Analysis of correlation between students' engagement and student success

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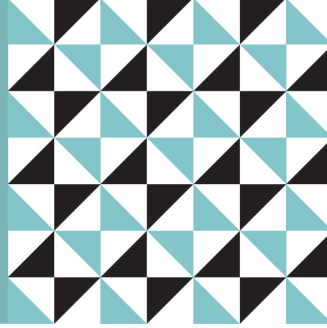
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'All learners can learn'

(UNESCO 1994, Department of Education 2001)

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The study investigates the relationship between student engagement and student success at Durban University of technology in KwaZulu Natal. Student engagement has long been recognized as a critical factor in shaping the academic success and overall well-being of students within educational institutions. The level of engagement exhibited by students in their learning experiences encompasses various dimensions, including academic participation, social interactions, and involvement in extracurricular activities. Extensive research has underscored the positive relationship between student engagement and academic achievements, highlighting the multifaceted benefits it brings to students' educational journeys.

ORIENTATION/BACKGROUND

Analysis of correlation between students' engagement and student success

According to SASSE (2023), student engagement can be defined as what students do (the time and energy they devote to educationally purposeful activities) and what institutions do

Student engagement and student success are essential aspects of educational outcomes that have garnered significant attention in recent years.

Understanding student engagement can offer insight into important student outcomes such as student performance, progression and retention (Delfino, 2019).

It is thus important to understand how student engagement can be fostered.

PROBLEM STATEMENT

Analysis of correlation between students' engagement and student success

NUMEROUS STUDIES HAVE EXPLORED THE RELATIONSHIP BETWEEN STUDENT ENGAGEMENT AND ACADEMIC ACHIEVEMENT (FREDRICKS ET AL., 2004; KUH, 2009), EMPHASIZING THE CRUCIAL ROLE ENGAGEMENT PLAYS IN FOSTERING STUDENT SUCCESS.

HOWEVER, DESPITE THE GROWING BODY OF RESEARCH, THERE IS A NEED FOR A COMPREHENSIVE EXAMINATION OF THE MULTIFACETED FACTORS THAT INFLUENCE STUDENT ENGAGEMENT AND, SUBSEQUENTLY, IMPACT STUDENT SUCCESS (DELFINO, 2019).

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RESEARCH PURPOSE

This study aimed to uncover and analyzing the factors influencing the engagement and academic success of students at the Durban University of Technology (DUT).

Analysis of correlation between students' engagement and

Student success

CRITICAL THEORY

Critical theory provides a theoretical framework to surface and challenge the biases and oppressive structures that can undermine learning and alienate students.

Applying critical theory to student engagement is about creating a more just and inclusive educational experience, where all students have the opportunity to thrive and reach their full potential.

The importance of applying critical theory to student engagement lies in its potential to promote equity, foster inclusivity, challenge assumptions and empower students.

- Analysis of correlation between students' engagement and student success

LITERATURE REVIEW

Student engagement

According to Fredericks et al. (2004), student engagement is a multi-faceted concept made up of three dimensions, namely: behavioural, emotional and cognitive.

Indicators include student retention and educational attainment.

Refers to the effort expanded by students towards their learning, including both formal and informal activities (Krause & Coates, 2008).

Kuh et al. (2011) define student success as a favourable student performance outcome

According to Johar et al, (2023) Student engagement is a form of student involvement in activities and conditions likely to generate high quality learning

- Analysis of correlation between students' engagement and student success

LITERATURE

Authors	Findings
Delfino, 2019; Lee, 2014; Martínez et al., 2019; Schnitzler, Holzberger & Seidel, 2021; Schreiber & Yu, 2016	• Student engagement is a reliable predictor of academic performance.
Chipchase et al., 2017; Schnitzler et al., 2021	• Disengagement has been suggested to lead to significantly lower academic performance
Leach, 2016; Peters et al., 2019	What affects engagement and student success? • Formally introducing students to the university and programme • Available support structures • Quality of interactions between students and lecturers • Involvement of student representatives in governance processes

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RESEARCH METHODOLOGY

Analysis of correlation between students' engagement and student success

- **Research method:** The mixed-methods research method.

- **Research strategy:** Pragmatism

- **Target population:** 350 students registered in the Human Resources Management programme.

- **Sample:** 150 second-and-third year students.

