Leveraging Feedback for Excellence: A Study of Student Satisfaction in ICT Courses at Kepler College, Rwanda

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ABSTRACT

To remain relevant in the market, institutions must rethink their techniques and embrace a marketing perspective in order to adapt to the changing landscape. Student gladness is critical in higher education (HE) since it contributes to the success of institutions and individual students, especially in today's global environment. Student satisfaction refers to the level of contentment, fulfilment, and happiness that students feel as they progress through their educational journey. The primary goals of this study are to examine what influences students' satisfaction in ICT courses, at Kepler College, Kigali campus, and to develop methods for utilizing students input to improve instructions. The findings demonstrated that the course, Computer Applications 2, received an "Excellent" rating from a sizable majority of students (68.15%). The majority of students gave instructors "Excellent" evaluations (60%) followed by "Very Good" (24%), "Good" (8%), and "Fair" (4%). Students strongly agreed, giving the statement "The course objectives were clear" a high value of 4.544. The average evaluations ranged from 4.496 to 4.600 for each statement, suggesting that instructors' efforts were consistently well-received. The study recommends that carrying out long-term research will aid in monitoring the results of these recommendations over time, ensuring a continually excellent learning environment.

INTRODUCTION

Higher education institutions are growing and creating new, specialized programmes to meet the rising demand for education. These institutions need to show prospective students what makes them different in order to compete in the market (Matti, Kai, Caitlin, & Mehak, 2021). Universities must therefore adopt a mentality that facilitates the creation of cooperative projects with their students, emphasizing effectiveness and showcasing a commitment to strengthening cooperative management and educational networks with a focus on excellence (Carmen, et al., 2021). To remain relevant in the market, institutions must rethink their techniques and embrace a marketing perspective in order to adapt to the changing landscape. As a result, the higher education industry is shifting into increasingly competitive market contexts, putting certain institutions' viability at risk (Mallika Appuhamilage & Torii, 2019).

Given the strong connection between these requests and academic experiences rather than degree goals, both, institutions and students might be more inclined to respond to them attentively (Steve, Duncan, Asha, & Robert, 2023). Student gladness is critical in higher education (HE) since it contributes to the success of institutions and individual students, especially in today's global environment. Because of significant technology improvements, the HE industry has become more competitive (Wan & Elaine, 2023). Students attending higher learning educational institutions want to see the system improved and their education improved. They place a high importance on things like accessibility, immaculate facilities, a top-notch educational programme, services offered by the college, and extra chances for professional and personal growth including employability enhancement programmes and value-added courses (Anita & Meghana, 2022).

Student satisfaction refers to the level of contentment, fulfilment, and happiness that students feel as they progress through their educational journey. It comprises their total feeling of well-being and can be influenced by a variety of elements such as academic achievements, social relationships, and the quality of instruction and resources provided by the educational institution. Student satisfaction is important because it influences student retention rates, academic achievement, and overall performance in higher education (Alka & Ravi, 2023). External factors play a significant impact in determining student satisfaction levels with online learning. Some of the highlighted criteria are the university's infrastructure facilities, which include cutting-edge ICT facilities, appropriate ICT facilities, stimulating ICT facilities, and access to teaching materials (Rozaini, et al., 2022). Institutions must guarantee that they meet the requirements and expectations of all stakeholders. This is because their pleasure with the institution's services is critical in creating its legitimacy. To improve the quality of higher education, it is vital to go beyond the traditional approach of quality assurance and adopt a quality culture (Shivangi, 2022).

With the growing sector of ICT education, worldwide, makes it imperative to offer top-notch courses that satisfy the demands of students. It might be difficult to comprehend the variables that influence student satisfaction and to use

their criticism for development. The primary goals of this study are to examine what are the influences students' satisfaction in ICT courses, at Kepler College, Kigali campus, and to develop methods for utilizing students input to improve instructions. It is expected that the findings and recommendations of this study will create the foundation from which the ICT teaching team, at this institution, can grow and contribute to the credibility of our college as well as to the satisfaction of the students.

LITERATURE REVIEW

To have insights from the previously conducted research worth more in scientific research as this bring the researchers understanding up to acquire the meaning of the field and the needs to enrich their research. In this case, we are reviewing various articles that contributed in this field of understanding and/or assessing students' satisfaction especially in higher learning education.

