

ADU Students' Perspective toward Active Learning

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Abstract—This study examines Abu Dhabi University (ADU) students' perspectives toward active learning, especially in terms regarding the changes that the university needs to make to improve the current learning experience. The study follows the qualitative research approach by interviewing 65 students from all of the colleges and from all levels at ADU. The study sample was selected randomly and interviews were conducted during spring semester and both terms of summer classes during the 2012-3 academic year. The study reveals that ADU has provided students with an active learning experience in classrooms. This experience has included not only student involvement in classroom activities, interaction with instructors, and interaction with other students but moreover the opportunities to discuss topics and connect them to other fields and to give feedback, which motivates students by allowing them to express their thoughts and situations. The study also finds that the active learning experience at ADU depends on whether instructors have been trained to implement the strategies of active learning. For example, some instructors are professionals in this area and implement many of these strategies, including problem-based learning, team-based learning, case-based instruction, panel discussion, peer teaching, and role-playing. Finally, this study reviews student suggestions for improving the quality of active learning at ADU. Suggestions include launching new techniques to involve students in classroom activities, using technological devices, participating in educational workshops and hosting competitions, making billboards and announcements, holding workshops, and developing strong relationships with instructors.

Keywords— Active learning, students, education, teaching, Abu Dhabi University, UAE.

I. INTRODUCTION

THE core goal of the teaching and learning process is to prepare learners for their personal and professional lives. To accomplish this goal, the process of teaching and learning has continually changed over the past century and continues to change in the second decade of the twenty-first century to meet the needs of learners and societies. These changes have implemented different approaches to make the learning experience for learners an active experience. That is, traditional teaching and learning styles are no longer acceptable to learners or educational institutions, and the focus has moved to new teaching and learning styles.

Therefore, initiatives, studies, and experiments have

recently argued that active learning should be a requirement for any educational activity. The importance of active learning has been taken into account, and measures for its promotion can be seen in many societies in recent times [1]. Implementing active learning is to maximize the benefits that learners can get from educational institutions. Though active learning is a philosophy that supports the goals and outcomes of education, it is also a practice by which students learn through doing and experiencing [2]

Active learning accomplishes most when instructional activities connect what students do with what they think they are doing by assuring that what students do in class relates to their personal learning [3]. For example, it is generally recognized that energetic, team-based learning reflects the workplace and cultivates skills that are valuable and relevant in the workplace [4]. Though team-based learning is only one way to promote active learning in the classroom, all ways encourage student involvement in the classroom, student interaction with instructor, student interaction with other students studying the same topics [5]

Active learning aims to provide students with what they need to achieve progress and exert control over their learning [6]. Its methods naturally and extra-cognitively deliver challenging, interesting, and flexible learning via student consolidation, clarification, and questioning, all while assuming students bring different knowledge bases to their learning processes [7]. Extra-cognitive approaches focus on higher levels of cognition, such as analysis, synthesis, and evaluation [8].

Active learning learners construct their own meanings from the subjects taught to them, or in other words, that students exert effort into finding a way to digest the information that they have received, which no longer makes them passive receivers. Learners must link their own knowledge bases to knowledge being taught in order to make sense of how the two relate and to make knowledge cumulative. To do this, students must question and investigate; "They must compare and question, challenge and investigate, accept or discard old information and beliefs in order to progress" by doing authentic tasks is what develops the true meaningful learning [9].

Active learning in the classroom includes student involvement, interaction with instructors, and interaction with other students. One studied approach concerns the use of visual media, for children who are mostly taught using these

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means more easily understand meaning and can respond to teachers and with other students at a much faster rate [10]. By promoting discussion, learners learn more effectively. Learners have the ability to retain 10% of what they read, 20% of what they hear, 30% of what they see, 50% of what they see and hear, 70% of what they say as they talk, and 90% of what they say as they if performing the activity in question [11].

Active learning has a great impact and influence on learners in a personal sense as well. While promoting proper knowledge, attitudes, and skills among students [12]. active learning also enhances personalities by developing them into future leaders, which can be observed in the modern world [13]. Plus, it accommodates these different personalities, too; while some students learn better or prefer to learn through the use of visual aids, others learn better or prefer to learn verbally or intuitively. Successful approaches to active learning can sufficiently accommodate all preferences.

In essence, then, active learning helps to harmonize learning for all students by offering equally effective strategies for all learning styles [14]. Doing so promotes effective learning by giving students the opportunities to talk, listen, write, read, and reflect on the content [15]. It fosters critical thinking and encourages student to learn more about the material than what is simply taught by the instructor, which promotes a self-focused study method [16].

Researchers have indicated that active learning can be implemented using different tools and approaches. Most important is the use of technology, which offers learners a chance to use the Internet, in order to make the learning process more fun and memorable. On the Internet, for instance, many websites offer teachers the resources to help them to establish computer review games [17].

One key element of all learning is content review, so active learning promotes activities that enhance learning about topics that seem monotonous. Activities like these may include students involving themselves in competitive games, critical thinking synthesis, and situations allowing students to review their peers. Peer review strategies are particularly effective because they offer students a chance to be able to quiz each other on major topics, which improves total understanding. For example, flash cards allow students to partner with their classmates in order to carry out oral reviews [18].

This study, therefore, uses learners' perspectives to examine the availability of active learning at Abu Dhabi University and the possibility of implementing active learning strategies to improve the quality of the learning experience among ADU students.