RESEARCH METHODOLOGY

Analysis of correlation between students' engagement and student success

Data collection: student performance data, **f**ocus groups discussions and self-administered questionnaires.
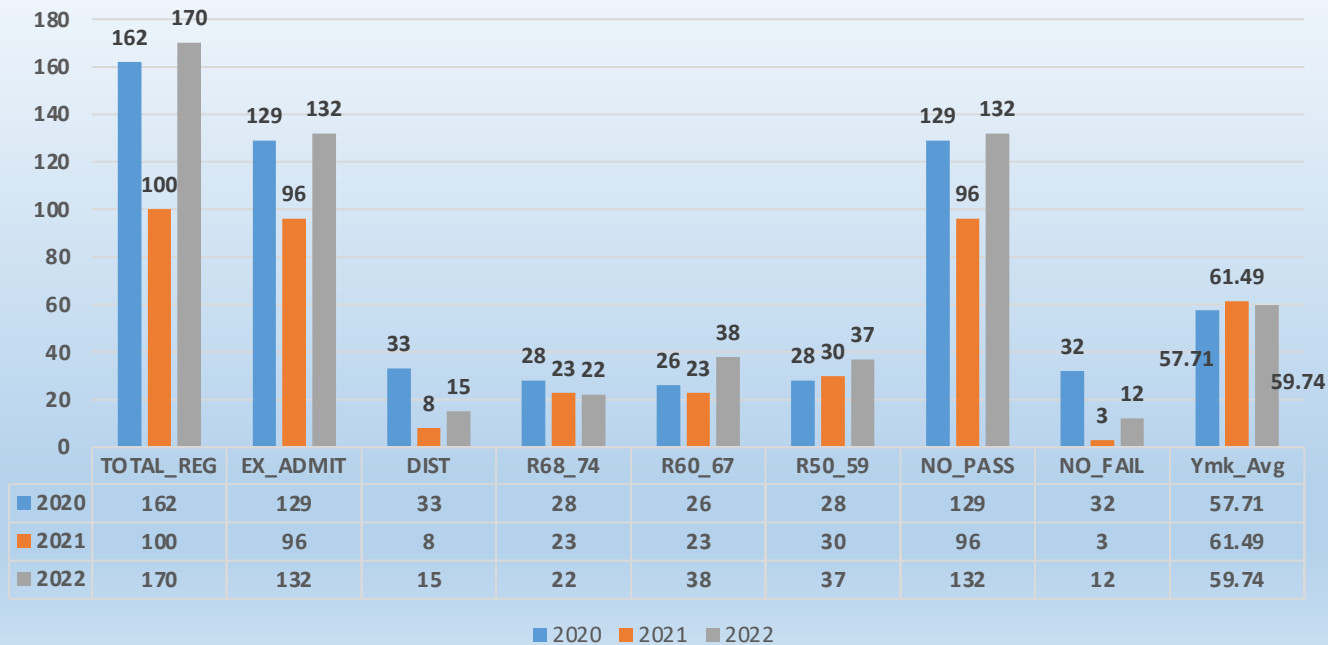
Data analysis: The quantitative data were first analysed (Excel) followed by the qualitative data analysis (thematic analysis).