A study entitled "*Student Satisfaction Scale Development and Application for Sport Management in China*" of Liu, Wang, & Wu (2017). Researchers, argued that in order to evaluate how well colleges and universities in America and Europe are performing, one must consider student happiness. With an emphasis on student happiness in particular, it has become a standard indication in the assessment process. As a result, there has been a great deal of study conducted globally on higher education, with a particular focus on comprehending the idea and quantifying student happiness. Higher education in the US has also demonstrated that addressing students' needs, raising educational standards, and determining future course require a high degree of student satisfaction. Research in the twenty-first century has focused on creating measuring tools, conducting empirical studies, and deciphering the definition of student satisfaction. Student satisfaction surveys have grown in importance as a strategy for universities throughout the world, especially in developed nations, since they support prospective students in their school selection, assess the quality of instruction, and enhance the relationship between schools and students.

As of Anita & Meghana (2022) in their "*Student satisfaction survey: a key for quality improvement in the higher education institution*"; stated that before enrolling, students assess an institution's resources and calibre. Usually, they do this by looking through the institution's website, admission portals, peer reviews, and public opinion. With a focus on enhancing infrastructural facilities, service quality, welfare measures for students and staff, and overall satisfaction with the educational experience, the main activities include teaching, learning, evaluation, research, extension activities, and innovation. Students in higher education want an enhanced educational experience and a better system that includes more opportunities for employment, high-quality education, comprehensive institutional services, well-equipped infrastructure, accessibility, and additional value-adding courses.

The study, "*The impact of loyalty on the student satisfaction in higher education: A structural equation modeling analysis*" by Mallika Appuhamilage & Torii (2019) that stated that the notion of student loyalty and happiness is becoming more important as the danger of global rivalry among educational institutions develops. The higher education sector is moving towards more competitive market models, which might jeopardize the viability of certain existing institutions. Globalization and the digital revolution have also created a demand for new and varied subjects of study in education. Simultaneously, these variables have the potential to affect students' satisfaction levels in their learning environments as well as their decisions to enroll in universities. One of the main reasons why there is an increasing focus on researching student satisfaction is because higher levels of student satisfaction and loyalty can lead to a stronger competitive advantage.

Also, a paper from Vazquez, M. et al. (2022), entitled "*Student satisfaction in university students: A systematic review of the literature*". In this study, researchers argue that the happy state that a person experiences when they feel that their expectations have been met is called satisfaction. When students' expectations and academic standards are met, it refers to the degree of contentment and enjoyment they experience. The results of the performed research indicate that there was a rise in publications on the topic in 2019, with the majority of articles coming from countries in Latin America. Questionnaires were mostly employed to investigate undergraduate students, and the analysis was mixed. The importance of this study resides in its capacity to identify the variables that broadly impact student satisfaction, providing insightful information for developing efficient school policies and tackling problems like academic underperformance, school-related anxiety, and student attrition. The importance of this study resides in its capacity to identify the variables that broadly impact student satisfaction, providing insightful information for developing efficient school policies and tackling problems like academic underperformance, school-related anxiety, and student attrition. It is recommended that further research be done in this field.

Lastly, we reviewed a study by Negm, E.M. (2023), entitled "*A student's satisfaction model for an executive education blended learning approach, considering aspects for marketing applications*"; which argues that "Student satisfaction" describes the feelings that students feel about the value they believe they have gained from the educational resources and materials they have used in return for their time and money. High levels of pleasure have been found to increase students' commitment to online learning since it influences their motivation to use the platform going forward. Students who receive technical support and have access to sufficient technology are less likely to be dissatisfied. As a result, it's critical to establish open lines of communication regarding course assessments from the outset. Tests with an acceptable amount of difficulty can positively affect students' interest and satisfaction, whereas tests that are ineffective and impose undue expectations on them might cause a decline in motivation.

These research findings assist us obtain a better grasp of student satisfaction in higher education and highlight its critical role in shaping educational institutions' future. Future study should investigate and expand our understanding of the factors that influence student satisfaction, resulting in better educational experiences and student accomplishment.

METHODOLOGY

The aim of this study is to study student satisfaction in ICT courses at Kepler College, Rwanda, to improve ICT education through feedback. Establishing a robust mechanism to collect and assess feedback would help the college better understand student expectations, identify areas in need of improvement, and raise the calibre of its ICT programmes. The ultimate objective is to enable Kepler College to keep an eye on its programmes in order to meet the evolving demands of its students and deliver first-rate ICT courses.

An exploratory quantitative research technique is used to match the study with the aforementioned goal. Because a survey questionnaire is a good fit for this study's descriptive character, it is used to gather data. The aforementioned technique is used to a sample of 125 Kepler college students, of whom are of first year of Southern New Hampshire University program, and enrolled to study the Computer Applications 2 module, Microsoft Office Excel, Video Editing, and Microsoft Office PowerPoint parts, are determined to be accountable for the outcomes. The students are distributed in six sections from A to F. A questionnaire of 16 questions is shared in Google Form.

