Abstract- Students face academic transitional problems when they graduate from high school to university. The coursework of university is more complicated than high school and these problems add to the difficulty students’ face coping with their new curriculum. This paper addresses the research conducted by a group of Petroleum Institute (PI) students regarding the issues which students encounter when transitioning to university. The purpose of our research was to bring these problems to the attention of university staff and faculty. In order to investigate these problems, we surveyed a bunch of PI freshman students and analyzed the results we retrieved. Results of the survey identified the issues students faced and our group was able to provide recommendations to overcome these issues.

I. Introduction

Academic transition refers to the phase when students transfer from the high school academics to more varied and relatively more involved university academics. The transition from high school to university is a wonderful experience for adolescents all over the world; however, the wonderful experience is also accompanied by major changes. Students undergo a variety of social and mental challenges during this experience. This is a life-changing and personality developing stage for students which is accompanied by them making a series of choices.

The situation is further complicated for students because they are leaving the comfort of their homes and their friends and family behind; the university comes as a challenge where students try take responsibility and make new friends. The amount of responsibility placed on their shoulders increases significantly, thus they have to become independent in a very short period of time. Our team of engineering students is conducting research to figure out the different issues associated with this transition and the difficulties young students have to overcome. The imperative point to note is that this transition involves a huge change during a short period of time. It is very hard for students to change their habits and learning styles overnight.

II. Literature Review:

There were four main themes discussed in the articles [1-4] and they are time management, social behavioral changes, curriculum importance and learning styles.

A. Curriculum importance

The curriculum of the first year plays an important role in the academic progress of the students. Susan and Mark [1] explain specific types of ways in which the university staff and academic faculty can help new students to cope with this transition and develop better learning habits. If the high school curriculum is designed in a way which is similar to university level courses, the students will be better equipped to handle their courses and will be able to devote more time and energy towards other aspects of their university lives.

B. Time management

Time management is one of the many transitional challenges faced by the first year students [2]. Van der Meer etc. argued that time management is the responsibility of the student. However, universities could play a role in helping first-year students to develop the required skills in managing their time and keeping up with their studies. The challenges that students face in managing their time are keeping up with studies, responsibility for keeping up and remembering, workload expectations and teachers’ expectations [2]. Adolescents have the luxury of their parents emphasizing the value of time management to them while at home, whereas in university, the responsibility of time management falls in the students’ lap.

C. Social behavioral changes

The differences in behavioral changes from high school to university are often attributed to lack of supervision [3]. Analysis of data has shown that students who elected to live in private dorms were already drinking higher levels in high school and their levels increased as compared to students who had other living arrangements such as on-campus housing [3]. The lack of supervision leads to increased freedom. Therefore, greater supervision is needed in dorms to end such activities. Another critical factor is “peer pressure”. In dorms, to further identify with your friends, students take to activities such as drinking or smoking to be become part of a group or culture. Stricter rules and regulations could be enforced in dormitories and
freshmen could be educated on pros and cons of un-healthy activities like drinking / smoking or bullying.

D. Learning style
The learning style of high school is very different from the learning style at university. Two major arguments discussed by Murtagh [4] are independent learning and assessment. The new students find self-studying tough and demanding. Professors at university point out that the students’ problem is lack of experience in writing and composing assignments. The students have low self-esteem about their work until they are guided and directed by giving step by step information for the whole assignment. Murtagh [4] further points out the high school teachers should spend more time in developing critical thinking among students which will better prepare them for university level assignments and assessments.

III. PURPOSE
Our team of engineering students is conducting research to find out the different causes for this transition and the different options the young students have to overcome these difficulties.