Ethical considerations: the study will be guided by DUTs ethical considerations (voluntary participation, informed consent, confidentiality and right to withdraw).
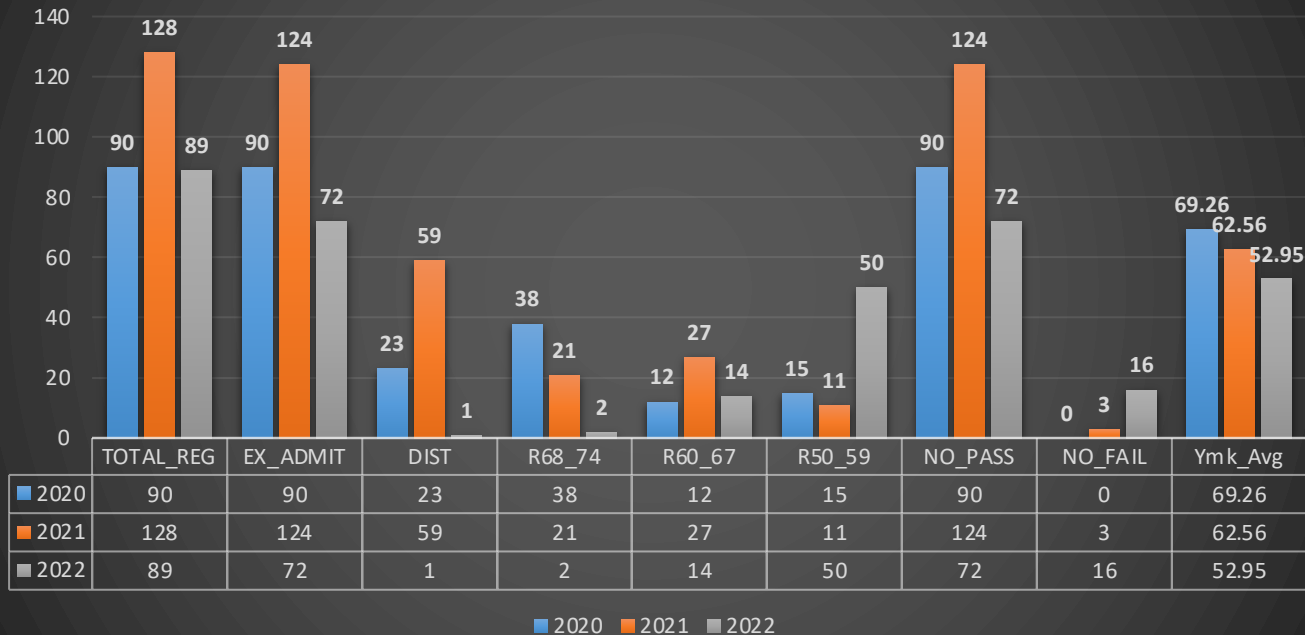
Quantitative data

Labour Relations (LABR 101)

	TOTAL_REG	EX_ADMIT	DIST	R68_74	R60_67	R50_59	NO_PASS	NO_FAIL	Ymk_Avg
2020	162	129	33	28	26	28	129	32	57.71
2021	100	96	8	23	23	30	96	3	61.49
2022	170	132	15	22	38	37	132	12	59.74

Student performances for Labour Relations 1 show a slight dip in the student average year mark in 2021. As a 2nd semester module, the student may have experienced major challenges with transitioning to multimodal T&L

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Quantitative data

Labour Relations (LABR201) 2020 - 2022

	TOTAL_REG	EX_ADMIT	DIST	R68_74	R60_67	R50_59	NO_PASS	NO_FAIL	Ymk_Avg
2020	90	90	23	38	12	15	90	0	69.26
2021	128	124	59	21	27	11	124	3	62.56
2022	89	72	1	2	14	50	72	16	52.95

The average performance for Labour Relations 2 trend shows a decline in the average year mark for students. The decline in performance may be attributed to limited in-person engagement during COVID restrictions

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Qualitative data

❖ **Theme 1: Preparing for assessments through tutorials, revision and self study**

The following were some of the illustrative voices of the participants in this regard:

- "I mostly use tutorials, if **tutorials are provided then I find it easier to study"**; "I study course material. some modules have tutorials which help with preparation" ; "I study the material and tutorials help familiarize with the testing structure" and " **Tutors are not always helpful**".

- "Study weeks before that assessment"; "I use data , laptop and quite room to prepare for my assessments"; "**I study hard and do research**"

- "Some lecturers gives clearly information; some don't give information enough. So, you have to use whatever you find".

- "**Not all lecturers are assessable; little information provided**"

QUALITATIVE DATA

- **Theme 2: Making up for missed lecture or tutorial**

  The following were some of the quotes which supported this finding:

- "If the lectures are online, I watch recordings when I am able to do so" and "try to listen to the recordings emailed by the lectures"

- "I ask those who were present to help and explain whatever was taught or discussed in my absence"

- "Do it on my own and ask for consultation"; "Study on my own"; "I make time to study"; "I do work on my own and try to understand the content by myself" and "I go over the lecture notes"

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Qualitative data

❖ **Theme 3: Student support services**

The following were some of the responses from students:

- "I study, the library supports me with books"
- "I am **not aware** of the support services available to me, and we were not given proper orientation about these services"

❖ **Theme 4: Living conditions**

Some responses from students:

- "The residence I reside in has **no study room**; the sleeping rooms are so small. The **issue of connectivity** and electricity. Other than that, everything is going well. However, if I were to be given a chance to reside here again, I would not take that offer."