Comprehensive information on the methodology, calculations, and outcome of the Likert scale analysis exercise may be found in the paper that follows. Students' satisfactions and preferences were rated on a 5-point Likert-type scale, with Strongly Disagree to Strongly Agree being the highest score. Descriptive and inferential statistics were also, chosen to be used in the data analysis. Descriptive analysis involves calculating the item mean, whereas inferential statistics needed data to be displayed as frequencies and percentages. Furthermore, we evaluated the average scores of students on their opinions regarding various aspects of attending class.

FINDINGS AND DISCUSSION

The research results are shown below according to the order of the questionnaire. Where the students have to react on the questions such as: What overall rating would you give to the course? What overall rating would you give the teacher? Would you recommend this course to other students? And provide their opinions on different given statements what focus on the effectiveness of the content and the preparedness of teachers.

Sections

Figure 1 - Students distribution per sections

segment F included approximately 19.69% of the whole dataset and was determined to be the most frequently investigated segment among those examined. Section A, which accounted for 15.75% of the data, was just behind. This data emphasizes how crucial these portions are to the dataset. Conversely, Sections B and E accounted for 14.17% and 14.96% of the dataset, respectively, and Sections D and C made up 9.45% and 11.81% of the data, demonstrating their notable presence. These results highlight the various degrees of representation in each segment and provide insightful information on the makeup of the dataset. The understanding of this is essential for next data-driven studies and conclusions.

Figure 2 - Course effectiveness rating

A significant proportion of students, precisely 68.15%, gave the course, Computer Applications 2, an "Excellent" rating, signifying a high degree of satisfaction. This robust recommendation underscores the efficacy and calibre of the course, given that a sizable majority of students thought well of it. It is also important to note that 24.44% of students chose to give the course a "Very Good" rating, demonstrating the course's strong positive impact on a sizable section of the class. Conversely, although being less common, the "Good" grade nonetheless makes up an impressive 7.41% of the input, demonstrating a respectable degree of contentment. In conclusion, a large majority of students rated the course as "Excellent," indicating a solid consensus among them. This makes the course an enticing choice for anyone looking for a top-notch educational experience.
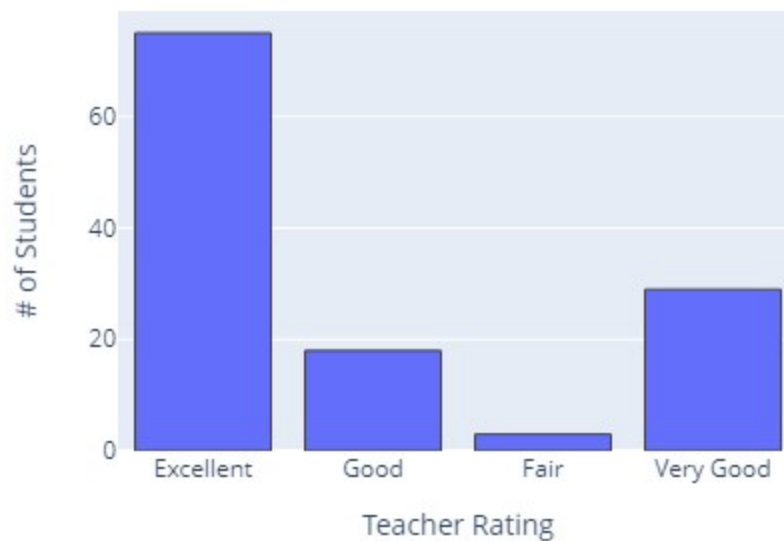
Figure 3 - Teachers' rating

The most often assigned rating is "Excellent," accounting for 60% of the replies, according to an analysis of the dataset including student ratings of their instructors. With 24% of ratings, "Very Good" is the second most popular, followed by "Good" (8%), "Fair" (4%), and "Poor" (4%). The large number of "Excellent" ratings suggests that students are generally satisfied with their instructors, which in the context of this study reflects the overall excellence of instruction. It is important to take note of the disparities in ratings since "Good" and "Fair" ratings imply that there is potential for development in some situations. This highlights how important it is to continuously assess and enhance teaching strategies in order to accommodate students' diverse preferences and expectations.

