An Investigation into the Effect of the Implementation of the Integrated Curriculum on Young Omani Learners

دراسة أثر تطبيق المنهج التكاملي على المتعلمین الصغار في سلطنة عمان

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Dissertation submitted in partial fulfillment of the requirements for the Degree of Master of Teaching English to Speakers of Other Languages (TESOL)

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December 2012
Dissertation Title

An Investigation into the Effect of the Implementation of the Integrated Curriculum on Young Omani Learners

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Abstract

The current study is mainly an experimental research initiated to examine the effect of implementing the integrated curriculum approach on some selected grade two learners in Oman who in the time of this study were implementing integration in teaching English. Because a substantial body of research encourages using the integrated curriculum approach where subjects are taught in relation to each other, this study was designed to address the prevalent issues related to the integrated curriculum approach. This study emphasizes the need for further exploration of the factors account for the achievement differences observed when using two instructional approaches in Omani schools. This research is also pursued to improve the efficiency of using integrated curriculum in Omani schools and to ascertain which educational practices and means promote better learning.

Among the significant findings were:

1. The current study shows compelling evidence that children who received a two year education of integrated curriculum approach demonstrate greater achievement in both the pre-test and post-test of the study than their peers who received the ‘isolated- subject approach’.

2. It is also indicated that the non IC students performed better in the post-test compared to the pre-test.

3. A positive attitude of selected teachers toward using the IC was also proved. Teachers are willing to continue implement the IC with young learners in the future.

4. The findings of the current study highlight a few implications for practitioners and users of instructional approaches in classrooms
ملخص

لقد حظي التدريس باستخدام المنهج التكاملي بقدر كبير من الاهتمام في الأونة الأخيرة، لذلك فقد تم تصميم هذه الدراسة لمعرفة أثر تطبيق المنهج التكاملي في مادة اللغة الإنجليزية على عينة تكونت من (82) طالب وطالبة من طلبة الصف الثاني في سلطنة عمان، والذين كانوا يدرسون باستخدام المنهج التكاملي وقت تطبيق الدراسة.

وقد لاحظ كثير من الباحثين أن التكامل بين المواد الدراسية يعتبر وسيلة فعالة للتعليم الذي يكسر الحواجز في العملية التعليمية، حيث يتم تدريس المواد الدراسية بطريقة متناقضة. في حين لاحظ بعض الباحثين آخرون أن هناك بعض الصعوبات في تنفيذ طريقة التدريس بالمنهج التكامل مثل مشكلة الأعداد والتحضير، والتقييم، وغيرها من المشكلات ذات الصلة. لذلك فإن هذه الدراسة هدفها إلى توضيح أثر استخدام المنهج التكاملي كطريقة من طرق التدريس الفعالة، مما قد يفتح أبواب أمام مزيد من البحوث حول أفضل طريقة لتعليم الأطفال.

ولتحديد وتوثيق أثر استخدام طريقة التكامل كوسيلة من وسائل التدريس، فقد تم تنفيذ هذه الدراسة على عينة مختارة من الطلاب والمعلمين في سلطنة عمان. وقد قامت البحثة بتطبيق اختبار لقياس التحصيل الدراسي القبلي والبعدي على المجموعة التجريبية المكونة من (54) طالب وطالبة (28 طالب وطالبة)، حيث درست المجموعة التجريبية المواد الدراسية المختلفة في الصف الأول والثاني باستخدام المنهج التكاملي بينما درست المجموعة الضابطة باستخدام طريقة المواد المنفصلة.

وقد أظهرت نتائج الدراسة أن المجموعة التجريبية والتي حظيت بتطبيق المنهج التكاملي قد أبدت تحسناً ملحوظاً في نتائج الاختبار القبلي والبعدي مقارنة بأقرانهم في المجموعة الضابطة.

وفي ضوء نتائج هذه الدراسة، توصلت البحثة إلى مجموعة من التوصيات التي تستهدف تعزيز الممارسات التربوية في المدارس العمانية وتوضيح العوامل التي تؤثر على تعلم الأطفال الصغار.
Dedicated to the soul of my father and to my beloved mother who has joined me through all my ups and downs during this journey, and to all who helped and encouraged me to make this work possible.
Acknowledgments

First of all, I give my heartfelt thanks to Allah Almighty for granting me the conciliation, knowledge and the patience to complete this dissertation. Without this support, this work would not be a success.

Secondly, I would like to convey my gratitude and appreciation to my supervisor, Dr. Amanda Howard for her support, encouragement and constant help and advice. I will always remember her saying ‘Don’t worry. Everything will be OK’. I do appreciate her patience to make this project successful.

I am grateful to the headmistresses and the senior teachers of the selected schools for their cooperation and willingness to make this project attainable.

I like to express my humble thanks to all students in Al Buraimi Governorate who contributed in this study and the teachers for their willingness to answer the research questionnaire and who helped to make this work feasible.

My sincere and special gratefulness is furnished to all my family members who stood beside me throughout this whole journey. Without their support and encouragement, this work could not have taken place.

Lastly, I put forward my appreciation and acknowledgement to all those who assisted and supported me in any respect to achieve my aspiration.
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1. CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

When formal, non-traditional education first started in Oman in 1970, the critical challenge was to ensure education for everyone all over the country aiming to provide an equal opportunity of education to both genders. Once this was largely ensured by the middle of the 1990s, the Ministry of Education has altered its efforts toward the provision of qualitative amendments in the entire educational system in the whole country. One of the most influential educational reforms was the introduction of the Basic Education in the academic year 1998-1999 starting in only 17 schools all over the country and aiming to complete its’ phase to all schools by 2004. According to the National Report on Quality Education in Oman (2004), the basic education then was targeted to replace the old general education system which was implemented in all Omani schools. With the basic education system, Omani students were expected to be better learners through the exposure to real-life situations and best practice of experiential learning opportunities.

Guided by the 2020 vision conference which was held in 1995, the Ministry of Education in Oman has been driven to take some steps to “ensure that students would be adequately prepared for the requirements of further and higher education, the labour market and the modern life” (MOE, 2004, p. 15). The Ministry of Education has therefore, formed a ‘review committee’ to be responsible of an ongoing process of comprehensive evaluation of the outcomes of basic education. Issan (2008) suggested that a much more
emphasis should be focused on to achieve the literacy development of young children in both their mother tongue and the English language as a foreign language.

Considering the challenges encountered by the education in Oman, (ibid) has pointed that reforms in the educational goals should be made to meet the needs of modern worldwide economy. Thus a restructuring of educational goals should involve a stronger and more sufficient background of knowledge especially in Science, Mathematics and English language obtained by Omani learners (ibid). There is also an economic need to produce a much more qualified capable Omanis in the labor market.

Therefore, it was of great significance to improve the teaching and learning of Science, Mathematics and English Language subjects. Consequently, applying the approach of integrated curriculum (IC) was launched in the academic year 2006-2007. As a start, it was first piloted to grade 1 students in only four schools in Muscat, the capital of Oman. The Integrated curriculum is a four-year scheme targeted to students of grades 1-4.

Referring to Roush (2008), it is claimed that implementing the IC has helped the second language learners to progress competency with their classmates mainly because of the developed positive attitudes acquired while working on real world challenges. For example, the integration of numeracy in teaching English as a second language represents the ability of solving real problems, therefore, that the learner gains both knowledge and self-confidence and is better in constructing and assimilating new experiences.

According to the Educational Development in Malaysia &Oman (2008), the teaching of English language in the integrated curriculum approach in Oman
concentrates on improving the four key skills of the language (listening, speaking, reading and writing) with the consolidation of Math and Science concepts. It could be drawn then that the fundamental rationale behind the use of integrated curriculum is to improve young children’s motivation, proficiency and productivity in their early school years. According to Cameron (2001), this is important since it is inevitable that later or secondary learning will be influenced by early learning. That is, if from the beginning young children consider learning as uninteresting, useless or ineffective, then secondary education will be much harder and teachers will need to dedicate greater effort and time to remotivate children who believe they struggle in learning.

1.2 Significance of the Study

Young children’s learning is of a fundamental importance in all educational organizations around the world and which has recently expanded but still insufficiently researched Cameron (2001). Nevertheless, many implications, recommendations and findings about the best way children learn English as a second language were revealed in the last few decades. Hence, the Ministry of Education as well as individuals such as teachers, supervisors, teacher trainers and curricula officers were busy tracking the best and the most beneficial and rewarding programmes of teaching young children. However, the success or failure of these methods and approaches cannot be ensured unless these methods are experimented, examined and researched. On the other hand, countries and educators, if we could say, are forced to implement different and innovative strategies and approaches for several reasons. First, they are responsible to provide the best to their citizens so that they do not step behind
others. Second, there is a huge challenge among the educational organizations to chase the advancing changing world and changing knowledge in the 21st century. These changes are not associated only to information and concepts but also to teaching approaches, resources and technologies. Third, educators all over the world undergo excessive pressure competing with others, whether locally or internationally, to help to create better achievers.

Thus, the need to implement approaches such as the integrated curriculum in Omani schools has arisen. Furthermore, the national Report on Quality Education in Oman (2004, p. 27) suggests that “One of the major challenges in curricula development is to ensure that the reforms show a consistency across all subjects”. It could be drawn then that this consistency is hopefully to be achieved through the implementation of integrated curriculum.

Therefore, this current study is highly significant for several reasons. First, it aims to enlighten educators and education organizations of the effects and benefits of the implementation of integrated curriculum. It intends to thoroughly examine young children learning which might open doors for more researches of the best way children can learn. A third point, this study is an endeavor to investigate an area in which research still scarce in the Omani setting. The findings of this study intend to enhance the educational practices in Omani schools by providing implications and recommendations regarding the factors that affect young children’s teaching and learning which might influence decision-making at the local level. Another last point, the study aims at providing clues and cues for raising better Omani educational achievers.
1.3 Research Questions

It is believed that the implementation of the integrated curriculum in Omani schools has led to several inquiries. As an Omani citizen and having been involved in the Omani educational system for more than fifteen years moving from working as English language teacher, a senior teacher and then a supervisor, it is, therefore, an identifiable responsibility to ensure that young children receive a type of education which prepares them for their future life. The integrated curriculum was implemented first to grade 1 students in the year 2010-2011. This research study aims to investigate thee learners who are now in grade 2. Hence, this study aims to examine the following questions:

1. Is there a difference in second grade students’ test scores before and after utilizing the approach of integrated curriculum?

