The Abu Dhabi school model: Effective delivery of the curriculum

Dr. Tommi Eranpalo
Abu Dhabi Education Council

Cynthia Jorgenson, ABD
Abu Dhabi Education Council

Dr. M. Lynn Woolsey
Emirates College for Advanced Education

(This study conducted under protection of Abu Dhabi Education Council Research Department and Professor Masood Badri.)

Abstract

This pilot study used Discourse Analysis to investigate five different curriculum delivery approaches using the Abu Dhabi School model curriculum as the foundation in Cycle 1 schools (grades 1 – 5). Participants included 32 teachers from different nationalities. Results of the Discourse Analysis indicated that most teachers appreciated the combination of several different research-based strategies for the delivery of curriculum. All respondents thought also that shared planning between subject teachers is rewarding and appropriate to rationalize the use of curriculum outcomes in content creation. These results revealed most participants preferred using a collaborative framework to design a school-based curriculum delivery that included shared planning between subject areas. Teachers highlighted the differences in school climates and the need for flexibility in curriculum delivery to match the specific needs of the students in each school. Implications for curriculum delivery were the basis of the study.

Keywords: Abu Dhabi Education Council, curriculum delivery, cooperative planning, international education, Finnish Approach to education

Introduction

Curriculum development of a school is the methodical planning for the education of students in a school resulting in courses of study and delivery methods (Alvior, 2015). Several aspects affect all curriculum development in meeting the needs of 21st century learners. Shared beliefs and philosophies of education among all involved participants is essential in the areas of curriculum planning, implementation and evaluation. These beliefs and philosophies lead to a vision for the school, which guides the school in all areas including subjects taught, delivery methods, types of materials used and the evaluation of students (Bilbao, Lucido, Iringan, & Javier 2008). Then, we need a definition for the curriculum. Kerr defines curriculum as, "All the learning which is planned and guided by the school, whether it is carried on in groups or individually, inside or outside the school" (Kelly, 1999, p. 20).

The purpose of this article is to consider the problematics of curriculum delivery and explore whether there is more need for school based collaborative planning for reaching the outcomes of Abu Dhabi School Model. Abu Dhabi is the largest of the seven Emirates in the United Arab Emirates. Formal education in Abu Dhabi began in the 1960s. In 1971, the seven emirates formally joined to solidify the nation and point the people of the UAE toward a rapid expansion in every facet of life. The internal structure of the government included the Ministry of Education and Youth, began in 1971. As was its charge, the Ministry of Education and Youth began to systematically open schools, develop standards of competence and promote education to a level comparable to education in the west (Bradshaw, Tennant, & Lydiatt, 2004).

The Abu Dhabi government is proudly committed to serving students at the highest level possible. In 2008, the government planned a journey that would propel Emirati students to high levels of success. The Abu Dhabi Educational Council (ADEC) started to develop and implement a policy agenda designed to dramatically increase student achievement and support the development of bilingual Emirati students. Students receive instruction in both English and Arabic from teachers who are Arabic-medium teachers (AMTs) and English-medium teachers (EMTs). EMTs teach the subjects for English, Math, and Science while AMTs are responsible for Arabic and Islamic lessons.

The students in 2010 returned to a new school system. Abu Dhabi's "New School Model" served as the foundation for a curriculum based on research, student-centered, technology-rich and delivered in modern teaching facilities. The New School Model linked the school curriculum with student outcomes allowing for the provision of a variety of learning opportunities suiting the needs of students with different learning styles. With critical thinking skills at the center, the curriculum also focused on a sustained development of the cultural and national identity of Emirati youth (ADEC, 2013a, b).

Several key components guided instruction and planning of the New School Model. The development of students' literacy in both Arabic and English was critical. The New School Model emphasized the consistent focus on student outcomes, which supported continuous and rigorous professional development for teachers. Standardizing the curriculum and the delivery of the curriculum across all ADEC schools was a cornerstone for the success of the students (ADEC, 2013a).

