

Southern African Association for Institutional Research

Foundations of HEMIS 2016

Key principles of Student reporting

Presented by: Lynne Angus, Rhodes University



Acknowledgements

- Valpac documentation
- Herman Visser
- Neels Bezuidenhout
- Moira van der Merwe
- Lynne Angus



Purpose

The purpose of this session is to explain the foundations and principles of the South Higher Education Management African Information System (HEMIS) as it relates to student reporting.



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Purpose

Discuss Student reporting in terms of:

- Academic structure
- Structured reporting
- The HEMIS relationship
- Student defined
- The student walk
- Applications, registrations and cancelations
- Census date



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Purpose continued

- Assessment and student activity
- **Examinations and graduation**
- What and who to include
- What is an FTE?
- The bouncers Auditors
- Data integrity
- Valpac
- Valpac reports
- Internal uses of HEMIS reporting



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Outcomes

To have a better understanding of the foundations of **HEMIS** student reporting



"Not everything that can be counted counts, and not everything that counts can be counted."

- Albert Einstein



What is HEMIS?

- · Higher Education Management Information System
- HEMIS is an audited snapshot of an Institution's Student, Staff and Space information at a specific point in time for a specific academic year, guided by DHET directives
- These various calculated reports determine the subsidy that the institution will receive based on certain variables.
- Used for benchmarking by DHET ito throughput and pass rates and also quality assurance
- · Common currency that can be rolled up Nationally



What is HEMIS? continued

Student Submissions

- Course registrations (Teaching Input Unit)
- Qualification completion (Teaching Output Unit)

In the calculation of funding the following variables are important:

- CESM of qualifications and courses determines <u>funding group</u> of subsidy.
- · Course level determines further weighting



What is HEMIS? continued

The fact that a student is registered is not the only qualifying factor for inclusion of a student in HEMIS. Academic activity at all levels of study must be proven at all times.



Academic Structure

- All academic structure related information needs to reside in one place for reporting purposes.
- Business rules should be encapsulated in the student management system



Academic Structure

Approved Qualification Information

- Qualification Name
- Qualification Type
- Qualification Level
- Minimum Time
- Attendance mode

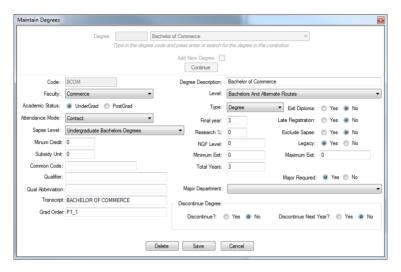
Approved Course Information

- Course Name
- Course Level
- CESM

Qualification - Course relationship



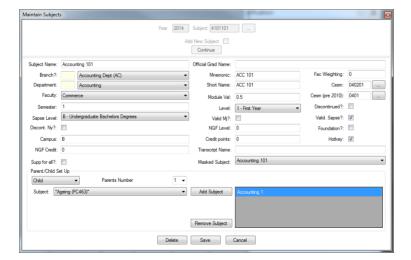
RU Qualification Record





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RU Course Record

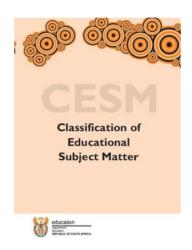




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CESM explained





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1st Order

01	Agriculture, Agricultural Operations And Related Sciences
02	Architecture And The Built Environment
03	Visual And Performing Arts
04	Business, Economics And Management Studies
05	Communication, Journalism And Related Studies
06	Computer And Information Sciences
07	Education
08	Engineering
09	Health Professions And Related Clinical Sciences
10	Family Ecology And Consumer Sciences
11	Languages, Linguistics And Literature
12	Law
13	Life Sciences
14	Physical Sciences
15	Mathematics And Statistics
16	Military Sciences
17	Philosophy, Religion And Theology
18	Psychology
19	Public Management And Services
20	Social Sciences



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2nd Order

0401	Business Administration, Management And Operations
0402	Accounting And Related Services
0403	Business/Corporate Communications
0404	Economics
0405	Entrepreneurial and Small Business Operations
0406	Finance and Financial Management Services
0407	Hospitality Administration/Management
0408	Human Resource Management and Services
0409	International Business
0410	Management Sciences And Quantitative Methods
0411	Marketing
0412	Real Estate
0413	Taxation
0414	Insurance
0415	General Sales, Merchandising And Related Marketing Operations
0416	Specialised Sales, Merchandising And Marketing Operations
0417	Parks, Recreation And Leisure Facilities Management
0499	Business, Economics and Management Studies, Other