2. Is there a difference between second grade students’ scores who have been utilizing the integrated curriculum and students who have been utilizing the separate model ‘English for me’ curriculum?

3. To what extent has the experience of teaching the integrated curriculum met teachers’ expectations?

1.4 Scope of the Study

The scope of the study involves a total of three cycle one schools (primary schools), two in which integrated curriculum was implemented (about 54 students) and one in which the ‘English for me’ curriculum (about 28 students) was used. The ‘English for me’ curriculum is considered as ‘isolated- subject approach’ where each subject is taught separately. One grade 2 class was
investigated from each of the three schools in the academic year 2011-2012 with the total of 82 students. Teachers of all grade 2 integrated curriculum classes were involved in the study.

1.5 Structure of the Study

This research study is organized into six chapters. Chapter one provides an overview of the characteristics of this current study. Chapter two presents the theoretical framework and the literature review related to the effects of the implementation of the integrated curriculum approach. Then some useful definitions of the integrated curriculum are discussed. Additionally, general features associated with children education are described. The research design of methodology is detailed in chapter three. Chapter four describes the research findings based on the analysis of data. The findings are organized based on the research questions. In chapter five, a detailed discussion of the findings is addressed. Finally, a conclusion of the study is drawn in chapter six.
2. CHAPTER TWO: THEORITICAL FRAMEWORK AND LITERATURE REVIEW

2.0 Introduction

This chapter aims to examine the literature background of the implementation of Integrated Curriculum (IC) and its impact on young learners’ achievement. It also provides a critical summary of previous research of the intended topic. Henceforth, the chapter has been classified into several sections. Section one presents the historical background of the integrated curriculum. Section two aims at providing several definitions of the integrated curriculum approach. Children literacy is introduced in section three. Then, section four illustrates what factors influence young leaners’ education. Section five focuses on young leaners’ achievement. Goals and development of the English language curriculum are dealt with in section six.

To start with, it is beneficial to define what ‘integrated curriculum’ means. Integrated curriculum or thematic teaching as some educators called is when teachers teach skills and abilities to students using joined contexts (Murdoch 1998). Joined context might mean teaching the language corresponding with other subjects such as Mathematics, Science, Arabic language and Social Studies. This is particularly done to broaden the teaching and life experiences offered to students by making the content richer in various concepts and different learning situations. So, it could be inferred that integrated curriculum is mainly about making connections to help structuring the learners’ knowledge by learning new experiences and be able to adapt them with the old related ones.
There are some broad assumptions behind the implementation of the integrated curriculum as an educational practice and whether it could be considered as a high quality education in which the challenge is to enhance learners’ academic proficiencies avoiding the gaps of other instructional approaches. Young English second language learners who are not yet proficient in mastering the second language are in need to be provided with a high quality education because as Met (1994) suggests these young learners need to confront the demands of curriculum content before they could master the second language. In a study reported by Lake (1994) and aimed to investigate the effectiveness of implementing curriculum integration to a limited number of elementary and secondary learners, it was claimed by teachers and educators involved in the study that integration curriculum proves to meet these learners’ needs. Nevertheless, according to (ibid), this claim should be verified through researching a bigger number of students bearing in mind further factors such as the type of subjects integrated and the teaching methodology. But a deep investigation of the effects of the integrated curriculum intended by the researcher would, expectantly, help providing us with actual considerations and crucial implications in the learning process for teachers, learners and other stakeholders.

Thus, an experimental investigation was chosen to examine the effects of the IC implementation by the administration of achievement test to grade two learners. As Bell (1999) assumes, with such experimental investigation, the difference between two selected groups could be attributed to the difference in treatment. The researcher aims to monitor and follow up the progress in second graders’ achievement before and after the integration practice. It is, therefore, assumed that the change in achievement is due to the change in practice as different forms of practice can lead to different achievements by students.
2.1 Integrated Curriculum- Historical Background

Historically, nearly a century ago, the idea of integrated curriculum started when John Dewey, unlike other progressives, called attention to the importance of integrating knowledge and experience to young learners rather than dealing with isolated subject matter (New 1992). Dewey emphasizes that early childhood education counts on the creation of an appropriate classroom environment where young learners have the opportunities to initiate their own learning based on their own needs and interests. However, in spite of the promising endeavors, carrying out integrated curriculum approach in period had it flaws because of poor teacher preparation and training and subsequently teachers struggled in applying proper implementation of strategies and techniques needed (ibid). It is, therefore essential to provide teachers with the pre-service and in service training when implementing new teaching practices.

According to Cameron (2001), Piaget views the learning process as a kind of constructive process in which the learner acquires the knowledge through building on, arranging and rearranging information and experiences. According to New (1992), Piaget comes to an agreement with Dewey. This agreement emphasized the prominence of the teaching environment onto children education moving toward a much more child-centered education where the learner only is the active part of the learning process, not the teacher nor the teaching method. However, educators by that time were not specific enough on how to implement the integrated curriculum.

Dressel 1958 (cited in Lake 1994) argues that the importance of curriculum integration is not only in linking subject matters but it is also to motivate learners to anticipate further relationships and consequently construct new methods and
structures. It is crucial that young learners are raised to be independent and active in
the learning process as this will not only raise their achievement at school but will
also push them into the world of adults where they can practice higher thinking
abilities (e.g. think logically, analyze and evaluate).

Humanistic education has emerged after much criticism to the industrial education
which focuses on the diversity. Humanistic learning highlights the way children feel,
think and believe (New 1992). Again, based on the little accessibility offered to
teachers onto how to best capture children’s feeling and thinking, there was much left
to teachers’ own conceptions and assumptions to do in classrooms. Teachers were not
yet prepared to understand and assess their learners’ needs to enable them to facilitate
the learning process. Teaching, therefore, was shaped and guided by what teachers are
able to do or what they think they are able to do, not what their students need to learn.

It was strongly hoped then that children will reach the maximum of their performance
if they are taught integrated subjects (Snapp 2006). On the other hand, George (1996)
has argued that integration of knowledge is a mind process that functions naturally
and does not require an integration of curriculum and what is more is that integrating
the curriculum might negatively affect and conflict with this natural process of human
mind.

New (1992) mentions that presently in many schools, integrated curriculum is
implemented in three different forms; the integration of all subject matters using a
single subject; the integration of only two connected subjects within one subject (e.g.
Math and Science); and the integration of a new subject into an existing one. Within
the scope of this study, the integrated curriculum investigated is divided into the
following:
Teacher/ Preparation Books

1. Initial Arabic language literacy named- ‘Bustan Al Hurrof’ and aims at developing the children’s mother tongue literacy

2. Initial Arabic Numeracy named- ‘Bustan Al Adad’ which helps developing the children’s awareness of numbers, shapes and sizes

The integrated curriculum has utilized the following students’ books


2) English language integrated curriculum is designed into a class book and a skills book. There are considerably a few mathematical and scientific conceptions which are covered with through the English course books presumably aiming to enable young learners to learn Math and Science through the English language medium. This attention is predominantly unquestionable here since the after school education in Oman requires a good command of English in Math and Science. As mentioned in the teacher’s book, ‘Other subject areas are carefully integrated into the English course’ (Moe 2012, p. 20). For example, children are taught how to be good citizens and how to develop wellbeing.

Perkins 1991, p. 7, cited in Lake (1994) supports the movement toward curriculum integration when he states:
“A concern with connecting things up, with integrating ideas, within and across subject matters, and with elements of out-of-school life, inherently is a concern with understanding in a broader and a deeper sense. Accordingly there is a natural alliance between those making a special effort to teach for understanding and those making a special effort toward integrative education”

It is therefore, the abilities and skills that students gain through the integration what matters. These abilities hopefully will reflect on other developments in the child’s life.

According to Met (1994) there is a basic need for nonlinguistic content which supports the language teaching in terms of providing authenticity to communication and that language now are seen to be less ‘monolithic’. Still more challenging are two main concerns. First, the curriculum design that is mainly integrative, child-centered and skills-focused is not an easy task. The second is a counter question of how and who is to teach different contents and subject matters through a second language. Met (1994) argues that when teaching a content, teachers need to view every content lesson as a language lesson where there will be much more opportunities for young learners to conceptualize the whole world around them. In other words, language and content cannot be taught separately because they both form the basis of learners’ knowledge.

To help investigating the effect of the integration on children, Carter & Mason (1997) have identified three key strengths in implementing integrated curriculum in schools. The first one is related to the time allocated to subjects because implementing IC is a good way to get advantage of the teaching time at schools since teaching isolating subjects will load the teaching timetable. Moreover, Dunn, (1984) argues that
although schools’ timetables allocate learning into isolated subjects, children’s minds are not prepared for this unnatural division. Second, using the IC presumably will lead to more collaboration and team work among school teachers. In fact, teachers’ cooperation could be clearly noticed in the planning, delivering and evaluating the lesson. These stages will involve a lot of team work which will consequently enable teachers to associate their lessons. However, a question appears to be reasonable is the teachers’ attitude and willingness toward teaching other subjects.