QUALITATIVE DATA

- Examining the factors influencing student engagement and student success

Theme 5: Strategies to improve student success and engagement

- "I think library should have all the resources. Some prescribed textbooks are not in the library and hours should change"
- "The university should also have backup resources to deal with load shedding"
- "Need for orientation sessions in order for students to be informed about the university, their departments and their respective programmes".

QUALITATIVE DATA

Theme 6: Extramural Activities

'I believe that participating in sports activities provides me with opportunities to interact with my peers and enhances my focus as a student'.

'Due to limited resources, my participation is almost non-existent'. 'I preferer spending time with my friends'.

'Political activities is my kind of extramural activity, and fighting for students' rights is my passion'.

- Analysis of correlation between students' engagement and student success

REMARKS ON FINDINGS

- Analysis of correlation between students' engagement and student success

The findings revealed that there are different factors that positively affect students' engagement and ultimately influence their academic achievements.

These included consulting with lecturers, attending tutorial sessions and having opportunities to actively participate during classes.

The findings also highlighted factors negatively contributing to engagement. This included lack of understanding of assessment requirements, language barrier and unsatisfactory living conditions in some student residences.

Quantitative data indicates that student performance has declined (for both LABR2 and 3)

RECOMMENDATIONS

Analysis of correlation between students' engagement and student success

Meaningful orientation for all students bi-annually

Remind students about the importance of HIPs and far-reaching implications of engagement

Positive engagement molds lifelong learners

RECOMMENDATIONS

1. **Promote Critical Pedagogy**:
   Empower Student Voices

   Dialogic Learning

2. **Address Power Dynamics**
   Inclusive Leadership

   Democratic Classrooms

3. **Curriculum Transformation**
   Culturally Relevant Curriculum

   Critical Content

4. **Institutional Accountability**:

Equity Audits: Conduct regular equity audits to assess and address disparities in student engagement and success across different demographics.

Transparent Reporting: Ensure transparency in reporting student success metrics, disaggregated by race, gender, socioeconomic status, and other relevant factors.

APPLYING CRITICAL THEORY TO ENHANCE STUDENT ENGAGEMENT AND SUCCESS:

APPLYING CRITICAL THEORY TO STUDENT ENGAGEMENT INVOLVES CRITICALLY EXAMINING AND TRANSFORMING EXISTING EDUCATIONAL PRACTICES TO ADDRESS POWER IMBALANCES, PROMOTE EQUITY, AND MEET THE DIVERSE NEEDS OF ALL STUDENTS

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RECOMMENDATIONS

Active Learning Techniques: Implement Interactive Teaching Methods: Incorporate group discussions, problem-solving activities, and hands-on projects to make learning more engaging.

Flipped Classroom Model: Encourage students to review lecture materials at home and engage in interactive activities in the classroom.

Enhanced Academic Support: Tutoring and Mentoring Programs: Provide peer tutoring and establish mentoring programs where senior students or faculty members guide and support less experienced students.

Writing and Study Skills Workshops: Offer workshops focused on improving academic writing, study techniques, and time management skills.

Extracurricular Involvement: Clubs and Societies: Encourage students to join or form clubs related to their academic interests or hobbies to foster a sense of community and belonging.

Community Service and Volunteering: Promote involvement in community service projects to develop leadership skills and social responsibility.

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CONCLUDING REMARKS

Analysis of correlation between students' engagement and student success:

Adaptive DUT graduates:
- ✓ Different
- ✓ Upended
- ✓ Transformed

Diversity Prediction Theorem

The squared error of the collective prediction equals the average squared error minus the predictive diversity

The findings of this study underscore the significant correlation between student engagement and student success at Durban University of Technology. Quantitative analysis revealed a strong positive relationship between engagement levels and academic achievement, while qualitative insights highlighted the importance of social interactions and extracurricular involvement in promoting overall student well-being.

These results suggest that fostering a supportive and engaging learning environment is crucial for enhancing student outcomes. **By applying critical theory, educators and institutions are encouraged to reevaluate and innovate their engagement strategies to better address the diverse** needs of students, ultimately driving academic success and personal growth

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THANK YOU