REAP
RURAL EDUCATION ACCESS PROGRAMME

in association with

National Bursary
Support Providers Forum

SUB-REPORT:
Guidelines for organisations compiling selected retrospective stats: Throughput, time to completion and year-on-year progression rates

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DG MT

THIS SUB-REPORT

This report is one of the products of a two-year research project which set out to discover what difference bursary support providers (BSPs) may make to student success at universities – and what their (unique) contributions to this might be.

Funded by the DG Murray Trust and commissioned by the Rural Education Access Programme (REAP), the project was carried out in active close collaboration with members of the National Bursary Support Providers Forum (NBSPF), a network of about 25 organisations which support university students in South Africa.

Given that the research question was about what difference the bursary support provider organisations (BSP) may be making to student outcomes (success), considerable detailed work on the measurement of academic outcomes was undertaken.

Once the definitional work on measuring throughput and progression rates had been finalised (see 'Terms used in the bursary support provider sector when measuring academic outcomes: Towards developing common usage / definitions'), four BSPs undertook a retrospective analysis of their own data using the agreed methods of counting (see 'Academic outcomes of students supported by four bursary support provider organisations'). In order to do so, however, a detailed guide on what and how to count was produced – so that variables were excluded as far as possible and real comparisons could be made. This is that detailed guide.

ACCESS TO THE REPORTS

These sub-reports, along with the full research report and a shorter version comprising the executive summary and findings, are posted on the REAP and NBSPF websites at

https://www.reap.org.za/pages/reports.html
https://nationalbursaryforum.org.za/resource-portal/

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INTRODUCTION

This guide identifies factors to be considered regarding each indicator when compiling retrospective stats – so that the results can be compared across the sector with the benefit of the same methodology and notes that qualify the findings.

Three indicators are addressed:

- throughput rates;
- time to completion ; and
- year–on-year progression rates.

For each there is

- a statement about what we would like measured;
- the definition from the outcomes document, to remind you of what was agreed; and
- a set of prompts for what to count and the notes to be made – with examples to clarify any muddy explanations!

Stats are only sought for undergraduate students. This can include an Honours only if it is included in the original degree.

Explanatory notes

In general where there are contextual issues that may affect outcomes, it is useful to add a short note – e.g. 'in 2018 the #Fees must Fall disruptions during the year and including exam time resulted in high anxiety amongst some of the students we support, especially at x, y , z universities'.

A note on the nature of the students with whom you work could be included once at the beginning of the report.

Identifying the cohorts

The first thing to do is establish which cohorts you will be analysing. It would be ideal to have at least three cohorts from each organisation.

- For the throughput rates and time to completion, please opt for cohorts that started sufficiently long ago such that there are NO (or very few) students still studying.
- The year-on-year progression rate can include more recent years e.g. from 2019.

Sub-analyses

Throughput stats are usually accompanied by a supplementary sub-analysis of the reasons for students not graduating – and this is recommended here.

In addition, however, there may be some fascinating findings in sub-analyses by field/faculty and/or by university. For some organisations, this may be easy to do, but not for others. The suggestion is that this is discussed at a Forum meeting - and which sub-analysis might be most useful for each indicator - and those who want to and are able to, do these as suits them.

Format of findings

In order to be able to do comparisons across the sector, please produce tables with numbers - not just figures/charts.

Percentages should be rounded off, with no decimal points.

Cleaning data

Cleaning the data so that they are internally consistent and comply with the criteria as agreed can be an exacting task. We hope that this serves your purposes beyond this exercise!

CONSTRUCTING THE AWARD COHORTS

Please choose your award cohorts that started sufficiently long ago such that all (or at least 95%) of the students have conceivably finished studying.

Definition	The year when the student became a beneficiary of the bursary support organisation – no matter their year of academic study.
Elaboration	This is not necessarily the year the student started studying (their 'start year'), as they may only have become a beneficiary after their first year of studying. For organisations who only take students from the first year of studying, however, the start year and the year of becoming a beneficiary is the same.

