Student levels of engagement in learning: A case study of Cape Peninsula University of Technology (CPUT)

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South Africa is currently faced with the challenge of undesirably low throughput rates in higher education. The need to keep students interested and motivated to succeed are key objectives of many lecturers and institutions. Empirical studies have shown that one of the factors influencing student success at university is student engagement. This paper presents lecturers' and students' perspectives on levels of student engagement in four (Engineering, Business, Applied Sciences, and Informatics and Design) of the six faculties at CPUT as well as factors that contribute to and constrain these levels of engagement in learning. Finally, the paper offers some practical strategies for promoting student engagement and success in learning.

Keywords: Student engagement, engagement construct, an engaged university, South African Survey of Student Engagement

Introduction

While empirical research (Scott, Yeld & Hendry, 2007; Swanepoel, De Beer & Müller, 2009) has revealed undesirably low throughput rates at South African universities, a consideration of the specific situation at CPUT demonstrates that low throughput rates are evident in all faculties. In the Faculties of Engineering and Applied Sciences, only 14.6% and 33.2%, respectively, of diploma students admitted between 2002 and 2006 completed their qualifications in the time prescribed for the qualifications (data obtained from CPUT's Management Information System). For the many students who do not finish their studies in minimum time, their lengthened studies constitute a prolonged financial burden to the University (which continues to outlay resources for the students) and the state (which subsidises the University). Furthermore, students who take longer than the prescribed time represent delayed income for the University (the Department of Education gives universities subsidies based on the number of graduates); while non-graduating students constitute subsidy forfeiture by the University (Cross & Carpentier, 2009; Swanepoel *et al*., 2009). At a community and national level, low completion rates add to the continued shortage of skills in the country, especially in Science and Engineering.

If the low throughput rates are to be improved, institutions/lecturers need to keep students interested and motivated to succeed in higher education. One of the factors shown empirically to influence student success at university is student engagement. This study focuses on lecturers' and students' perspectives on levels of student engagement in four (Engineering, Business, Applied Sciences and Informatics and Design) of the six faculties at CPUT as well as the factors that contributed to and constrained students' interests and levels of engagement in learning. The study also offers some practical strategies for promoting student engagement and success in learning.

Theoretical framework

The study was guided by the 'engagement' construct, the meaning of which has evolved over time (Kuh, 2009b). The earliest use of the engagement construct was by Ralph Tyler, who showed the positive effects of time-on-task (how much time students spend on activities related to their schoolwork) on learning

(Merwin, 1969). In the 1970s, Pace developed the College Student Experiences Questionnaire (CSEQ), based on what he termed quality of efforts. He showed that students gained more from their studies and other aspects of the college experience when they invested more time and energy in educationally purposeful tasks such as studying, interacting with their peers and teachers about substantive matters, and applying what they learn to concrete situations and tasks (Pace, 1990). Alexander Astin (1984) fleshed out and popularised the quality of effort concept with his theory of involvement in which he emphasised the importance of involvement in student achievement. Since then, different scholars have made contributions towards addressing different dimensions of student effort and time-on-task, and their relationship to various desired outcomes of education (Tinto, 1987, 1993; Pike, 2006).

Currently, engagement is conceptualised as the time and effort students invest in educational activities that are linked to desired college outcomes (Kuh, Cruce, Shoup, Kinzie & Gonyea, 2008). Engagement encompasses various factors, namely investment in the academic experience of college; interactions with lecturers; involvement in co-curricular activities; and interaction with peers (Kuh, 2009b). The factors that influence students' levels of engagement are either student based or institution linked (Strydom & Mentz, 2010). The former includes study habits, time-on-task, interaction with staff, peer involvement, and motivation (Eccles & Wigfield, 2002). However, student-based factors are not sufficient, on their own, to fully account for engagement, and the institution itself, as well as the lecturers, are pivotal contributors to student engagement (Pike, 2000; Pike & Killian, 2001). Certain institutional practices such as prompt feedback, high expectations and clear communication of these, respect for diverse talents and ways of learning, and institutional environments that are perceived by students as inclusive and affirming, are known to lead to high levels of student engagement (Pascarella & Terenzini, 1991; Chickering & Reisser, 1993; Kuh, 2001).

