CETAP News

Internal staff newsletter for CETAP

February 2018

CETAP
Centre for Educational Testing for Access and Placement

this issue

NBT-Wits meeting

On the 6th of February 2018, two academics and collaborators, Professor Lionel Green-Thompson (Assistant Dean: Teaching and Learning, Faculty of Health Sciences, WITS) and Sfiso Mabizela, from Wits University visited CETAP.

Robert Prince, Darlington Mutakwa and Ashley Niekerk spent the day with the Wits team.

The purpose of the visit was to seek understanding on the meaning of NBT performance data in relation to Medical students' performance at Wits University. The meeting also created an opportunity for the Wits academics to share research they had done on the NBT.

The results of this research will inform student selection and placement at Wits. The results also have huge potential in assisting the development of targeted interventions for students in need.

NBT-by-numbers

2514

Facebook followers

324

Twitter followers

NBT
National Benchmark Tests Project

University of the Witwatersrand, Johannesburg

Community of Practice for the Teaching and Learning of Mathematics

Robert Prince and Pragashni Padayachee attended the Universities South Africa (USAf) Community of Practice for the Teaching and Learning of Mathematics meeting on the 13th February 2018 at the University of the Western Cape. Forty-five participants attended and various interesting talks on mathematics education were presented. The main themes centred around predictors of success for higher education, supporting the development of mathematics students and mathematics teachers, and decolonisation of mathematics and mathematics education for higher education. Amongst the presenters were stalwarts in the field of mathematics education: Professor Cyril Julie, Professor Karin Brodie and Professor Renuka Vithal to name a few.

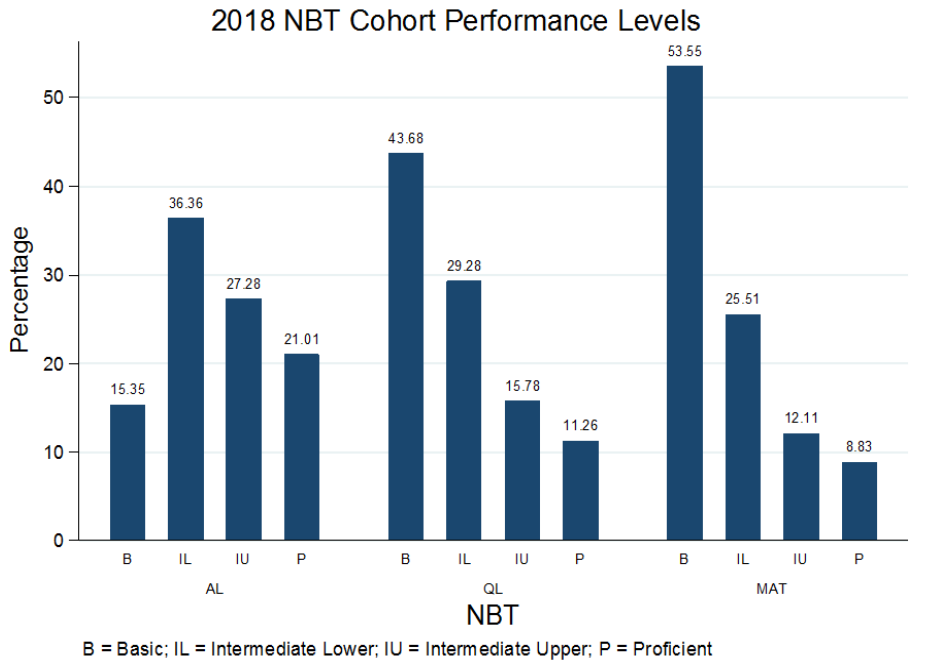

Figure 1

Robert and Pragashni presented a talk entitled “Profile and Diagnostic information of the 2018 higher education intake cohort with a focus on Mathematics and Quantitative Literacy”. This presentation began with a comparison of the school leaving assessments (NSC) and the higher education entry assessments (NBTs) and sketched the complementary roles that both assessments played in the South African educational landscape.

The profile of the test writers for 2018 Higher education intake with regard to Mathematics and Quantitative Literacy was presented. In Figure1, it can be seen that less than 10% of the 2018 incoming cohort have scores in the ‘proficient’ Mathematics category and more than 50% of the scores fall into the ‘basic’ category. The implications are that most students are likely to struggle with courses requiring them to apply their school mathematics knowledge to mathematically demanding higher education courses and programmes.

Similarly, just more than 10% of students’ Quantitative Literacy scores fall into the ‘proficient’ category and more than 40% of students’ scores fall into the ‘basic’ category, suggesting that the majority of students will find quantitative aspects of their courses a challenge.

