA statistical procedures indicated that the mean score of the experimental group, exposed to the CBI instructional treatment, was significantly higher than that of the control group taught by the traditional method of teaching, on the posttest. This significant improvement was expressed in the participants' mean scores on the posttest. Students exposed to the CBI model showed a greater interest level in learning English as a second language in the tenth grade students than students exposed to the conventional method to teaching. This finding supports Gardner's (1985) who hypothesized that a favorable set of attitudes and motivation could predict successful second-language learning. The same assertion was claimed by Scarcella (1990) that motivation plays a central role in second language development. In their classic study on attitude and motivation, Gardner and Lambert (1972) also explained that attitude and motivation are factors that influence the development of second-language proficiency. Motivation to learn a second language is significantly tied to students' attitude toward the second-language speakers (Cummins, 1979a). Krashen and Terrell (1983), in agreement with Dulay and Burt's (1977) explained that having the correct attitudes will encourage students to obtain more input. The results validated the hypothesis put by Erickson (2007) that motivation correlates positively and inversely with curriculum and instruction design; ill-designed curriculum and instruction lower learners' engagement in the course of study and well-designed instruction raises learners' interest in learning.

RECOMMENDATIONS

Further research is recommended to provide additional knowledge regarding the following:

– The effects of CBI on students' learning of Arabic or English as a mother tongue language may be investigated and their interactions could be examined in order to get an in-depth information and help

students enhance their knowledge of the language learnt.

– Further replication of the experiment at other different levels of learners in schools and other educational institutions. It was argued that using the CBI is applicable to all stages.

Implications

The following implications can be drawn from the study treatment and findings. More efforts are vital if the concept-based instruction and curriculum model requirements can be met in the educational sector of Jordan. The following considerations are possible:

– Educators should shift the old methods of topic-based to conceptually oriented instruction; the focus of learning swings from memorizing isolated facts to using them as a tool for understanding the deeper, transferable concepts and principles. In order to make learning more meaningful and inspiring, the aim of curricular instruction should develop into providing conceptual learning and building brain schemata to intellectually manage the expanding information base.

– Educators and educational experts are to provide what Erickson called a "coherent curriculum". Representing a sense of purpose, unity, relevance and pertinence, a "coherent curriculum" holds together, make sense as a whole; and its parts are unified and connected by the relevance to students' lives.

– English teachers should pay more attention to Concept-Based Curricula and Instruction, and prepare their English lessons under the guidance of Erickson's Model. They could be more successful in motivating their students toward their courses. Teachers could understand the difficulties of their students because of the fact that the CBI model of teaching has its own well-defined levels that are in a structure of knowledge.

Educators are recommended to come closer to the new CBI model of learning, which motivates and engages students in academic study; educators need to consider teaching generations for living in the 21st century and the age of conceptual learning.

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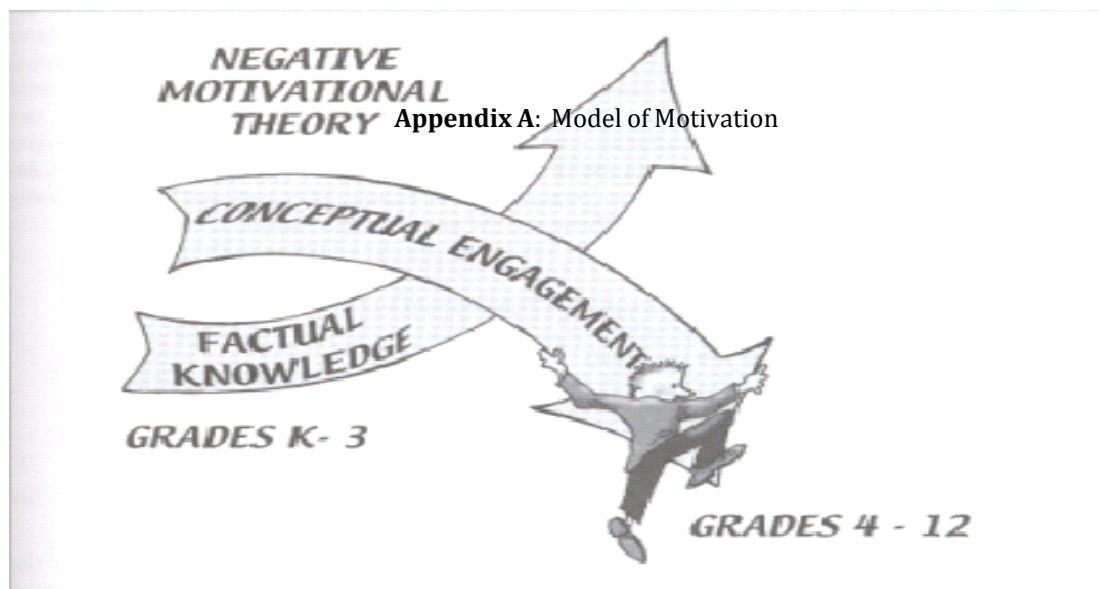
Appendix A: Model of Motivation