In this study, a broad understanding of student engagement, which goes beyond students' attitudes and institutional factors, is adopted. We believe that other factors such as the students' socio-economic background and language barriers play an important role in students' engagement in their studies. Thus, student engagement should encompass the historically situated individual within his or her contextual variables such as personal and familial circumstances which, at every moment, influence how engaged an individual is in learning (Koljatic & Kuh, 2001).

While various studies on student engagement have found that students' background characteristics generally account for only 1-5% of the variance in levels of engagement (Pike, 2000; Pike & Killian, 2001), we argue that student backgrounds in the South African context play a major role in students' levels of engagement in learning. This view is supported by a number of studies (e.g. Sternberg, 2007; Du Preez, Steyn & Owen, 2008; Mqwashu, 2009). In addition, although the engagement construct does not include the effects of language on student levels of engagement in learning, various researchers (e.g. Ayliff, 2010; Müller, Swanepoel & De Beer, 2010) have shown that language barriers play a vital role in predicting academic performance. This is particularly important in the South African context because many English second language (ESL) students entering university may not have fully acquired and grasped the skills of listening, speaking, reading and writing in English, which are important areas of language competence (Ayliff &Wang, 2006; Cross & Carpentier, 2009; Mqwashu, 2009).

Furthermore, most studies carried out nationally and internationally on student levels of engagement are silent on lecturers' perspectives (Chapman, 2003). We believe that lecturers' perspectives are important since teachers deal with students daily in the classroom and lecturers' results can therefore be used to confirm students' reported levels of engagement in the learning tasks. To this end, we investigated both lecturers' and students' perspectives on student levels of engagement at CPUT, together with factors that contribute or constrain students' interests and levels of engagement in their learning.

Student engagement internationally and in South African higher education institutions

Research indicates that high levels of student engagement are linked with improved performance; a conclusion which holds true regardless of a student's socioeconomic background (Mounts & Steinberg,

1995; Voelkl, 1995). Students who are engaged perform better in general (Willingham, Pollack & Lewis, 2002), have lower drop-out rates, pay more attention, look more interested and are more persistent in the face of challenges than disengaged students (Skinner & Belmont, 1993). Conversely, students with low levels of engagement are susceptible to a wide range of long-term adverse consequences, including disruptive behaviour in class, absenteeism, impaired concentration and dropping out of their studies (Lee, Smith & Croninger, 1995; Steinberg, Brown & Dornbusch, 1996).

As a result of the influence that the level of student engagement has on student success in higher education, there are efforts around the world to gauge student engagement levels in universities and colleges, using, for example, the National Survey of Student Engagement (NSSE), first introduced in 2000 in the USA (Kuh, 2000). The NSSE seeks to measure the quality of an undergraduate education by assessing how actively students are involved with their studies, lecturers and the campus community. It assesses the level of academic challenge, student-faculty interaction, the extent to which a college offers an active and collaborative learning environment, opportunities to take advantage of cultural or extracurricular experiences, and whether the college creates a supportive environment for different groups on campus (Kuh, 2001). Instruments with similar benchmarks are now widely utilised in Australasia and, to a lesser extent, in Europe (Trowler & Trowler, 2010) and South Africa (Strydom & Mentz, 2010).

In South Africa, the Council on Higher Education (CHE) ran the South African Survey of Student Engagement (SASSE – adapted from NSSE) in 2009. This involved seven universities in the country, among them CPUT. The study was aimed at understanding the conditions and drivers of success rates in the South African context. Among the elements assessed were five benchmarks for effective educational practice: level of academic challenge; active and collaborative learning; student-staff interaction; enriching educational experiences; and supportive campus environment (Strydom & Mentz, 2010). Against these benchmarks, CPUT performed significantly better than the mean score for the 'level of academic challenge', 'active and collaborative learning', and 'staff-student interaction', but significantly lower than the mean score for 'supportive campus environment'. The score for CPUT in the benchmark 'enriching educational experience' was similar to the mean score of the other participating universities. Overall, all participating universities scored lowest for the benchmarks measuring 'student-staff interaction' and 'enriching educational experiences'. For CPUT, the scores for these two benchmarks were 22 and 26 out of 100, respectively.