Table 1 - Statement on effectiveness of the course contents

Statements	Min	Max	Mean	SD
The course objectives were clear	0	72	4.544	0.614
The course resources were clear and well written	0	69	4.504	0.602
The assignments were easy to understand and not beyond students' level	0	59	4.368	0.709
The course contained scenarios or information that are directly relevant to the workplace	0	74	4.536	0.627
I learned new skills while taking this module/class	0	90	4.712	0.490

The high maximum scores for every statement indicate a substantial percentage of students with extremely favourable views. With an average score of 4.712, which was somewhat higher than the overall score of 0.490, the statement "I learned new skills while taking this module/class" was the most popular one among students, suggesting that the course was effective in imparting new abilities to them. On the other hand, the statement "The assignments were easy to understand and not beyond students' level" obtained the lowest average score of 4.368 and the biggest standard deviation of 0.709. This indicates that while most students thought the tasks were understandable, there was some variation in their opinions, which might be related to different personal experiences and skill levels. The results show that the course was quite good, with 4.544 and 4.504 averages for "The course objectives were clear" and "The course resources were clear and well written," respectively, receiving positive evaluations.

Table 2 - Statements on Teachers performance

Statements	Min	Max	Mean	SD
The teacher demonstrated knowledge of the subject matter	0	68	4.496	0.640
The teacher highlighted the purpose of taking the class and expected outcomes	0	71	4.560	0.529
The teacher was effective in engaging students in the course	0	73	4.536	0.601
The teacher was effective in reinforcing higher expectations in class	0	76	4.552	0.613
The teacher was effective in managing time (start and end class on time)	0	78	4.568	0.612
The teacher frequently encouraged feedback from students	0	77	4.576	0.584
I felt comfortable talking to the teacher about my concerns, challenges, or questions in the module	0	77	4.568	0.625
The teacher provided clear feedback that helped me to improve and gain additional skills/knowledge	0	79	4.600	0.567

Students assessed the assertions on a range of 0 to the maximum values shown; on average, a rating of between 4.496 and 4.600 was given to each statement. The average scores for every statement show that the instructors' work was well-received and adequate. With the highest mean score of 4.600, the statement "The teacher provided clear feedback that helped me to improve and gain additional skills/knowledge" was given credit. The low standard deviations support the constancy of the pupils' experiences. The maximum numbers show that the teachers received the best evaluations possible for each statement. When considered collectively, these findings show that instructors are seen favorably for their capacity to instruct, their active participation in the classroom, and their attention to the needs of the pupils.

CONCLUSION

According to the statistics, pupils are split up across many segments, with Segment F receiving the highest study time at around 19.69%. At 15.75%, Section A is likewise fairly represented. This distribution provides useful information for upcoming data-driven research and conclusions and emphasizes the significance of particular dataset parts.

The course "Computer Applications 2" received an "Excellent" rating from a sizable majority of students (68.15%), indicating excellent satisfaction and a strong endorsement of its quality. Additionally, 24.44% of students gave it a "Very Good" rating, showing that a sizable section of the student population was greatly impacted favorably by the course. "Good" evaluations were less prevalent (7.41%), but they nevertheless indicated a reasonable degree of satisfaction. Ultimately, the high percentage of "Excellent" ratings indicates a high degree of student agreement, which makes the course a desirable option for students seeking a remarkable learning environment.

The majority of students gave instructors "Excellent" evaluations (60%) followed by "Very Good" (24%), "Good" (8%), "Fair" (4%), and "Poor" (4%). This shows a general level of satisfaction with the quality of the instruction, but it also emphasizes the necessity of continuous evaluation and improvement to accommodate a range of student preferences and expectations.

The dataset offers insightful information on how students feel about the course material. Students strongly agreed, giving the statement "The course objectives were clear" a high value of 4.544. Similarly, with an average rating of 4.504, "The course resources were clear and well-written" received favourable feedback. The statement "The assignments were easy to understand and not beyond students' level" (averaging 4.368 with the largest standard deviation of 0.709) nevertheless, suggested a range of experiences and skill levels. However, with an average rating of 4.536, the statement "The course contained scenarios or information relevant to the workplace" was perceived favorably. Finally, with an average rating of 4.712, "I learned new skills while taking this module/class" obtained the greatest rating.

The average evaluations ranged from 4.496 to 4.600 for each statement, suggesting that instructors' efforts were consistently well-received. The statement that garnered the highest average rating of 4.600, "The teacher gave me clear feedback that aided in my improvement and acquisition of additional skills/knowledge," demonstrated how successful the teachers were in offering insightful criticism. The low standard deviations imply that students are in good agreement, which supports their favourable opinions of teachers' work even more.

RECOMMENDATION

The study recommends that the college should stick to its successful teaching strategies while also emphasizing ongoing development, segment analysis, and more precise assignment writing. Encouraging educators to grow as professionals, getting student feedback, and exchanging effective teaching strategies will all help to raise the standard of instruction. In order to resolve discrepancies in student assessments, it is also critical to encourage diversity and inclusion in the classroom. Last but not least, carrying out long-term research will aid in monitoring the results of these recommendations over time, ensuring a continually excellent learning environment.

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