

## Development of Educational Leadership Skills In A Project Based Data Modeling Course At Zayed University

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### ABSTRACT

This study aims to investigate the development of educational leadership skills in a general data modeling education course using the Project Based Learning approach (PBL) at Zayed University, UAE. The research goal was completed first by reviewing the most important educational leadership skills that university students need to have in order to meet career and job challenges and second, by investigating the impact of employing the PBL methodology on students' perception of educational leadership skills, and ultimately on their performance. The research used a class observation method as well as a quantitative survey method that was conducted towards the end of the study period. Findings and results indicated that acquiring educational leadership skills via a PBL approach is highly possible, and positive feedback was recorded as per the students' perception and performance.

**Keywords:** Educational leadership skills, Project based learning approach, General education courses.

### INTRODUCTION

Education is an international/global scale enterprise. According to literature in every country in the world, education is a firmly established component no matter what the social, economic and political directions are. Also, in comparing education, in general, across many countries and societies, it can be observed that the educational provision is characterized by many contrasts that can be attributed to social, economic, ethnic and religious factors. All these factors shape the patterns that are observed in the organization, management and development of the educational system. These factors also make education an appropriate field to develop skills within students, faculty members and administrators' population (Foskett & Lumby, 2003). Regarding different educational systems, further analysis and comparison among different educational systems, and the reasons behind discrepancies between the developed countries' educational system and the Arab educational system, especially at the university level, has led to the argument that human resources, financial support and type of curriculum are behind these great differences in the two systems (Akkari, 2004). Yet, as a teacher & a researcher, I strongly believe that the real reason behind these discrepancies, is the lack of proper educational leadership skills in developing countries' educational systems.

Currently, educators are united around the fact that students in educational institutions need "21<sup>st</sup> century skills" to be successful in their careers, jobs and lives. Indeed, critical thinking and problem solving as well as other skills, have been components of human progress throughout history (Rotherham & Willingham, 2009). The concept of educational leadership has emerged in recent years, and many business oriented concepts, such as communication and presentation, have found their way into the field of education. From different literature sources, the most important of these educational leadership skills can be identified as being: mission-stating, goal-setting, team working, monitoring and evaluating (Al-Mutawa, 2003; Adair, 2007). Many of these skills have been heavily developed within students' population in the educational domain, in many Western and Eastern countries and very good results have been obtained by educational institutions that have employed them (Trent, 2006)

This work investigates educational leadership skills (mainly goal setting and team working) as being educational components that have to be present, not only within managers and conventional leaders as often referred to from a traditional perspective, but rather within all contributors to the educational system in higher education, namely within the managers' level, the faculty members' level and especially within the students' community. Therefore, this study aims to explore the importance of educational leadership skills in the domain of higher education, and to investigate the development of these skills, within students' population, by using the project based learning approach (PBL), as well as a daily awareness exercise. This exercise was designed to help students understand the objective of the course, the objective of different units of the course and the objective of the course project. This study also aims to investigate how the development of these skills within the students' population may affect their overall academic

performance (grade comparison) and students' involvement (class observation). The work concludes by providing summaries and recommendations for further work in this field of higher education in order to prepare capable and competent graduates who would help in developing their societies, their countries and the region.

In sum, our major goal for this study involved determining:

- Whether PBL approach can be successfully used to develop educational leadership skills within the students' population.

Whether acquiring educational leadership skills will affect students' course achievements.

#### LITERATURE REVIEW

Nobody argues about the fact that knowledge and skills are what helps institutions and leads countries and societies to develop. (Alldredge, Johnson, & Stoltzfus, 2003) For instance, leadership skills along with other skills (linguistic, communication and technical) were originally business oriented skills, but have been smoothly implemented in the field of education and once implemented, very good results have been obtained as per the performance of educational institutions in many countries (Trent, 2006). Many comparative studies have shown that the concept of developing leadership skills is very relative as it changes from west to east, thus developing educational leadership skills within educational institutions would depend, in a similar way, on many factors such as the culture, the politics and the economy of these countries.

In recognizing that leadership development involves more than just developing individual leaders, has now led to a greater focus on the context in which leadership is developed. In fact, thoughtful and careful considerations about how to best use leadership competencies in various domains have been carried out and programs and curriculum have been developed all over the world. Furthermore, new ways of thinking about the nature of leadership and leadership application have been explored by inspiring ideas and concepts from business-like fields and domains. Recently, effective leadership has been commonly viewed as central to organizational and institutional success and more priority and importance are now placed on leadership development than ever before (Alldredge, Johnson, & Stoltzfus, 2003)

Looking at the educational system in general and that of the university level in specific, many types of educational interactions can be noticed within different institutions. Examples of these interactions are: the interaction between professors and students, administration and professors, administration and students, students and curriculum, and professors and curriculum. (Towards an agenda, 1998) In this work, the focus would be given to curriculum and students, and the study would try to demonstrate how a curriculum (using the PBL approach) can be used as a vehicle for educational leadership skills development (goal setting and team working). This study can also show how students' daily involvement and awareness with educational leadership skills can help them acquire some of these skills and adapt them in their learning styles thus having an impact on their overall academic performance.