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3rd Order

0402 Accounting and Related Services

040201 Accounting

040202 Auditing 040203 Accounting and Finance 040299 Accounting and Related Services, Other



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Allocation of CESM's

CODE DESCRIPTION CESM1 CESM2 CESM3 CESM
BAN1601 BANKING 1 04 06 02 040602

1st Order

04 Business, Economics And Management Studies

2nd Order

06 Finance and Financial Management Services

3rd Order

02 Banking and Financial Support Systems

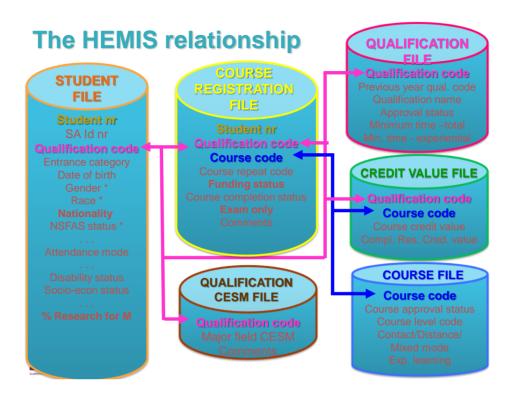
An area of study which prepares individuals to perform a wide variety of customer services in banks, insurance agencies, savings and loan companies, and related enterprises. Includes instruction in communications and public relations skills, business equipment operation, and technical skills applicable to the methods and operations of specific financial or insurance services.

Structured Reporting

It's all about the six pack!







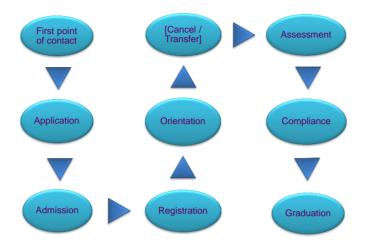
What is a student?

To be considered a higher education student, a person must satisfy both of the following conditions:

- He/she must be enrolled for a course which forms part of the curriculum of a Ministerially approved qualification
- He/she must be in possession of either a senior certificate with endorsement or certificate of exemption, or a senior certificate without endorsement or be admitted at the discretion of the senate.
 From 2009 NSC entry



The student walk





First point of contact

- Institutional website
- School visits
- Prospectus
- Open days
- Media



Application / Admission

Application



Evaluation



Admission



Registration

Information gathered from this process:

- Biographical information
- Qualification information
- Course information



Census dates

How to determine the census dates

- Midpoint of the academic period
 - 15 April (for first semester courses)
 - 1 June (for year courses)
 - 15 September (for second semester courses)



Who and what to include

Who to include?

- A student
- Students who are registered before or on census date
- Students who have not cancelled a course before or on census date
- Students who are effectively registered for an approved qualification
- · Students who are effectively registered for a course
- · Student who are deemed to have been academically active



Effective registration for a qualification

The student must meet all of the following criteria:

- Satisfies the statutory entry requirements for admission to a formally approved qualification offered by the institution
- Officially enrolled for the qualification between 1 January and 31 December of collection year
- Effectively registered (conditions determined by institution) for at least one course which is part of the curriculum of the qualification



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Effective registration for a course

A student is effectively registered for a course when all of the following criteria have been met:

- On the census date, the course is an approved component of the student's curriculum
- On the census date, the student is still entitled to be undertaking the course, has not officially been withdrawn from the course and has not been officially excluded from the course

On the census date the student is active



Assessment and activity

Proof of <u>academic</u> activity

Contact (Face-to Face)

- · Class attendance
- · Class test
- Assessment

Distance (ODL)

- Assignments
- Portfolios
- · Research activities
- Other activities
- Assessment



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Examination and Graduation

- Assessed students
- Students that comply
- Graduation



What is an FTE?

- Full Time Equivalent
- A student carrying a normal full time course load over one year will be 1 FTE (120 NQF credits).
- The FTE is further divided between the different CESMs of the courses the student is registered for.
- In an ideal world, if all students were taking four courses full time in one year then the credit value per CESM would be 0.25 equaling 1 FTE per student per year (0.25 * 4).