Another important advantage of IC implementation is its influence on the students themselves in particular. Carter & Mason (1997) believe that using IC helps to produce more skillful, independent and active learners. The authors presume that the learners might be skillful in the scene of using their own skill in an individual subject to enhance their ability in another subject. For example, students who are good in numeracy but face difficulties in the English language might have the chance to exceed in the language within the classroom since numeracy is taught through English. It is also assumed that subjects associated to learners’ lives will enrich their own skills through the application in the real world through the use of the language outside the classroom. Moreover, independency of the IC learners could be gained through enhancing their abilities of problem solving. This is why Lake (1994) claims that holistic or integrated approaches are recalled faster and easier because of the multiple instances that children have to practice and use the language. Hence, the achievement test used in this study is targeted to evaluate students’ abilities to demonstrate what is learnt in classrooms.
2.2 Definitions of the Integrated Curriculum Approach

Dewey 1912 (cited in New 1992 p. 288), highlighting the child’s personal and social interests, suggests that the integrated curriculum is a way of “blending several subject areas into theme studies”. In other words, it is the approach of making children experience a plenty of real life situations that help to obtain an early more focused and realistic education. In this definition, the word ‘blending’ successfully describes the nature of integration and knowledge cannot be put into clusters especially when dealing with young learners because the misplacement of any cluster knowledge if it could be called, will affect their need to make sense and to form patterns and perhaps disturb their schemata.

Similarly, (Met 1994, p. 160) argues that the integrated curriculum is the circumstances “when the demands of the curriculum exceed the linguistic skills of students”. This is another angle of looking at the integration as it more specifically represents the educational need for integration because teaching a language requires to be facilitated by themes and concepts.

Furthermore, in a project implementing the integrated curriculum for adult education, (Kathleen 2010, p. 8) has defined the IC as “it is a form of contextualized learning that uses the content of real world including the world of work, to engage students and prepare them for transition to postsecondary education and careers”

(Shoemaker 1989, cited in Lake 1994, p.2) defined integration of curriculum as

“…education that is organized in such a way that it cuts across subject-matter lines, bringing together various aspects of the curriculum into meaningful association to
focus upon broad areas of study. It views learning and teaching in a holistic way and reflects the real world, which is interactive”.

What is interesting about this definition is that it highlights the type of connection between the aspects of curriculum as meaningful and it also describes the purpose and the reason of connection. It seems important, though, to mention the teachers’ role since this was also neglected in the previous research.

Particularly, the implementation of the integrated curriculum in Oman aims at developing of children’s literacy skills using a holistic approach where the child is the center of the teaching process and where his knowledge could be put into practice.

2.3 Integrated Curriculum and Children Literacy

When investigating young learners’ language proficiency and achievement, it appears a crucial step to illustrate what literacy means. Basically, literacy is simply understood as the “ability to read and write” (Hudelson 1994, p. 129) yet, educators have struggled for ages to work out how to allow children become literate and work better for each individualized learner. According to Cameron (2001), one of the factors affecting children literacy is the approach of teaching as he claimed that most children need to be formally trained to gain the literacy skills.

Omani young learners typically join the school at the age of seven with little exposure to literacy. These children in most cases have little ability to read and write their native language. Most of young Omanis receive no pre schooling in rural communities where parents do not cater for early literacy during their children’s early lives. In other words, in the Omani context schools play a major role for being responsible to get young children become literate and subsequently the teaching
method implemented. On the other hand, it is fair to say that some children of highly-educated parents are more likely to be literate having their early years of childhood been exposed to literacy. Moreover, most Omani young children usually do not have the chance to practice what have been taught outside the school. This is a great challenge since this will affect their motivation toward learning as they assume that learning is a waste of time because they would not use it outside the classroom. It appeared, consequently, that because of the common low literacy background of young Omani learners, careful selection and utilizing of curriculum and creation of motivating environment all prove to be necessary for the occurrence of reading and writing within the Omani classrooms. Hamayan (1994) argues that the multidimensional progression of young learners’ literacy requires more than one best assumed approach. Hence, there is a need to adapt a collection of instructional approaches which can serve the prerequisite of most second language learners. It is, therefore, fair to say that the integrated curriculum would help the occurrence of literacy in classrooms.

It is important to adapt a holistic approach when teaching young learners to read and write to create meaningful framework leading to authentic language learning (Hamayan 1994). A key strategy was suggested to develop young learners’ literacy skills, especially those who come from low-literacy backgrounds- is to integrate academic subject areas with literacy. He gave an example of the integration of literacy with social studies. He asserts that it was beneficial to use the concept of weather taught in social studies to raise students’ awareness of where a short story taught in a literacy class occur. The main argument here, therefore, is to suggest whether the implementation of the integrated curriculum is worth or it is just a waste of time.
In relation to the Omani IC experiment, specifically reading and writing are first introduced to first graders highlighting the following basic skills:

1. Alfred fonts to help developing the motor skills of young learners through moving their hands smoothly from left to right.

2. Pre-reading and pre-writing which includes following pattern sequences, matching shapes, and spot-the-difference activities. These activities are aimed to developing visual discrimination and comparison skills, automatic movement of the eye from left to right and visual and oral memory. Pre-writing activities are designed to enhance fine motor control, hand and eye coordination, spatial awareness, smooth hand movement across the page.

3. Phonological awareness and phonics activities are carefully arranged to help children move from working with individual letters and sounds to recognizing more complex sound patterns to enable children intellectually connect sounds and letters (Cameron 2001)

4. Sight recognition to learn to read common content words and high frequency grammatical words (e.g. is, are, the).

5. Guessing meaning from text

6. Writing development is developed in parallel with reading. The focus of the course is on individual letter formation and writing words while developing hand movement (Moe 2012)

7. Spelling which is introduced for first graders in the second semester.

In addition, Hudelson (1994) has mentioned the need to create the appropriate environment that represents context to young learners. An example given was to display projects and charts related to different content areas such as science and social studies to create a purpose for teaching, enhance the engagement and obtain
confidence. Willet (1992) cited in Lake (1994) reported that 87 students in grade five scored higher when integrating Math and Arts compared when studying isolated mathematical concepts. Nonetheless, a kind of skepticism arises. That is, how this integrated approach is intended to meet the needs of young Omani learners. In this case it is crucial to explain what influence children’s education and literacy.

2.4 What Factors Influence Children Education

One of the most important factors which influences child education is whether it counts for the child’s own needs because basically children are psychologically encouraged when the curriculum addresses their needs, problems, concerns and interests (Roush 2008). It is crucial for us as educators to ask what our learners need to know and be able to do through their learning styles and preferences. In fact, McGrath (2002) argues that the actual relation between young learners’ education represented in a coursebook syllabus and learners’ needs is a rough one. He puts a huge responsibility on teachers who are required to bear in mind their learners’ needs while planning, delivering and assessing the teaching lessons.

The importance of IC lays in the fact that it should be carried out to meet the young learners’ needs where they ought to be the center of the learning and teaching process. Masuhara (1998) summarizes the learners’ needs in three categories. They are the personal needs (e.g., age, sex), learning needs (e.g. learning styles and experiences) and future professional needs (e.g. knowledge of language and language use). The importance of learners’ needs then requires to first be identified and then measured using precise and unbiased data. It is also important that no overlapping occur among these types of needs.
A second important factor is the link that education offers to learners with their teachers, schools and community. The teacher thus should be a facilitator of information and not an information provider (Roush 2008). So, the curriculum should meet the needs of both teachers and community. Based on Hamayan (1994) more structural teaching approaches such as the isolated-subject approach have evidently proved to be ineffective to satisfy learners’ needs as the learner is no longer viewed as the core of the teaching process. The implementation of the integrated curriculum course in Oman is targeted to a variety of learners’ learning styles. It could be argued then that the IC could meet and the challenges of Omani learners.

2.5 Young Learners’ Achievement

Basically, when investigating the effect of teaching approaches, academic outcomes of learners should be put into consideration. According to Moe (2012) the academic outcomes of grade two course books clearly focus on three dimensions:

1. Language learning outcomes (four main skills: writing, reading, speaking and listening)

2. General learning outcomes (knowledge, values, attitudes and learning abilities)

3. Math and science learning outcomes

Met (1994) argues that the IC lessons are viewed as significant chances for learners’ concept attainment through the engagement of meaningful contexts. When illustrating content lessons, Genesee et al. 1989 (cited in Met 1994) identified two key language objectives: The first type of objectives is when the language and the content are closely related to each other. It is necessary for learners to understand the language in order to accomplish the objective. For example, learners cannot add and subtract in
math unless they know the two terms (addition and subtraction). They also cannot define healthy and unhealthy foods unless they understand the meaning of both terms.

The second type of objective occurs when learners are able to achieve the aims through content. In other words, learners still can describe good food and bad food without basic knowledge about the terms healthy and unhealthy. Both types of objectives are intended to be measured through different types of questions of the achievement test (research instrument).

2.6 English Language Curriculum- Goals and Development

From the theoretical prospective, it seems important to understand the philosophy and the goals of English language teaching curriculum to young learners and to check if these goals could be achieved better through the IC. According to Bourke (2006), a key goal of the English language teaching curriculum is to enable young learners to communicate successfully using English. Secondly is to prepare young learners for future learning by facilitating the acquisition of the language through context. Another goal is to support young learners’ development cognitively and linguistically and finally is to get young learners engaged in real life situations where they are able to talk, read and write using the appropriate language.

There is, considerably, more to mention but it proves necessary that creating the right teaching environment for aims to be achieved remains particularly important. In other words, goals could not be achieved unless young learners are equipped with the vital conditions and motivating experiences for the target language to be acquired (Brouke 2006). On the other hand, what is questionable, though, is whether such conditions are necessary in the sense of their effect on the teaching. Cloud (1994), for example, has briefed the conditions that impact second language learning by internal and external
factors. Internal factors mainly deals with the learner’s age, gender, attitudes, personality or capabilities. Whereas external conditions generally mean the context where children grow and learn.

In equivalence to objectives are the outcomes. To examine the learners’ outcomes of using any materials in language teaching classrooms such as course books or teacher-produced materials, it is necessary to evaluate these materials during and after the use (McGrath 2002). He suggests that what matters in evaluating the learner’s achievement based on using particular materials is the ability of the learner to convey the knowledge learned (e.g. during the actual use) into other situations (e.g. after the use) with no outsider support (Ellis 1998, cited in McGrath 2002).

2.7 Conclusion

In general, investigating the effect of integrated curriculum involves many factors and dynamics. Hence, this investigation cannot be meant to provide fixed results to implement or not to implement integrated approaches. Rather more significant, it aims at exploring what could be done to develop children education and language proficiency in a second language teaching setting.
3. CHAPTER THREE: METHODOLOGY

This research study investigates the effect of using the integrated curriculum on Omani young learners. The previous chapter therefore presented the review of literature related to this topic. This chapter aims to present the method and the design used to carry out this research.