#### *Curriculum*

Beside administration and professors, university curriculum has been recognized to have a great input and role in the academic environment in educational institutions. Good and well-developed curriculum helps university professors and students to achieve their academic goals and outcomes. Furthermore, the curriculum has been considered to be the real heart of the improvement of education. It is not only a list of topics to be taught to students in educational institutions; it can serve several purposes simultaneously. Indeed, Hicks (2007) has stated that curriculum may be viewed as a powerful tool for the administration and professors in their attempts to develop their own educational institutions, to increase equal access for all students and to raise the quality of teaching and learning. Hicks continues in stating that all of that can be fulfilled by using the curriculum as a channel for skills development.

Also, it is worth noting that to proceed with curriculum development from the traditional approach to the PBL approach, in a leadership environment, it is necessary to understand that a curriculum involves process thinking rather than project thinking. This curriculum development is in general a process that requires expertise and continuous production of new knowledge and skills. In addition, as Joyce (1995) has pointed out, there will always be a need for strong research, potential directions and curriculum models, as well as a systematic assessment and analysis on the implementation of the new curriculum within educational institutions (Joyce & Showers, 1995). Furthermore, for a curriculum that is meant to be adopted in an academic leadership environment, direct copying and transfer of any curriculum types, of any developed educational systems in other countries, would not be successful due to cultural, social, and other differences. A real challenging and relevant academic curriculum could move from one type to another, or can take part of one type and parts of other types. Course outlines and course outcomes should be carefully planned and designed accordingly and tested afterwards.

In addition, when choosing a curriculum that will help developing educational leadership skills, it is always

required to search for interesting experiences, problems and their solutions that may be useful as resources in the ongoing curriculum design and assessment. For instance, in Zayed University, this specific approach was carefully taken into account in the development of general education courses. For example, in “The introduction to environmental sciences” a course that deals with environmental problems, solutions and issues related to the UAE environment were heavily discussed and UAE statistical data were presented and studied. Students’ enthusiasm and involvement during all those discussions were very noticeable and, students showed interest in the course material as various cases and examples were relevant to their society and culture. (Catalog)

Concerning the PBL approach, Boud (1983) has found that it is a curriculum design and a teaching/learning strategy which simultaneously develops higher thinking order, disciplinary knowledge bases and practical skills by placing students in the active role of practitioners (or problem solvers). Students in the PBL approach are confronted with a situation which reflects the real world (Boud, 1985). Project Based Learning (PBL) has been proved to be the most effective approach to lifelong learning and assessment. This academic approach can train students and learners in general, in such characteristics as: enthusiasm, motivation, leadership skills, interpersonal skills and organizational skills. All these skills are very desirable talents in the 21<sup>st</sup> century both in the education axis, jobs axis and lives of people in general (Johns, 2013). Although the PBL approach has been extensively used in academia all over the world, Yeo (2007) and others have shown that this method interestingly has recently emerged as a tool for the development of leadership skills given the new challenging roles of leaders to act in the fast changing global societies (Yeo, 2007). The basic characteristics of PBL are that it is context based using real life cases, it focuses on thinking skills and reaching goals, it requires integration of interdisciplinary knowledge and can be applied in small groups. Students are driven by a posed real life project and become interested in its different phases. As for the university professor’s role, it is considered as one of support, rather than direction, and facilitating rather than instructing. It is obvious therefore that PBL is a student-centered teaching and instructing approach rather than professor centered teaching.

In conclusion, the fact that UAE is a young country (around 40 years old), and its educational systems and higher education in specific are even younger, there is a high expectation that leadership skills will be overwhelmingly embraced by educators, administrators and researchers to introduce these new educational concepts and procedures within their curriculum and development activities, as well as to utilize and develop known approaches (such as PBL approach) in order to help graduating students with competence, knowledge and educational leadership skills.

### **Students**

At the college and university level, it is worth mentioning that different relations and interactions among all educational components are even stronger and critical as students embrace the world of work within just a few years. In recent years, most leadership training programs especially, those conducted and established in the western world were based on the traditional concept of leadership (Expert Power: Lead from the front, 2012). Within many educational institutions, only a small population of students may have had the chance to acquire leadership skills that they need for their future jobs or to serve their communities. In most universities around the world and in specific in the Arab countries, the development of student leadership skills is not truly seen as part of the academic curriculum, but it is mostly attributed to “extra-curricular” activities. Thus, leadership skills are mostly regarded as part of students’ non-academic activities in clubs and organizations rather than being part of the students’ daily life. (Al-Dabbagh & Assaad, 2010)

In the literature, Caine and Caine (1991) have found that the most effective leadership trainings and programs occur in everyday settings that mainly include the course of learning. These everyday venues can potentially serve as opportunities for leadership skills development for all university students. In this regard, courses in addition to student organizations (student councils and student clubs) contain many good opportunities for developing leadership skills. In fact, if during each semester university students are exposed to educational leadership development exercises, and if these exercises become part of that organization’s ongoing activities, many new leadership skills will be implemented and developed within the students’ population by the time he or she graduates from college. The success would be tremendous if similar strategies are adopted in every class of the university, and in all other universities and institutions of the nation. Wheatley (1999) has explained that these trials of implementing leadership skills within courses will certainly have a great impact on institutions, communities and society’s development.