In the effort to standardize both the curriculum and the delivery of the curriculum, ADEC developed and organized a set of learning standards as well as specific student learning outcomes. In the end, ADEC provides detailed learning standards for all subjects. Classroom teachers must have a clear understanding of the learning outcomes for the grades they teach. Teacher expectations are to be able to deliver curriculum content using strategies that enable all students to meet the pre-determined learning outcomes (ADEC, 2012). Teachers receive the curriculum for each grade level, along with the expected Learning Outcomes, upon arrival in the country.

Curriculum Delivery Models
Curriculum delivery, how teachers teach or deliver instruction, is hardly new but conceptualization of the way teaching and learning strategies are and how we define the terms remains ever changing. For example, the instructional strategies incorporated into schools in the 1970s are less likely to match the needs of the 21st century learner. "What" (the content) is taught and "how" it (the curriculum) is taught is dependent on the setting, the needs of the learners and, to some extent, teacher preferences.

In many schools, like ADEC schools in Abu Dhabi, the descriptive and prescribed curriculum is the norm. The responsibility for *delivery* of the curriculum belongs with the teachers. It is in that delivery of instruction that the 'magic' happens and students achieve at high levels or disaster occurs and students make no progress or worse yet, regress.

The curriculum itself developed from three core sources: needs and interests of learners, values and culture of society, and realm of systematic knowledge or subject matter. Subject matter refers to the belief of what every student needs to understand and know to be successful (Goodson 1987).

The structure of the lesson is critical to the delivery of the curriculum. Structuring of the curriculum occurs by sequencing the 'what and when' of topics. There is a hierarchical relationship between various content elements and the impact of these elements to daily teaching in the form of term planning, weekly planning and lesson planning (Masters, 2010).

Masters (2010) used three general principles to guide planning of curriculum delivery. These principles led to the following guidelines:

1. Students must be the first concern when planning. Student development is at the center focusing on all aspects of the child. Learning needs to be personalized and specific for each student's different styles and intellect while meeting the needs of the stakeholders and society.

2. Curriculum requires teaching staff working together to organize learning allowing for all involved to participate. The ADEC Learning Outcomes give direction for the curriculum. Learning Outcomes are the expectations of "mastery" that students learn for success in education. There are yearly Learning Outcomes divided into subject and unit outcomes.

3. The school day needs a variety of learning experiences and activities dispersed over several outcomes.

Curriculum development is an "intellectual journey" for students including experiences that move students toward mastery in their learning. The journey focuses on helping students understand content, allowing for connections within the content areas, leading to mastery and providing continuous assessment to ensure the students are learning. Classrooms are a small version of society making it important to meet the needs of all students there. Each classroom has those students who complete work quickly and need to be challenged more and those students who require more time to learn an outcome. Ideally, each student in the classroom should be able to participate and have an equal chance of success. In this study, we investigated the process of content delivery models used for instruction, specifically models frequently used in Finland (OPM, 2012).

Education in Finland and Curriculum Delivery
Curriculum sets the course of study for the school, (the Learning Outcomes). It dictates the teaching and learning within a school providing for all aspects of the school itself. In Finnish education, it is important that all children succeed to the best of their abilities. The perspective of the needs of all the children in a school has translated to some of the highest scores on international exams such as the Program for International Student Achievement (PISA) (OCED, 2014). The PISA exam given to 15-year old students 65 countries throughout the world. In the overall average in Mathematics, Science and Reading, students in Finland scored in the top 12

countries with Canada's students scoring at 13 followed by Australia at 19, Great Britain at 23 and the United States at 26. The United Arab Emirates' students averaged a combined score of 434, which placed them at 48, ahead of Thailand, Mexico and Qatar. The country with the lowest combined scores was Peru, with a score of 368 (OCED, 2014).

Finland has consistently led PISA scores. In the continued effort to improve the quality of education and improve student outcomes, Finland has adopted "phenomenon-based" teaching using crosscut themes instead of subject-based classes. These tenets are the core of the curriculum (NCF 2016).

Integration of subjects supporting an interdisciplinary approach to teaching and learning are not new in Finland but, like many approaches to education, are evolving. Finnish schools began trials with teaching and learning using inter-disciplinary themes as a foundation in the 1980s. Indeed, interdisciplinary instruction became infused in the Finnish middle-school curriculum where in the past teachers were subject-based (EPA Q1 2016).). In the interest of bringing the success of students in Finland to Abu Dhabi, this study investigated the features of five different curriculum delivery models.

