ISSN 2522-6398 Vol. 7, Issue 8: 121-130, DOI: 10.25236/FER.2024.070820

A Case Study on Student Satisfaction in a Programme Involving Both Online and Hybrid Learning

Min Gao, Jiaying Chen, Jiayu He, Jiafang Li

Lingnan University Hong Kong, Hong Kong, 999077, China

Abstract: *This study uses quantitative and qualitative approaches to evaluate student satisfaction with the IHEM Programme at Hong Kong Lingnan University, examining elements such as teaching modes, course content, and workloads. Following adjustments due to COVID-19, a survey of 30 students showed that 67% are satisfied or very satisfied, suggesting that online and hybrid teaching methods did not detract from their satisfaction. Results indicate that students value course content, arrangement, and workload more than the teaching mode in assessing their satisfaction with the program.*

Keywords: *Higher education, Hybrid learning, Covid-19, Satisfaction, Teaching mode, Online teaching*

1. Introduction

With globalization accelerating, international higher education has rapidly expanded. Recent shifts have seen Chinese mainland students increasingly pursue studies abroad, motivated by factors such as political considerations and professional qualifications[1], rather than solely academic pursuits. Self-funded studies have become more common since the late 1990s, and students' fields of interest have diversified beyond traditional science-related areas to include management, business economics, and engineering[2].

In the last two years, the COVID-19 pandemic has significantly altered international student mobility[3], with many students from the Chinese mainland favoring destinations like Hong Kong SAR for its strategic geographic and cultural advantages . Hong Kong now ranks as the second most popular study destination after the United States[4], offering local universities a unique opportunity to attract and retain these students.

The pandemic has prompted a shift to online and hybrid learning models, raising questions about their acceptance and effectiveness[5]. This study analyzes the satisfaction of Chinese mainland students enrolled in the International Higher Education and Management (IHEM) program at Lingnan University (LU) to understand their experiences and perspectives on these new learning modalities[6]. By investigating the factors influencing student satisfaction and the challenges they face in hybrid and online environments, this research aims to provide actionable insights for improving student experiences and inform strategies for universities in Hong Kong SAR to engage more effectively with this student population[7].

2. Literature Review

2.1. The Impact of COVID-19 on Student Mobility and Teaching Mode in Higher Education

The COVID-19 pandemic has transformed all facets of higher education, notably shifting teaching methods to online platforms while discontinuing many in-person activities[8]. This shift has required administrators to rethink their strategies to maintain teaching quality and student engagement. Traditionally, international student mobility favored Western countries, but recent trends show a pivot towards Asian destinations like Hong Kong, now ranked second in popularity among Chinese students, largely due to its proximity and perceived safety during the pandemic[9].

The pandemic's ongoing impact has led to decreased mobility due to safety concerns, visa restrictions, and a reevaluation of the risks associated with overseas study. These factors necessitate flexible delivery models to accommodate both present and absent students, ensuring academic continuity via online and

ISSN 2522-6398 Vol. 7, Issue 8: 121-130, DOI: 10.25236/FER.2024.070820

hybrid formats and fostering an engaging learning environment remotely[10].

2.2. Students Satisfaction in Higher Education

Measuring student satisfaction through surveys and interviews is a standard practice in higher education[11], aiming to assess and enhance the operational quality of programs[12] . Unlike compulsory education, higher education involves multiple stakeholders, including students and instructors[13], each with distinct expectations and standards for educational quality[14]. The study's focus on a self-financed master-level program requires understanding these varied perspectives because its financial model depends heavily on tuition, making student satisfaction a critical metric[15]. Our survey, thus, is tailored to capture students' specific perceptions of program content and delivery, which include educational content, workload, instructor support, and infrastructural facilities, informed by comprehensive prior research[16].

3. Methodology

This study assesses student satisfaction at Lingnan University using quantitative and qualitative methods, focusing on the impact of online and hybrid teaching modes. The research involved 66 International Higher Education and Management (IHEM) students from the 2021-2022 academic year, with 30 completing questionnaires and three participating in interviews. This sample navigated academic challenges during COVID-19, influencing their learning preferences and mobility.

