

# RESOURCEFULNESS MATTERS: STUDENT PATTERNS FOR COPING WITH STRUCTURAL AND ACADEMIC CHALLENGES

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## ABSTRACT

There is general agreement that there are many structural constraints beyond students' control which influence the degree of success that students can attain as they learn to participate in academic practice. Less understood are the patterns of students' experiences of the socio-economic environment of their schooling and university, their views of the enabling and constraining conditions of learning and their perceptions of their agency in overcoming these conditions. The data for our study were collected through a questionnaire survey of 591 Bachelor of Education students across three years of the degree at a South African University. To examine students' strategies for coping with the challenges and adversities they encountered at school and at university (the object and mode of their engagement), the study expounds on the idea of "resourcefulness" (Dison 2009; Cottrell 2001) as students articulate their experiences of learning. Patterns of student resourcefulness and levels of articulation emerging from this study present a way for lecturers to understand students as social beings who bring with them a range of strategies which shape their engagement with material, social, academic and affective challenges.

**Keywords:** resourcefulness, agency, structural constraints, student success, alienation, engagement

## INTRODUCTION

Students' successful participation in higher education institutions (HEIs) in South Africa has been and remains a contentious issue and is now also expressed through calls for decolonized and transformative education programmes. There is major concern about university throughput

and retention rates, as revealed by the Council for Higher Education report on undergraduate curriculum study (Council on Higher Education 2013), which found that 60 per cent of students who enter university never graduate. Spaul (2016) cites a recent study (Van Broekhuizen and Van der Berg) which shows that “of 100 children that started school, only 14 will qualify for university, 12 will actually enrol and only 6 will get some kind of undergraduate qualification within 6 years”. In epistemic terms, poor participation means that “core (university) curricula, as formally planned and funded, are being successfully accessed by only a relatively small proportion of students” (Scott, Yeld and Henry 2007, 48; Council on Higher Education 2013, 46). Social and economic inequalities, lack of preparedness and poor performance are commonly known as factors that correlate with poor academic performance. The CHE report on access and throughput in South African Higher Education (Council on Higher Education 2010) draws on three case studies to describe structural and academic challenges faced by students. These case studies reveal “spaces of tension” (2010, 40) emerging in a range of social and academic spaces in universities in the context of unsystematic and poorly integrated pedagogical and curriculum interventions.

Although structural and academic challenges in university contexts have been well documented, less interrogated have been the patterns of students’ accounts of the socio-economic environment of their schooling and university, their perceptions of the enabling and constraining conditions of learning at their university and of their agency in responding to these conditions. This study is focused on students’ perceptions of their engagement with their studies, at school and at university, seen against their socio-economic background and experience. The study recognises how institutional factors such as resources, dominant teaching approaches, curricula and assessment can function to either engage students or exclude them. Guided by Fataar’s call (2018, 602) to focus attention on the “educational subject” and to ask questions about students’ subject positions and processes of engagement, this study proposes an analytical way of differentiating both the mode and the objects of students’ engagement. It emphasises that students’ engagement in response to the challenges they face is not static (succeeding or failing to engage). Students have “complex identities, changing across time and space, and reproduced in social interaction” (Darvin and Norton 2016, 20). This kind of relational fluidity creates an interesting pattern, which this study seeks to unravel.

Social conditions play a major role in facilitating or limiting students’ investment in and their defence of particular ways of thinking about themselves. Nevertheless, their mode of engagement depends on the way they negotiate their social and academic identity in relation to existing institutional structures. To examine students’ strategies for coping with the challenges and adversities they encountered at school and at university (the object and mode of their

engagement), the study expounds on the idea of “resourcefulness” (Dison 2009; Cottrell 2001) as students articulate their experiences of learning. We argue that a study on students’ resourcefulness is important if tertiary educators wish students to “immerse themselves in voices, texts and conversations relevant to their studies” (Barnett 2007, 43).

## RESEARCH METHODOLOGY

The data for this study were collected through a questionnaire survey of Bachelor of Education students across the four years of the degree in a South African University. In the design of the survey special attention was given to students’ accounts of the material, social, academic and affective conditions of learning at school and at university, respectively and their reflections of how they had coped with these conditions in the past (when they were at school) and how they cope in the present (whilst at university). It is important to point out that the survey was not designed to establish causal links between specific students’ accounts of the present and past conditions and their ways of coping at university.