Curriculum Models of Instruction

Curriculum delivery models were investigated during this this study. The study included five models because they differ from each other clearly. Teachers typically understand the models or can understand them with relatively little introduction or review.

Subject-Centered Curriculum Delivery Model

Shoemaker (1991) described subject-centered model as the delivery of standards that ensure the coverage of all subject matter for mastery by the learners. Each subject taught in isolation from the other. Mastery is the overall goal of subject-centered model. Learning takes place in a systematic process using the textbook as the primary instructional tool. Generalizations found within the field of study craft the objectives and prescribe the inherent intellectual processes. Questioning techniques concentrate on "what" rather than "how" and "why".

Core Curriculum Delivery Model

Core Curriculum Delivery Model wraps around learning experiences all students need. The purpose of this model is "to create a universal sense of inquiry, discourse, and understanding among learners of different backgrounds and aspirations and set of learning experiences intended to promote a common body of knowledge are carefully prepared" (Wilson 2005). Broad areas of concern observed relying on "themes" for a foundation language.

Themes centered on life help with integration of learning bringing the subjects together as one. Problem solving and reflective thinking are an integral part. An example of possible a possible theme includes: Earth and Space in science, stories about space in English and Arabic, space exploration in the UAE in civics, and art classes to create a solar system. (Wilson 2005).

Broad Fields Model Curriculum Delivery Model

Beauchamp (1982) described the Broad Fields Curriculum Delivery model as a combination of more than one subject into one field of study, like integrating science and reading with stories about space. The goal of this model is to move away from independent subjects and develop themes within a few subjects. Integration of learning is highlighted to achieve success in more than one subject area at a time (Beauchamp, 1982). It differs from the Core Curriculum Delivery Model in that the incorporation of this model stresses content coverage, and acquisition of

information. A main concept of Broad Field Model is to move from knowledge-based instruction to an integration of subjects around themes.

Phenomenon-based Model (PBM) Curriculum Delivery Model

In this model, learning views education "as a conceptual change in the interaction with the environment" (Østergaard, Lieblein, Breland, & Francis, 2010, p. 8). In classrooms, teachers help students examine 21st century skills. Contextual-pedagogical perspectives and core ideas are key to delivering curricula using the Phenomenon-based Model (Østergaard, et. al., 2010).

Outcome-based Delivery Model

When teachers focus, and organize the educational experience within the school around student success at the end of the experience defines outcome-based model. The basis of the system is to focus on what is important for students to achieve and organizing the curriculum, instruction and assessment around those significant outcomes (Berlach & McNaught, 2007).

According to Linda Darling-Hammond, the teacher is the most important person in the classroom (Darling-Hammond, 2000). Teachers must know the content. Teachers must know the intricacies of the curriculum and the learning outcomes at each level and grade. Teachers develop the tight procedures that maximize time for learning. Teachers know how to deliver the curriculum using multiple strategies that can meet the needs of the various students in the class. Teachers strategically combine the knowledge and skills that can promote students to high levels of achievement, through the combination of subject matter knowledge, classroom management, and the ability to deliver content to students in a way that they both understand and can integrate into their academic lives. As all good teachers know, there are many ways to teach a lesson.

With these concepts in mind, we developed our pilot on curriculum delivery with Tyler (1949) rationale. Tyler developed a model for curriculum delivery providing teachers with the autonomy to plan for learning that provides students in the class the potential for the best education possible. He indicated that organization and evaluation of lesson plans is as important to teachers as evaluation of students. As Darling-Hammond (2000) suggested, if the teacher is the most important person in the classroom, much of the burden of teaching students how to learn relies on the teacher. Teachers must be able to support students' achievement at the pre-determined level of the Learning Outcomes described in the school curriculum. In this case, teachers must ensure all students successfully meet the Learning Outcomes in the Abu Dhabi School Model. The educational curricula as well as the delivery models need to be flexible and ever changing to accommodate learning styles of students and meet their needs.