While the SASSE report indicated that CPUT had very low scores for two benchmarks, it is also possible that, for the benchmarks with higher scores (generally between 40 and 50 out of 100), there was wide variation among individual students or among specific groups of students. Thus, this study responds to recent analyses (Pascarella, 2006; Umbach, Kinzie, Thomas, Palmer & Kuh, 2007) that have proposed the investigation of student engagement at levels that are finer than the five SASSE benchmarks. To enrich the CPUT SASSE results, which were highly quantitative, we felt that a more qualitative investigation of lecturers' and students' perspectives on student levels of engagement at CPUT was necessary. Furthermore, factors that promote or hinder students' levels of engagement in learning may be of benefit to the institution in designing interventions for enhancing throughput rates. Thus, the study was guided by the following questions:

- What are lecturers' and students' perceptions of students' levels of engagement in their studies at CPUT?
- What factors contribute to and hinder students' interests and levels of engagement in their studies at CPUT?
- What are some of the strategies for enhancing students' engagement in their studies that can be applied at CPUT?

Methodology

Qualitative methods were used in this study because, in this context, they are superior to other approaches for identifying values, assumptions, expectations and behaviour (Goetz & LeCompte, 1984).

Participants and context

The sample of this study was drawn from the following faculties, who were willing to participate in the study: Engineering, Applied Sciences, Business, and Informatics and Design. Students who participated in this study were enrolled for National Diploma courses in Construction, Nature Conservation, Accountancy and Graphic Design, and the student sample was drawn from students in their first and second year of study. The study was carried out in the second semester (October 2009) which would have given first-year students sufficient time to settle in at the university so that they could give informed answers to the questions posed.

Lecturers of the sampled students were interviewed, using the same questions as the students, to determine where gaps existed in lecturers' expectations and assumptions about student levels of engagement, and factors that enhanced and hindered students' levels of engagement with their studies.

Data collection

For students, five focus group interviews were carried out, each comprising five to six students taking the same course. In total, between 25 and 30 focus group participants from four different diploma courses were interviewed. Interviewees for the focus groups were drawn from students considered by their lecturers to have either high or low levels of engagement. For the lecturers, in-depth individual interviews were conducted. An unstructured interview guide (Appendix 1) was designed based on this study's research questions and was used to guide the focus group and interview discussions.

Data analysis

Data analysis of the interviews was done using analytical induction strategy (Mitchell, 1984), which involves scanning the data for categories of phenomena and for relationships among such categories, developing working typologies and hypotheses upon an examination of initial cases, then modifying and refining typologies and hypotheses on the basis of subsequent cases (Znaniecki, 1934; Robinson, 1951). Through the use of this approach, insights and evidence of differences and similarities between lecturers' and students' perceptions on student levels of engagement at CPUT, and factors that contribute to and hinder students' interests and levels of engagement in learning, were uncovered.

Trustworthiness of data

The trustworthiness/authenticity of information gathered in this study was ensured using member checks and all the interview and focus-group transcripts were sent to the lecturers and students who took part in this study for verification.

Ethical considerations

During this study, all participants were treated with respect and sensitivity. Activities carried out during the study were negotiated with the participants and informed consent was sought from every lecturer and student who participated. The anonymity of participants was also assured. It is noteworthy that, at the time of the study, the Fundani Centre for Higher Education Development (where the study was conducted from) did not have an Ethics Committee. However, the Director of the Centre granted permission for the study to be conducted based on the ethical considerations discussed above.

Results and discussion

The following four themes were identified through the analysis of the data which was done using analytical induction strategy (Mitchell, 1984): student behaviour/attitudes; institutional factors; students' background characteristics; and language barriers.

Student behaviour/attitudes

A few lecturers (four out of 12) reported that students at CPUT were engaged in their studies while, in contrast, the majority of the students (20 out of 30) indicated that they had high levels of engagement in their learning. These engaged students, according to the lecturers and students interviewed, liked studying at CPUT, attended all their lectures and participated fully in the activities carried out during their lectures. The majority of lecturers (eight out of 12), who responded that students had low levels of engagement in learning, felt that the students lacked dedication, knowledge of what is required of them in tertiary education, the skills to study and to apply knowledge, focus, and time management skills. The non-engaged students were seen as immature and as having been forced to take up a course of study by parents. The latter point is illustrated by the following quote from a lecturer:

> *A third of the first-years have no idea of what they were coming to study and what it involved. It is a curriculum mandate to them instead of interest.*

A few students (10 of 30) reported that they did not fully engage in their learning because of laziness, tiredness, being shy, falling asleep during lectures, not understanding the subject because they did different subjects at high school, or simply a lack of interest. The latter point corroborates results from lecturers that some of the students were taking courses they were not interested in.