Five-hundred and ninety-one of 758 students (78%) responded to the survey in October 2012 recording their perceptions of their material, social, academic and affective experiences in school and at university. This number includes three cohorts of BEd students – 250 first year students; 200 second year; and 141 third year students.<sup>1</sup> Close to 80 per cent (across the three cohorts) were in the age range of 18–25 years of age, when responding to the survey, 75 per cent of whom were female (this is unsurprising as teaching, both historically and currently, tends to be a female-dominated vocation). In all three cohorts, most students spoke English as a home language (40%),<sup>2</sup> with isiZulu a close second (23%). Most of the respondents were studying to become high-school teachers (between 43 and 64% of respondents). Just under a quarter of participants were specialising in the senior phase (21–25%), while between 14 and 32 per cent of the participants were studying to be foundation phase teachers. 88 per cent of the second- and third-year participants matriculated between 2001 and 2010, with the majority of the first-year cohort matriculating after 2011.

The study unpacks students’ resourcefulness in the following way. First, it offers an explanation of how students engage with the learning opportunities and resources at university by examining differences and commonalities in their personal accounts of their engagement with material, social, academic and affective challenges. Second it provides an examination of students’ modes of articulation when they reflect on their experiences of learning in response to these challenges they encounter. The differentiated levels of engagement are analysed using Biggs’s and Collis’s (1982) distinction between “multi-structural” and “relational” levels of understanding.<sup>3</sup>

The study unravels these patterns on the basis of a content analysis of general patterns emerging from the data. We used a process of induction to uncover themes and dispositions in the way students reflect on their experiences and perceptions. Different sets of codes were developed for the quantitative and qualitative survey questions respectively. These were then broken down to capture specific data produced by students' responses, in particular their responses for the qualitative questions. For example, in the question (quantitative) "How do you get to university every day?", each option was allocated a code (Bus = 1, Car = 2, Taxi = 3, Walking = 4, Other = 5). In the question (qualitative) "Describe any challenging or difficult situation you have encountered when you were at school," the following coding set was applied:

- No challenge / unanswered = 0
- Physical resources = 1
  - Home = H
  - School = S
- Learning affordance/resources = 2
  - Home = H
  - School = S
- Social resources = 3
  - Home = H
  - School = S
- Affective Resources = 4
  - Home = H
  - School = S

## **SEQUEL OF STUDIES TO UNDERSTAND STUDENTS' PERFORMANCE**

Three studies preceded this survey and have influenced its development and approach to analysing student responses to the survey. They all perceive students' access to university in terms of their increased participation and engagement with the institution's social and academic processes. The first is a biographical questionnaire derived from the Faculty of Humanities Admissions Committee which, from 1988 to 2009, was used to give those students who had not achieved automatic entrance to the university a second chance of being assessed for a place on the undergraduate programme (Enslin et al. 2006). The analysis of students' responses enabled the committee to establish a portrait of those attributes which suggest potential for success at university such as internal locus of control, goal-directedness and the capacity for self-

reflection.<sup>4</sup> The second is research on student perceptions of their academic participation (Cross et al. 2009). The study interviewed 107 third-year undergraduate students in the faculties of Humanities, Science, and Engineering and the Built Environment (EBE), focussing on students' perceptions of the institutional and academic rules that regulate their social life at the university as well as their academic learning, and their efforts in making their voice heard, finding solutions to problems and choosing to work hard at achieving academically, despite past experiences of failure and racially-based forms of alienation. The study highlighted the problems experienced by most students in negotiating aspects of the institutional culture which are fundamentally different from their school environments. The third study is a small case study with 18 first Year Bachelor of Education students, which investigated students' perceptions on continuity and discontinuity regarding academic writing in comparison to experiences of school writing. The study (Shalem et al. 2013) highlights 2 kinds of discontinuities: Firstly, average and the low-achieving students, experienced the requirement to position themselves in relation to knowledge authorities as constraining. Secondly, these students struggled to interpret their lecturers' feedback on their writing. Conceptually, these findings reflect the gap between the form of writing the students think they are supposed to follow and the textual forms they are expected to produce by the university.

The present study was designed to unpack the complex relational aspects of resourcefulness and modes of articulation manifested in students' responses to issues related to the socio-economic constraints in their schooling environment and the constraining and/or enabling conditions structured by the university. It would investigate the interface between students' social and academic experiences and their aspirations and levels of engagement.

## **RESOURCEFULNESS AND AN ENABLING ENVIRONMENT**

There seems to be a general agreement that there are many structural constraints, which strongly influence the degree of success that students can attain when they learn to participate in academic practice. Mann (2003) offers a perspective on the way in which students experience alienation from the content of their studies, the process of learning or from their fellow students. This is true in particular for those who come to university under-prepared as a consequence of inadequate schooling and harsh socio-economic home circumstances. The majority of higher education students in South Africa are faced with these structural constraints. In addition, the institutional culture of universities – curriculum regulations, teaching approaches and rules of academic practice – are largely unfamiliar to all students, let alone to those who come from poor socio-economic environments.