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Auditing – 3rd Submission

- According to DHET directives, an audit on all 3rd submissions on student HEMIS information must be undertaken, checked and all reports certified by an external auditor.
- Letter of engagement between Institution and Auditors to set out the scope of audit as prescribed by Audit directives
- Check the paper trail of the student walk.
- Ensure accuracy
- Avoid creative reporting



Data integrity

Old familiar GIGO

- · Pro-active cleaning up of data as tested by reporting validations.
- Ensure Institutional rules are adhered to in the registration / administrative process regarding student records during the student walk.
- · Software available to assist with this process
- · Automated checks distributed and checkups done
- · Some Institutions have a data integrity officer

"A clever person solves a problem.

A wise person avoids it."

- Albert Einstein



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VALPAC

What is Valpac?

- Software provided by DHET to ensure a standardised platform for consolidation of all HEMIS information
- To validate data
- · To generate standardised reports
- To ensure a uniform standard of reporting

Valpac validations

- Validates all data across the six files
- Generate validation / error reports
- Data quality insurance / Data Integrity



VALPAC reports

Headcount Reports:

- Headcount of Enrolled Students Table 2.12
- Headcount of Students who completed their degrees Table 2.13

FTE Reports:

- Enrolled Funded credit report Distance / Contact
- Complete Funded credit report Distance / Contact



Table 2.12: Headcount Enrolments

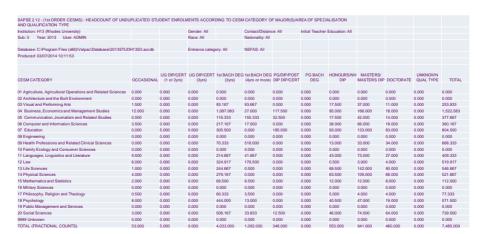




Table 2.13: Headcount Graduates

Institution: H13 (Rhodes University)			Gender: All		Contact/Distan	ce: All	Initial Teacher I	ducation: All				
Sub: 3 Year: 2013 User: ADMIN			Race: All		Nationality: All	uu. Pill	annua reaction					
Oub. 5 Teal. 2010 Coat. Abmit			reacc. res		reasonanty. For							
Database: C:\Program Files (x86)\Valpac\Database\2013STUI	OH13S3.accdb		Entrance categ	ory: All	NSFAS: All							
Produced: 03/07/2014 10:31:57												
	UG DIP/CERT	UG DIP/CERT	1st BACH DEG	1st BACH DEG	PG/DIP/POST	PG BACH	HONOURS/NH		MASTERS/ MASTERS DIP NON		UNKNOWN	
CESM CATEGORY	(1 or 2yrs)	(3yrs)	(3yrs)	(4yrs or more)	DIP DIP/CERT	DEG	DIP	RESEARCH	RESEARCH	DOCTORATE	QUAL TYPE	TOTAL
01 Agriculture, Agricultural Operations and Related Sciences	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
02 Architecture and the Built Environment	0.000	0.000			0.000	0.000			0.000	0.000	0.000	0.000
03 Visual and Performing Arts	0.000	0.000			0.000	0.000		9.500	2.500	2.000	0.000	70.667
04 Business, Economics and Management Studies	0.000	0.000		7.000	81.500	0.000		22.000	16.000		0.000	530.083
05 Communication. Journalism and Related Studies	0.000	0.000		59.500	32.000	0.000		8.000	8.000	1.000	0.000	143.167
06 Computer and Information Sciences	0.000	0.000			0.000	0.000		14.000	3.000	3.000	0.000	118.667
07 Education	1.000	0.000		0.000	138.000	0.000		18.000	5.000	15,000	0.000	258.000
08 Engineering	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
09 Health Professions and Related Clinical Sciences	0.000	0.000	14.500	88.000	0.000	0.000	13.000	13.000	0.000	4.000	0.000	132.500
10 Family Ecology and Consumer Sciences	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11 Languages, Linguistics and Literature	0.000	0.000	63.500	0.000	1.000	0.000	34.000	13.600	15.400	4.000	0.000	131.500
12 Law	0.000	0.000	76.083	83.000	0.000	0.000	1.000	1.000	0.000	1.000	0.000	162.083
13 Life Sciences	0.000	0.000	81.500	0.000	0.000	0.000	64.500	45.000	3.000	17.000	0.000	211.000
14 Physical Sciences	0.000	0.000	60.667	0.000	0.000	0.000	59.500	26.000	6.000	14.000	0.000	166.167
15 Mathematics and Statistics	0.000	0.000	20.333	2.000	0.000	0.000	10.000	2.000	0.000	1.000	0.000	35.333
16 Military Sciences	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17 Philosophy, Religion and Theology	0.000	0.000	19.500	1.000	0.000	0.000	5.000	1.500	1.500	0.000	0.000	28.500
18 Psychology	0.000	0.000	118.333	0.000	0.000	0.000	38.500	13.500	7.500	2.000	0.000	179.833
19 Public Management and Services	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20 Social Sciences	0.000	0.000	103.000	1.000	13.500	0.000	45.000	23.000	4.000	4.000	0.000	193.500
9999 Unknown	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL (FRACTIONAL COUNTS)	1.000	0.000	1,026.000	263.000	266.000	0.000	453.000	210.100	71.900	70.000	0.000	2,361.000