Thus, student attributes such as attitudes, skills, academic potential, intellectual development, efforts and interests affect levels of engagement in learning in CPUT.

Institutional factors

The institutional factors cited by some lecturers (four out 12) as contributing to high levels of engagement included the university being well resourced, the environment and lecturers being friendly, lecturers making the subject matter interesting, putting materials on Blackboard, creating an environment where students are not afraid of asking for more explanation, using visual aids, scaffolding and group work, being empathetic and understanding of students' needs and always motivating and giving good feedback to students on their work, the library, information technology centre, mentors, tutors and the writing centre.

Institutional factors raised by the majority of the lecturers (10 of 12) which impede student engagement included ad hoc changes to the lecture programme and a lack of lecture venues; heavy workload; students not having easy access to lecturers because they teach on two campuses; lecturers' fast pace of teaching; students' nonattendance at lectures; exposure to drugs; poor library resources; a lack of a culture of reading; use of degrading words on students, which lowers their morale; a lack of financial resources for students from poor backgrounds; and a perceived loophole in the university access policy. The latter response is captured well in the following quotes:

> *The access policy of the institution needs to be overhauled because lots of the people come in who will never succeed in tertiary institutions.*

> *... the selection process for students, students come in the system with very low marks, some of them cannot perform well.*

Some of the institutional factors which were identified by students as aiding engagement were similar to those mentioned by the lecturers. In addition, students highlighted the following: a free environment where students' opinions are valued; extra notes; guest lecturers; extra classes provided for those who need them; a cafeteria; the extended curriculum programme; discounted fees if you have a sibling studying at CPUT; and student loans and bursaries. These results support Kuh's (2001) argument that institutional environments that are perceived by students as inclusive and affirming may lead to high levels of student engagement in their studies.

Institutional factors considered by the students as hindering engagement included not being able to access the lecturers due to multi-campus teaching; a tight timetable whereby lectures are not properly spaced, leading to tiredness and a lack of concentration; struggling to adjust to writing assignments at tertiary level; not being allowed into the lectures after arriving five minutes late; not understanding

instructions from lecturers; skipping lectures to finish assignments; the fast pace of teaching by lecturers; use of difficult terms and concepts; a poor registration process; and unsatisfactory library and financial aid services. On the latter point, some of the students commented:

> *Assistance in the library sometimes is not helpful; they look confused and laid-back ... financial aid people chase you and tell you they cannot serve you. It's June and there is no answer for whether you received financial aid. It makes it easy to cope if administration is done early.*

The above results confirm the importance of institutional policies and practices in influencing student levels of engagement in learning (Astin, 1984; Chickering & Reisser, 1993; Pascarella & Terenzini, 1991).

Students' background characteristics

A few (four of 12) lecturers raised the point that family support played a key role in promoting high levels of student engagement in learning. The majority of lecturers (eight of 12), who felt that students had low levels of engagement, gave varied background factors which account for this, with poverty considered as a major factor in students' disengagement. For example, it was posited that students from poor backgrounds lack finances for fees, textbooks, accommodation and transport and therefore have to work to support themselves. The other major point raised was poor educational readiness as the majority of disengaged students came from schools which were disadvantaged with regard to resources and qualified teachers. As a result, these students were ill-prepared to cope with their university studies. The following quote illustrates this point:

> *We get students in higher education that don't know how to study and what it means to study and do the bare minimum to pass and they cannot do application of knowledge.*

Other background factors considered as leading to low levels of student engagement are parents forcing students to study certain courses, a lack of motivation to study from home, and sickness and funerals in the family.

From the students' responses, family support was echoed as a key factor in encouraging high levels of student engagement in learning. Poverty-related issues were reasons given by most students for their low levels of engagement in learning. One illustrated it thus:

> *At home you have no time to read, you cook, clean the house, iron and at the end you are tired.*

Another student commented:

> *I am a bread winner at home. My siblings will ask for help. I am always thinking of getting a job to help my family, but I worry if I will cope.*

These results corroborate that poor educational readiness, a lack of family support and poverty are key background characteristics which affect student levels of engagement in learning (Sternberg, 2007; Du Preez *et al*., 2008; Mqwashu, 2009).

