

Analyzing The Students' Academic Performance By Learning And Doing Technology

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ABSTRACT

Predicting students' performance is a very important task in any educational system. Therefore, to predict the learner's behavior towards studies many techniques are used like clustering, classification, regression. Technology could be used to measure student performance by utilizing computer-based assessment platforms that collect and analyze data from students' interactions. Those platforms allow for in-depth collection and analysis of data, providing insights into individual student strengths and weaknesses. By correlating this data with common student success metrics, potential trends can be identified. Additionally, technology-enhanced education systems capture a rich array of data as students interact with them, which can be used to predict student performance. In this paper, student's performance prediction model and new features are introduced that have a great influence on student's academic achievement. student absence days in class and parents' involvement in the learning process. In this paper, considerable attention is on the punctuality of students and the effect of participation of parents in the learning process. This category of features is concerned with the learner's interaction with the e-learning management system. Those are benefited by the automation of many processes involved in usual students' activities which handle massive volumes of data collected from software tools for technology-enhanced learning. The researcher intentioned to find out there is a significant impact on technology education learning by doing. Thus, analyzing and processing these data carefully could give us useful information about the students' knowledge and the relationship between them and the academic tasks.

Keywords: Analyzing, academic, Performance, Learning and Doing.

Introduction:

For a long time, specialists and instructors have put a lot of concentration into understanding various techniques and methodologies for upgrading the understudy learning climate. Over time and the schooling system keeps on propelling, educators devote adequate time into growing better approaches to impart course material successfully and such that helps all students. With innovation turning out to be more pervasive in current culture, techniques for successfully executing computerized applications into the homeroom has turned into a significant concentration in the instructive local area. This section examines manners by which innovation can be executed into the educational plan to improve understudy commitment and achievement. Zero in is put on how a particular mechanical application, Edmodo, can be utilized in the students to accomplish learning objectives.

Data correspondences and innovation (ICT) proficiency has significant ramifications for social capital whether that be as instructive establishments, connections between individuals in the public eye, or widespread correspondence around the remainder of the world (Mignone and Henley, 2009). In an instructive setting, innovation can work with additional adaptable and popularity-based styles of educating and learning, give understudies more independence and command over their learning, and support the advancement of mental abilities and grasping (Buckingham, 2003). Integrating computerized advancements into the homeroom can prompt significant advances in understudy commitment and realizing which can guarantee that understudies are staying aware of the interest of an innovation-based world. Teachers assume a basic part in guaranteeing

that understudies are drawing in with innovation successfully.

Review of Literature:

Teachers by and large have inspirational perspectives towards the execution of innovation into the study hall. Teachers feel that when they are furnished with suitable preparation on proficient advanced capabilities, they can involve mechanical apparatuses in the homeroom to upgrade the educational experience for understudies (Kirksey, 2012). Instances of expert capabilities that teachers feel ought to be remembered for preparing are innovation taking care of capacities, educational program incorporation, innovation mixture into instructive exercises, giving evaluative input, empowering cooperative activities with innovation and answering emphatically to the consideration of Understudies' Points of view on Innovation.

It is essential to consider how understudies will get innovation while executing it into the homeroom. At the point when understudies see that the traits of a given innovation are drawing in and helpful to their learning, they are probably going to embrace that innovation and use it to improve their grasping obviously satisfied (Sun, Lee, Lee and Regulation, 2016). A few highlights that make innovation more interesting to understudies are adaptability, openness, convenience and in general commitment. As a rule, concentrates on show that understudies report elevated degrees of fulfillment with the utilization of instructive innovation as it permits them to intuitively participate in learning. Understudies likewise accept that innovation works with a more noteworthy grasping obviously satisfied, adds to higher scholarly accomplishment and better sets them up for the innovation subordinate labor force. Various examinations have upheld the possibility that general understudy inspiration and commitment to learning is improved by the execution of educational innovation (Mo, 2011).

More explicitly, innovation connects with understudies behaviorally (more exertion and time spent partaking in learning exercises); inwardly (decidedly affecting perspectives and interests towards learning); and intellectually (mental venture to grasp content). Whether innovation is coordinated during class time or after school hours, understudies are offered more chances to cooperate with educators, team up with peers and draw in themselves in the growing experience. Explicit innovation models that have been displayed to improve understudy commitment incorporate web-conferencing programming, online journals, wikis, person to person communication locales and computerized games (Schindler et al., 2017).

Innovation can be broadly coordinated into a few parts of the educational program. As examined, various investigations have stressed that understudies and educators maintain positive points of view towards an innovation implanted educational plan. Understudies can profit from the utilization of innovation in most branches of knowledge inside the educational program to upgrade in general commitment and comprehension of content. Educators can coordinate innovation into class illustrations, after-school exercises, tasks and appraisal techniques. With the many instructive innovation assets and applications offered, educators can modify illustration designs that won't just work with higher scholarly accomplishment for understudies, yet in addition set them up for an innovation-based labor force. One explicit mechanical application that can be utilized in the homeroom to upgrade understudy commitment and achievement is Edmodo (Edmodo, 2008).