General theory and conceptualization in curriculum development appears to have changed relatively little throughout most of the World during the last decades. From this point of view, teachers deliver curriculum based on the needs of the students in the classroom and requirements of the subject (Tyler, 1949). Using this model of instructional delivery, teachers pose the following questions while preparing for instruction (Tyler, 1949, p. 1):

1. What educational purposes should the school seek to attain?
2. What educational experiences can be provided that are likely to attain these purposes?
3. How can these educational experiences be effectively organized?
4. How can we determine whether these purposes are being attained?

By issuing these guidelines, teachers went out to plan a shared educational entity with a holistic approach.

Method

In this study, we used Tyler rationale to develop the research questions and discourse analysis to examine the data. The study investigated what participants are thinking about the processes of working with different models of curriculum delivery, with each other, and regarding Abu Dhabi school model outcomes. This study addressed the following research questions:

1. Is there a need to allow curriculum delivery models to be school-based in Abu Dhabi schools?
2. Do pedagogical discussions about curriculum delivery models in the schools deepen the cooperation between Arabic Medium Teachers (AMT) and English Medium Teachers (EMT)?
3. What model is more supported by the teachers in the study?
4. What did the teachers think about Abu Dhabi School model outcomes?

To answer these research questions, the researchers incorporated a Discourse Analysis design. Discourse analysis is the term used to identify approaches to analyze written, vocal, or sign language use. The use of sentences, propositions, speech and when subjects talk are all objects of discourse analysis. 'Naturally occurring' language use is the center of the analysis.

Table 1. Example of a speech act chart

Performer	Q1	Q2	Q3	Q4
Group 1.	EF: "In our school we should combine all or as many subjects we can."	[Pedagogical guidelines were shortly left behind and the group began to work with practical matters]	EF: "We can combine the best elements from remaining three models " AF: "Yes, but can we choose the subjects first for the weekly plan?"	AF: "These outcomes are too narrow"
Group 2.	AF:" I suggest that we name our learning entity with a topic. Innovation! Let's choose innovation."	[Group agreed to drop out the Broad field model, but they had a long discussion over the matter. In the end, they decided to go with outcome based model]	[Group agreed to drop out the Broad field model, but they had a long discussion over the matter. In the end, they decided to go with outcome based model]	EM: "We have to combine the outcomes from different subjects"
Group 3.	AF: "We can imagine the world without pollution. Colors, atmosphere, like you now. Sea without litter and oil. Then another aspect, world we live in now all polluted and dirty."	AF: Can we have these models in Arabic? EM: "Tt's already translated, look." AF: "Oh, good now we can work."	EF: "Let's go through these curriculum models first. I already have my own opinion. Maybe we could choose the phenomenon based model."	AF: "That's fine, I have all the outcomes for grade five here." AF: "You can't take them all, only one term."
Group 4.	EF: "In my class the behavior management comes number one."	EM: "I read lately an article about behaviorism. Behaviorism is often seen as something to avoid, but actually it's somehow the most effective way learn."	AF:" We can leave out Activity lessons and combine all the others" [After a lively discussion the group ends up with phenomenon based approach]	EF: "How can I teach the Arabic outcomes in English lesson?" EM: "The outcomes are the same."

A=AMT teacher
E=EMT teacher
F=Female
M=Male
[--] General description about the conversation

The main idea of this study is the activity speakers are engaged in when they say what they are thinking. Our focus in analyzing was a form of speech act analyzing[1] where we identified the

---

[1] Speech acts are related to the intent of the speaker and how what effect the listener is said. John Searle (1975) has introduced the notion of an 'indirect speech act'. In His theory of indirect speech acts he thinks that when someone speaks some things are communicated through shared prior knowledge and nonverbal communication, as well as common rational thinking and inference in cohesion with the hearer.

focus of discussion allocated to the research questions. Speech acts analysis is "a particular way of talking about and understanding the word or an aspect of the world" (Jorgenson & Philips, 2002, p. 1).

Setting for the study
The setting for study was Al Ameen school, an ADEC school Abu Dhabi in June 2016. The school was part of EPA (Education Partnership Agreement between Edu Cluster Finland ltd and ADEC[2]) project from 2010 to 2016. The project developed best classroom practices with a focus of transferring them to other ADEC schools. Al Ameen School is a Cycle one school (grades 1-5).