Pioneering work on the question of students' access to the rules of academic practice was

done by Craig (1996, 2001) who, in a series of articles, brought into focus a principal point: “disadvantage” is a consequence of the relation between the familiar cultural context that a student has internalised and the unfamiliar culture of the institutional context which the student has not yet internalised (Craig 2001, 30). Craig’s contribution is known in particular for her examination of the idea of “academic form” (1996), i.e. the ways in which academic practice specialises knowledge and the implications of various permutations of form and content relations for academic learning. Following her pioneering work, researchers in the field of higher education, on the basis of further empirical research on students’ preparedness, have come to argue that many students who meet the requirements for access to university study still face significant challenges in relation to the ordering and structuring of academic knowledge required for successful academic participation (Morrow 2007; Enslin et al. 2006; Slonimsky and Shalem 2006; Scott, Yeld and Henry 2007; Boughey 2008; Council on Higher Education 2013; Manik 2015; Osman, Cockcroft and Kajee 2011; Cliff, Yeld and Hanslo 2003; Yeld 2003; Dison 2009).

In this study we bring in the concept of “resourcefulness”, a concept which we use to foreground “the complex combination of emotional, motivational and endurance qualities believed to indicate commitment to learning” (Dison 2009, 37). The idea of resourcefulness is in line with Beard, Clegg and Smith’s (2007) findings that students succeed in their learning “by drawing on their own individual and social resources” highlighting “the importance of the affective, the bodily and sociality in relationship to their engagement with learning” (2007, 249). Resourcefulness can also be understood through Barnett’s distinction (2007, 16) between the “will to learn” that is “fundamentally internal to the person” and external motivating factors. Barnett argues that a student develops a deep approach to learning and becomes personally invested as she “projects herself actively into her studies” and is not merely fulfilling the means towards an instrumental goal such as getting good results. This presents an alternative to the alienation described by Mann (2001), and involves critical and creative engagement with the subject, fellow students and teachers, leaving the student with a desire for life-long learning.

The interest in students’ resourcefulness is careful NOT to return to the deficit view that student success is dependent on factors such as intelligence, motivation, aptitude and language ability inherent to the individual as an easy way of explaining student failure and success. Individual or socially constructed attributes are not viewed as factors that explain academic performance and can be seen as an approach that abdicates Higher Education from taking responsibility for “perpetuating structural disadvantage” (Boughey 2008). Rather, the researchers are challenged to recognise the multiple facets that constitute students’ resourcefulness that go beyond the traditional notions of pure cognitive ability (Moon 2004,

47) and which allows them to negotiate their subject positions in multiple spaces and make “purposeful use of resources” (Kapp 2017, 18).

## **SOCIO AND ECONOMIC PORTRAYAL OF THE STUDENTS BEFORE UNIVERSITY**

Across all three cohorts, roughly half of the students chose the BEd degree as their first choice (44% first years; 50% of second years, and 52% of third years). By implication, about half of the students were engaging in a degree that they had originally not intended or wished to do. Fifty-one per cent of the students lived with both parents when they were at school. Only half of the students (50%) studied in schools which included all five basic facilities (electricity, computers, science laboratories, a library and playgrounds).<sup>5</sup>

The material conditions associated with poverty which students experienced at school continue to affect many of them at university. Our data shows that many students rely on financial aid (62% of 1st Years, 72% of 2nd Years and 65% of the 3rd Years) and must find jobs to support themselves and more so, to survive. These are significant constraints, which students reported on in the survey.

Students recounted a variety of challenges they had experienced when they had been at school. We noted four types of challenges that seem to arise as a result of the flux between internal and external experience. First, *difficult material conditions* associated with poverty such as hunger, long distance to schools, inability to pay school fees, no clean water, and lack of electricity (for some participants, both at school and at home). Second, insufficient and sometime complete *lack of learning resources* was reported. Important ones include teachers in key subjects such as Maths and Science, text books, well-resourced libraries and laboratories, internet access and computers. Lack of time to study was also reported often; commonly as a result of taking care of a sick parent, working on home chores after school, long distance of the school from home and conditions unconducive for learning such as noise and little or no parental support. Although time to study appears obvious, it is a very important resource for students who feel that their knowledge is inadequate, that they are *very average* (1st year) and *don't really know how to study* (1st year). Third, students reported unconducive social conditions while at school, including bullying from peers and from teachers, peer-pressure, drugs and gangsterism. Fourth, some students had undergone severe *emotional traumas*, such as the loss of a parent, a sibling or other close caregiver.

We found very few comments such as “I was lucky to be available to have many resources”. “I think this may have given me the opportunity to become more engaged” (2<sup>nd</sup> year) or “I was extremely fortunate to attend such a good school; no real challenges were faced”.