Methodology:

The research method was quantitative method and the population of the research includes all the students of the secondary school's stage in the government schools and it was calculated sample size was 342 according to Roasoft electronic sample size calculator. The questionnaires were distributed to the students by hand. The returned questionnaire responses to the researcher's Google account were 342. This means that the rate of the returned questionnaires is 90%. Mean scores and standard deviations are used. The aim of this system is to build a world where technology and development matters. Their main objective is to tackle recent technologies to develop online learning methods for students and educational institutes.

Findings & Recommendation:

Identifying the status of students' performance in the university (table 1) shows that students are neutral about their performance level in terms of participation. Thus, it can be concluded that their level of performance in terms of participation is average as the percentage is 63.4%. The item with the highest mean amongst all the seven of this sub-section is the since its mean score is 3.95. This shows that there is an agreement that "We contribute effectively in classroom tasks". The item comes in the 2nd rank as its mean score is 3.50. Thus, there is an agreement that "We demonstrate knowledge gained from the presented material". Item comes in the 3rd rank since its mean score is 3.47. Thus, there is an agreement that "We provide creative solutions for questions". The item comes in the 4th rank as its mean score is 3.20 showing the respondents are neutral about the content stating "We prepare material to be presented in class". The item comes in the 5th rank as its mean score is 2.80. Thus, the respondents are neutral about the content stating "We remain focused throughout the class time." The item comes in the 7th rank as its mean score is 2.74 indicating the respondents are neutral about "We are able to communicate with our classmates or instructors effectively whether we work in groups, pairs, or individually". The item with the lowest mean score 2.58 is as its mean score is 2.58 indicating that the

respondents are neutral about the content stating that “We work in groups effectively where everyone has a specific mission”.

Table 1: The impact of Students’ Performance in Teams of Participation

Variables	N	Mean	Std	Interpretation	Rank
We contribute effectively in classroom tasks	342	3.95	1.049	Agree	1
We prepare material to presented in class	342	3.20	1.186	Neutral	4
We work in groups effectively where everyone has specific mission	342	2.58	1.341		7
We provide creative solutions for questions	342	3.47	1.280	Agree	3
We demonstrate knowledge gained from the presented materials	342	3.50	1.069	Agree	2
We can communicate effectively.	342	2.74	1.287	Neutral	6
We remain focused throughout the class time	342	2.80	1.295	Neutral	5

In accordance to the outcomes of the Pearson’s correlation test (table 4) between technology-based education in terms of the perceived ease of use and perceived usefulness (independent variable) and students’ performance (dependent variable), it is found out that the Pearson correlation value between technology-based education in terms of perceived ease of use is 0.707 which is a high and significant correlation value indicating that technology-based education in terms of perceived ease is correlated with students’ performance at the level 0.01 as the sig. is 0.00 \geq 0.01 where both of them impact each other negatively and positively. likewise, the Pearson correlation value between technology-based education in terms of perceived usefulness is 0.582 ** which is a high and significant correlation value indicating that technology-based education in terms of perceived usefulness is correlated with students’ performance at the level 0.01 as the sig. is 0.00 \geq 0.01 where both impact each other negatively and positively.

Table 2: Pearson’s Correlation test

	Perceived ease of use	Perceived ease of usefulness	Students’ performance
Perceived ease of use	1		
Perceived ease of usefulness	Pearson Correlation Sig. .413** .000	1	
Students’ performance	Pearson Correlation Sig. .707** .000	.582** .000	1

** Correlation is significant at the 0.01 level (2-tailed)

As a result of the data analysis process that has just been carried out through this chapter, the researcher was able to reach several findings that are worth given due attention and being discussed for the purpose of more clarity for the audience of the study. The data analysis shows that technology-based education is given attention in the Ahlia University in the kingdom of Bahrain. Employing technology is the domain of teaching and learning is being adopted in terms of the devices being used and the applications and programs that are applied by the instructors.

In addition, the association between online class attendance and academic achievement has a multitude of implications for educators and policymakers. It is recommended that encouraging students to constantly attend online classes may improve their academic performance. This could be done by creating interactive and engaging online classes that encourage students’ participation. In addition, offering incentives for attendance, such as extra credit or recognition, could encourage students to view online classes as an integral component of their educational experience.

Conclusion:

As technology becomes increasingly prevalent in the education system and workforce, it is important for students to become familiarized with various digital applications. Integrating technology into the curriculum not only provides students with the opportunity to expand their skills and succeed academically, it also prepares them for the real-world upon graduation. While educational technology shifts the learning environment from being teacher-centered to student-centered, it is important that teachers carefully think through effective methods of implementation. Since there are hundreds of technological applications out there, each with distinguishing features, it is important that teachers guide students in the process of learning about these technologies to prevent them from becoming overwhelmed. It is recommended that teachers also provide continuous feedback to students throughout their experiences with using technology. Future recommendations would include developing more research pertaining to methods of effectively implementing technology into the curriculum. While this chapter has focused on the impact that technology

has on student engagement and success, research could be done to understand methods educators can use to facilitate this process.

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