Language barrier

Findings from a few of the lecturers (5 of 12) and students (10 of 30) indicated limited competence in English and the language of the discipline by ESL students as a factor which led to low levels of student engagement in learning. One lecture stated:

> *The language being used to teach [English] the subject is a problem. Students don't understand the language of the discipline and needs conceptual understanding and using mother tongue helps them learn those concepts". A student commented: "lecturers do notes the way they understand, but we don't understand English. English is not our mother tongue so we struggle. We have to deal with ... biological terms.*

The above results support the argument that English language competence may be seen as a serious factor which affects English second language speakers' level of engagement in learning (Ayliff, 2010; Cross & Carpentier, 2009:15; Mqwashu, 2009).

Enhancing student engagement at CPUT: Suggested strategies for improving student levels of engagement in learning

Based on the findings of this study, the researchers' experiences and research in this field, strategies for enhancing student levels of engagement in teaching and learning in CPUT are provided below. These strategies will be presented using the themes identified above.

Student behaviour/attitudes

Student behaviours which are linked to engagement include study habits, time-on-task, interaction with staff, peer involvement, and motivation (Eccles & Wigfield, 2002). Engaged students pay more attention, look more interested and are more persistent in the face of challenges than disengaged students (Skinner & Belmont, 1993).

On the other hand, students with low levels of engagement are at risk of a wide range of long-term adverse consequences, including disruptive behaviour in class, absenteeism, impaired concentration and dropping out (Lee *et al*., 1995; Steinberg *et al*., 1996). Based on the above arguments, the researchers propose that parents, CPUT orientation programmes and lecturers should emphasise to students that, while the university can provide all the favourable conditions to enhance high levels of student engagement, students are ultimately responsible for the effort they put into their studies.

Institutional factors

Students raised several institutional factors which led to their disengagement, as described above. To help address these, the researchers suggest that CPUT's orientation programme needs to be improved. Current practice confirms Jama, Mapesela and Beylefeld's (2008) findings that university orientation programmes for the social and academic integration of all new students are often very hurried and students are bombarded with a great amount of information which they are expected to assimilate. Furthermore, the quality of these programmes is poor (Cuseo, 2003), resulting in limited impact on the preparedness of students for higher education. For example, findings in this study indicated that some students are doing courses or programmes not because of their own interest and passion, but because they were not well advised on what the course involved to enable them to make informed choices. Therefore, improved orientation programmes need to be designed.

There is no doubt that many factors contribute to students' interest and level of engagement in learning, and teachers have little control over many of those factors (Lumsden, 1994). However, research has shown that teachers can influence student motivation; that certain practices do work to increase time spent on task; and that there are ways to make assigned work more engaging and more effective for students at all levels (Anderman & Midgley, 1998; Skinner & Belmont, 1991). Also, research confirms that, to a large extent, students expect to learn if their teachers expect them to learn (Stipek, quoted in Lumsden, 1994). In the CPUT context, it is recommended that lecturers motivate students by ensuring that classroom expectations for performance and behaviour are clear and consistent; help students understand the criteria for individual assignments by giving them examples of high, average and low level work; make students feel welcomed, supported, cared for and listened to (Zhang, 2006; Jones, 2008) and respond positively to student questions and praise students verbally for work well done.

Regarding instructional practices, lecturers should give students work that develops their sense of competency, allows them to develop connections with others (Jones, 2008), gives them some degree of autonomy, and provides opportunities for originality and self-expression (Anderman & Midgley, 1998).

It is unquestionable that well-designed and well-maintained classroom facilities have a positive impact on student engagement (Jones, 2008). At CPUT, some of the lecture rooms are stuffy with no air conditioning, too small for the number of students they accommodate, and sometimes there are no lecture rooms available for lecturers to conduct their lectures. It is proposed in this paper that CPUT revise the booking schedule of lecture rooms and improves the lecture room facilities to be able to cater for needs of the lecturers and students.

It was evident that some of the students who joined CPUT are ill-prepared for tertiary education. As a result of differing levels of academic preparation and in the interest of properly integrating these students into university life, CPUT should design a developmental education course as part of the undergraduate curriculum in addition to the existing Extended Curriculum Programme (ECP). The ECP should also be further strengthened, as many interviewees felt that the University does not give adequate support to this Programme. According to the interviewees, existing student learning services such as tutoring and mentoring are not known to all the students and the University should put measures in place to ensure that these services are accessed by students from all faculties. Currently, these services seem to benefit only ECP students and those living in the campus residences.