3.1 Context of the Study

The study was aimed to investigate young Omani grade two learners who are normally aged between 7 and 8 years and who were already taught English in grade one. These children are taught in mixed gender and ability classes and are taught by BA degree Omani female teachers. There are approximately a total 30 students in each class. The schools involved in the study are cycle 1 schools in which grades 1-4 are taught. The school day usually starts at 7.15 and ends at 1.30 with a total of four sessions per day. Each session lasts for 70 minutes. In general, the integrated approach has been applied in three out of 16 Omani schools in the location of the research. Two of the schools implementing the IC were selected to be the sample of this study (as experimental group) because of their comparable conditions such as, the location of the two schools (both are considered city schools), level and number of students, teachers and classes. Generally, both schools have similar background of children performance according to the annual school performance review committee. The third school implementing the separate-subject approach was chosen to be the control group of this research.

The two integrated classes (experimental group) in both schools were chosen randomly bearing in mind that classes in all Omani government contain mixed
abilities students who have been distributed based on their performance in the previous academic year. The third class (control group) was also selected randomly based on the school timetable suitability.

3.2 Participants

3.2.1 Students

The participants in the study are young children in the second grade in three Omani government schools in Al Buraimi governorate aged between 7 to 8. The total number of the investigated children is 82 with the exclusion of students who were absent either in the pre-test or the post-test. Fifty four of these children (experimental group) were already taught using integrated curriculum approach in grade 1. The other 28 students (control group) have been studying the regular isolated subject approach where English is taught as a mere language. These children, as previously mentioned, have little practice of English Language outside the school and thus, it is commonly known that school teachers are in charge to raise their ability to read and write. Recently, the use of technology has helped many of these young learners getting exposed to the English language through using words (e.g., play, start, game) but still many others are struggling with literacy in both their mother language and the English language. A small number of these children had received a pre- schooling in paid private schools. In other few cases, these children appear to be better than others who did not have the chance to get admitted to any pre-schooling. Nonetheless, it is fair to say that these students have the opportunity to access learning resources centers (LRC) in their schools where they can read to develop their literacy skills but still these centers are not fully activated because of lack of awareness of their importance. Driven by the aims of this research, it was originally intended to interview these
children but due to their communication difficulties in using the English language, this was not possible. Only results of the achievement tests were, therefore, used to report answers of questions 1 and 2 of the research.

3.2.2 Teachers

The study has researched the teachers of integrated curriculum in the two IC schools chosen. All teachers are experienced female Omanis and are applying the integrated curriculum for that academic year. Their experience is ranged between 5 to 18 years. The total number of IC teachers is 10. All of them are teaching two integrated classes, 20 lessons a week with 10 lessons for each class. Most of these teachers have attended the IC training course offered by the Ministry of Education. These teachers work in schools where there is a senior teacher (usually the most experienced teacher) responsible for teachers’ support and follow up.

3.3 Methodological Approach

This research study is mainly an experimental approach where quantitative data was collected through the administration of the achievement test. This was adopted to carry out this research where hypotheses based on observations can be verified or disproved. This experimental method could also be described as quasi-experimental (Swetnam 2000) and it, therefore, was chosen to be used in this study as it is precise, objective in measurement and it allows prediction if replication of the study is required. This quantitative method was also preferred to be used because Nunan (1992) suggests this is to be used for more reliable results. This is because results are mostly not subjective. This was important for the researcher as this study aims to deal with young children where outcomes are hard to be measured due to their age. This approach was also used because it allows the researcher to draw conclusions about
cause and effect (Bell 1999). That is, in the case of this research the change in students’ achievement would be due to the change in treatment (implementation of the IC). What is challenging, thus, is that all possible related causes should be considered. The researcher has, therefore, carefully chosen two matched groups in terms of age, type of school, mixed ability, mixed gender and social class. However, the risk of the “Hawthorne Effect” was inevitable. That is, as Swetnam (2000) describes it, when the behavior of participants changes if they know they are tested. Because this could not be avoidable, it would, to some extent, unquestionably affect the results of the achievement test.

Questionnaires were also used in this research to explore teachers’ attitudes towards implementing the IC.

3.4 Instruments

3.4.1 Achievement Test

Achievement tests are considered one of the useful instruments for educational research used to measure abilities and competence in different areas (Ary, Jacobs & Razavieh 2002). Tests were chosen to be used in this current study to measure students’ progress in acquiring the areas of knowledge taught in the selected unit and also identify area of weaknesses of achieving the target outcomes.

The test consists of 6 questions in four pages. The questions were designed to evaluate young learners’ achievement based on the objectives of the unit. In the process to decide the test questions, two meetings were conducted with senior teachers in schools. The questions were revised and adapted by them to meet the general aims of the course book and the learning outcomes of the tested unit. It was
important that questions in the test match the layout of the questions usually appear to grade 2 children in their skills books. This was considered to save time during the administration of the test. Questions in the test were a combination of language items (literacy) and cross-curricular links to Math and Science. It was also planned that the results of the test will help teachers monitoring the progress of their own children and perhaps providing instant reflection of their teaching and hopefully giving them indications for the assessment of the children’s performance. The table 3.1 below shows the types of questions of the achievement test.

Table 3.1 Types of questions of the achievement test

<table>
<thead>
<tr>
<th>Questions</th>
<th>Literacy</th>
<th>Activity</th>
<th>Cross-curricular links</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Word recognition</td>
<td>Write the missing letters</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Write numbers</td>
<td>Write the numbers</td>
<td>1. Read&amp; sequence numbers</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. record information on a chart</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. identify decimal places (hundreds, tens, units)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4. count in steps</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Read and write</td>
<td>Write the missing prepositions</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Identify and read initial clusters</td>
<td>Write the letters of the sounds</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Write whole words</td>
<td>Complete the sentences</td>
<td>1. identify and write the five senses</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. identify parts of human body</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. describe observations</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Word completion</td>
<td>Read and write</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>35</td>
</tr>
</tbody>
</table>
The total mark of the test was 35. Each correct item is awarded 1 mark. Zero was given if the task was not attempted.

3.4.2 Teachers’ Questionnaire

According to Bell (1999), questionnaires are good instruments used to collect data quickly and cheaply but they seriously need to be focused on the main aim of the research. In order to answer question 3 of the current study, the researcher aimed to give the teachers the opportunity to give their opinions about the effect of implementing the IC through responding to the research questionnaires. Teachers are asked to respond to seven statements indicating their opinion about the integrated curriculum. [Appendix A].

3.5 Procedure of Implementing the Study

A test to measure young learners’ achievement was administered to grade two students in order to answer question 1 of the research. The test which was aimed to be administered before children start studying the tested unit will be referred to as a pre-test. The same test was planned to be administered to the same children after finishing the tested unit. This will be referred to as a post-test. Thus, students in the experimental group were given the pre-achievement test before they are taught unit 3 and the post-test directly after finishing the unit. In deciding the tested unit, three separate meetings were conducted with two senior teachers and a teacher from the three schools implementing the IC. Unit three was selected for several reasons (Table 3.2). First, it was agreed that it is not preferable to test the beginning units in the course book as children will need some time to get along with the teaching approaches used. The unit chosen was one of the most interesting units in the book as the content is designed to help children practice the language learned and link it to
real life situations. It was important for the research purposes to select an appealing unit since these students are not used to sitting for testing for 40 minutes and therefore, it was necessary to choose an attractive unit to young learners. After the results were obtained, the correlation between the pre and the post-tests was examined to answer question 1 of the study.

Table 3.2 Topics of the units of grade 2 IC course book

<table>
<thead>
<tr>
<th>Unit 1</th>
<th>Unit 2</th>
<th>Unit 3</th>
<th>Unit 4</th>
<th>Unit 5</th>
<th>Unit 6</th>
<th>Unit 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free time</td>
<td>Animals</td>
<td>The senses</td>
<td>Adventure</td>
<td>Moving around</td>
<td>The weather</td>
<td>Special days</td>
</tr>
</tbody>
</table>

The same achievement test was given to the students in the control group in order to compare the results obtained by both groups (experimental and control groups) in order to answer question 2 of the study. The timing of the administration of the achievement tests to both groups is seen below in table 3.3.

Table 3.3: Timing of administering pre-tests and post-tests

<table>
<thead>
<tr>
<th>School</th>
<th>Time of pre-test</th>
<th>Time of post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>School 1 (IC) Experimental group</td>
<td>13.3.2011</td>
<td>11.4.2011</td>
</tr>
<tr>
<td>School 2 (IC) Experimental group</td>
<td>14.3.2011</td>
<td>10.4.2011</td>
</tr>
<tr>
<td>School 3 (NON-IC) Control group</td>
<td>19.3.2011</td>
<td>2.5.2011</td>
</tr>
</tbody>
</table>

With respect to question 3, questionnaires were administered to teachers of the integrated curriculum classes to explore their attitude towards teaching the integrated curriculum approach.
3.6 Data Analysis

In processing the data of the study, the scores of the two groups (experimental group and control group) in addition to the responses of the questionnaires were computed using the SPSS (Statistical Package for the social sciences). Hence, the findings of the study were reported in chapter 4.