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Enrolled Funded Credit Report

				_								
ENROLLED FUNDED CREDIT REPORT, CONTACT-ONLY MINON-FOUNDATION	IODE, EXCLUDI	NG EXPERIEN	TIAL LEARNING	, FOR FOUND	ATION PLUS							
nstitution: H13 (Rhodes University)			Gender: All									
Sub: 3 Year: 2013 User: ADMIN			Race: All									
Database: C:\Program Files (x86)\Valpac\Database\2013STUD	H13S3.accdb		Entrance categ	jory: All								
Produced: 03/07/2014 09:41:55			Nationality: All									
(a) Unweighted Credit	PRE-TERT	LOW UG	INT UG	HIGH UG	PREP PG	LOW PG	INT PG NON- RSH	INT PG RSH	HI PG NON- RSH	HI PG RSH	OTHER	TOTA
CESM Categories (E586)												
010 Agriculture, Agricultural Operations and Related Sciences	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
020 Architecture and the Built Environment	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
03A Music	0.000	0.000	55.912	2.000	0.000	5.269	0.750	2.581	0.000	1.329	0.000	67.841
3B Visual Arts	0.000	0.000	75.148	16.000	0.000	1.437	0.000	6.528	0.000	2.215	0.000	101.328
ISC All Other Arts, Visual and Performing	0.000	0.000	48.542	0.000	0.000	10.538	1.825	2.209	0.000	1.329	0.000	64.443
140 Business, Economics and Management Studies	0.000	0.000	913.545	67.969	43.956	111.196	20.069	25.469	0.000	8.316	0.000	1,190.51
50 Communication, Journalism and Related Studies	0.000	0.000	133.055	59.964	35.000	14.370	2.008	13.370	0.000	6.202	0.000	263.969
060 Computer and Information Sciences	0.000	0.000	238.311	2.500	0.000	37.844	10.915	23.148	0.000	8.694	0.000	321.412
70 Education	0.000	1.336	211.661	0.000	159.257	43.431	23.520	33.632	0.000	43.409	0.000	516.246
080 Engineering	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99A Nursing, Rehab, Therapy, etc.	0.000	0.000	48.376	0.000	0.000	12.922	0.000	5.558	0.000	2.898	0.000	69.754
98 All Other Health Care and Health Sciences	0.000	0.000	280.790	94.500	0.000	0.000	0.000	8.276	5.580	6.952	0.000	396.098
100 Family Ecology and Consumer Sciences	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110 Languages, Linguistics and Literature	0.000	0.000	403.505	0.000	0.000	40.856	5.728	31.222	0.000	11.961	0.000	493.272
20 Law	0.000	0.000	418.190	0.000	0.000	0.500	0.000	1.500	0.000	2.668	0.000	422.858
30 Life Sciences	0.000	0.000	219.811	0.000	0.000	68.089	1.180	56.545	0.000	43.470	0.000	389.095
140 Physical Sciences	0.000	0.000	288.263	0.000	0.000	63.062	11.800	36.727	0.000	31.838	0.000	431.690
50 Mathematics and Statistics	0.000	0.000	179.875	2.000	0.000	11.443	2.655	2.851	0.000	3.864	0.000	202.688
60 Military Sciences	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70 Philosophy, Religion and Theology	0.000	0.000	106.722	0.000	0.000	4.790	0.365	1.095	0.000	1.772	0.000	114.744
80 Psychology	0.000	0.000	392.528	0.000	0.000	39.507	2.190	15.143	0.000	8.417	0.000	457.785
190 Public Management and Services	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
200 Social Sciences	0.000	0.000	547.093	0.000	12.000	44.618	1.778	25.917	0.000	28.352	0.000	659.757
Other	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	0.000	1.336	4 561 326	244 933	250 213	509.872	84 782	291 770	5 580	213.686	0.000	6 163 49