Administrators and faculty members must recognise that virtually every institutional policy and practice (e.g. class schedule, regulations on class attendance, student orientation and financial aid policies) can significantly affect the way students spent their time and the amount of effort they devote to academic pursuits (Astin, 1984). Given the highlighted weaknesses in the aspects such as class schedules, the registration process, and the delay of feedback on financial aid, CPUT needs to improve on policies and practices affecting these and other institutional factors that affect levels of student engagement in learning.

Several studies have also shown that living on campus, as opposed to commuting to college, is positively related to engagement (Chickering, 1975). The gains associated with on-campus living are further enhanced by participating in learning communities, which substantially increases student engagement, self-reported gains in learning, and persistence (Zhao & Kuh, 2004). In the CPUT context, only 20 percent of the student population lives in the University residences, and the University needs to find ways of accommodating more students in the residences in order to reap the benefits of on-campus living.

Language barrier

Consistent with research in the social psychology of achievement motivation, students who begin class with weaker reading and writing skills are less likely to be engaged, setting the stage for a cycle of reduced achievement growth (Kelly, 2007). These results corroborate findings of this study where some of the CPUT students reported to be struggling to cope with writing assignment at tertiary level and understanding of English. It is proposed that the existing academic literacy and the multilingual projects (implemented in some of the faculties) be integrated into the curriculum of all faculties in order to enhance levels of engagement of the students who are struggling with language, reading and writing.

Student background characteristics

Findings in this study indicated that poverty leads to students taking up part-time jobs to pay their fees and support their families, which affects some students' levels of engagement in learning at CPUT. Although working while attending college takes time and energy away from academic pursuits, part-time employment on campus actually facilitates retention (Kuh, Kinzie, Buckley, Bridges & Hayek, 2007), since, by spending time on the campus, the student is likely to gainfully interact with other students or staff. On a more subtle psychological level, relying on the college as a source of income can result in a greater sense of attachment to the college (Astin, 1984). It is acknowledged here that CPUT provides part-time jobs to students. However, this paper proposes that CPUT should ensure that these jobs go to the neediest students as it may help raise their levels of engagement in learning.

Conclusion

This study highlights that students behaviour/attitudes, institutional factors, background characteristics and language barriers influence students' levels of engagement in learning at CPUT. We have suggested various strategies that CPUT can use to improve student engagement, bearing in mind that different combinations of complementary, interactive and synergistic conditions should be applied (Kuh, 2009a), with the goal of making CPUT an engaged university in which:

... everyone embraces the challenge of continually doing better for students and actively collaborating to understand more about the student experience and working together to design better approaches and programmes; a university where faculty members seek out student perspectives on their learning, and see them as critical voices in their ongoing conversation about quality (NSSE, 2008:4).

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Appendix 1: Lecturers′ and students′ interview guide

1. Do you think all the students you teach enjoy studying at CPUT? Yes/No

   If yes, what makes them like studying at CPUT?

   If no, what makes them not like studying at CPUT?

2. Do you think all the students you teach like the subjects you teach? Yes/No

   If yes, what do you think makes them like the subjects?

   If no, what factors do you think makes the students not like the subjects?

3. Do all your students participate fully in the activities during the lecture? Yes/No

   If yes, what motivates them to fully participate?

   If no, what factors impede your students from fully participating?

4. Do your students understand what you teach during your lectures? Yes/No

   If yes, what makes them understand fully?

   If no, what factors impede their understanding?

5. Do you have a problem of students missing lectures? Yes/No

   If yes, what motivates the students to attend their lectures?

   If no, what factors lead to students not attending their lectures?

6. Do you have instances of students causing disruptions or not concentrating during lectures? Yes/No

   If yes, what factors affect their concentration?

7. Do all your students complete assignments given and submit them on time? Yes/No

   If yes, what motivates them to fully engage with their assignments?

If no, what makes students not fully engage with their assignments?

8. How do you encourage and develop your students to fully like and get involved in their studies?
9. What factors enhance students' performance in your subject?
10. What factors impede your students' performance in your subject?
11. What support is the university providing to your students to enable them to perform well in their studies?
12. What help should the university provide to your students to help them fully participate in their studies?
13. What factors enhance students' success in their studies at CPUT?
14. What factors impede students' success in their studies at CPUT?

Note that the same interview guide was used for lecturers and students with questions being framed differently for the students.