To begin the study, we invited teachers from other Abu Dhabi Cycle 1 schools to participate in the study. First, we sent e-mails to all the schools in the same cluster of schools. Teachers willing to participate responded by e-mail, and once the event started at Al Ameen School, the agreements for participation were signed. Thirty-two teachers joined the study. In this group of teachers, we had 11 male teachers, two of them SEN teachers and 21 female teachers, one of them SEN teacher, two of them AMT Heads of Faculty (HoF).

From these participants, we created four groups of eight teachers. We organized these groups in common understanding, to get equal set of different skills. We divided males, females and SEN teachers in different groups from different schools. Organization of this kind of integration teams can vary greatly[3] (AACTE, 2010) but this grouping deemed appropriate for this study.

In the beginning, teachers received the objectives and methods of the study. They worked using multidiscipline integration to examine the various curriculum delivery models. All groups included Arabic Medium Teachers (AMTs) and English Medium Teachers (EMTs). The Special Education Needs teachers (SENs) dispersed to separate groups.

Next, teachers heard a short introduction to the different curriculum delivery models. We used Prezi for the presentation so that group might have a visual image of the process. In addition, teachers received different curriculum delivery models in writing. Teachers obtained all the information about the study and about the different models of curriculum delivery. Teachers got time to consider and discuss the information before deliberating as a team and coming up with a plan of action for future use.

Group work
The next step was for each group to begin planning for curriculum delivery using the model assigned to them. The time of the school year was ideal because most of the teachers had already started the planning for the next academic year. In a six-hour workshop, each team was provided large sheets of paper, colored pencils and weekly plan templates as well as all Abu Dhabi School

---

[2] The EPA has been created to fuse Abu Dhabi and Finnish education with the hopes of developing "world-class flagship schools in the UAE. Designing and trials of different delivery methods using the ADEC curriculum is key. Showcasing new ways to deliver the curriculum from 2010 to 2015, teachers acquired new skills and thoughts toward how classrooms should be run (http://peda.net/veraja/ecfi/epa/project).

[3] Organization of integration teams, three ways: a) Do-it-yourself integration is when a teacher brings other subjects into their lessons like an Arabic teacher teaching the science vocabulary even though they do not teach science.
b) Team-Teach-It Integration: Partnering with another teacher to incorporate various subjects and to cover the same themes or skills.
c)Multidiscipline Integration: A team of teachers with different expertise work in cooperation with each other to create a fully integrated curriculum delivery plan. The team agrees to themes and skills to be taught. The team then deliver their lesson based on the planning of the team (AACTE 2010).

model outcomes translated in both languages. Teams were able to accomplish the initial planning task in the assigned amount of time. In the end of the day, all teams gave a presentation about their work. During the sessions, two members of our research team collected the speech acts and made general notes about the atmosphere and tone of discussion in groups. The research team also collected all presentations and the material teachers worked on to further use in analysis.

Team 1
Team 1 had a very practical approach to the task. They started right away examining the different curriculum delivery models and identifying their own interests into the models. One teacher took the lead giving others time for input and ideas. The team decided that the subject-centered model and outcome-based model were similar and very narrow in depth so they left those out of the plan. Deciding that common core model, phenomenon-based model, and broad field model were close to what they were doing and worked well together, the team developed their plan around these models.

Team 2
Team 2 had a strong personality in the group who led the entire discussion and kept the team very focused on what ADEC dictates at this time that is outcome-based model. The team agreed that other models would be helpful if all the outcomes could be combined to work together. The focus of the team stayed with the ADEC outcomes and the team lost momentum because of the narrow scope of their discussion.

Team 3
This team of teachers struggled with language barriers until the researcher added someone who could translate to the team. At that time, the team discussion became vibrant and they decided to work with the phenomenon-based model to organize their work. The team decided that outcomes guide their instruction so it was hard to plan using the phenomenon-based model.

Team 4
Team 4 discussed the different models and decided that the phenomenon-based model would be the most productive for them as a team. They determined that they had the outcomes already and could work with that. The team came back to the outcomes on several occasions during the session but worked with phenomenon-based in the end.