3.7 Research Ethics

Swetnam (2000) argues that using experimental approaches is challenging in terms of ethical protocols and validity. The researcher, thus, has carefully maintained ethics by sustaining that no harm is caused to the participants throughout the research. One important issue was to obtain permission to access schools. The researcher job being an English language supervisor has helped in this issue. However, before carrying out the study, meetings were held with the head of the three schools explaining the aim and the procedure of this research and highlighting the importance of voluntary contribution of both teachers and children into this study. Conditions of the study were clarified to the head teachers and that findings of the study would be used for research purposes that would benefit their schools as this study aims at evaluating the effects of the newly implemented IC approach. Anonymity and confidentiality (Bell 1999) were also guaranteed as providing a name of any participant was optional. It was also crucial that no extra work load would be caused to both children and teachers during the study and that the achievement tests are planned to be administered during free timetable and therefore would not cause any late in executing teachers’ syllabus plans. In addition, the name, job and contact details of the researcher were provided to administration, senior teacher and teachers for any queries. [Appendix B: informed consent]
3.8 Reliability and Validity

In order to increase the quality of this study, it was important to verify the reliability and validity of the research. Reliability refers to the extent to which the research produces the same result when replicated (Bell 1999). He suggests a test-retest to check reliability when using tests. However, within the scope of this study, this could not be possible due to time constraints. Nevertheless, reliability of questionnaire items was calculated by Cronbach’s Alpha and indicated a high reliability (0.62) [Section 4.3.1]

Validity is another important, yet complex measure to be considered in educational research (Bell 1999). It aims to check if the item used in the research measures what it is planned to measure. Within this research, validity was assured by the careful selection of research instruments and sample.
4. CHAPTER FOUR: RESEARCH FINDINGS

This study aimed to investigate the effect of implementing the integrated curriculum on Omani young learners. Therefore, this chapter aims to report the findings of the study in relation to the research questions. The research questions were:

1. Is there a significant difference in second grade students’ test scores before and after utilizing the approach of integrated curriculum?

2. Is there a significant difference between second grade students’ scores who have been utilizing the integrated curriculum and students who have been utilizing the separate model ‘English for me’ curriculum?

3. To what extent has the experience of teaching the IC met teachers’ expectations?

This current study is an experimental study research. First, an achievement test was administered to the experimental group before and after utilizing the IC as a new teaching method initiated in the Omani context. The same achievement test was then administered to the control group who were not using the IC approach but still applying the isolated-subject approach. To examine the teachers’ perceptions of this new teaching method (IC), questionnaires were also completed by teachers who were teaching the English language classes with integration of math and Science. Results have been reported accordingly to explore how effective was the use of the IC in the selected Omani schools.
4.1 Findings Related to Question 1

- Is there a significant difference in second grade students’ test scores before and after utilizing the approach of integrated curriculum?

To get a clear idea about the effects of the implementation of the IC teaching approach, the results describe the properties of the independent variable (IC teaching approach) and the dependent variable (children’s achievement). Results are also used to calculate the mean and the standard deviation of students’ performance in both pre-test and post-test of the experimental group to check if there was any progress of students’ performance.

According to Borg & Gall (1983), the differences due to the application of the independent variable (IC teaching approach) to the dependent variable (achievement) of the subjects of the study are determined by comparing the scores of the pre-test and the post test. That is, the findings of this one group pre-test- post-test design would measure how the new treatment (IC) improves the achievement of the study sample. As previously mentioned, the study sample (54 grade two learners) were taught the English language lessons by using the integrated curriculum approach in their schools (for 70 minutes per day). It is, therefore, reasonably expected that the gain in the achievement might be attributed to this regular instructional treatment. Further of that, the effectiveness of the independent variable (IC teaching approach) on the achievement of learners should also be determined if it is significantly different. The findings in table 4.1 show that there is a significant achievement progress of the experimental group in the post-test. The mean of the pre-test is 19.30 whereas the mean of the post-test is 26.37. The difference between the two means determines a significant progress in the post-test.
The most common procedure to analyze data of the one-group pre-test post-test design is to measure a t test for correlated means (Borg & Gall 1983). This t test is used to determine whether the difference between the two means is statistically significant. This is done when the same subject sample takes both the pre-test and the post-test.

The statistical results as shown in table 1, indicated that the difference between the pre and post English achievement test for the integrated curriculum group was found in favour of the post English achievement test, \( t = -8.18 \), \( p = 0.00 \)

| Table 4.1 Dependent T-test for experimental group (pre vs. post-test) |
|-------------------|---|----------------|---|----------------|---|
| Experimental group | N | Mean | Std. Deviation | df | T-Test | Sig. |
| Pre-Test            | 54 | 19.30 | 8.831 | 53 | -8.181 | 0.000* |
| Post-Test           | 26.37 | 7.246 |

Note: *p<.01

The figure below demonstrates the difference in the mean of the experimental group (IC) in the pre-test (mean= 19.3) and the post-test (mean= 26.37). That is, most experimental group students involved in this study scored higher in the post-test compared to the pre-test.
To provide an overall explanation of the students sample in the experimental group, figure 4.2 below displays data for the study sample. As it is clearly seen that most students performed better in the post-test compared to the pre-test. The number of students who showed progress in the post-test exceeds that of pre-test. The graph chart also shows the number of the experimental group students and the test score (35). As seen, a big number of students got full mark in the post-test.

Figure 4.1 Difference in the means of achievement test of the experimental group

Figure 4.2: Difference in the achievement of the experimental group
4.2 Findings Related to Question 2

- Is there a significant difference between second grade students’ scores who have been utilizing the integrated curriculum and students who have been utilizing the separate model ‘English for me’ curriculum?

It should be noted here that in order to answer this research question, two treatment groups were formed. The experimental group (N=54) and the control group (N=28). Then only the experimental group received the treatment which is in this case, the IC teaching method. Then a pre-test and a post –test were administered to each group. According to Borg &Gall (1983), it is important that both groups should be treated alike as possible except for the independent variable (IC method). Both selected schools in this research study were treated equally and were both taught under normal conditions. Hence, the difference between the two groups in the achievement could be attributed to the effect of the independent variable over and above the effect of any external factors.

As seen in table 4.2, the number of the participants in experimental group is n=54 and the number of the participants in the control group n=28. Therefore, I is necessary to determine homogeneity between the two groups, A two-tailed independent sample T-Test was conducted on the pre English achievement test and the results showed that there is a significant statistical difference between the experimental group (IC) and the control group (non-IC) before the treatment began , \( t=-5.74, p=0.000 \), which confirms non- homogeneity groups in the achievement.
Therefore, Analysis of Covariance (Ancova) was computed to control the impact of significant statistical differences between the integrated curriculum (IC) and non-IC groups.

Table 4.2: Independent T-Tests for experimental and control groups

<table>
<thead>
<tr>
<th>GROUPS</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>df</th>
<th>T-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>54</td>
<td>19.30</td>
<td>8.83</td>
<td>80</td>
<td>-5.74</td>
<td>0.000</td>
</tr>
<tr>
<td>Control group</td>
<td>28</td>
<td>10.00</td>
<td>5.75</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.3 below indicates that there is a progress in the achievement of the control group (non-IC) in the post-test (mean=15.17) compared to the pre-test (mean=10). That is, the scores of the students also increased after utilizing the separate-subject approach.

Figure 4.3: Differences in the mean within the control group
Results in figure 4.4 show that students’ performance in both groups differs in their pre-test. In the experimental group, the mean is 19.21 and in the control group the mean is 10.

![Means of pre-test](chart)

**Figure 4.4: Differences in the mean of the pre-test of two groups**

Table 4.3 below shows the means and standard deviations of the experimental group and the control group in the post-test. It indicates that students of experimental group scored higher in the post-test than the control group.
Table 4.3: Descriptive statistics for post-test

<table>
<thead>
<tr>
<th>GROUPS</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment group</td>
<td>54</td>
<td>26.37</td>
<td>7.25</td>
</tr>
<tr>
<td>Control group</td>
<td>28</td>
<td>15.17</td>
<td>8.26</td>
</tr>
</tbody>
</table>

Figure 4.5: Difference in the means of post-test of the two groups

Four means scores were calculated in this pre-test post-test group design (Borg & Gall 1983). These are two pre-test means and two post-test means related to performance of both groups. A preferred statistical technique therefore, would be the analysis of covariance (ANCOVA) in which both groups post-test means are compared. The analysis of covariance summary is shown below (table 4.4). After the effect of the pre-test was removed statistically, the significant $F$ value (17.865) indicates that the null hypothesis of no difference between post-test means could be
rejected. That is there is a significant difference in the test scores between the experimental group and the control group.

Table 4.4: Analysis of ANCOVA for the two groups

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>2954.829</td>
<td>2</td>
<td>1477.414</td>
<td>28.666</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>4432.424</td>
<td>1</td>
<td>4432.424</td>
<td>86.000</td>
<td>.000</td>
</tr>
<tr>
<td>PRE</td>
<td>529.647</td>
<td>1</td>
<td>529.647</td>
<td>10.277</td>
<td>.002</td>
</tr>
<tr>
<td>GROUPS</td>
<td>920.762</td>
<td>1</td>
<td>920.762</td>
<td>17.865</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>4071.623</td>
<td>79</td>
<td>51.540</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48629.000</td>
<td>82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>7026.451</td>
<td>81</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3 Findings of Question 3

- To what extent has the experience of teaching the IC met teachers’ expectations?

To examine the consistency of the answers to the questions, the Cronbach’s alpha internal-consistency estimate was employed. As seen in the table below, Cronbach’s alpha (α) for the whole questionnaire was 0.622, which indicates a high reliability of the items.

Table 4.5: Reliability of questionnaire items

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>No. Of items</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statements</td>
<td>7</td>
<td>0.622</td>
</tr>
</tbody>
</table>

The table below shows the mean and standard deviation for the questionnaire items.
Table 4.6: Descriptive Statistics the Questionnaire items

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statements</td>
<td>4.8</td>
<td>0.24</td>
</tr>
</tbody>
</table>

As mentioned before, the selected teachers are Omanis of BA holders. Their experience in teaching within the Omani context ranged between 5 to 18 years. Some of them taught the IC when it was first introduced for the sample subjects in grade 1. These selected teachers have responded to all the questionnaire items and then the results were keyed into SPSS to calculate the percentage of each statement. Responses to the items will thus be reported and presented in the order appeared in the questionnaire [Appendix A]

As seen in table 4.7 below, the responses of participants indicate a positive attitude towards the teaching of the integrated curriculum.

- **Statement 1: The IC course book is well-structured to address young learners’ needs**

More than half of the participants (60%) agree that the IC course book addresses learners’ needs. This confirms a study reported by Lake (1994) [Section 2.1] which also suggested a further research to investigate the teaching methodology itself. Within the scope of this study, investigating the teaching methodology was the aim of the study.