“Perhaps the only challenge I can think of was trying to juggle the compulsory extra-murals and school work” (3<sup>rd</sup> year). Much more common was the following experience reported by a 3<sup>rd</sup> year student who said:

“We did not have water to drink at school. I had to carry water and food everyday then I go to school, because there was no Tuckshop and again the school was too far. By the time I get to school I was tired.”

## RESOURCEFULNESS IN COPING WITH ADVERSITIES WHILE AT SCHOOL

Students were invested in subject positions as hard workers in environments where many of their friends drop out of school. They knew that they “needed to work very hard in order to pass matric and get a university entrance” (1<sup>st</sup> year) but many felt that they could not rely on their teachers: “what we were taught [is] not enough in preparing us for the final National Examination and beyond” (1<sup>st</sup> year). Students also claimed that some of the teachers “didn’t know the subject content very much” (1<sup>st</sup> year) and many of their parents had not completed 12 years of schooling. Some of these trends are summed up by a 3<sup>rd</sup> year student:

“Teachers did not teach, they simply gave notes with no explanation. School was under resourced in that subjects like Natural Science were taught in abstract, especially the experimental part. School was too far.”

Looking at how students deal with material, social and academic challenges and how they attempt to resolve dilemmas is integral to the analysis of “resourcefulness”; this kind of analysis yields “patterns of resourcefulness”, which in turn provides insight into how students seek solutions and the extent to which they identify personally with the task at hand (Barnett 2007; Tishman, Perkins and Jay 1995).

Our analysis proposes three patterns of resourcefulness: First is about “pushing through alone” both in relation to the subject and the process of study (Mann 2001, 7). This sense was interpreted from comments such as: “I had to do all the work on my own even when I did not know what I was doing” (1<sup>st</sup> year), “It was only myself reading alone with a candle light” (3<sup>rd</sup> year) “and Parents don’t know anything about school work” (3<sup>rd</sup> year). In this first set of quotes there is also a sense of alienation, of being alone and feeling that no help can come by but that one must cope. Second is about *finding personal strategies* to manage the difficult conditions (getting a job, adhering to a goal) and developing means to organise one’s learning (pacing the work to meet deadlines, finding learning material). The former included: “I used to sell vegetables in order to raise school fees” (2<sup>nd</sup> year) or “doing gardening around the township to get money” (3<sup>rd</sup> year). The latter included working hard and in an organised way: “found a



rhythm to work with, organized and made sure that my work was always up to date” (2<sup>nd</sup> year), finding resources in “a community library two hours away from home” (3<sup>rd</sup> year) and using a dictionary “to improve my English and write essays and also spend a lot of the time reading books and newspapers” (1<sup>st</sup> year).

In this pattern of resourcefulness students identify their personal strategies for coping and reflect on the consequences and value of these strategies. They make choices to become focussed:

“I personally made a choice to choose for greatest after I had read a book, *The purpose driven life*. I made a choice not to let my background determine my future.” (1<sup>st</sup> year)

“I became an avid reader. I read anything, all the time. I did not want to be left behind, and I learned to ask questions, during and outside school.” (3<sup>rd</sup> year)

Other students remember getting together with friends “since their input was good” (1<sup>st</sup> year), “sometimes consulting other teachers” (1<sup>st</sup> year) and “older people maybe who have matriculated, some from our grandparents if it was something relevant to what they might know” (2<sup>nd</sup> year). This set of quotes brings about the various *informal ways of collective support* in which students remember being engaged in order to cope. This is the third pattern of resourcefulness that we identified. Students reported forming study groups (mainly in science and mathematics), using the resources in the group “to help each other in the school” (1<sup>st</sup> year). In some cases, the group called on a teacher who was teaching in a lower grade “to teach us after school” (1<sup>st</sup> year) or attended Saturday schools “where we were taught by other teachers” (1<sup>st</sup> year). In some schools which had lacked adequately qualified teacher, learners were even more ambitious: They “started [their] own school improvement committee, which would attempt to fulfil the requirements that the school failed to fulfil” (1<sup>st</sup> year).

## RESOURCEFULNESS IN COPING WITH ADVERSITIES WHILE AT UNIVERSITY

Heavy and intense workload, learning in a second language, acquiring the subtleties of academic discourse (*Being a reader, understanding the ways questions are asked, structuring essays, and expressing ideas academically*) and learning time management (*being able to complete so many tasks and assignments in a short period of time*) are the definitive challenges of academic environment pointed to by all the students across the three years of study.