Results
The following research questions guided this pilot study:
1. Is there a need to allow curriculum delivery models to be school-based in Abu Dhabi schools?
2. Do pedagogical discussions about curriculum delivery models in the schools deepen the cooperation between Arabic Medium Teachers (AMT) and English Medium Teachers (EMT)?
3. What model approach works best for the teachers in Abu Dhabi schools?
4. What did the teachers think about Abu Dhabi school model outcomes?

After analyzing the data collected, the question answers are as follows:

Research Question 1
Is there a need to allow curriculum delivery models to be school-based in Abu Dhabi schools?

The curriculum itself should be the leading document describing what teach but not necessarily what to assess. Curriculum preparation every year is essential by teachers in order to

be current. From all this we can make a conclusion: The best way to ensure proper curriculum delivery is to do school based (research based) planning.

All teams appeared to arrive quickly at some similar conclusions. One model of curriculum delivery cannot meet allow for success of all students in the classrooms of the teachers in this study. Since the ADEC Curriculum is outcomes-based, it appears to be almost imperative that teachers be encouraged to employ the curriculum delivery model that best suits the subject, students and classroom.

Research Question 2
Do pedagogical discussions about curriculum delivery models in the schools deepen the cooperation between Arabic Medium Teachers (AMT) and English Medium Teachers (EMT)?

Teachers' enthusiasm and insight into the need for such a debate suggested clearly that time for Professional Development in Abu Dhabi Schools should be used to focus on school-based curriculum delivery planning. The discussion and planning worked well with teams of teachers who were from different disciplines, both AMTs and EMTs. The discussions appeared to lead to deep educational discussions about what would work here and in other settings. This may indicate that discussions regarding pedagogical frameworks can deepen professional relationships and cooperation in school teams.

Research Question 3
What model approach works best for the teachers in Abu Dhabi schools?

Through the discourse of each of the four teams, it appears that the phenomenon-based model was the most popular with three of the teams out of four. Teachers focused on the outcomes required by ADEC and voiced how it would be hard to incorporate any other model other than outcome-based with directives to cover so many outcomes in a term.

Research Question 4
What did the teachers think about Abu Dhabi school model outcomes?

Teachers had an opportunity to work closely with each other, now first time with translated outcomes. There was a shared understanding that the outcomes are giving good bases for integrated learning areas and continuous assessment. Most of the teachers share the opinion that there are too many outcomes and the outcomes have a narrow perspective to the actual skills. This narrowness also gives challenges to learner-centered curriculum delivery, since it is strongly focusing on assessment.

Limitations
The results of this pilot study are not without limitations. The study conducted in Abu Dhabi schools, incorporated a small sample of convenience, both of which could affect generalization. Although a limitation to generalization is apparent, the intent of this study was to investigate the perception of different curriculum delivery models. Data were collected in a location specified instead of the "natural field setting" (Creswell, 2013, p. 45). Since the author led the discussions with the teams, responses may have been predisposed. Due to the differences in languages and cultures, perceptions may be diverse and language could be an issue (Creswell, 2003).

Conclusion
This pilot study investigated four research questions regarding the incorporation of several different curriculum delivery models. The results revealed, unsurprisingly, that teachers preferred

to be able to incorporate several different models for instruction. This finding is in line with research that suggests effective teachers have a wide variety of curriculum delivery strategies they can employ. They know when these strategies are often most successful and with specific content and specific students. Outcome-based education with effective teachers can propel students to high levels of achievement. (Marzano, Marzano & Pickering, 2003).

The opposite is also true. The studies by Marzano, et.al. (2003) and others reveal that high performance in schools with outcome-based curriculum delivery has a strong correlation with teacher effectiveness. Clear and challenging performance standards for all stakeholders (administration, teachers, and students) help expand the outcomes' value. Policies have been developed to assure these outcomes are high quality through testing and evaluation (Sahlberg, 2007)

It was interesting that AMT and EMT teachers in this study started to combine the subjects in their planning. Globally, policy reform and development of curriculum has focused on increasing the amount of time spent on literacy and numeracy. Understanding the need for students to achieve in reading, writing and mathematics has been a force driving educational reforms. Literacy and numeracy are the main factors for success in many international school systems since student achievement is being judged with assessments such as Program for International Student Assessment (PISA[4]) and International Association for the Evaluation of Educational Achievement (IEA[5]). Even though schools have concentrated on the importance of literacy and numeracy, significant time allocation and resources have been neglected (Sahlberg, 2007).