- **Statement 2: The IC course is designed to help young learners’ autonomy**

Most of the teachers (80%) believe that the IC course is designed to help learners’ autonomy. This finding strengthens the notion of looking at the integrated curriculum as not only linking subjects together but also encouraging learners to control their learning based on their needs. [Section 2.2]
○ **Statement 3: The IC has developed students' interest in the English Language**

Most respondents (80%) agree that the IC has developed young learners’ interest in learning the English language. Met (1994) in [Section 2.2] emphasizes the need to teach the language within content. It is believed then that this finding confirms the importance of the integrated curriculum as it enhances more engagement of the learners in the learning process.

○ **Statement 4: The course book is comprehensive and helpful to achieve outcomes**

About 80% of teachers consider the IC helpful to achieve aims and outcomes of the course book. Teachers’ responses for this statement confirm the results of the students’ in the achievement test [Section 5.1] as it was proved that outcomes were achieved better through the IC approach.

○ **Statement 5: The materials used are suitable**

About 70% of teachers believe that the materials used in the IC course were suitable. This is believed to enhance the motivation of both teachers and learners when applying whichever teaching methods. McGrath (2002) in [Section 2.7] highlights the importance of evaluating the suitability of materials not only during the use but also after using them. This confirms the dominance of the IC from the perspective of teachers.

○ **Statement 6: I would recommend that IC continues to be taught to these children in grades 3 & 4**
All teachers participated in the questionnaire suggest that they recommend teaching IC for young children. This is an important finding as many educators emphasize the role and the attitude of teachers when implementing any teaching approach. Teachers’ willingness toward teaching other themes or concepts is also highlighted when implementing the IC [Section 2.2] which eventually confirms the preference of using the IC as a teaching practice.

- **Statement 7: I have enjoyed teaching the IC**

The findings of this statement prove that all teachers have enjoyed teaching the IC to young children. One of main challenges for teachers presented by (George 1996) is the difficulty in planning other themes, yet the finding proves the preference of the IC over other teaching methods. Teaching concepts of Math and Science was not an obstacle faced by the selected teachers.
Table 4.7: Teachers’ attitudes toward the integrated curriculum

<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
<th>No.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>very</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Deviation</th>
<th>direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The IC course book is well-structured to address young learners’ needs</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td>4.5</td>
<td>0.71</td>
<td>very</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>60</td>
<td>30</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>very</td>
</tr>
<tr>
<td>2</td>
<td>The IC course is designed to help young learners’ autonomy</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>4.8</td>
<td>0.42</td>
<td>very</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>80</td>
<td>20</td>
<td>00</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>very</td>
</tr>
<tr>
<td>3</td>
<td>The IC has developed students' interest in the English Language</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>4.8</td>
<td>0.42</td>
<td>very</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>80</td>
<td>20</td>
<td>00</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>very</td>
</tr>
<tr>
<td>4</td>
<td>The course book is comprehensive and helpful to achieve outcomes</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>4.8</td>
<td>0.42</td>
<td>very</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>80</td>
<td>20</td>
<td>00</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>very</td>
</tr>
<tr>
<td>5</td>
<td>The materials used are suitable</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>4.7</td>
<td>0.48</td>
<td>very</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>70</td>
<td>30</td>
<td>00</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>very</td>
</tr>
<tr>
<td>6</td>
<td>I would recommend that IC continues to be taught to these children in grades 3 &amp; 4</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>5.0</td>
<td>0.00</td>
<td>very</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>00</td>
<td>00</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>very</td>
</tr>
<tr>
<td>7</td>
<td>I have enjoyed teaching the IC</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>5.0</td>
<td>0.00</td>
<td>very</td>
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<tr>
<td></td>
<td></td>
<td>100</td>
<td>00</td>
<td>00</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>very</td>
</tr>
</tbody>
</table>
5. CHAPTER FIVE: DISCUSSION

In the previous chapter, results were reported from the research instruments. This chapter aims to discuss the importance of these results in reference to the aims of the study and previous academic literature on the topic.

5.1 Discussion Related to Question 1

- Is there a significance difference in second grade students’ test scores before and after utilizing the approach of integrated curriculum?

The findings show a significant difference in second grade students’ scores before and after utilizing the integrated curriculum approach. The IC Students’ scores have increased from (mean=19.30) in the pre-test to (mean= 26.37) in the post-test. To some extent then, it could be argued, therefore, that the impetus to integrate curriculum within the Omani context can lead to a better achievement of grade two students. As mentioned earlier [Section 2.2], there is a natural need to connect the nonlinguistic content with language teaching (Met, 1994) for young children. It could be assumed then that the integrated curriculum has offered these young children a kind of authenticity to build on concrete knowledge which they were able to use to perform better in the test. For example, students show a numerical competence when filling in a table ordering numbers from (100-199) in which they formed a meaningful relation between Mathematics and the language in question 2 in the test [Appendix C]. Another example is that students’ performance in the test shows a good ability to recall the meaning of a range of vocabulary items.
Referring to young children achievement, it could also be assumed that these children have performed better in the post test because they tend to understand relations between the content and the language (Roush 2008). This could be clearly seen in the question that tests Science knowledge in which students were able to match the human four senses with the appropriate pictures. One would then argue that the integrated curriculum provides a wide range of learning opportunities for young children to experience real life situations (New 1992). It is anticipated that young children, in particular, will accordingly perceive and construct vocabulary that could be used to interact with family and friends for example, a child can use words like see, hear, smell and feel in different situations. On the other hand, more gifted students, interestingly, also scored better in the test presumably because of their abilities to problem solving that perhaps would not be noticeable when utilizing the isolated subject matter approaches (Roush 2008).

It could also be assumed from the study findings of question one that there is an explicit account in the integration curriculum approach toward active learning in which young children are able to put their knowledge into practice. For example, when asked to identify the sounds of a multiple items appeared in a picture it could be concluded that they have gained the ability to practice and relate the sounds to the correct items. Unexpectedly and based on the marking done by the researcher, a few students were eager to match sounds correctly with other not required items. As mentioned earlier [Section 2.2], this interest will lead to motivating learner to predict further relations when utilizing the integrated curriculum and also to be able to use and possibly generalize these learned skills to similar situations. Having given children these opportunities, it could therefore be claimed that teaching in Oman would move to be much more students-centered preparing young Omanis for future life. A kind of skepticism arises, however. That is, it is by no means guaranteed that children will be able to make correct connections or formulate
acceptable generalizations in all situations. So, it is evident that an explicit account should be
directed to the role of the teacher in classrooms as they assist, guide and facilitate the learning of
children. Yet, it is fair, to refer to how the English language teacher is supported in teaching the
integrated curriculum. According to Moe (2012), English Language teachers are provided with
detailed explanations describing Math and Science activities. They are also assisted with Math
and Science references to guide them through the technical terms. Moreover, they are provided
by an audio CD with pronunciation of Math and Science terminology. The Ministry of Education
has highlighted the importance of the teacher being comfortable in teaching the integration and
not expecting them to act as experts in classrooms. Instead, English language teachers are
encouraged to ask for consultations from subject specialist colleagues. If this could be done, it
would, expectedly, allow a space for collaboration and team work (Dunn 1984). In fact, the
cooperation among teachers is important as it will presumably lead to a supportive stress- free
learning environment where students are expected to learn better as this would represent a
context for learning (Hudelson 1994). More than anything else, is the training provided to the
English language teachers before and during the teaching of the integrated curriculum. Most
teachers (8 out of 10) who have responded to the second research instrument (questionnaire)
have acknowledged being adequately trained before or during their experience of teaching the
IC. What still remains problematic is the need of following up teacher training within the Omani
context. Having been in a consistent contact with English language teachers and their training for
more than five years, it is suggested that a much more attention should be drawn to following up
training after the training sessions completed and particularly in the classrooms. Such attention is
necessary because the country spends a lot of money for training teachers but still largely lacking
is the application of skills in classrooms. As a matter of fact, this is seen as a topic that would require further research within the Omani setting addressing the reasons behind such attention.

In regard to the children literacy, it could be inferred that the integration in curriculum will lead to enhance children’s ability to read and write. The results have indicated that children responded better in terms of phonological awareness, sight recognition, pre-reading and pre-writing. Their ability to forming letters and writing words has proved better achievement. It is understood from research that children literacy is mainly influenced by the teaching approach (Cameron 2001). This is believed to be true in the Omani context since young Omanis have little exposure to literacy outside the classroom.

5.2 Discussion Related to Question 2

- Is there a difference between the scores of second grade students who have been utilizing the integrated curriculum and the scores of students who have been utilizing the subject separate model ‘English for me’ curriculum?

The findings related to question 2 have shown a significant difference in the achievement of integrated curriculum students upon their peers who used the subject separate approach. This result supports the result of question 1 indicating a preference in using the integrated curriculum. However, it is worth to mention that the results have also shown an increase in the achievement of separate model students in the post-test (mean= 15.17) compared with their results in the pre-test (mean=10.00). That is, the separate model students have also shown learning improvement. Such improvement may question the dominance of integrated curriculum upon other curriculum experiences and consequently even the non-integration could also lead to better achievement in knowledge, language and methodology (George 1996). Presumably, this could be due to several
reasons. First, students might have remembered the questions appeared in the pre-test and as a result performed better in the post-test although the post-test of this group has been administered later than the two experimental groups due to research pressure. Secondly, this improvement could possibly be referred to the students’ ability to stimulate their prior knowledge but again this could be due to the effectiveness of the approach used to teach these children especially that they were taught using the subject separate approach in grade 1. Third, this could be due to good teaching but that again will lead us to a conclusion by (George 1996) that it is the good teaching what matters not necessarily the teaching approaches. It is believed that time for judgment is required here although it is not the judgment of the success or failure of approaches we seek as educators but the assessment of the success and how teaching methods can be made better in certain settings providing better learning opportunities and experiences to young children.