A portion of students feel stuck, that nothing will ever change: “Still trying to cope with the situation, have not figured it out yet” (1<sup>st</sup> year), “Still trying to cope – STRESSED OUT!” (emphasis in the original, 2<sup>nd</sup> year). These students describe the struggle to acquire the academic

language used as “just massive” (2<sup>nd</sup> year). A *sense of pushing through alone* is expressed in this pattern. Included are statements such as “Nobody is willing to assist ... they just don’t care” (1<sup>st</sup> year) and “only pray to God that one day there will be a solution to my problem” (1<sup>st</sup> year), “It is difficult, it is by grace that I manage” (3<sup>rd</sup> year). This set of quotes resonates with Mann’s (2001, 10) point that students “can be seen to be estranged both from this new land (of academia), but also from their own language, culture and desire (our addition)”.<sup>6</sup> Hence the experience of having to cope alone induces a sense of alienation. The second pattern of resourcefulness is of *being generally proactive*, albeit, with no specific strategy devised in relation to a specific academic challenge. Students’ responses, classified as “proactive” come across as being hands-on, positive and practical and, like the second pattern we identified in relation to coping with adversities while at school, the responses in this pattern are centred on personal strategies. The pattern can be summarised by the following citation – “Work better. Plan better. Read more” (1<sup>st</sup> year). Typical responses included were: “just motivate and push myself” (1<sup>st</sup> Year), “I just got on with it hey” (1<sup>st</sup> year), “I give it my all” (2<sup>nd</sup> year), “just had to be strong” (2<sup>nd</sup> year), “applied myself more” (3<sup>rd</sup> year), “shape up or ship out” (3<sup>rd</sup> year). Here, there is an explicit acknowledgement of the consequences of not applying oneself. The third pattern of resourcefulness was also similar to what we found in the data on school, namely, *establishing informal ways of collective support*. Belonging to a study group is perceived to help students in a variety of ways. It helps to “find friends and socialise” (2<sup>nd</sup> year), “practise communicating in English” (2<sup>nd</sup> year), “bounce ideas off each other to get the best result” (1<sup>st</sup> year), and “work becomes easier after being discussed” (2<sup>nd</sup> year).

The fourth group of responses signals a new pattern of resourcefulness, namely, of *targeting a specific academic challenge with a specific action*. Time management of heavy and intense workload and learning academic knowledge in a second language are the two most common academic challenges raised by students across the three years of study. Students described teaching themselves *time management skills* of scheduling their work with a tight utilization of time:

“I draw up time planning sheets. I use free time for studying rather than socializing (sometimes). I have adjusted to long hours of travel and now feel less tired.” (3<sup>rd</sup> year)

The challenge of learning academic knowledge in a second language is perceived by students to coincide with mastering academic discourse: “how to write academically” (1<sup>st</sup> year), “structuring of essays” (2<sup>nd</sup> year) and “knowing how to reference” (2<sup>nd</sup> year). Adjusting to a new kind of language both in reading and in writing is hard for all students, but is perceived to

be more difficult given the school background a student comes from:

“The most difficult challenge I have faced. It’s to write academically. The structuring of the essays; the reason is because back at school we were taught in our languages most of the time. So now it’s difficult to adapt.” (2<sup>nd</sup> year)

In their attempt to cope with these academic challenges, students reported three main strategies. Underlying of all of these, different as they seem to be, is a search for a better *understanding of what academic criteria count*. First, students surf on the internet to find *examples of essays*, good strategies for reading academic articles. Second, some students (albeit, very few) report to *immerse themselves* in reading novels, newspapers and academic texts. Third, students reported *discussing comments and feedback* made by lecturers on their assignments. This included *reading the lecturer’s comments* (Between 78 and 83% of the respondents) or *discussing the assessment with their peers* (between 44 and 50% of the respondents). Fourth, students reported approaching the Writing Centre.<sup>7</sup> The experience of going to the Writing Centre ranges from expecting it to teach one how “to write academically” (3<sup>rd</sup> year), “structure an essay” (2<sup>nd</sup> year), finding out what the essay is actually about, and how to reference academic texts but also getting reassured “that I am on the right track” (1<sup>st</sup> year). Usage of the Writing Centre dropped as students became more senior in the BEd programme, with a drop of 61 per cent of reported usage from first to third year.

## DIFFERENT FORMS OF ARTICULATION

While the previous section focused on the objects of reflection in the form of material, social, academic and affective challenges, this section explores the different ways in which students articulated their engagement with these objects. When analysing students’ responses, we noted that some students provided generalised, vague answers in response to the prompts, while others produced more detailed accounts of how they made sense of their experiences. Taking into account that these responses were recorded on a survey and students may not have made the effort to articulate their thoughts carefully, the differences are worth noting. Our aim in painting patterns of articulation is not to judge these as surface or deeper kinds of reasoning. Rather, we want to gauge what Tishman et al. (1995, 38) describe as students’ “abiding tendencies to explore, to enquire and probe into new areas, to seek clarity, to think critically and carefully, to be organised in their thinking”. Students’ reflections on their engagement with these challenges is captured by the manner in which they reason and articulate their domains of practice.