Schools internationally put too much emphasis on structural knowledge, technical skills and cognition known as "system-world". In addition, schools focusing on social tolerance and drawing on the culture around them including areas like values, beliefs, and social experiences, the "life-world", as a balance of outcomes and experiences enables schools to perform at a higher level. This kind of integration of both sides of knowledge is often neglected when it comes to planning of lessons. That is why it is good to have a wider scope to curriculum delivery, that gives room to community building, shared experiences and to value traditions and culture. (Habermas, 1972; Sahlberg, 2007, 2008).

Sahlberg (2007) describes "the global educational reform movement" as a movement to focus on basic knowledge and common core skills in subjects, common standards for teaching and learning, measurable knowledge and stronger school and teacher accountability for results. With the increased accountability in schools, administration and teachers have become more competitive instead of cooperative in their practice. With the increase of external forces, schools then start 'teaching for test' rather than "teaching for knowledge". In the middle of this conversation, we have AMT and EMT teachers trying to do their best for the students to achieve best possible results. School-based planning often falls on the shoulders of teachers and as result, we have two camps of teachers making curriculum plans for the same group of students. Results of this study indicate that when school management is supporting real-time curriculum delivery, we can see improvement in AMT –EMT cooperation.

---

[4] The Program for International Student Assessment (PISA) is an international assessment evaluating education systems, given to 15-year-old students worldwide. Over 80 countries have participated to date.

[5] The International Association for the Evaluation of Educational Achievement (IEA) is a cooperative on international research institutions and government agencies. This cooperative conducts studies on educational achievement and other issues in education focusing on a deeper understanding on policies and practices in educational systems.

Beginning to think about curriculum from the top level of an organization, guidelines driving the essential parts of the schools must be malleable for ever-changing community needs. Leadership within the school needs to react to these changing needs with a shared vision and understanding of the culture. Educational reform continue to dictate new regulations providing ever-changing criteria for schools but also for the school management in general. These are criteria driven by external measurements focusing on how to provide education for students to be successful in modern schools. Focusing on socializing students, creativity, and living a better life has become more valuable. To avoid idiosyncrasies, we need to develop a common understanding of learning processes if these criteria are incorporated into the curriculum (Baker-Doyle & Gustavson, 2014).

The results of this study support the idea, that schools must address the following to meet expectations. External demands and beliefs guide the need for internal accountability for learning conditions that provide success to students. Conditions considered toward perceptions, knowledge and skills to optimize the learning environments for student (Sahlberg, 2008).

The Abu Dhabi school model outcomes represent the external norms and expectations for the curriculum delivery in Abu Dhabi schools. They also give a good understanding what students should understand and achieve on different levels. This study also reveals that there might be a common interest to investigate deeper the nature of the outcomes, and different possibilities to narrow down the number of them.

What comes to internal conditions of delivering the outcome, the micro-level, it is clear that schools should increase the stakes of school based planning of curriculum delivery and research based knowledge of the teachers about the different designs of curriculum delivery to be able to deconstruct the objectives and use their own pedagogical thinking to form themes and units. It is incumbent upon us, as administrators to analyze the profound effect of curriculum delivery on the achievement of students in Abu Dhabi and the UAE.

Future Plans
However, the results give indication that research in this area need to be more widely. Research options for the future would include inclusion of more schools including Cycle 2 schools so that the sample would be larger making the study more valid.

References
AACTE 2010: 21ST Century knowledge and skills in educator preparation. Retrieved from: http://www.p21.org/storage/documents/aacte_p21_whitepaper2010.pdf

Active learning in achieving ADEC curriculum outcomes: EPA 2 Process White Paper|Q1 2016|Educluster Finland.