As a summary, developing leadership skills within the educational field at universities and colleges (That is why they will be called from now on educational leadership skills) is a complicated matter and process. Many components are overlapped and therefore should be taken into consideration. A lot of the focus was directed in previous studies on preparing administrators (Day, 2011) and instructors throughout educational programs and professional development activities (Edwards, Baume, & Webb, 2003). Little work has been used to investigate the curriculum and students, as being educational components that need tremendous improvement and development within educational institutions. The focus of this study, as per educational leadership skills (goal setting and team working), has been directed to the curriculum (PBL approach) and students (awareness exercise).

## METHODS

This study was conducted at Zayed University in Dubai, UAE, to analyze the output of developing curriculum using project based learning (PBL) as an implementing channel of educational leadership skills. In parallel, another part of the work took place on a daily basis in the format of an awareness exercise. The study has taken into account Zayed University students' background and their culture. General education students who were simultaneously part of the study consisted of 50 female students in their third and fourth semester. The course used in the study was the "Data modeling" course, and the study took place during the fall semester 2010 in the Dubai campus.

**Curriculum.** To investigate the development of educational leadership skills via PBL approach, a careful study was carried out using courses offered in Zayed University. The discussed course here is a PBL general education course and the main objective behind using such approach is to develop educational leadership skills (Goal setting and team working) within the undergraduate students' population. The data modeling course is a general education course that is normally delivered through classroom lectures and activities. In this study, the course was redesigned using PBL approach in order to allow students to work on a project throughout the semester.

The course (Data Modeling) is, originally, designed to provide Zayed University students with a broad general education in quantitative reasoning and critical thinking. It also provides a foundation for the development of their ability to function competently and confidently in major programs. The course is focused on analytical reasoning and thinking to solve real world problems in business, finance, economics, computer science, education and the natural sciences. The content of the course is delivered through classroom activities to introduce the students to the various topics. For some topics or case studies, data can be from primary sources connected with other courses, such as Environmental Science, Health Science and other general education courses. In each area, knowledge, analytical skills, critical thinking and understanding are developed using relevant examples for discussion, analysis and interpretation in class with follow up exercises or assignments of a similar nature to be done individually or in groups outside the classroom. To be able to take this course, students should have suitable mathematics placement test results. The course emphasis is on applications of quantitative reasoning in the context of real world cases that are mostly related to the UAE. Using the knowledge and skills learned and discussed in the classroom, students were provided with a course project early in the semester and the students were introduced to the approach of PBL. The rationale behind using this approach to learning is that real-world cases tend generally to capture students' interest and enhance serious thinking as the students acquire and apply new knowledge in a project based learning context.

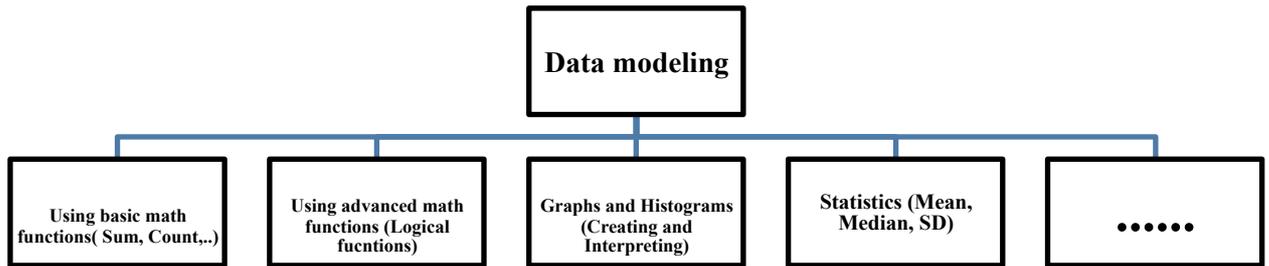
This data modeling project had three different sets of data and students needed first to complete these sets by collecting primary data using either data collection or surveys. Afterwards, students needed to model all the data and make sense out of it by using some or all knowledge and skills learned in classroom activities. Students needed to organize the data, to use mathematical and logical functions, to create graphs and scatter plots, to use statistics, data descriptors and histograms as well as to conduct data analysis. All that was performed by using an open-ended method in which students and their groups could choose different concepts and skills as long as their work is clear, the analysis is correct and the conclusion is relevant. Students needed to work in groups, and therefore get involved in project group planning. Results, discussions and project challenges were looked at inside and outside the classroom on a regular basis (At least one time per week).