Guideline

What / how to count	Example
Identify the cohort years	e.g. 2016, 2015, 2014 etc

The following three factors will be used in calculations

The number of students in each cohort i.e. everyone who started studying in a given year, excluding ONLY those who left for other funding.	Total number
The number of students studying at each university – by cohort year	List of universities and the no. of students at each – for each cohort year
The number of students in each faculty – by cohort year.	List of faculties and no. of students at each – for each cohort year

It may be useful if you produced notes on the following factors:

What proportion of each award cohort was recruited at the beginning of their first year of study? later than the start of their first year?	e.g. 'X% of the 20xx award cohort was recruited at the beginning of their first year of study while y% were recruited during their qualification (later than the start of their first year).'
What proportion of each award cohort was supported for one year? two years? three years? more?	'We supported students in the 20xx award cohort for one year = x% two years = x% three years = x% more = x%
What is the funding package?	'All students are fully funded'. 'All students are partially funded'. X% of students in the 20xx were fully funded while y% were partly funded.

What / how to count	Example
Does your organisation focus on supporting students in particular fields / faculties?	'We only support students doing qualifications in the Health Sciences.' 'We support students in a wide range of qualifications.'
Are your students characterised by any demographic factors?	'All our students come from households with total incomes of less than Rxx per annum.' 'All our students went to rural schools.' 'All of our students are women.'

STATS ON OUTCOMES OF AWARD COHORTS

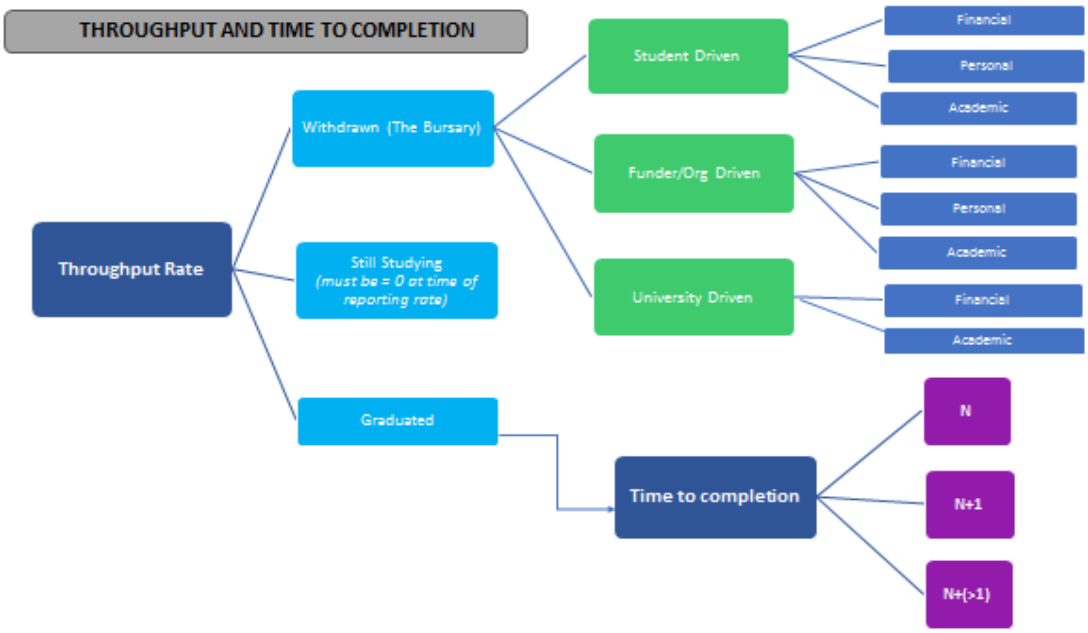
THROUGHPUT

Generally, ***throughput is the number of students in a group (or cohort) who graduate compared with the total number who were in that group when it was constituted – which is usually when they started to study.***

For calculating the throughput of an award cohort, we would like to know **the proportion of all students in that award cohort who graduated** – excluding only those who dropped off (left for other funding).

A supplementary sub-analysis would provide the reasons for those who did not graduate.

Definition	The proportion of all students in an award cohort (the year they started being supported by an organisation) who graduated while still being supported by that organisation – no matter how long they took to do so.					
Time period		year–on-year	X	final assessment		org level
Elaboration	Throughput can only be calculated once (almost) no-one in that award cohort is still doing their undergraduate degree – i.e. after the minimum time of the longest undergraduate degree, plus a few years has passed. It is calculated as the number of students who graduated, as a proportion of everyone who started being supported in year X (e.g.100) less those who left for other funding (e.g. 10). If 55 graduated, the throughput is 55 / 90. (The 35 who did not complete - for whatever reason - are included in the calculation.) An analysis can be given of completion times (graduated in 'n', 'n+1', 'n+2' etc) those who dropped out (giving the range of reasons).					