Demographically, 90% are under 30 years old, divided into 47% aged 20-25 and 43% aged 26-29. Attendance modes are split between 43% on weekends and 57% on weekdays. Employment data shows 40% are employed full-time, 7% part-time, and 53% unemployed, with 67% having prior online learning experience, primarily from non-"211" or "985 Project" universities. Detailed demographics are in Table 1.

Table 1: Basic data of questionnaire

Basic data of questionnaire				
Demographic Information	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
Your gender	A. Male	5	16.67	16.67
	B. Female	25	83.33	100.00
Your age:	20-25	14	46.67	46.67
	26-29	13	43.33	90.00
	30-35	2	6.67	96.67
	36-39	1	3.33	100.00
What mode do you attend?	Weekday mode	17	56.67	56.67
	Weekend mode	13	43.33	100.00
Your educational background:	"211 Project"Universities	8	26.67	26.67
	Universities not in -211 Project" and 985 Project"	19	63.33	90.00
	Overseas universities	1	3.33	93.33
	None of them	2	6.67	10000
Your working status:	I have a full-time job	12	40.00	40.00
	I have a part-time job	2	6.67	46.67
	I'm not working now	16	53.33	100.00
Total		30	100.0	100.0

Based on literature research, the questionnaire was developed to cover general student satisfaction, course content, course delivery, and basic student information. Specifically, 4-6 questions targeted the experiences of students in different learning modes, including fully online and hybrid. The questionnaire comprised 25 questions tailored to these dimensions. It was then distributed via an online platform known as Wenjuanxing, capturing both broad and specific aspects of course content and delivery. As shown in Table 2.

ISSN 2522-6398 Vol. 7, Issue 8: 121-130, DOI: 10.25236/FER.2024.070820

Table 2: Content & Delivery – items and sub-items

Content & Delivery – items and sub-items		
Main Category	**Items**	**Sub-items**
Course Content	General Content Quality	Overall quality of the course content
	Material content	What do you think about the course assignment?
		Which type of assignment do you prefer to do?(You can choose as many choices as you want)
	Workload	About the workload of reading.
		About the workload of writing.
	Content Arrangement	What do you think about the content arrangement?
Delivery	General Teaching Quality	Overall quality of the teaching
		The opportunity to interact intellectually with faculty and classmates
	Helpfulness of Instructors	Overall quality of academic advising and guidance
		Overall, how helpful are the professors you met in the programme?
		Instructors are rich in content knowledge.
		Instructors have good teaching skills.
		Instructors know students' needs well.
	Helpfulness of Non-academic Staffs	How helpful are the school administrative staffs to the issues you face?
	Quality of Facility	Quality of facility (e.g., online: accessibility of learning materials; offline: on-campus facility)

In this study, SPSS software will be employed for statistical analysis of survey data, including descriptive statistics, correlation analysis, linear regression, and chi-square tests to explore relationships between student satisfaction, workload, demographic variables, and other questionnaire dimensions.

Post-survey, interview topics and questions were refined based on insights from the literature review and initial survey results. Interviews will cover four main areas: student satisfaction, course delivery, course content, and learning mode, aiming to enhance the understanding of the quantitative data from the surveys.

1) Do you work on weekends or weekdays?

2) Based on your current work or study situation, do you prefer to study offline or online?

3) Do you think there is any difference between the classroom knowledge obtained offline and online? If so, why is there any difference?

4) Do you study online or offline? How is your weekly study schedule?

5) Do you feel left behind when both online and offline students were involved in the class? (for online students)

6) How do you interact with online students when you have both online and offline students? Can you feel their presence? (For offline students)

7) What do you think are the advantages of online courses compared with the offline courses you have taken before?

8) Compared with previous offline courses, what do you think are the disadvantages of online courses?

9) Did all of the above affect your overall satisfaction with the course? If so, can you give some examples?

Three survey respondents provided their WeChat details and were interviewed on this platform in Chinese to ensure clear communication. The data from these interviews were categorized and combined with questionnaire responses for analysis. This approach allowed for a detailed examination of the relationship between student satisfaction and various factors such as course content, delivery, learning

ISSN 2522-6398 Vol. 7, Issue 8: 121-130, DOI: 10.25236/FER.2024.070820

mode, and student background. The integrated data supported a thorough discussion of the overall findings.