The two main educational leadership skills that were developed using this PBL data modeling course were: goal setting and team working. During the semester, students were encouraged to work on their open-ended data modeling project inside and outside classrooms. Necessary skills and knowledge were provided via realistic activities that are applicable to students' experiences. Students also had the opportunity to stay focused and appreciate the fact that there is a course in goal setting and a goal behind acquiring certain knowledge and skills which helps them in working on the project. Furthermore, students were divided into small groups of two to three members and therefore have worked as a team or divided the project duties among group members. This working methodology has helped students share knowledge, skills and raised further issues to be solved. Thus, all of those experiences and assessments would help PBL students to develop their team's working skills and would help them be engaged in a long active learning environment.

**Students.** In a trial to reinforce the acquisition of educational leadership skills within Zayed University students' population, an awareness exercise was launched in the data modeling general education course. The aim behind conducting this part of the work (awareness exercise) is basically to help Zayed University undergraduate students focus on one or two educational leadership skills (goal setting), be aware of it and have the chance to exercise it on a daily basis pattern.

An example of how the course objective and units' specific objective were discussed is illustrated in the flow chart below (as per the data modeling course). This educational leadership skill exercise was launched at the beginning of each class and has served as a tool for students to stay focused on the actual unit's material and link it to

the course material and the project work. It is also meant to help students have a clear vision of the goal and the objective behind studying a specific unit and how does it converge to the course’s outcomes in specific and Zayed University learning outcomes in general.



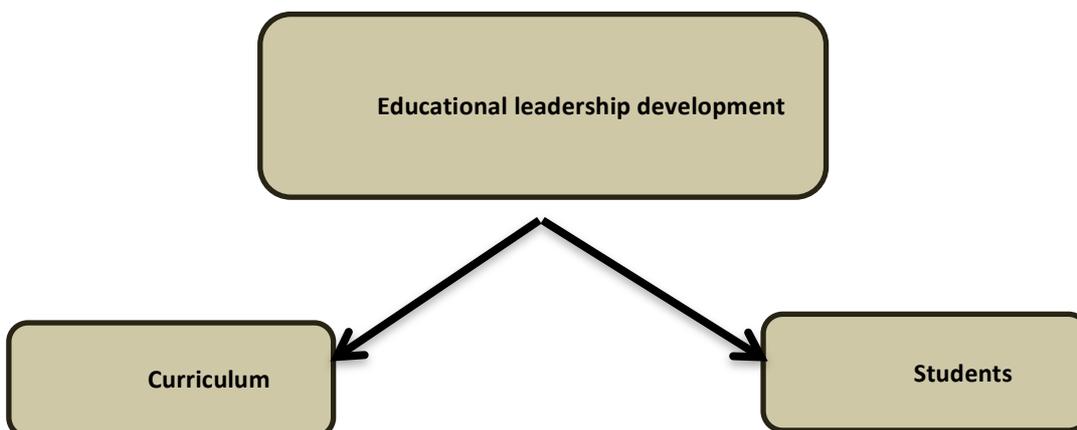
**Figure 1:** Example of flow chart used to illustrate course and unit objectives on a daily basis (Awareness exercise).