IV. METHODOLOGY
The target audience of our research was the first semester male students. We conducted surveys comprising mainly closed ended questions about time management, curriculum design, learning style and social behavioral changes. There was also a section about personal information which was kept confidential. It helped to group the students according to their educational level. We opted for closed ended questions because they are answered easily and are less time consuming. Our target was to survey about 15% of the freshman male students, which we achieved by surveying 26 students. Surveys were conducted at Satah (PI restaurant), the ILC library, the student center and the PI hostel. Results of the surveys have been presented using graphs and pie charts. In hindsight, our team could have interviewed a higher population or incoming male students and/or extended the survey to freshmen female students as well.

V. RESULTS:
We surveyed 26 male freshmen students of PI. After going through the students’ responses from the survey, we collected some quantitative and qualitative data. Results were formulated from the collected data. The survey results caught our attention as several items were unexpected.

One of our objectives was to find out how much the students were affected by transition from the high school to university. Fig.1 shows that percentage of students who had achieved “A” grades in high school had decreased by fifty percent when they reached university. Consequently, the percentage of mediocre students increased significantly, while there was a decrease in students with the lowest grade in the university. It is interesting to see that majority of the student population falls into the average category and depending on their choices could become great or below average in their educational careers.

Fig. 1: The difference between high school grades and midterm grade point average (GPA)

Fig.2 correlates the learning style with the educational background of the students. It shows that most of the students who studied in private English schools were able to cope with different learning style problems much better than other students. Interestingly, public high school students performed better dealing with university learning styles than the private Arabic high school students.

Fig. 2: The importance of study skills according to students

It is shown in fig.3 that most of the students spend more time on recreational activities rather than studying and
solving their homework. Less than 20% of the students spend more than 3 hours on studying while almost none of them spend more than 3 hours on homework.

Fig. 3: Time spent on assignments, studying and recreational activities

Fig. 4 shows the different aspects of time management and which ones are the most problematic for students. Some surprising results have been received, like only one tenth of the students did not study late or on the weekends. On the contrary, a greater percentage of the students gave priority to solving assignments.

Fig. 4: Aspects of time management

Our main motive to study social behavior in the survey was to understand the effect of new friendships on studies. Most of the students admitted to have more than thirty new friends in the university and socializing with them for at least two hours every day which accounts for over ten hours every given week. Thus, it is not surprising to know that almost all the students spend under three hours studying and that their studies are influenced by their friendships. At the same time, the majority of the students were quite socially active before coming to the PI and had their lifestyles changed after coming to the PI as several of them got heavy workload.

Finally, the curriculum section in the survey shows that most of the students are not even comfortable with timings of the courses. Major pro of this survey was that they feel that pre-requisites and co-requisites are helpful for them. It is not surprising for us to know that only a small percentage of the students dropped any course. Lastly, a huge number of students feel that studying major courses need previous knowledge and a good command of the English language.

VI. DISCUSSION

Figure 1 proved that the number of students having A-grades in high school decreased in the university. This suggests that the course work in university is either far more complicated than the course work in high school or there is a huge difference in the teaching style between the two. A possible reason for this decrease can be that students face transitional problems when they come to university but most likely, they were not prepared well enough by their high schools.
According to figure 2, students who studied in English private schools faced the least difficulty in transition, while students who studied in Arabic private schools faced the most difficulty in transition. Susan and Mark [1] and Murtagh [4] also agree with the idea that students perform better if their schools teach them with a similar learning style as in the university. This implies that the learning style of English private schools is more similar to the learning style of university. Probably, there is not enough monitoring on teachers and the school system in Arabic private schools whereas, in English private schools there is. There are several quality standards which the English private schools have to meet. Another critical point to note is that in university the standard of English helps students feel more confident in their ability to convey their feelings and thoughts. Being fluent in English early in their school lives prepares them for the rigors of the university.

Figures 3 and 4 connect the students studying lifestyle with time management. Although most of the students give priority to solving their assignments, most of them rely on others to copy it from. They procrastinate often and submit the assignments just before the deadlines. Van der Maar [2] supports the idea that procrastination leads to being unable to keep up with the workload and eventually causes pressure on students. In addition, they spend less time studying and more time on recreational activities. This caused them to study late and disturb their sleeping patterns. Another effect of this is they prefer studying on the weekends when they are far from their university friends rather than during the week.