4. Results

4.1. General Satisfaction

Figure 1 shows that 67% of students are satisfied or very satisfied with the IHEM program, appreciating aspects like the curriculum, teacher quality, and after-school services. However, 7% are not satisfied and 3% are very dissatisfied, with no further feedback obtainable from these respondents. Another 23% have neutral views, indicating potential gaps in meeting student expectations. While 93% believe the program meets their needs, there is room for improvement to enhance distinctive features and increase satisfaction.

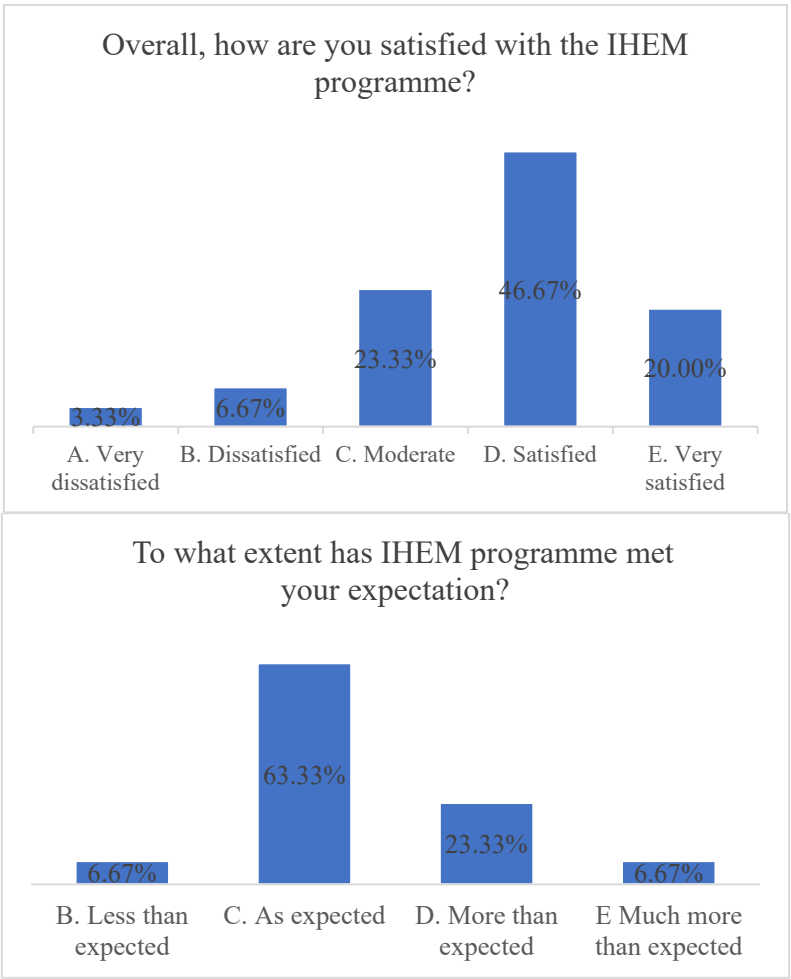

Figure 1: General Satisfaction and expectation

4.2. Content

Analysis of course content shows its significant impact on student satisfaction, with a correlation coefficient of 0.51 (P-value = 0.004), suggesting that content quality strongly influences student perceptions. However, other factors such as workload for writing and reading, course assignments, and content arrangement did not show significant correlations with satisfaction. These findings, detailed in Table 3, suggest that while course content is a crucial determinant of satisfaction, other elements examined do not significantly affect student perceptions.

The correlation analysis indicates that superior course content design enhances student satisfaction. Hence, it is recommended that course content be tailored to closely align with students' developmental zones[17]. Effective course design should consider students' current academic levels and learning contexts,

ISSN 2522-6398 Vol. 7, Issue 8: 121-130, DOI: 10.25236/FER.2024.070820

ensuring that teaching methods and support tools effectively facilitate the achievement of educational objectives.

Table 3: Correlation

Correlation		
		1. Overall, how are you satisfied with the IHEM programme?
Overall quality of the course content	Pearson correlation	0.505**
	p value	0.004
*p<0.05**p<0.01		

4.2.1. Overall Course Content Quality

Dai (2020) emphasized the utility of frequency analysis for understanding data distribution. Applying this method to assess the IHEM course content, the results showed positive feedback: 26.67% of respondents rated the content as excellent, 46.67% as very good, and 20% as good. Only 6.67% considered it fair, and none found it poor, as shown in Table 4. This indicates that nearly 94% of students are highly satisfied with the course content.