We found it interesting that students articulated the problems in two different patterns. The first is an accumulation of issues, listing one after another, in no specific order. When

reasons were given in a form of accumulation, these were generalised and foregrounded external factors such as inadequate teachers or teaching conditions and/or difficult home circumstances. In Biggs' and Collis' taxonomy (1982) this pattern is referred to as *multi-structural*

“There are lots of assignments and tests at a very little time which we have to do. 2) Having to avoid the issue of plagiarism. 3) Using wrong language and grammar during essays. 4) Not having access to computer, because I live outside the campus.” (1<sup>st</sup> year)

“Communication is in English. Freedom to do as you please but face the consequences; Diversity and integration of different ideologies; Doing my assignments different from the school; The feeling of being lonely no friends.” (2<sup>nd</sup> year)

In this pattern, we found what we call *formulaic responses*. In this we also included responses in which students did not contemplate on why they performed well or poorly. They merely indicated how they were feeling about their results, but did not elaborate or specify: “I liked the way I passed matric by Bachelor's degree. Most especially in my Home language I got an A” (1<sup>st</sup> year), “grateful” (2<sup>nd</sup> year), “just passing and room for improvement” (3<sup>rd</sup> year), “I want to move from current position to a better position” (2<sup>nd</sup> year).

The second pattern of articulation is qualitatively different. Students were describing what they perceived as a problem and elaborated on *that* problem, reflecting on why it was a challenge. They did so by showing how the problems had impacted negatively on their resourcefulness. More specifically they attempted to identify how the academic environment works (intensity of assessment; diversity of academic demands) and the specific aspects within that environment which affected their resourcefulness (don't work well under pressure; needing clear signalling). In Biggs' and Collis' taxonomy (1982) this type of articulation is referred to as a *relational mode of reasoning* as reflected in the quotations below

“There are many tasks that we have to do and there is a short period of time and some of the things are very difficult. We have to submit many assignments in a week and there are tests during that week, we have to study and do assignments in that one week, and when we do them under that pressure we don't do them perfectly; we don't get good and satisfying marks.” (1<sup>st</sup> year)

“Figuring out what it is that the lecturers actually want!!!! It seems like lecturers take a constructivist approach but do not give enough scaffolding and guidance. This is really difficult when it comes to assignments – one lecturer wants personal experiences and application, another lecturer wants the theory only – generally you find this out when you get your assignment back.” (3<sup>rd</sup> year)

The important point about the relational pattern is that students explore connections between key ideas and try to convey the significance of the information. In these kind of responses

students account for their feelings of satisfaction or disappointment and analyse these reasons critically. Their articulations suggest that they are able to position themselves in the light of new learning experiences, take responsibility for their learning, are reflexive and determined to “keep going forward” (Barnett 2007, 18). Their relational account can be divided into three categories: taking responsibly, speculative reasoning and self-efficacy within this pattern.

*Taking responsibility:* When the elaboration of the reasons for dissatisfaction was focused on academic effort, a sense of *honesty* and of *taking responsibility* was conveyed. When reflecting on her matric results, a 1<sup>st</sup> year student berated herself openly. She said, “I could have done so much better if I had listened in class; if I had been confident in myself; if I had stopped the self-defeating attitude. I know or I knew that I was more capable than what I had produced” (Matric results). Another highly self-critical 1<sup>st</sup> year student revealed the high standards she expected of herself, “Well, I’m to blame for my performance and through introspection, I manage to understand my short comings but I’ll be there because I know what it requires of me to be there and am addicted to excellence.” Some students in this category were dissatisfied with their mediocre results and showed determination as exemplified in the following reflection, “The fact I was expecting a distinction and instead I only got an Exemption which to me was not good enough as I sweated blood for it. Now, I’m done with my background.”

*Speculative reasoning:* In these responses students identified external factors but their elaboration was focused on explaining why these factors matter rather than on an attribution of blame. When the elaboration of dissatisfaction reflected on how better the situation could have been (e.g. “if I had all the resources and staying with parents and if it wasn’t so independent work”), we associated the expression of agency with speculative reasoning:

“I felt that with proper teaching and more exposure to different resources, I could have done way better. E.g. although our school had computers, we never used them, because there was either no internet or no one knew how to teach us. Computer classes were not integrated into our timetables .... It feels like the study materials that we had did not allow me to achieve what I wanted to. If we had things like Science laboratory, things would have been much better because we would be able to mix the real chemicals and see the actual results rather than mixing them on paper with a pen and the results cannot be seen.” (1<sup>st</sup> year)

“I feel that I could have been taught [at school] subjects more in accordance to how the course ‘Becoming a Teacher’ teaches one how to teach. I think that being taught in this way would have really contributed to my learning because learning should not just be about dictation.” (1<sup>st</sup> year)

*Self-efficacy:* When the elaboration in responses about overcoming material conditions was about the strong sense of pride experienced by the student, “self-efficacy”, was conveyed.