ADEC (2012). *The foundation of the New School Model: Teacher's guidebook.* Retrieved from: https://www.adec.ac.ae/en/MediaCenter/Publications/Teachers-Guide-PartA.pdf

ADEC (2013a). *The New School Model.* Retrieved from: https://www.adec.ac.ae/en/education/p12education/pages/new-school-model.aspx

ADEC (2013b). *"My identity" program.* Retrieved from: https://www.adec.ac.ae/en/MediaCenter/News/Pages/ADEC-launches-the-%E2%80%9CMy-Identity%E2%80%9D.aspx

Alvior, M. (January 9, 2015). Four major foundations of curriculum and their importance in education. In *SimplyEducate.Me.* Retrieved from http://simplyeducate.me/2015/01/09/4-major-foundations-of-curriculum-and-their-importance-in-education/

Baker-Doyle, K. & Gustavson, L. (2014). *Giving ourselves permission to teach: Permission seeking, teacher*

collaboration, and teacher agency. American Educational Research Association Annual Meeting,
   Philadelphia, Pennsylvania.

Beauchamp, G. (1982). Curriculum theory: Meaning, development, and use. *Theory into Practice, 21*(1), 23-27.

Berlach, R. , & McNaught, K. (2007). Outcomes based education? Rethinking the provision of compulsory education in Western Australia. *Issues in Educational Research, 17*(1), 1-14.

Bilbao, P., Lucido, P., Iringan. T., & Javier, R. (2008). *Curriculum development.*
   Quezon City:Lorimar Publishing.

Bradshaw, K., Tennant, L., & Lydiatt, S. (2004). Special education in the United Arab Emirates: Anxieties, attitudes and aspirations. *International Journal of Special Education, 19*(1)
   49-55.

Creswell, J.(2003).   *Research model: Qualitative, quantitative, and mixed methods approaches.*
   Thousand Oaks, CA, USA: Sage Publications.

Creswell, J.(2013). *Qualitative inquiry and research design: Choosing among five approaches.*
   Thousand Oaks, CA, USA: Sage Publications.

Darling-Hammond, L. (2000).Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives,* 8(1). Retrieved from http://epaa.asu.edu/epaa/v8nl.

Goodson, I. (1987). *School subjects and curriculum change.* London: The Falmer Press.

Habermas, J. (1972) Knowledge and human interest. London: Heinemann Press.

Jorgensen, M., & Phillips, L. (2002). *Discourse analysis as theory and method.* London: Sage
   Publications.

Kelly, A. (1999). T*he Curriculum: Theory and practice.* London, Thousand Oaks, New Delhi:

Masters, G. (2010.) *Teaching and learning school improvement framework.* Australian Council
   for Educational Research (ACER).

Marzano, R., Marzano, J., & Pickering, D. (2003). *Classroom management that works: Research-based strategies for every teacher.* Washington, D.C.:ASCD.

National Curriculum Framework (NCF). (2016). *Finnish national board of education.*
    http://www.oph.fi/english/curricula_and_qualifications/basic_education.

OCED (2014). PISA 2012 *Results in focus: What 15-year olds know wand that they can do with what they know.* Retrieved from: https://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf

Opetus- ja kulttuuriministeriön tiedote 11.4.2012. PISA 2009 -raportti selittää PISA-tulosten syitä ja muutossuuntia.   http://www.minedu.fi /OPM/Tiedotteet/2012/04/pisa09_julkaisu.html.

Østergaard , E., Lieblein, G. , Breland, T. & Francis, C. (2010). Students learning agroecology: Phenomenon-based education for responsible action. *The Journal of Agricultural Education and Extension. Competence for Rural Innovation and Transformation,*16.

Sahlberg, P. (2007) Education policies for raising studentlearning: the Finnish approach. *Journal of Education Policy Vol. 22*, (2), 147–171

Sahlberg, P. (2008). *Accountability in a knowledge society.* Springer Science+Business Media

Searle, J. (1975). Indirect speech acts. In *Syntax and Semantics*, 3: Speech Acts, ed. P. Cole & J. L. Morgan, 59–82. New York: Academic Press.

Shoemaker, B. (1991). Education 2000 integrated curriculum. *Phi Delta Kappan*, 72, (10).793-797.

Tyler, R. (1949). *Basic principles of curriculum and instruction.* Chicago, IL, USA: University
   of Chicago Press.

Wilson, L. (2005). Curriculum index: Curriculum – different types. Retrieved May 3, 2013, at http://www4.uwsp.edu/education/lwilson/curric/curtyp.htm