Table 4: Frequency analysis results

Frequency analysis results				
Sub-Item	Options	Frequency	Percentage (%)	Cumulative percentage (%)
Overall quality of the course content	Excellent	8	26.67	26.67
	Very good	14	46.67	73.33
	Good	6	20.00	93.33
	Fair	2	6.67	100.00
Total		30	100.0	100.0

According to McHugh (2013), chi-square statistics are used to analyze differences between groups without assuming a normal distribution. Our chi-square analysis revealed no significant differences in the reading and writing workloads across full-time, part-time, and non-working groups, suggesting that the current workload settings are manageable regardless of employment status.

As both Murray, Pére, Geist, & Hedrick (2012) and McNamara & Nolan (2022) suggest[18], the development of both online and offline courses should prioritize well-designed course content to ensure effective teaching[19]. The upcoming analysis will further explore the material content, workload, and arrangement of the course, with specifics provided in Table 5.

4.2.2. Material Content

Most students expressed satisfaction with the current course assignments, with roughly 17% desiring more individual tasks and an equal percentage preferring increased group work. Group presentations were favored, followed by reflective journals, while exams with open questions were less popular, and teaching portfolios the least, at only 20%. Closs et al. (2022) suggest that group assignments provide unique learning experiences, particularly valued by students in full-time employment[20].

4.2.3. Workload

The primary types of workload, reading and writing, were deemed appropriate by most students, reflecting their overall satisfaction with course content. A balanced number of students voiced a desire for both more and less reading, whereas a smaller proportion suggested reducing the writing workload to alleviate study pressure, as the grading system does not effectively measure completion of reading tasks.

4.2.4. Arrangement

The content arrangement received positive feedback, with some students suggesting an increase in education-related content over higher education management topics. This preference aligns with the backgrounds of many students, primarily primary and secondary school teachers, who seek more relevance to their current roles. A minority of students from higher education professions expressed a need for more specialized content in higher education management, reflecting diverse career goals within the student body.

ISSN 2522-6398 Vol. 7, Issue 8: 121-130, DOI: 10.25236/FER.2024.070820

Table 5: Results of Content Evaluation

Course content					
Items	Sub-items	Options	Frequency	Percentage (%)	Cumulative Percentage(%)
General Satisfaction	Overall quality of the course content	Excellent	8	26.67	26.67
		Very good	14	46.67	73.33
		Good	6	20.00	93.33
		Fair	2	6.67	100.00
Material Content	What do you think about the course assignment?	A. This programme should have more group work.	5	16.67	16.67
		B. This programme should have more individual tasks.	5	16.67	33.33
		C. I'm satisfied with the current course assignment.	19	63.33	96.67
		D. others	1	3.33	100.0
	Which type of assignment do you prefer to do?(You can choose as many choices as you want)	A. Reflective journal	15	50	100
		B. Group presentation	23	76.67	100
		C. Teaching portfolio	6	20	100
		D. Exam with open questions	13	43.33	100
		E. Others	1	3.33	100
Work-load	About the workload of reading,	A. I think we should have less readings	6	20.00	20.00
		B. I think the workload of reading is suitable	18	60.00	80.00
		C. I think we should have more readings.	6	20.00	100.00
	About the workload of writing,	A. I think we should have less writings.	9	30.00	30.00
		B. I think the workload of writing is suitable	18	60.00	90.00
		C. I think we should have more writings.	3	10.00	100.00
Arrangement	What do you think about the content arrangement?	A. This programme should include more knowledge about education	11	36.67	36.67
		B. This programme should include more content about higher education management	7	23.33	60.00
		C. I'm satisfied with current course arrangement	11	36.67	96.67
		D. Other suggestion	1	3.33	100.00
		E. I'm satisfied with current course arrangement	11	36.67	96.67

4.3. Delivery

The delivery category encompasses non-content factors that influence the effectiveness of a program, including teaching quality, instructor helpfulness, non-academic staff support, and facility quality (Roach & Lemasters, 2016). Detailed ratings for these factors are provided in Table 6, and interviews were conducted to assess student experiences with online and hybrid teaching modalities.

4.3.1. Overall Teaching Quality

Student satisfaction with teaching quality is high, with no negative ratings recorded. Most students rated the teaching as excellent, appreciating the high level of intellectual interaction with faculty and peers.