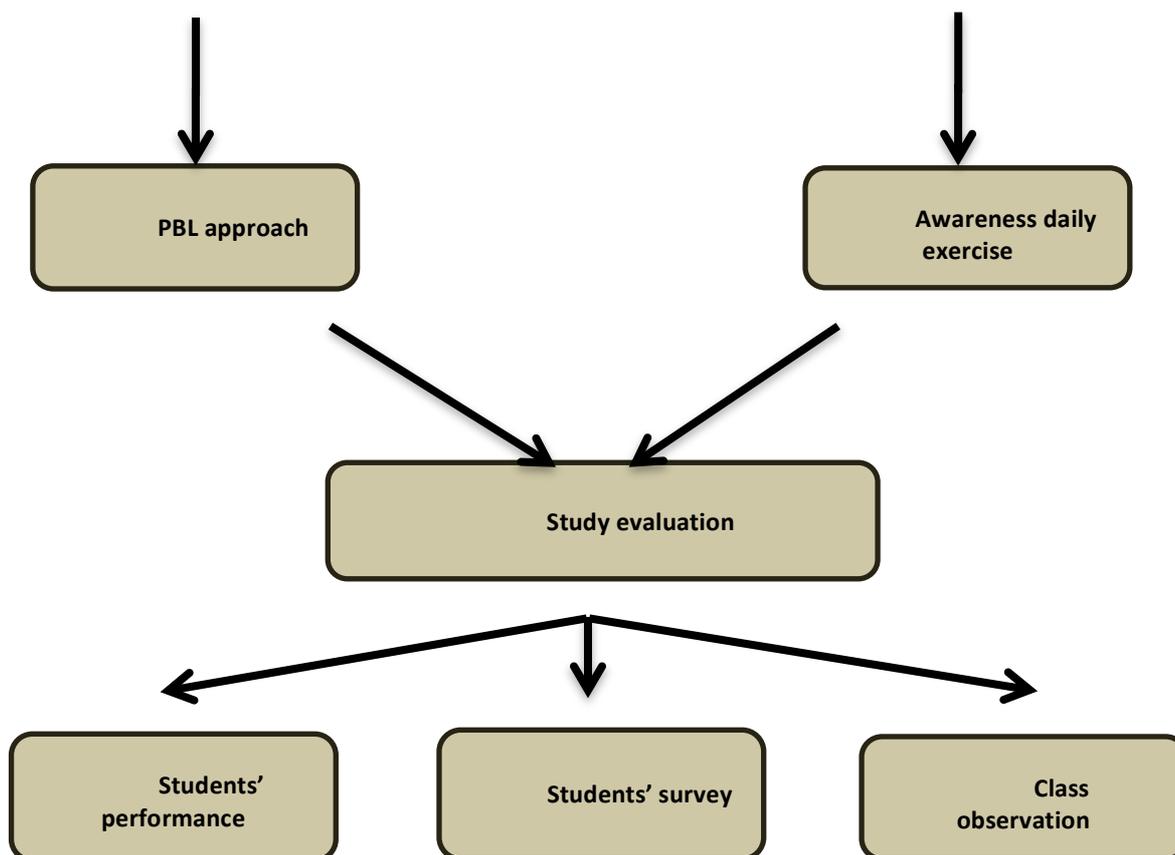
Furthermore, and in order to better quantify the educational leadership skills development impact on students in the data modeling course, a daily observation was carried out and numbers of students with educational leadership skills or no educational leadership skills were recorded throughout the 2010 fall semester. Three categories were set as per educational leadership skills. The first category showed students who are believed to have educational leadership skills (goal setting and team working). These students showed immediate and a spontaneous start in their project work during the allocated time inside the class. The second category of students showed some interest and is believed to have at least one of the educational leadership skills (goal setting or team working). This second category normally took longer to start working, but students spent most of their allocated time working on their project. The last category presented students who had no educational leadership skills. These students lost all the allocated time and were either talking or doing something else other than working on their project. The aim behind this observational part of the study was to investigate the relationship between the trial of developing educational leadership skills and students’ attitude. This simple observational exercise may give a good indication of how implementing educational leadership skills (via PBL) can affect students and their attitudes toward the course material and the project work and ultimately their performance. The observational exercise was launched at the beginning of the semester and each time the class meets for project work, numbers of students were recorded. At the conclusion of the observational exercise, the monthly average of students’ number was calculated as per the three categories. The data based on the observational part of the study were compared and only the first and the last monthly averages were presented.

To evaluate the impact of developing educational leadership skills within the population of Zayed University students, a grade comparison was conducted for the data modeling course students who were part of the study. For this reason, sections of the same general education course were investigated, and students’ grades were compared. Grade percentages for this course were divided among: Test1, Test2, Project and Final.

In order to further investigate the impact the developing educational leadership skills within the population of students had, a survey was administered for the “Data modeling” course students toward the end of the 2010 fall semester. The aim of the survey was explained to the students and then they were given flexible time outside the class to answer survey questions.

The figure below illustrates different components and steps of the study conducted at the Dubai campus of Zayed University for female students at the general education level (Prior to their majors).





**Figure 2:** A summary of the educational leadership skills' development study conducted at Zayed University in Dubai, UAE.

#### LIMITATIONS OF THE STUDY

Leadership skills have been known to hold a great importance in determining the success of students in their career (Lahkim & Draganova, 2011). Nevertheless, resistance to the new approach from both the professors' side and the students' side along with the lack of awareness of the importance of these skills could be a challenge in the trial of developing these leadership skills within the educational institutions. Another major challenge to applying PBL concepts in general education courses is that there are many sections (around 50 sections per fall semester for the data modeling course) and an average of 20-30 students per section. Also, language skills, varied backgrounds, attitudes toward teaching could be taken as challenges and limitations of developing educational leadership skills within institutions. In an effort to maintain quality teaching in all sections, general course outcomes were specified and general assessments was applied, yet all that limits the flexibility and openness of the PBL nature.