The control group (non-IC) has also, interestingly, demonstrated a better achievement in the Math and Science questions [Appendix C] in the post-test. This could suggest that young children were able to retain the knowledge taught and the outcomes of the unit were considerably achieved. This suggests the need to a further extensive coverage of research in this area and it would be advisable if both experimental and the controlled groups were re-tested later to check which group will ensure a long-term gain of what is learned.

Based on the findings, the non- integrated curriculum students have revealed a progress in their ability to read and write. According to Cameron (2001), the formal consistent teaching has a significant effect on improving children’s literacy skill. This suggests that the difference in the achievement was not due to using the integrated curriculum and that is as George (1996) suggest is the good teaching what explains the whole story.
Based on school achievement reports examined by the researcher and the observation reported by the English language supervisors, it was agreed that the controlled group (non IC) involves more low achievers yet, the group showed a better understanding of phonological awareness, word recognition and both pre-writing and pre-reading activities in the post test. As mentioned in [Section 2.5], the learners’ needs are important to be fulfilled by the teaching approach which should aim at bridging the gap between the target level and present level of young children. It is believed that it is not the matter of being excellent, but the way children are progressing using a particular teaching approach should be considered. This would, consequently, imply that the IC might provide a good enrichment for gifted students but not necessarily to slow learners who still require basic and concrete background of knowledge. This would also question the need for the IC within the Omani context since most Omani youngsters, as previously mentioned, are of common low literacy command. George (1996) argues that it is the teachers’ skills and awareness plus their ability to plan would lead to the differentiation of instruction that satisfy students’ needs and tackle individual differences within classrooms. Moreover, typical Omani classrooms are usually a mixture of mixed ability students who are arranged at the beginning of the academic year based on their performance in the previous year. On the other hand, according to Moe (2012), the IC course has never neglected the low achievers and instead has targeted to enable teachers to deal with mixed ability classes by various ways. First, it provides adequate time for teachers to deal with young children since the course limit is about 12 week a semester, the teacher has about an hour and a half per day where the teacher can spend being in contact with children and perhaps allow for extra activities. Secondly, the course is designed to have a plenty of open-ended activities where children are allowed to work at their own speed and provide challenge to different abilities. Additional activities are also included in the course book
to extend the learning for all abilities. The course also empowers the teacher by offering some options to select and adapt activities where possible.

It is also worth mentioning, though, that the period between the pre-test and the post-test with the experimental groups was less than a month. In the controlled group, the post test was administered after 44 days (Table 3.3). Which means that the controlled group has taken longer time to finish the tested unit than what is suggested by the teachers’ book which allows about two to three weeks to complete each unit as the researcher aimed to test the students directly after tested unit is taught. The findings might indicate then that the controlled group was given longer time to complete the unit and consequently were offered more opportunities to practice the language and perhaps more possibilities for the application of the unit outcomes. What proves to be necessary then is the triangulation of the results using another test for both groups.

5.3 Discussion Related to Question 3

- To what extent has the experience of teaching the IC met teachers’ expectations?

Since the questionnaire consists of seven statements to investigate teachers’ perception of their experience of teaching the IC for the academic year 2011-2012, the discussion of this question will then be divided into these headings according to the statements of the questionnaire.

The IC course book is well-structured to address young learners’ needs- 60%

The results show that 60% of the teachers believe that the IC addresses young children’s needs. As mentioned earlier and since Omani classrooms typically include mixed-ability students, it is therefore, necessary that any approach used to teach these children should meet their needs. Moe (2012) points out that the IC course books contain activities to match different learning styles
(e.g. kinesthetic, auditory and visual). However, McGrath (2002) emphasizes that it is mainly the teachers’ responsibility to target children’s needs while planning, performing and evaluating each lesson. Within the Omani context, the main challenge would then be the extent to which Omani teachers can tackle the needs of their students. A further investigation would thus be recommended to scrutinize this matter. Another challenge presented earlier [Section 2.5] is how to avoid the overlapping between the personal need and the learning need of a child.

**The IC course is designed to help young learners’ autonomy (being active learners)-80%**

Most Teachers believe the IC has helped children to be more independent learners. One of the main gains of the IC [Section 2.1] is that it empowers learners to make their own connections and relations and applying those to new situations. However, it must be remembered that raising children to be independent will take long time to be observed. But since this investigation was done towards the end of the academic year - May 2011, it could be assumed that teachers have noticed children being more self-reliant learners. A few further details regarding this issue are required to be elicited from teachers.

**The IC has developed students' interest in the English Language - 80%**

Based on the findings, most teachers agreed that the IC has developed children’s interest in the English language subject. One main drawback of the IC presented earlier [Section 2.2] is that it might disturb the natural process of human minds because of integrating subjects that might naturally not fit together (George 1996). Of course if this happens, children will not be cognitively motivated toward learning but again it is believed that the world outside is not naturally separated as well. The only thing should be done here is to make sure that the language
is arranged in a way that makes sense to children (Bourke, 2006). Sadly, such requirement is still largely lacking within the Omani context where young Omanis do not have sufficient exposure to language but mostly receive only disjointed bits of language in classrooms.

**The course book is comprehensive and helpful to achieve outcomes - 80%**

Results of this statement have indicated that 80% of the teachers believe implementing the IC has helped students to accomplish the outcomes of the course book. Since all selected teachers are experienced (teachers’ experience ranged from 5 to 18 years) because it was not recommended by the Ministry of Education that novice teachers teach the IC, this response would not presumably be due to the excitement of some novice teachers starting teaching a new practice. On the other hand, it is believed that teachers teaching the IC have gone through a good teaching experience to allow them assessing their children’s achievement of outcomes.

It must be remembered, though, that concrete outcomes would need a much more time to be observed. It is fair to say that the result does not mean that other approaches would not also help address the outcomes of curriculum.

**The materials used are suitable - 70%**

About 70% of teachers were satisfied with the course materials and believe they were helpful in achieving the outcomes. Most teachers were involved in training induction sessions about how to implement the IC. But, as mentioned in [Section 2.7], McGrath (2002), argues that it is crucial to examine the effect of materials while using these materials and after using them.

**I would recommend that IC continues to be taught to these children in grades 3 & 4 - 100%**
Results indicate that all IC teachers would preferably recommend continuing using the IC for grades 3 and 4 with their children. This finding is believed to be related to the better achievement that teachers have noticed during the implementation of the IC in the last two years.

**I have enjoyed teaching the IC - 100%**

Results have indicated that all teachers have enjoyed teaching the IC. An assumption could be drawn then that teachers have developed a positive attitude toward using the IC although they needed to devote effort and time in the preparation for this new approach.

**5.3 Linking Research to Previous Studies**

Based on a study by Drake & Burns (2004: p. 142), research on students used the IC for several years show significant increase of students’ performance and their attendance in schools. Students who employed the IC were better in class performance compared to their counterparts using discipline-based setting. In addition, teachers also revealed that IC helped them engaged their students in the teaching and learning process. The findings of the current study confirm the increase of the performance of young learners but did not address their attendance which proves to be important especially with young learners who usually feel reluctant to go to schools. This would be a gain to the IC approach if it proves to be true.

In a comparative study investigating the effect of using the IC on grade four learners in South Africa and the Philippines (Pohl 2005), it was found that one of the main problems faced teachers when implementing the IC was the difficulty in integrating certain themes. Within the scope of this study, the selected teachers did not report this difficulty; presumably because most of them received training that prepared them to deal with such difficulties.
5.5 Implications for Teaching and Learning

As the success of teaching approaches is not randomly obtained, it is then the role of educators to enhance opportunities to maximize the benefit of any teaching practice. For teachers, it is crucial that they receive the appropriate training (New 1992) in the methodologies used to enrich them with variety of devices empowering them to adapt situations according to the students’ needs. What is particularly important within the Omani context, however, is the following up of this in-service training. This should be done to assure that the skills obtained in the training sessions are applied within the classroom setting. Mainly, this could be done by scheduling joint visits of trainers and supervisors where they can provide support to the teachers in need. It is also important that any teaching approaches undergone ongoing process of assessment by teachers, supervisors and policy makers. No single teaching approach can be the best but the feedback obtained from everyone should be used for the purpose of development. What is also necessary in the Omani context is the need to reduce the work load on teachers. Teachers need sufficient time for planning and preparation and not to be distracted with other administrative duties. Another suggested point is that teachers should also be encouraged to observe their peers in their free lessons. This would help to share experience among teachers and would not affect their timetable.

With regard to the young children, it is vital that these young children are allowed much more time for reading opportunities to enhance their literacy skills. Teachers should allocate time for reading either in the classrooms or in the learning resource centers in the schools. Classroom display [Section 2.4] can also stimulate students’ interest and motivation in learning the language and this would provide opportunities for them to get exposed to the language.
5.6 Limitations of the Study

First of all, it is important to mention that the topic of exploring the effect of the implementation of integrated curriculum on Omani young learners was chosen to be examined mainly because of a personal interest of the researcher in spite of the limitations that the study has undergone.

One of the main challenges was the difficulty to investigate the topic of integrated curriculum because of the limited number of researches that have dealt with topic. A second challenge was the difficulty in dealing with young children (grade two) especially in the process of administrating the pre and post-tests. Although, the duration of the tests was not too long (about 40 minutes) but it was necessary to arrange for a co-monitor to help the researcher managing the class while children when performing the two tests. Moreover, it was originally planned for the study to interview a few children to get feedback of using the integrated curriculum but this was not done because it was not possible to handle the interview in the English language and because some of the children were shy to talk to the researcher. This could be due to their uncertainty of their abilities to speak in English language. The analysis of the data was another challenge for the researcher because of the lack of experience in dealing with statistical programmes.
5.7 Future Research Possibilities

Bourke (2006) [Section 2.7], highlights the importance of the learners’ motivation in the achievement of outcomes and since the findings of this current research addressed the effect of the implementation of the IC regardless of the learners’ motivation, this could be suggested as an alternative research area where motivation of learners is examined and the ways to enhance internal and external motivation could also be addressed.