ISSN 2522-6398 Vol. 7, Issue 8: 121-130, DOI: 10.25236/FER.2024.070820

4.3.2. Helpfulness of Instructors

Instructors were evaluated across five levels of helpfulness, reflecting their content knowledge, teaching skills, and understanding of student needs, based on Shulman's (1986) pedagogical content knowledge framework[21]. Feedback was overwhelmingly positive, although regression analysis showed no significant relationship between the helpfulness of instructors and the quality of academic advising and guidance. However, a positive correlation exists between teaching quality and instructors' teaching skills (detailed in Table 7).

4.3.3. Helpfulness of the Non-academic Staff

This category assessed the support provided by administrative and teaching assistants, with the majority of feedback being positive, except for one student who rated it as not helpful[22]. Regression analysis indicates a positive correlation between the quality of non-academic support and overall teaching quality (see Table 8).

4.3.4. Quality of Facility

Table 6: Delivery

Delivery					
Items	Sub-items	Options	Frequency	Percentage (%)	Cumulative Percentage(%)
General Quality	Overall quality of the teaching	Excellent	11	36.67	36.67
		Very good	11	36.67	73.33
		Good	6	20.00	93.33
		Fair	2	6.67	100.00
	The opportunity to interact intellectually with faculty and classmates	Excellent	8	26.67	26.67
		Very good	12	40.00	66.67
		Good	7	23.33	90.00
		Fair	3	10.00	100.00
Helpfulness of Instructors	Overall, how helpful are the professors you met in the programme?	Slightly helpful	3	10.00	10.00
		Moderately helpful	7	23.33	33.33
		Very helpful	15	50.00	83.33
		Extremely helpful	5	16.67	100.00
	Quality of academic advising and guidance	Excellent	8	26.67	26.67
		Very good	14	46.67	73.33
		Good	3	10.00	83.33
		Fair	5	16.67	100.00
Helpfulness of Non-academic Staffs	How helpful are the school administrative staffs to the issues you face?	Not at all helpful	1	3.33	3.33
		Slightly helpful	2	6.67	10.00
		Moderately helpful	10	33.33	43.33
		Very helpful	13	43.33	86.67
		Extremely helpful	4	13.33	100.00
Quality of Facility	Quality of facility (e.g. online accessibility of learning materials offline: on-campus facility)	Excellent	10	33.33	33.33
		Very good	10	33.33	66.67
		Good	7	23.33	90.00
		Fair	3	10.00	100.00

Facilities were rated from poor to excellent, with the majority of students expressing satisfaction. No students rated the facilities as poor, underscoring general contentment with the physical and digital learning environment.

ISSN 2522-6398 Vol. 7, Issue 8: 121-130, DOI: 10.25236/FER.2024.070820

Table 7: Helpfulness of Instructors

Helpfulness of Instructors									
	Unstandardised Coefficient		Standardised Coefficient	t	p	VIF	R^2	Adjusted R^2	F
	B	Standard Error	Beta						
Constant	4.059	0.640	-	6.345	0.000**	-	0.408	0.339	F(3,26)= 5.962, p=0.003
Instructors are rich in content knowledge.	0.491	0.333	0.501	1.477	0.152	5.056			
Instructors have good teaching skills.	-0.774	0.306	-0.833	-2.528	0.018*	4.768			
Instructors know students' need well.	-0.260	0.293	-0.249	-0.887	0.383	3.448			
Dependent Variable:Overall quality of the teaching									

Table 8: Helpfulness of the Non-academic Staff

Helpfulness of the Non-academic Staff									
	Unstandardised Coefficient		Standardised Coefficient	*t*	*p*	VIF	R^2	Adjusted R^2	*F*
	B	Standard Error	Beta						
Constant	3.715	0.600	-	6.187	0.000**	-	0.244	0.217	F(1,28)=9.041, p=0.006
How helpful are the school administrative staffs to the issues you face?	-0.490	0.163	-0.494	-3.007	0.006**	1.000			
Dependent Variable:Overall quality of the teaching									

4.3.5. Interview Specifically for Online and Hybrid Experience

In the IHEM program, hybrid teaching modes are used for both weekday and weekend students. The satisfaction survey showed that 66.67% of students are satisfied or very satisfied with this approach[23]. About one-third experienced a mix of online and face-to-face courses, with 40% studying entirely online. There was no significant difference in satisfaction between students in purely online classes and those in mixed modes.