#### RESULTS AND DISCUSSION

Developing educational leadership skills within students' population in Zayed University was hoped to have a positive impact on the students' performances. For this reason, a grade comparison was carried out within sections of the same general education course and students' grades were compared. The figure below shows an example of grades' comparison between Test1 taken at the beginning of the semester and Test2 taken toward the end of the semester. The comparison was conducted as per individual students' grades. (22 students from one section of the data modeling course)

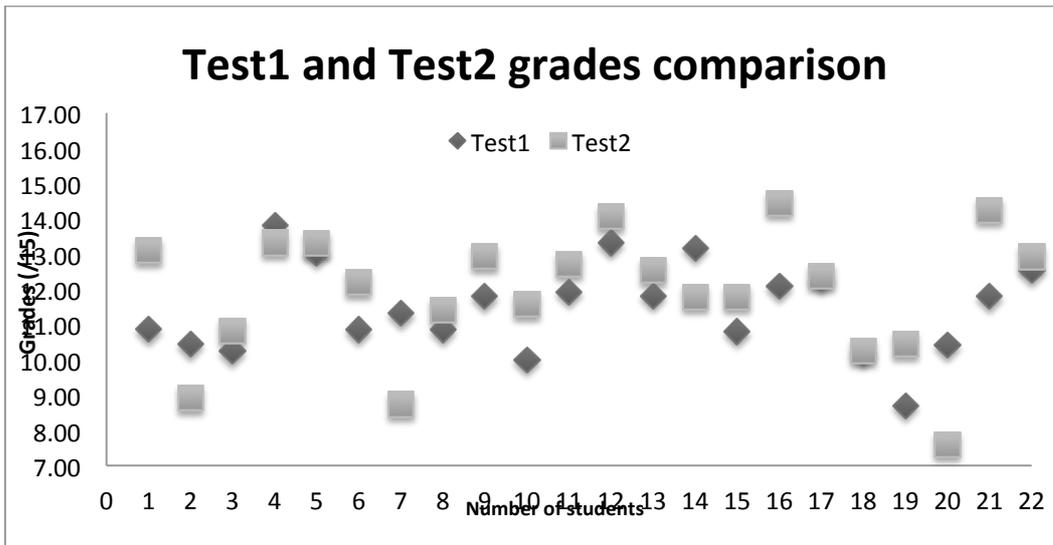


Figure 3: Example of the data modeling course grade comparison as per individual students.

The grades comparison launched for the data modeling general education course during the same semester, has shown that most of the students have performed better toward the end of the semester (Test2) as compared to their performance at the beginning of the semester (Test1). The grades were looked at per individual students, and overall, a positive change has been noticed while comparing Test1 grade for each student to Test2 grade. The class average was calculated for both tests, and was found to change from 76% to 79% (with a standard deviation of 1.26 and a range of 5.08 for Test1 and a standard deviation of 1.81 and a range of 6.84 for Test2). Therefore, it is believed that developing educational leadership skills within the students’ community has played a great role in helping students staying focused, learning better and therefore getting better grades. The grades’ comparison has shown that more than 77% of students had performed better toward the end of the semester.

To study further the impact of developing educational leadership skills via the PBL approach, a survey was administered for the “Data modeling” course students toward the end of the semester. The following charts present students’ perception and attitude toward the course project (PBL approach) and how the project has helped them acquire certain skills. (Educational leadership skills)