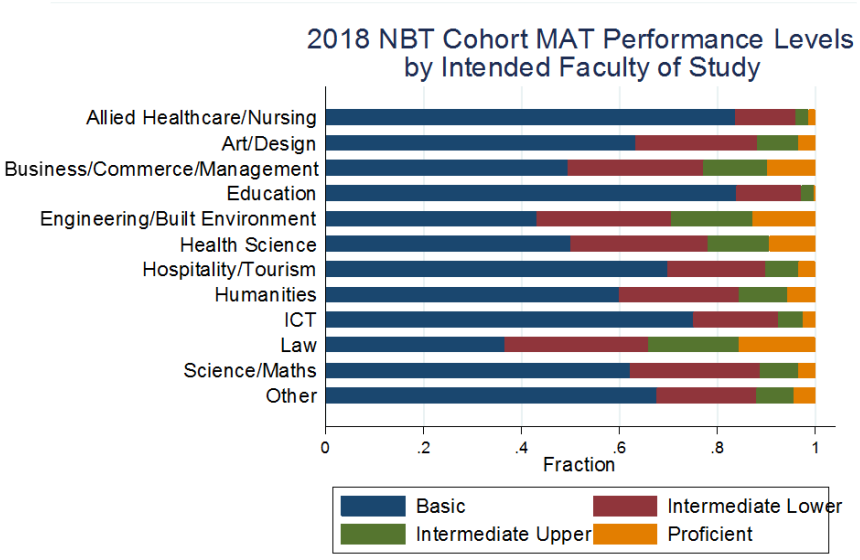

Figure 2

In Figure 2 the performance categories of the 2018 higher education intake was disaggregated by intended faculty of study and as can be seen from the Figure, even students intending to study Science, Technology, Engineering and Mathematics (STEM) programmes will be severely challenged in terms of Mathematics.

The presentation further focussed on how a more in-depth look into writers' performance on the various sub-domains of the NBT MAT and QL can be leveraged to inform the support higher education offers incoming students, ensuring there is alignment between student preparedness and course demand.

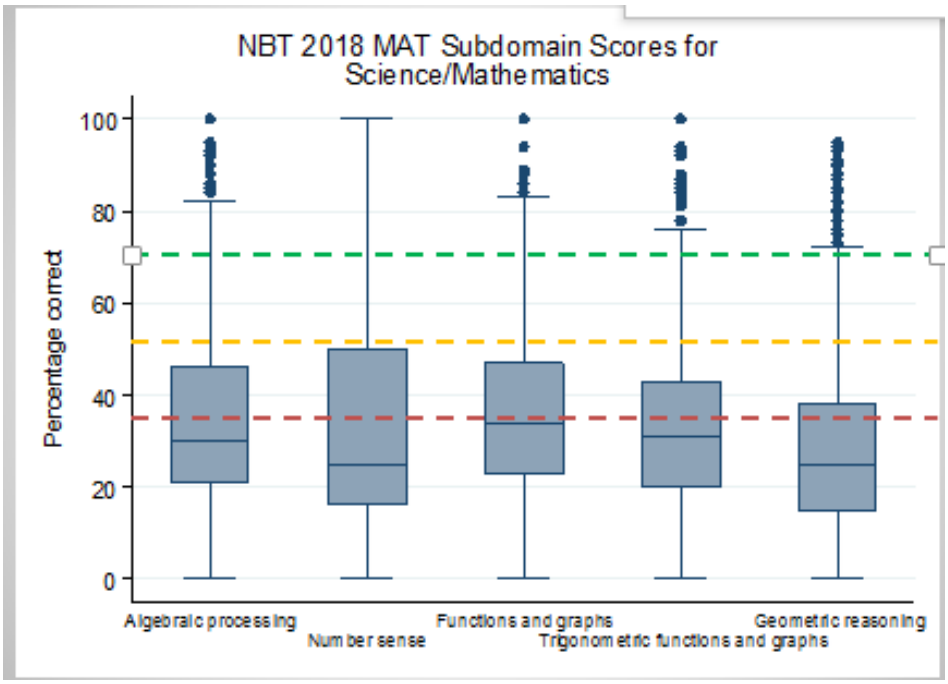

Figure 3

As an example, (Figure 3) the Mathematics subdomain scores for writers applying to study science and mathematics at higher education in 2018 were presented. The dotted lines denote the basic, intermediate lower and upper and proficient benchmarks in red, yellow and green respectively. The presenters noted that in all five sub-domains the medians were below the basic benchmark implying that more than fifty percent of the writers are likely to experience considerable challenges doing mathematics.

In addition, more than seventy-five percent of the writers fall below the intermediate benchmark and would require extensive academic support were they to undertake mathematics courses in higher education. Low performance in geometric reasoning and algebraic processing will have to be addressed to enable student success in first year mathematics courses.

The presenters ended with the question to the Mathematics community on whether this an institutional or a larger challenge and suggested that perhaps collaboration is key in addressing the dual challenge of student and institutional preparedness for the studying of mathematics within STEM programmes.

KwaZulu-Natal NBT Project

Naziema Jappie and Armstrong Cele (KZN DoE)

As part of an ongoing NBT outreach project started in 2016, Naziema Jappie and Janine Dunlop travelled to KwaZulu-Natal this month to present to the top achievers in quintile 1 and 2 schools in four school districts: Umzinyathi, Ugu, Ilembe, and King Cetshwayo.

The learners, who have been given the opportunity to write the NBTs for free, heard from Naziema and Janine about what to expect from the NBTs and how to register.

Some of the learners in the Umzinyathi District

Learners in Ilembe Distric

Send submissions to:

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by the 20th of each month

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