Interviews with weekday and weekend-mode students revealed that online learning provides considerable convenience, especially for those juggling work and study. Students appreciated being able to attend sessions from any location via Zoom, though some missed on-campus interactions. They were pleased with both the quality of content and instruction, confirming that delivery mode did not impact their overall satisfaction.

Overall, the hybrid format was well-received, with students enjoying the content and interaction with peers and instructors. Despite some challenges, particularly around engagement and interaction, online learning has proven effective during the pandemic.

5. Discussion

5.1. Students' Perception about Content

Students expressed mixed satisfaction with the course arrangement; a similar number were pleased with the existing material, while others desired more educational content, and a few suggested lessening higher education management topics and guest lectures. Aligning course content with students' professional backgrounds, particularly for those in primary and secondary education, can enhance relevance and engagement, as supported by Vygotsky's Zone of Proximal Development theory [24]. The preference for group assignments highlights a desire for collaborative experiences, valued especially by working students. While the current workload is generally well-received, there's an interest in rebalancing

ISSN 2522-6398 Vol. 7, Issue 8: 121-130, DOI: 10.25236/FER.2024.070820

reading and writing tasks, with suggestions to incorporate objective assessments like multiple-choice questions to better gauge understanding. To boost satisfaction, initiating the course with a survey to tailor materials to student backgrounds and integrating more interactive and team-based activities could address diverse needs effectively. Implementing these adjustments would help create a more personalized and responsive educational environment, catering to the varied professional and personal circumstances of the students.

5.2. Students' Perception about Delivery

The shift to online and hybrid teaching modes in the IHEM program has influenced students' satisfaction with various delivery aspects. Instructors' ability to engage students remotely has become paramount, highlighting the need for enhanced digital teaching skills to maintain student engagement and satisfaction, as direct interactions are less feasible online (Shulman, 1986). Additionally, the role of non-academic staff has become more critical yet less accessible in virtual settings, underscoring the need for improved strategies to increase their visibility and support. The essential role of technology in education is evident, requiring reliable digital infrastructure like robust internet connectivity and quality audio-visual equipment to facilitate effective online learning. Students have expressed a general contentment with the delivery methods but advocate for more engaging and interactive activities that can better integrate online and on-site participants, thereby fostering stronger connections and dynamic interactions. To enhance online teaching efficacy, Meyers (2008) and Pelz (2010) suggest adopting strategies that promote active student participation and presence[25], which may include reevaluating assignment structures and providing training for instructors in online engagement techniques[26]. Regular inclusion of non-academic staff through seminars and orientation sessions could replicate a more traditional campus experience, enhancing the program's overall educational value. By focusing on these elements, the IHEM program can deliver not just content but also a supportive, engaging, and inclusive educational environment for all students.

6. Limitation

This study has limitations, including a small sample size of 30 questionnaires that may not capture broader student perspectives, potentially leading to deviations in the statistical analysis. The scales used for responses were sometimes ambiguous, possibly confusing participants. Furthermore, the focus was primarily on interactions within teaching modes, omitting broader aspects like classroom organization[27]. Additionally, the study lacked diverse indicators of student satisfaction such as course innovation and the relevance of teaching materials and credit alignment.

7. Conclusion

The findings from the questionnaires and interviews suggest that students are generally satisfied with the IHEM program, which employs both online and hybrid teaching methods. Despite this satisfaction, the ongoing pandemic necessitates further refinement in pedagogical methods and content quality control. Moreover, to stand out among similar programs in Hong Kong, enhancing involvement with non-academic staff could help replicate a more campus-like experience, extending beyond merely completing assignments and attending classes.

References

[1] Duan, S,F.(2017). Review and trend prospect of Chinese students studying abroad -- Based on the analysis of 2016 report on international mobility trend of Chinese students Journal of Qiqihar University (Philosophy And Social Sciences) (03), 175-178.

[2] Fang, S,J. (2010). International mobility of Chinese students: driving forces and risk prevention (doctoral dissertation, East China Normal University) https://kns.cnki.net/ KCMS/ detail/detail. aspx? dbname=CDFD0911&filename=2010198443.nh

[3] Subedi, S., Nayaju, S., Subedi, S., Shah, S. K., Shah, J. M. (2020). Impact of e-learning during COVID-19 pandemic among nurshing students and teachers of Nepal. International Journal of Science and Healthcare Research, 5(3), 9.