Since the main drawback of the implementation of the integrated curriculum [Section 2.2] was attributed to poor teacher preparation, future research could also be suggested to investigate the relation between the planning and the effectiveness of the IC. Teachers’ motivation and its’ effect on the success of the implementation of the IC could also be highlighted as a further research area. The results of the achievement test of this current study could be discussed with teachers and even with students for feedback purposes. These achievement tests could also be used as diagnostic tests where areas of weaknesses could be addressed.

Teachers’ interviews would also be suggested as a possible research area where difficulties could be clearly addressed and discussed.
5.8 Other Related Findings

This research study was mainly driven by personal motivation toward providing better learning to young children. Examining the effect of using integrated curriculum upon young learners was the main concern. Nonetheless, during the research, benefits were more than expected. Although it is common to be attracted to new educational practices but this study has supported deeper reflection about other considerations not only because they affect the success of any teaching method but also to raise the objectivity of any research. The appreciation of sharing opinions and experience with all concerned was a valuable benefit. The study has also raised the awareness toward the necessity of classroom research where the focus is the benefit of learners and which would doubtlessly help maintain commitment to one’s own career. The value of this current study has allowed self-criticism and patience to anticipate and hopefully avoid problems in the future. The research has also enriched the skill of investigation in the field of young learners where responsibility is huge to raise a new generation who should be responsible for their own learning.
6. CHAPTER SIX: CONCLUSION

6.1 Summary of the Study

The current study is mainly an experimental research aimed to examine the effect of implementing the integrated curriculum approach on grade two learners in the Sultanate of Oman in the academic year 2011-2012. The integrated curriculum approach was mainly introduced through the Omani context for the purpose of literacy development highlighting the holistic approach of teaching (Educational Development in Malaysia and Oman 2008) in which the learner is the focus of the teaching. To be a part in this educational reform, this research study was initiated to evaluate how effective the use of the IC in the selected Omani schools is. It is worth mentioning, though that Omani context has its own characteristics that may differ from other countries in terms of its culture, environment and teachers and teaching manner. An achievement test was, therefore administered to an experimental group (IC) before and after being taught through integration to measure any progress in achieving the outcomes of the coursebook. The same achievement test was also administered to the control group students (non IC) who have studied through the isolated subject approach in order to compare results. This research study also aimed to explore and clarify the effectiveness of implementing the IC from the prospective of teachers who were applying the IC in their classes.

The substantial body of research presented encourages using the integrated curriculum approach where subjects are taught in relation to each other. According to Roush (2008) when students learn through isolated subjects they tend to misplace relations that can be made or obtained from disciplines. Competing students then will not be provided with opportunities of connecting their
earning with real world. Similarly, more gifted students might also lose the skill of problem finding and solving with discrete subjects. However, it is not an easy task to integrate curriculum. George (1996) argues that it is a waste of time and effort to try to teach subjects which normally do not fit together. It is consequently evident that complete success of any teaching practice cannot be accomplished without appropriate understanding and application of the method.

The earlier discussion of the current study shows compelling evidence that children who received a two year education of integrated curriculum approach demonstrate greater achievement in both the pre- test and post-test of the study than their peers who received the ‘isolated- subject approach’. It is also indicated that the non IC students performed better in the post-test compared to the pre-test. A positive attitude of selected teachers toward using the IC was also proved. Teachers are willing to continue implement the IC with young learners in the future. Notably, the results of this study might vary based on the type of study instruments, the number of students, the type and phase of tests administered, the type of teaching children received and the degree of which the integrated curriculum is implemented.

This study emphasizes the need for further exploration of the factors account for the achievement differences observed when using two instructional approaches in Omani schools. In fact, the researcher in this study was not merely examining whether integrated curriculum benefits children or not; rather this research is pursued to improve the efficiency of using integrated curriculum in Omani schools and to ascertain which educational practices and means promote better learning.
6.2 Conclusion

Based on this research study, using the integration curriculum has in fact proved to help learners improve their literacy skills. Although an extensive coverage of investigating all IC schools would be useful, results of this research have indicated a dominance of the IC as a teaching practice used within the selected schools. It could, therefore be concluded that the Omani endeavors were successful in providing better learning where students are the focus of the educational process. Additionally, teachers selected as participants in the study have shown positive attitudes toward using this approach. They believe that the IC is good in the sense of encouraging learners to perform better and that they have enjoyed teaching to enhance their own experience. No doubt well intended effort was made by teachers who, in fact, play a major role in the implementation of any practice. It could be assumed therefore that these teachers have been excitedly utilizing a new teaching practice within their classrooms. Such innovations in the teaching practice create a kind of enthusiasm and curiosity in the implementation which sometimes help enable these teachers overcome the obstacles such as allocating time for planning and preparation and the challenge to teach other areas further of their own major. What is more important though is the positive professional attitudes of the teachers when using a new practice in the classrooms. That is, teachers are required to be able to reduce the pressure of any surrounding factors on themselves and learners when using a new approach. Additionally, they need to alter what is new to the benefit of the learners and to anticipate problems and find solutions in advance.

The successful implementation of teaching approaches is by no mean guaranteed, yet, this does not mean new instructional approaches should be abandoned. The researcher believes that no single approach is a whole failure, yet all teaching practices should be altered to foster learning,
little positive effects should be more meaningful in teaching situations and a careful planning is mandatory for better results. The question arises, therefore, is not what to implement but how to carry out the appropriate and meaningful teaching practices with consideration of the important of evaluation and ongoing reflection to monitor progress of students. Another question which seems to be persuasive is how this current instructional approach interacts with the other contextual and environmental factors of young learners. This research study provides suggestive points concerning the effect of integrated curriculum on young Omanis’ achievement. The findings of the current study highlight a few implications for practitioners and users of instructional approaches in classrooms (e.g. teachers) and for decision makers in the country.

On the whole, students differ in their own learning and the integrated curriculum is just one of many approaches used to handle individual differences but it certainly should be used within multiple strategies and techniques to maximize learning opportunities for each and every student.
References


Cameron, L. (2001). Challenges for ELT from the expansion in teaching children. *ELT Journal*, vol. 57/2, pp. 105-112

Cameron, L. (2001). Teaching language to young learners. Cambridge:CUP


Hamayan, Else V. (1994). ‘Literacy development of second language children: the whole child, the whole curriculum, the whole community’ in F. Genesee (ed.). Educating second language children. McGill University. Ch.6


Appendices

Appendix A: Teachers’ Questionnaire

An Investigation into the effect of Integrated Curriculum on young Omani learners

May 2012

Dear teacher,

I am Aisha Al Jarrahi, acting senior supervisor of English in Al Buraimi. I am currently doing my Master Degree in the British University in Dubai. I am conducting this questionnaire to survey the opinions of Omani teachers on the integrated curriculum(IC). I would greatly appreciate your participation in my research.

This is not a test so there are no “right” or “wrong” answers, and you don’t even need to write your name on it. I am interested in your personal opinion. Please give your answers sincerely as only this will guarantee the success of the investigation. You are welcome to comment on any part of the questionnaire by writing additional notes.

Please feel free to contact me for further clarification or details. My email is aysha.aljarahi@moe.om

Your help is much appreciated. Thank you.
Could you please check ‘X’ what is applicable to you in the following?

☐ Gender: Male ☐ Female ☐

☐ Years of experience in teaching English: ........................................

☐ Highest qualification relevant to teaching: Diploma ☐ BA ☐ MA ☐ PhD ☐
Other (please specify): ............

☐ School:............................................... Region:............

Have you attended the IC training course? Yes ☐ No ☐

Name (optional) .................................................................

Following are a number of statements with which some people agree and others disagree. I would like you to
Indicate your opinion after each statement by putting an ‘X’ in the box that best describes the extent to which
You agree or disagree with the statement. Thank you very much for your help.

<table>
<thead>
<tr>
<th>Statements</th>
<th>5 very</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1 not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The IC course book is well-structured to address young learners’ needs</td>
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<tr>
<td>2. The IC course is designed to help young learners’ autonomy (being active learners)</td>
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<tr>
<td>3. The IC has developed students’ interest in the English Language</td>
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<td>4. The course book is comprehensive and helpful to achieve outcomes</td>
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<td>5. The materials are suitable</td>
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<tr>
<td>6. I would recommend that IC continues to be taught to these children in grades 3 &amp; 4</td>
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<tr>
<td>7. I have enjoyed teaching the IC</td>
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Any additional comments

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Appendix B: Informed Consent

Informed consent

Dear Head Teacher…………………………….. School……………………………..

I am Aisha Al Jarrahi, acting senior supervisor of English in Al Buraimi. I am currently doing my Master Degree in the British University in Dubai. I am administrating an achievement test to grade two students in your school. This test will be given two times first as a pre-test and then as a post-test. I am also intending to explore students’ opinions about the integrated curriculum if possible. The data obtained from your students will only be used for the research purposes and will be kept highly protected. I greatly appreciate your participation in my research.

You are welcome to comment on any stage of this research study.

Please feel free to contact me for further clarification or details. My email is aysha.aljarahi@moe.om

Your help is much appreciated. Thank you.

Respectfully yours,
aisha
Appendix C: The Achievement Test
I can see a girl dancing next to a robot.

I can see an elephant standing ______ a ball.

I can see a parrot flying ______ a giraffe.

I can see a frog swimming ______ some jelly.

I can see a boy skipping ______ a crocodile.
Write the letters on the pictures:

dl - fl - pl

sn - sp - st

gr - tr - fr
4. Complete the sentences.

1. My _____ can _____.
   - eyes
   - feel
   - tongue
   - nose
   - hear
   - taste
   - ears
   - smell
   - see
   - hands

2. Read and write.

This is a ______ cat.

- fat
- thin

This is a ______ giraffe.

- short
- tall
Appendix D: Examples of Students’ Responses
4. Complete the sentences.

1. My eyes can see.
2. My eyes can tongue.
3. My eyes can hear.
4. My eyes can nose.
5. My eyes can taste.

eyes  feel
    tongue  nose
    hear  taste
    ears  smell
    see  hands

2. Read and write.

This is a [fat] cat.

short  tall

This is a [short] giraffe.
Write the letters on the pictures

d - fl - pl

sn - sp - st

gr - tr - fr