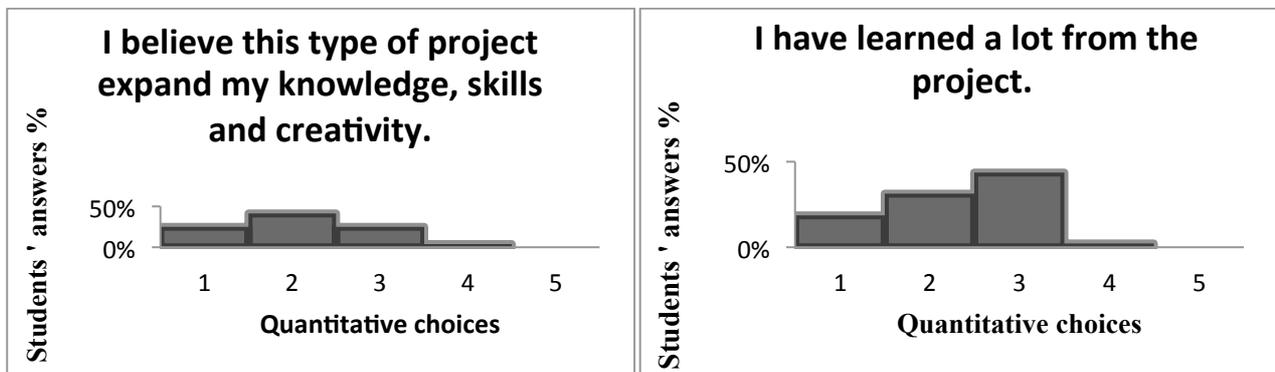


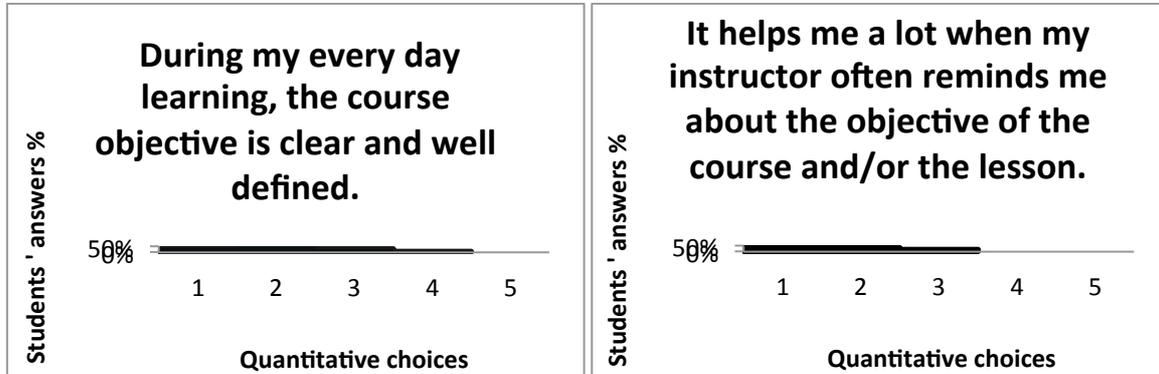
Figure 4 and Figure 5: Statistics of educational leadership skills perceived by 2010 ZU undergraduate students. (1,2,3,4,5) were converted respectively from (Strongly agree, Agree, Neutral, Disagree, Strongly disagree).

The aim behind using the project based approach in the above general education course was to enhance the quality of student learning compared with other traditional instructional methods. After all, the PBL approach was a vehicle to develop educational leadership skills (namely: goal setting and team working) within the community of students. Thus, evaluating the students’ perception toward the PBL approach is an indirect way to evaluate students’ perception toward educational leadership skills acquisition.

Survey results have shown that, students’ perception toward this style of learning was mostly positive. A good percent of students have liked the project and believed to have learned a lot from it. Another percentage of students (a minority) were either neutral or they disagreed about the project concept. Also, more than 60% of students believed that the project has helped them acquire knowledge and skills. This study has suggested that educational approaches such as PBL can certainly improve students’ learning and students’ attitude toward acquiring educational leadership skills that were embedded within the PBL approach. The data has also shown that more effort still needs to

be directed to curriculum development, and that most, if not all, general education courses in Zayed University should be developed toward the PBL approach or similar academic methodologies.

In addition to conducting a survey and asking students for their feedback as per the project and how it helps them to acquire educational leadership skills, other questions were used to investigate the students' acquisition of the discussed educational leadership skills in the coursework (goal setting). The answers have shown an interesting trend. A good percentage (around 70%) of the students' population has shown great appreciation of identifying course objective and the continuous emphasis on its importance. The following figures show data presentation for a few selected questions of the survey:



**Figure 6 and Figure 7:** Statistics of educational leadership skills awareness perception (goal setting). (1,2,3,4,5) were converted respectively from (Strongly agree, Agree, Neutral, Disagree, Strongly disagree).

The above figures show that, in general, students have a positive attitude toward educational leadership skills awareness (goal setting). The results are very encouraging and they are showing very good students' perception of an important educational leadership skill and its importance to students' learning throughout the semester. Other questions of the survey have shown that the majority of students have found that focusing on the objective of the course and other specific objectives help them understand better and perform better in the classroom. Most of the students believed that it will help them a lot if other instructors reminded them about their respective course's objective.

Finally, to further evaluate the impact of developing educational leadership skills via the PBL approach, the class observation, conducted throughout the 2010 fall semester, has shown a positive increase in students' involvement with the course's material, as well as a change in students' behavior in acquiring knowledge. As the semester went on, students have seemed to be more involved with the course's material. They have come up with many questions raised while working on their project. They have looked more enthusiastic about learning and finding solutions to problems. Furthermore, it was noticed that the team's working skill had been improved with time. At first, students shared their concerns about how to take different responsibilities while working on the project. But, over time, many challenges were overcome and students seemed to appreciate the concept of working in groups. These attitudes were certainly related to the PBL approach and the rationale behind using it as a vehicle to implement educational leadership skills within Zayed University student's population.

Figures below illustrate how students' behavior and attitude have changed throughout the semester. Indeed, the average number of students with educational leadership skills recorded toward the end of the semester has increased compared to the same number recorded at the beginning of the same semester. The same pattern was recorded for students with some educational leadership skills. Those students who have shown some interest in the project have seemed to increase in numbers at the end of the semester. This positive change as per the number of students who have shown more involvement and who have seemed to change their behavior toward the course and the project is most probably related to the development of educational leadership skills throughout the PBL approach within students' population of the data modeling course.