II. STUDY PROBLEM

The quality of the teaching and learning experiences that ADU offers to its students has been criticized by many students over the past five years. Even though researchers have discussed this matter with students on several occasions (e.g., after class, during courses, during general meetings, and during office hours), students insist that active learning is not

practiced strongly enough at ADU. Therefore, this study examines whether the university involves students in active learning experiences and which possible avenues exist that might improve the experience of students. The study answered the following two questions:

Q1: Does Abu Dhabi University provide active learning experience to students?

Q2: How should we improve the active learning experience that ADU provides to students?

Our study was limited to the undergraduate students at ADU that were registered in either the spring semester, summer session A, or summer session B during the 2012-3 academic year.

III. STUDY APPROACH

This study followed the qualitative research approach by interviewing 65 students from four colleges—namely, the College of Arts and Sciences, the College of Business Administration, the College of Engineering, and the College of General Requirements (i.e., the University College). Our researchers worked in collaboration with students of research-report writing courses, who conducted the interviews with participants from the sample during spring and summer terms during the 2012-3 school year. The sample was selected by randomly selecting 32 male students and 33 female students, all of whom were undergraduates. The sample includes students from both morning and evening classes.

IV. FINDINGS AND DISCUSSION

The findings regarding Q1 show that ADU does provide students with educational environments that promote active learning. Students (N=45) stated that they experience active learning in their classes. For instance, students explained the different activities that constitute active learning, such as instructors talking to students about the justifications and the purposes of every assignment. Doing so involves learners in the teaching and learning process because they may express their views regarding course assignments in order to have a better understanding of the course purposes and how it prepares them to meet university standards. Students also reported that instructors encouraged students to participate in class discussion, to debate, to participate in group work and group projects. Each of these activities engages students in the learning process by enabling them to improve their communication and negotiation skills. One student reported that “ADU instructors use techniques that help students to get engaged in the class discussion and become more active in the class and break the ice between students; instructors apply active learning by organizing students into groups when it comes to class discussions and problem solving.”

With this activity, instructors enable students to connect and compare topics, to give feedback, which motivates students and instructors to examine their thoughts and situations. Instructors who had implemented active learning were

reported to use a variety of teaching approaches, including problem-based learning, team-based learning, case-based instruction, panel discussion, peer teaching, and role-playing.

Students generally stressed the idea that active learning at ADU depends on both instructors and students, though responses largely agreed that if a university employs active instructors, then students (and instructors) obtain an active learning experience in the classroom. Active instructors were qualified to be equipped with knowledge relating to the subject matter, an array of teaching methods, experienced use of technology, the capacity to deal with, interact, motivate, encourage, appreciate, and support students, as well as help them to solve their problems.

Student responses also suggested that an equally important element of active learning is the students, that if you have active, informed students, then they will engage themselves in the teaching and learning activities. Therefore, student quality is essential to cultivating and sustaining an active learning environment. Students who show interest and are motivated to learn and benefit from the instructors promote active learning activities and help instructors to enrich those activities.

Active learning also seems to depend upon the availability of supportive resources for all facilities. Because ADU has high-quality resources and facilities, this element seems fulfilled. Classrooms are well equipped with projectors, computers, and interactive boards (in some classes); the university library is rich with required and non-required readings, as well as electronic sources for all majors; plus, all classes were reportedly clean and comfortable. Furthermore, the university maintains computer laboratories, physics laboratories, chemistry laboratories, and other teaching and learning support units for all programs. All of these are resources essential to having an active learning environment.

Respondents (N=50) also mentioned that they were involved in practical activities and that these activities became part of their active learning experience at ADU. Some had enrolled in practicum courses, internship programs, field trips, open days, cultural activities, research, and academic competitions. By and large, the different educational degree programs that ADU offers require students to fulfill practicum requirements, such as practicum courses or internships, in addition to the requirements of some courses that necessitate field trips. Furthermore, the university arranges social and cultural activities for its students as well for the local community. These are requirements that ADU has fulfilled to provide students with an active learning experience.

On the other hand, respondents (N=20) stated that they had limited active learning experience at ADU. This refers to the quality of some instructors, some of whom followed more traditional teaching approaches, such as lecturing. These instructors reportedly did not use any technology, but preferred to lecture to students in a theoretical way. Even they had implemented technology at all, they preferred to read from PowerPoint slides. Such practices may derive from these instructors' lack of training, meaning that some instructors

need to update their technological skills, even though the university offers the educational technologies that instructors need in order to create an active learning environment for students.

Some instructors reportedly do not give any room for students to discuss their ideas or thoughts regarding the course topic; others were reported to not have the required knowledge and skills of how to teach the subject matter correctly; still others reportedly did not have the skills appropriate for classroom management. These lacks may point to instructors who have recently graduated and lack teaching experience.

Regarding Q2, students have several ideas and thoughts about how to improve an active learning experience at ADU. All students agreed that active learning is essential and should be required for preparing graduates for life and the job market. Some students suggested that instructors need professional development training in areas related to teaching methodologies, use of technology, classroom management, and interacting with students in order to help students to solve their problems. Other students indicated that instructors need training on how to involve students in classroom discussions and broaden the classroom activities to include a wider range of assignments and activities that enable students to learn by doing instead of by memorization. Some students even pointed out that ADU has the capacity and responsibility to choose high-quality instructors who are professionals and can implement active learning.

Above all, our findings show that it is crucial to maximize the active learning activities by associating them with all courses. That is, all instructors must move from traditional teaching methods to active learning methods. Plus, the different educational requirements for courses need to be reviewed to meet the active learning requirements and to provide the university campus with the latest technologies and infrastructure of active learning. If instructors establish positive and friendly relationships with students, students will be able to express their views freely without fear and instructors will be able to solve students' problems more easily.

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