The section on social behavior of our survey revealed to us that most of the students have more than thirty friends in the university and thus, spend at least two hours socializing with them. This can be due to the lack of social activities available on campus at the PI. As students do not get enough recreational activities from the university, they try to kill their boredom by socializing with other students. It is also likely due to the reason that the students do not have a motive to study and finish their assignments on time.

The curriculum part of the survey mentioned that the students were quite pleased with the requirement of pre requisites and co requisites. This shows that taking such courses helped them with their studies. Susan and Mark [1] agree with the phenomenon that taking such courses helps the students cope with advanced courses. On the other hand, they felt that the timings and availability of the courses were not adequate. Most probably this is because this can lead to delaying their graduation. Since, some courses are just offered in specific semesters, students might have to struggle to keep up with every course each semester. They feel the pressure of not dropping any courses because if they did drop any course, they will have to wait almost a year to take that same course again.

Figure 5 shows that most of the students chose time management as the key factor of transitional problems which they faced. One of the reasons for this to happen can be that the students do not spend enough time on assignments at first, and they feel a great deal of pressure when the deadline approaches. This is most likely due to the excess of time spent on recreational activities by the students. One of the factors which was mentioned extensively in the free response question was decrease in freedom. The positive side to this is that many adverse effects of increased freedom are mentioned in [3], like drinking alcohol, smoking drugs and increased sexual activities.

VII. CONCLUSION

Survey results were analyzed with graphs and pie-charts. The results prove that students do face academic transitional problems and our research question was to identify the causes of these problems. The survey results helped us identify causes of these problems. Time management was chosen by most of the students as the greatest problem of academic transition. Next on the list was the learning style difference between the university and different schools. It was strange to see that schools with different primary language from English were not that successful in transition. This connects us to our third research question which was to show the relation between learning style and academic transition.

The key point out of the survey results of this section brought us to the conclusion that learning style of the schools and university must be similar in order to make the transition easier. This brings us to our last research question which correlates social behavior and academic transition. The results showed that most of the students had more than thirty friends and due to lack of social activities in university, students opt to have recreational activities with them. In most of the cases, this affected the student’s academics adversely. Although the survey was held in the PI, the results found can be generalized to almost all male students in universities of the UAE and possibly, even the Middle East. That is because of the similarity in the level of their primary and secondary education.

In addition, they have similar cultural backgrounds. On the contrary, not all of these results might apply to the females because of the difference in their treatment traditionally. Since, there have not been many studies done on females about similar topic; a research could be done to investigate the academic transitions they face. Those results could later be compared to our research results. Lastly, it came to our attention from the free response question section of our survey that freedom is also an important issue which has not yet been researched upon and could be researched in the future.
VIII. RECOMMENDATIONS

When we talk about time management, no doubt we can say that students should spend more time on studying rather than on recreational activities. We can achieve this if the students really give higher priority to their assignments and solved them themselves on time. They can accomplish this if they make a schedule and stuck to it. Lastly, there should be a time management course which would teach students how to manage their time better.

In terms of social behavior, students should be motivated to study. The PI should increase the amount of social gatherings and recreational activities students have. They should monitor and closely regulate the time allowed for a student to socialize. They can make a rule like the student has to study for half the time he/she socializes for. Students should understand that they should choose a course for their own benefit and not because of their friends.

Learning styles can be improved if students are given a two weeks course before they take the placement test. Instructors should give assignments which are not that different from what they taught in class. On the other hand, students should try to develop brainstorming techniques and researching skills.

A major problem arises when students are not able to take courses and have lower credits because there is a clash in timings of the different subjects. In addition, many major courses are just offered in one semester and students have to wait a year to take it if they dropped them. This slows their graduation and demoralizes them from studying. The PI administration should find solutions for them like offering online courses.

REFERENCES