Figure 1 Negative correlation between CBI design and learners' motivation. Source: Erickson, 2009: 99.
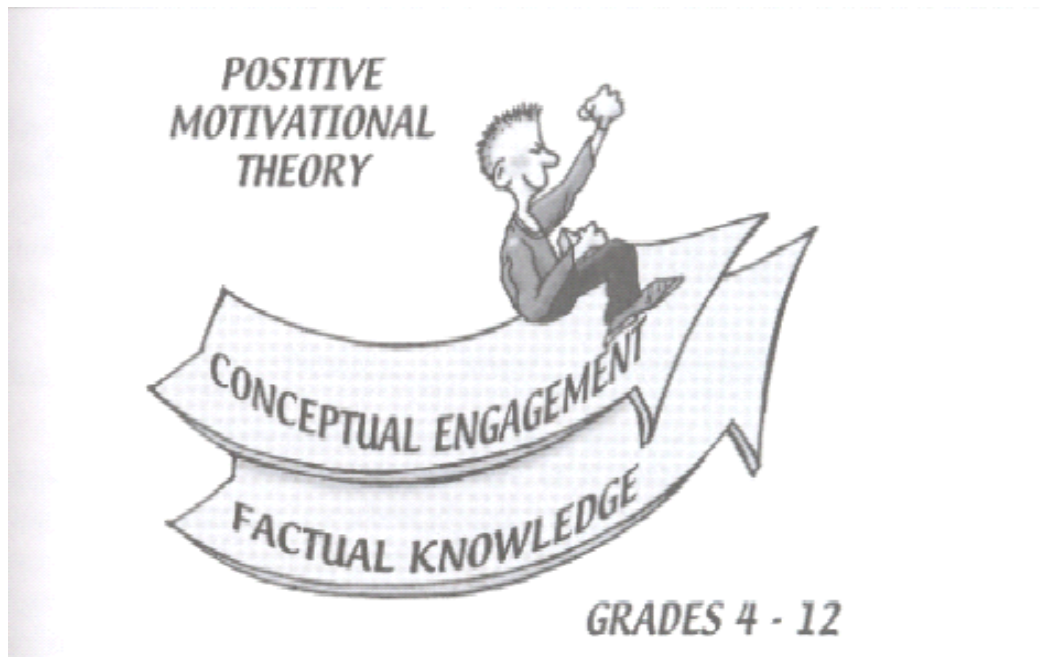
Figure 2 Positive correlations between CBI design and learners' motivation. Source: Erickson, 2009: 99

Appendix 2: Summary of T-test on the pre-test

Group	MS	SD	T-value	Sig.
Experimental	3.54	0.54 .	.354	.565
Control	3.59	0.51		

P< 0.05

Table 1 T-Value and level of significance for both groups on the pretest prior to the treatment

Tests of Between-Subjects Effects

Dependent Variable: pototal

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	9.08	1	9.08	58.28	.000	.519
Intercept	686.95	1	686.95	4405.6	.000	.988
group	9.08	1	9.08	58.28	.000	.519
Error	8.420	54	.156			
Total	719.37	56				
Corrected Total	17.50	55				

a. R Squared = .519 (Adjusted R Squared = .510)

Table 2 Results of ANCOVA for both groups on the posttest