Guideline

What / how to count	**Example**
Start with the whole award cohort - i.e. everyone who you started supporting in a particular year.	200
Subtract those who left for other funding. Subtract anyone who may still be studying (though ideally this should be 0). Do not subtract any others!	- 10 190 - 0 190 = nett total
Identify who graduated – and calculate these as a proportion of the nett total.	If 138 graduated, then 138 / 190 **= 72,6% = throughput rate for that cohort**
What about the 27,4% who did not graduate? Count all those who did not complete their degree - and then calculate them as a proportion of the nett total .	
Reasons will comprise any of the following Student driven: student withdrew from university as they were only partially funded and could not afford the extra expenses (financial) as they had personal / family /health issues (personal) as they did not want to continue studying - at all / a particular programme/ at that university etc (academic) Bursary org driven: student was excluded from receiving continuing support as the organisation did not support a programme they had moved	

to (financial) the student did not comply with the org's requirements (personal) the student failed more courses than the organisation allows in order to continue to support them (academic) University driven: student was excluded from continuing studying as they have outstanding fees and were not allowed to return (financial) they failed more courses than the university allows for them to continue at all (academic)	

Presenting the findings

Throughput rates of students supported by [org]: award cohorts 2013 - 2016

	total students in the cohort	no. of students who completed	% of students who completed
1. 2013	2. 97	3. 59	4. 60.8%
5. 2014	6. 110	7. 73	8. 66.3%
9. 2015	10.102	11.68	12.65.3%
13.2016	14.85	15.54	16.63.5%

Notes:
An award cohort comprises all students who the organisation began to support in a given year.
The total number of students comprises all students who were supported at the beginning of that year, but excluding those who left for other funding at some stage.

For university / faculty comparisons, you could use the format above for the initial analysis of each university/faculty and then provide a comparison:

Throughput rates of students supported by [org]: award cohorts 2013 – 2016: By university

17.	**18.2016**	**19.2015**	**20.2014**	**21.2013**
22.CPUT	23.63%	24.68%	25.59%	26.81%
27.NMU	28.etc	29.	30.	31.
32.Rhodes	33.	34.	35.	36.
37.etc	38.	39.	40.	41.

Description of those who did not graduate while supported by your organisation

Reasons for not graduating while supported by xxxxx:
award cohorts 2013 - 2016

		student driven			organisation driven			university driven	
	total no. who did not complete	financial	personal	academic	financial	personal	academic	financial	academic
2013	38	9%	3%	0	6%	15%	36%	3%	28%
2014	37	etc							
2015	34								
2016	31								

Notes:
Those who left for other funding at some stage are not included here.

Again sub-analyses by faculty / university would require that this exercise is repeated for each faculty / university – which may produce trends that inform practice – as well as comparisons within the sector.

TIME TO COMPLETION

Time to completion is a sub-analysis of those who graduated (i.e. the nett total for throughput above).

For each award cohort we would like the proportion of students who graduated in minimum (regulation) time; then in one extra year; then in two extra years etc.

Definition	The number of years taken by a student to complete their degree (not a proportion of anything.)					
Time period		year–on-year	x	final assessment	x	org level
Elaboration	If a student changes programme within a related field (and may carry over some credits), the start year is from the beginning of the original programme and it comprises one programme of study – or one 'instance'. If a student changes programme to an unrelated, entirely different field (and does not carry over any credits), the start year is from the beginning of the new programme and these two (the first option and the new choice) are counted as two separate 'instances'. In identifying programme changes: if the student failed their first option and then changed programmes, this could be described as a 'dropout' – even if within the same field; if the student passed their first option and then changed this could be regarded as a 'programme change'. If a student changes programme, 'n' (i.e. the regulation time for a programme) is identified as follows: If the new programme is in a similar field (especially if credits may be carried over) then 'n' is the minimum number of years of the new programme, but the years already spent are counted as spent towards it. If the new programme is in an entirely different field (and credits cannot be carried over) then there are two 'n's: • The first 'n' is for the first programme and the student is recorded as having dropped out or changed programme - or completed the degree. • The second is a new 'n' for the second and unrelated programme. That is, there are two instances of studying for one student. Regulation time for an **extended programme** is not 'n+1', but 'n' e.g. 4 years for a standard 3-year programme. If a student takes a year off, only the years spent studying are counted as time towards completion.					