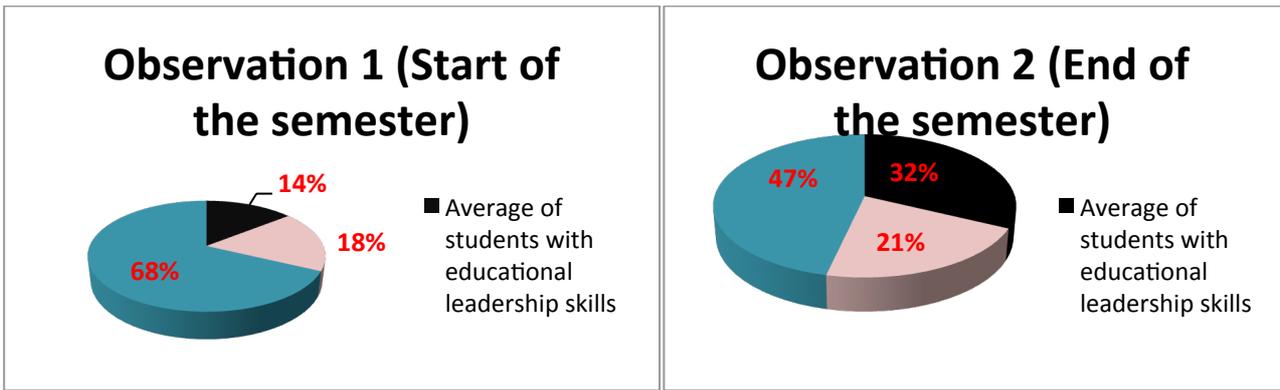


Figure 8 and Figure 9. Statistics of educational leadership skills development using the class observation.

The above class observation results show clearly that developing educational leadership skills within the data modeling course was fairly positive. The percent of students with educational leadership skills has increased with time. Indeed, at the beginning of the semester an average of around 14% of students has shown some indication of goal setting (objective) and readiness for team working. As the semester evolves, more students were falling into this group and towards the end of the semester, an average of around 32% of students was believed to acquire some educational leadership skills. The results have also shown that a lot of effort and work are still to be directed to students, as the number of students who have shown almost no involvement with the material of the course (Project) and were not interested is still high (47% toward the end of the semester).

As a summary, this example of courses that are offered at Zayed University is a really good case where students can acquire and develop educational leadership skills. The concepts embedded in this project have certainly helped many students acquire educational leadership skills (goal setting and team working) and helped them to better model their thinking and enhance their learning, and ultimately improve their academic performance.

**CONCLUSIONS AND RECOMMENDATIONS**

In Conclusion, the entire study conducted in Zayed University within a general education students’ population, has found that the development of educational leadership skills is highly effective and most positive. Indeed, these skills have proven to help students improve their learning skills as well as their performances both via approaches such as PLB and via a daily classroom awareness exercise. Educational leadership skills can therefore be vital parameters to improve education, and when these skills become integral parts of the instructional process, the benefits for students, professors and institutions will be tremendous.

Nevertheless, the process of developing educational leadership skills can face various challenges, such as the nature of general educational courses (high number of sections and students, core curriculum, assessment, number of professors), students’ resistance and ignorance of the learning concept as well as the lack of specific training needed for instructors. Therefore, at Zayed University, a lot of work and effort should still be directed to curriculum development, to application of new educational approaches, to students’ educational leadership awareness, and to educational leadership workshops.

Also, in addition to curriculum and students; professors and administrators should also be part of the educational leadership development experiment. Thus, establishing a synchronized medium and creating a leadership environment within the educational institution would without a doubt positively affect the performance of students, professors and administrators. Therefore, ongoing leadership workshops, ongoing curriculum development and ongoing educational leadership research should be part of Zayed University priorities in order to raise the level of education. Furthermore, developing educational leadership skills through courses and classroom activities should be in conjunction with outside clubs, extra curriculum activities etc to accelerate improving students’ recruitment, training, evaluation and ongoing developments. Implementing such outside of classroom activities should be considered highly cost effective approaches to successful students’ improvements. These efforts will be increasingly important for university students as those practices converge into establishing a new education system, improving its overall quality and substantially adding value to students’ learning.

In addition to applying non classical pedagogical ways of instructing such as project based learning (PBL) and problem solving, and direct incorporation of a few of the educational leadership skills within the university courses. Special courses could be designed to help developing these skills within the student population at the university level. For instance, one leadership course could be incorporated each semester for students during their general education period or prior to entering the general education university level. These courses could develop educational leadership skills and emphasize their importance in the education field and the job market. For instance, themes related to

students' culture, background and environment could be recommended for each course and within the university course outlines.

To conclude, in Zayed University, much work is still needed at the level of curriculum development, students' readiness (educational leadership skills), professor's competence and administrative cooperation. Further research is planned at the university to increase the educational leadership skills' development within the university student population, and using other courses. Also, further research would be conducted on curriculum development, professor and administrators' involvement in the domain of educational leadership skills' development. All of that is hoped to help developing education in Zayed University and in the UAE.

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