“I was the first person in my whole family to pass with exemption. I was so happy to make my

grandparents proud of me. That day when results came out she was so excited to see my name on the newspaper. It is so sad that I lost her before I graduated at Wits. May her soul rest in peace. I will always love her.” (1<sup>st</sup> year)

“I am so proud with my matric results because it reflects and determines for me the kind of potential that I have. Judging from the kind of situation in which I went through my schooling I can say very proud and with confidence that I did very well.” (2<sup>nd</sup> year)

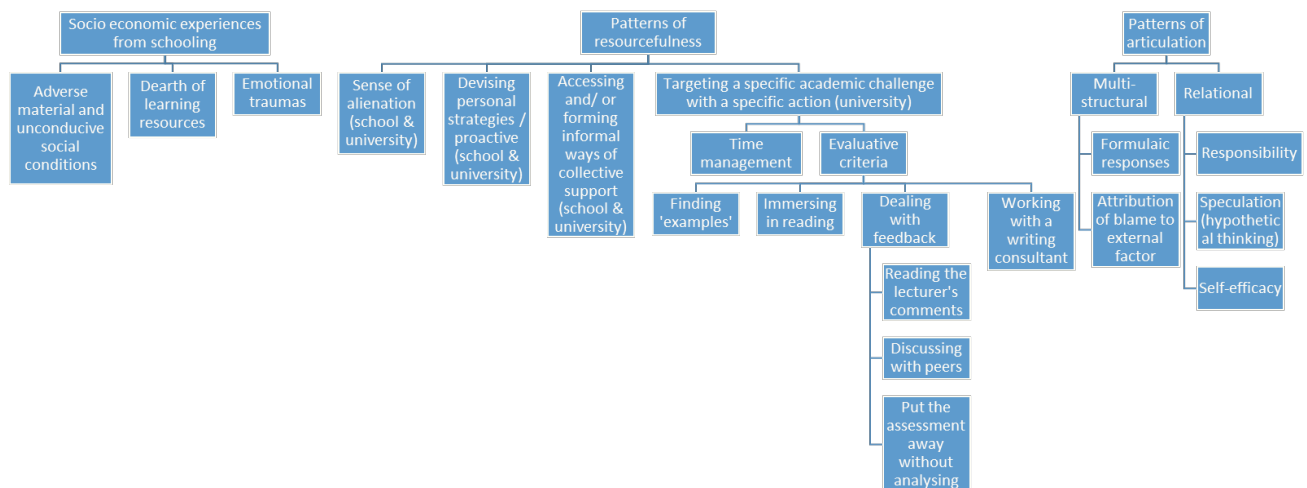
“I am doing well, achieving and gaining the knowledge that I need to become a great teacher and also my results are quite pleasing. I am satisfied with my performance.” (3<sup>rd</sup> year)

Through an exploration of the causes, consequences and implications of their reasons, these responses use convincing evidence to back up their claims. In this sense, the relational pattern of responses suggest a sense of “reflective judgment” (King and Kitchener 1994) in which subjects are able to justify their responses when discussing their experiences. What stands out in this pattern is the relation between elaboration and taking responsibility for results (whether they were good or poor).

## DISCUSSION

While we are aware that many of our students have had to deal with immensely challenging circumstances of a material, social, academic and psychological nature at school and at university, our analysis of the survey results has demonstrated a plethora of strategies for managing these difficult realities. Figure 1 demonstrates the complex pattern of “being” (in the material and academic sense) and “acting” (in personal and collective sense) as well as the modes in which students are reflecting on their academic achievements.

The complex pattern of resourcefulness decoded in this analysis is about what Barnett calls the “will to learn” (2007). Although some students report on feeling desperate and helpless, most of the comments are about the informal ways in which students engage the material, social, affective and academic conditions and the fluidity in which a student’s identity is constructed. The range of objects and modes of engagement present a resourceful agent. Moreover, the students’ search for ways of coping with pacing and their engagement with feedback with the view to understand what counts, show a mode of resourcefulness that is broadly aligned with the most difficult challenges academic learning requires. Managerialism and austerity measures which structure university life today tend to focus on throughput and performance. We believe, however, that this kind of analysis will assist tertiary educators in thinking about how to support students in their studies and promote a stronger student agency. Dispositions for resourceful engagement can be nurtured and developed as students become increasingly aware of their capacity to handle difficult and changing circumstances.