[4] UNESCO Institute of Statistics. (2019). Education: Inbound internationally mobile students by country of origin – students from China, both sexes. Paris: UNESCO Institute of Statistics.

ISSN 2522-6398 Vol. 7, Issue 8: 121-130, DOI: 10.25236/FER.2024.070820

[5] Pokhrel, S., & Chhetri, R. (2021). A literature review on impact of COVID-19 pandemic on teaching and learning. Higher Education for the Future, 8(1), 133-141.
[6] Pitman, T. (2000). Perceptions of academics and students as customers: A survey of administrative staff in higher education. Journal of Higher Education policy and management, 22(2), 165-175.
[7] Jaques, D. (2000). Learning in groups: A handbook for improving group work. Psychology Press.
[8] Manfuso, L. G. (2020, April 15). How the remote learning pivot could shape Higher Ed IT. EdTech Magazine.https://edtechmagazine.com/higher/article/2020/04/how-remote-learning-pivot-could-shape-higher-ed-it.
[9] Bodycott, P. (2009). Choosing a higher education study abroad destination: What Chinese mainland parents and students rate as important. Journal of Research in International Education, 8(3), 349–373.
[10] Amoah, P., & Mok, K. H. (2020). The Covid-19 pandemic and internationalisation of higher education: International students' knowledge, experiences and wellbeing. June 23, 2020. Emerald Blog https://www.emeraldgrouppublishing.com/topics/coronavirus/blog/covid-19-pande
[11] Aldridge, S., & Rowley, J. (1998). Measuring customer satisfaction in higher education. Quality assurance in education.
[12] Pariseau, S. E., & McDaniel, J. R. (1997). Assessing service quality in schools of business. International journal of quality & reliability management.
[13] Gruber, T., Fuß, S., Voss, R., & Gläser-Zikuda, M. (2010). Examining student satisfaction with higher education services: Using a new measurement tool. International journal of public sector management.
[14] Harvey, L., & Green, D. (1993). Defining quality. Assessment & evaluation in higher education, 18(1), 9-34.
[15] Hennig-Thurau, T., Langer, M. F., & Hansen, U. (2001). Modeling and managing student loyalty: An approach based on the concept of relationship quality. Journal of service research, 3(4), 331-344.
[16] Roach, V., & Lemasters, L. (2006). Satisfaction with online learning: A comparative descriptive study. Journal of Interactive Online Learning, 5(3), 317-332.
[17] Hassan, M. M., Mirza, T., & Hussain, M. W. (2020). A critical review by teachers on the online teaching-learning during the COVID-19. International Journal of Education and Management Engineering, 10(5), 17.
[18] Murray, M. C., Pérez, J., Geist, D., & Hedrick, A. (2012). Student interaction with online course content: Build it and they might come. Journal of Information Technology Education: Research, 11(1), 125-140.
[19] McNamara, J. P., & Nolan, M. F. (2022). An Approach to Determining, Delivering and Assessing Essential Course Content in a Medical Human Anatomy Course. Clinical Anatomy.
[20] Closs, L., Mahat, M., & Imms, W. (2022). Learning environments' influence on students' learning experience in an Australian Faculty of Business and Economics. Learning Environments Research, 25(1), 271-285.
[21] Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. Educational researcher, 15(2), 4-14.
[22] Hunter, F. (2018). Training administrative staff to become key players in the internationalization of higher education. International Higher Education, (92), 16-17.
[23] Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. Interactive learning environments, 1-13.
[24] Sun, L., & Zhang,S. (2021). Research status of dynamic evaluation of general capability based on ZPD Theory. Cultural and Educational Data (25), 153-156.
[25] Meyers, S. A. (2008). Using transformative pedagogy when teaching online. College Teaching, 56(4), 219-224.
[26] Pelz, B. (2010). (My) three principles of effective online pedagogy. Journal of Asynchronous Learning Networks, 14(1), 103-116.
[27] Cohen, E. G., & Lotan, R. A. (2014). Designing groupwork: strategies for the heterogeneous classroom third edition. Teachers College Press.