Completed Funded Credit Report

				_								
COMPLETED FUNDED CREDIT REPORT, CONTACT-ONLY NON-FOUNDATION	MODE, EXCLU	DING EXPERI	ENTIAL LEARNIN	IG, FOR FOUN	IDATION PLUS							
Institution: H13 (Rhodes University)			Gender: All									
Sub: 3 Year: 2013 User: ADMIN			Race: All									
Database: C:\Program Files (x86)\Valpac\Database\2013STUE	H13S3.accdb		Entrance categ	ory: All								
Produced: 03/07/2014 09:52:55			Nationality: All									
(a) Unweighted Credit	PRE-TERT	LOW UG	INT UG	HIGH UG	PREP PG	LOW PG	INT PG NON- RSH	INT PG RSH	HI PG NON- RSH	HI PG RSH	OTHER	TOTA
CESM Categories (E586)												
JESHI Categories (E000)												
010 Agriculture, Agricultural Operations and Related Sciences	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
020 Architecture and the Built Environment	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
03A Music	0.000	0.000	42.915	2.000	0.000	5.269	0.000	1.000	0.000	0.000	0.000	51.184
03B Visual Arts	0.000	0.000	66.127	16.000	0.000	0.479	0.000	6.000	0.000	4.000	0.000	92.606
3C All Other Arts, Visual and Performing	0.000	0.000	46.126	0.000	0.000	9.580	2.500	2.500	0.000	0.000	0.000	60.706
040 Business, Economics and Management Studies	0.000	0.000	771.966	44.219	41.014	85.552	16.000	22.000	0.000	4.000	0.000	984.751
050 Communication, Journalism and Related Studies	0.000	0.000	120.257	59.000	33.000	14.370	8.000	8.000	0.000	2.000	0.000	244.627
060 Computer and Information Sciences	0.000	0.000	198.900	2.500	0.000	35.850	3.000	14.000	0.000	6.000	0.000	260.250
070 Education	0.000	0.167	170.214	0.000	134.319	39.851	5.000	18.000	0.000	30.000	0.000	397.551
080 Engineering	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09A Nursing, Rehab, Therapy, etc.	0.000	0.000	43.459	0.000	0.000	12.922	0.000	5.000	0.000	2.000	0.000	63.381
09B All Other Health Care and Health Sciences	0.000	0.000	231.630	90.000	0.000	0.000	0.000	8.000	0.000	6.000	0.000	335.630
100 Family Ecology and Consumer Sciences	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110 Languages, Linguistics and Literature	0.000	0.000	333.653	0.000	0.000	32.192	15.400	13.600	0.000	8.000	0.000	402.845
120 Law	0.000	0.000	367.447	0.000	0.000	0.000	0.000	1.000	0.000	2.000	0.000	370.447
130 Life Sciences	0.000	0.000	199.823	0.000	0.000	65.107	3.000	45.000	0.000	34.000	0.000	346.930
140 Physical Sciences	0.000	0.000		0.000	0.000	59.086	5.500	26.000	0.000	28.000	0.000	362.413
150 Mathematics and Statistics	0.000	0.000		2.000	0.000	9.449	0.000	2.000	0.000	2.000	0.000	153.274
160 Military Sciences	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170 Philosophy, Religion and Theology	0.000	0.000		0.000	0.000	4.790	1.500	1.500	0.000	0.000	0.000	83.688
180 Psychology	0.000	0.000		0.000	0.000	37.591	7.500	13.500	0.000	4.000	0.000	411.933
190 Public Management and Services	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
200 Social Sciences	0.000	0.000		0.000	11.000	43.660	4.000	23.000	0.000	8.000	0.000	542.391
Other	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	0.000	0.167	3,852.137	215.719	219.333	455.748	71.400	210.100	0.000	140.000	0.000	5,164.604



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Internal uses of HEMIS reporting

Valpac reports can be used to:

- Calculate official Graduation Rates for your Institution Grad rate = Headcount of graduates from Table 2.13 / Headcount of enrolments from Table 2.12 * 100 e.g. 2361 / 7485 * 100 = 32%
- Calculate official Success Rates for your Institution Success rate = Courses completed from Completed Funded Credit Report / Courses enrolled from Enrolled Funded Credit Report*100 e.g. 5164.604 / 6163.498 * 100 = 84%



The beginning

... of a better understanding of HEMIS

Thank you

Questions?