**Figure 1:** Patterns of resourcefulness

It is of course impossible to predict which students will take the initiative or make use of the resources on offer to move forward with their studies. For example, we cannot assume that weaker students will seek out appropriate support or guidance or whether they will become stuck and succumb to a sense of alienation. What the analysis does show, however, is that discussions about transforming the curriculum which call for us to bring the “knowledge of the marginalised to bear on our teaching” (Garuba 2015), need to also incorporate more complex understandings of our students, what their challenges are and what patterns of resourcefulness they devise in order to cope with these challenges.

## CONCLUSION

It is often said that students have specific qualities or attributes in terms of their engagement with institutional culture that correlate with their success at university. In this article, we have countered generalised views of student capability and motivation that do not pay attention to the way students navigate their way in the face of particular challenges. We have focused on how students encounter the adverse material and social conditions they face and the academic challenges university studies pose. In our detailed analysis of BEd students’ responses to the survey questionnaire, we have inferred several patterns of resourcefulness and articulation across three years of study in relation to school and university experiences. By differentiating the external and internal resources at school and university students reported on, the article contributes to a better understanding of the aspects of their lives which “impact on their engagement in pedagogical spaces” (Beard et al. 2007, 250). The article also contributes to the

claim made by Morrell (2016) that lecturers need to understand their students and their contexts and engage with them “where they are, rather than assuming a universal basic knowledge or life experience”. This has implications for designing educational programmes that recognise how students grow, develop and change while they are at university as well as how “an alienated experience of learning ... might arise” (Mann 2001, 17). Biggs and Tang (2005, 7) suggest that when there is a large gap between different students’ levels of engagement with teaching, good teaching methods are required to “get most students to use the higher order cognitive level processes that the more academic students use spontaneously” Similarly, we believe that these insights into how students negotiate relations of power and academic demands at university based on their past, present and future forms of action (Emirbayer and Mische 1998) need to get the attention of academics who teach students at all levels of study. Qualities like resourcefulness in its complex patterns can be nurtured in different learning contexts and require reflective teaching and assessment practices (Ashwin et al. 2015) to show our “capacity to become aware of the conditions in which we work and of the responses we make to them” (Mann 2001, 17). Through conscious reflexivity, lecturers will be in a position to challenge subject positions and create a hospitable environment for students. To harness students’ sense of agency it follows then that there is a need to recognise the role of agency in shaping student engagement with material, social, academic and affective challenges. Patterns of student experiences with schooling and university that emerged from this study present opportunities for lecturers to understand students as social beings who bring with them a range of strategies and not as undervalued or decontextualised. Students entering a system of higher education for the first time need support with the transition as they negotiate new processes of learning.

The CHE report proposes several institutional and pedagogical strategies that have the potential to facilitate a greater connection with the students’ voice and bridge the “huge distance between high school preparation and university success” (CHE 2010, 41). These take the form of systematic and sustained resources and programmes that address material, social and affective barriers to success. The CHE report argues that it is no longer an option for university teachers to abdicate their role as teachers in diverse and changing education contexts. They need to teach in ways that “engage, challenge and transform undergraduate student learning” as well as change their attitudes and conceptions of students.

## NOTES

1. Fourth Year data was excluded from the data set because the particular cohort of Fourth Year students at the time of data collection was atypical for the particular institution. About half of this cohort was made up of students who were actually already qualified teachers who had been sent to the institution on an upskilling project. These students were mature age, working persons whose challenges were significantly different to those of the usual school-leaving student at the institution. A decision was made to exclude this data from the analysis as it skewed the results



- significantly, and thus added little value to the study. In addition the response rate of the cohort was very low (29%). The total of 591 does not include the 167 4th year students who responded.
2. Many of these students wrote English First language for their matric (a choice determined by the school), but their home language is one of the African languages.
  3. As the emphasis of the analysis is on the quality of student reasoning on various challenges, the accounts are not divided between school and university in the article
  4. This replaced previous attempts which were rather intuitive, as they were “attempting to identify an indefinable quality sometimes referred to as “sparkle” or “talent” (Dison et al. 2006, 437).
  5. The design of the survey did not permit finding out correlation between those who did not live with both parents and those whose schools did not have all the basic facilities? i.e. how large was the group that had neither the advantage of a stable family nor a well-resourced school.
  6. Mann draws on the psychologist Winnicott (1971) to discuss the situation where “one’s self is not validated in good enough relationships and contexts” and that leads to “a loss of a sense of self, and of agency and desire” (1971, 12–13).
  7. The Writing Centre is an initiative at The University of the Witwatersrand where trained Peer Tutors (who are, themselves, students) consult with students about their writing, focusing on issues of argument structure, coherence and using evidence to answer a question.

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