Guideline

What / how to count	42. Example
Identify the date each student started studying. Where a student has changed programme and • it is related to the current programme, the start year is from the beginning of the first programme; and • it is NOT related to the current programme, the start year is from the beginning of the current programme.	2013
Identify the minimum/regulation time for completion of their qualification. Whether or not the student has changed programme, the minimum/regulation time is for the current programme.	3 years
Calculate the regulation completion date	2016
Note the actual completion date and count the number of years between the two dates.	2017 – 4 years
Compare this with the regulation time. Where they are the same this is 'n' Where there is one year extra , this is 'n+1' etc.	= n+1

Presenting the findings

Years to completion of students who graduated while supported by [org]: award cohorts 2013 - 2016

	No. of students who completed	n	n+1	n+2	more than n+2
2013	59	26%	62%	12%	n/a
2014	73	etc			
2015	68				
2016	54				

Notes:
An award cohort comprises all students who the organisation began to support in a given year.
The extra year added to the regulation time for those registered for an extended programme is included in 'n' such that n = 4 years for a three-year degree etc..
As [org] does not continue to support students for more than n+2, any student how may have completed their qualification in a longer time will not have been supported by [org] – and is included in the throughput analysis above under 'Org reasons: academic'.

For any university / faculty sub-analysis, you could use the format above for the initial analysis of each university/r faculty and then provide a comparison.

YEAR-ON-YEAR PROGRESSION RATE

For year-on-year progression we would like to know for each calendar year (e.g. '2016' not 'second year') **the proportion of all students studying who progressed.**

This is not based on the award cohort as described above. Rather, the data set for this calculation comprises the total number of students who started at the beginning of any given year. It

- includes those who left for other funding that year; but
- necessarily excludes students who had dropped out or dropped off in previous years.

A general note should be made to that effect.

Definition	The proportion of all students who are being supported by an organisation who, at the end of a calendar year, pass sufficient of their courses to progress to the next academic year – whether or not they are carrying modules. The progression rate includes students who graduate.					
Time period	x	year–on-year	x	final assessment	x	org level
Elaboration	The progression rate is a proportion of all students – not just those who wrote exams (which is how DHET sometimes uses it.) It can also include students on in-service training (IST) who progress. If a student has a deferred exam – which makes it unclear as to whether or not they are progressing – this should be noted as a separate category. (If in doubt, an organisation can use the outcome printed on the university results.) The progression rate does not have a relationship with 'n' – nor is it concerned with whether or not the duration of their studies is extended. (This more inclusive term replaces 'year-on-year pass rate' which was used differently by various organisations to mean passing all courses/modules or passing some but still progressing. 'success rate' which was too inclusive and non-specific to be useful.)					

Guideline

What / how to count	Example
Total number of students studying that year - including those who dropped off (left for other funding) during the year.	590
Number of students who passed enough courses to progress academically - or who graduated.	512
Proportion who passed enough courses to progress academically - or who graduated.	512/590 = 87%

This then could be done for each faculty/university for each calendar year – to compare particular fields / faculties within the sector. (This also provides valuable information about where interventions may be needed.)

Presenting the findings

Year-on-year progression rates of students supported by [org]: award cohorts 2015 - 2019

	total students studying	no. of student who progressed	% of total who progressed
2019	128	96	75%
2018			
2017			
2016			
2015			

Notes:
An award cohort comprises all students who the organisation began to support in a given year.
The total number of students comprises all students who were supported at the beginning of that year, inc those who may have left for other funding during that year.

If you are doing a sub-analysis, you could use the format above for the initial analysis of each university or faculty and then provide a comparison:

Year-on-year progression rates of students supported by [org]: award cohorts 2015 – 2019: By university

	2019	2018	2017	2016	2015
CPUT	63%	68%	59%	81%	73%
NMU	etc				
Rhodes					
etc					