

Alignment of external and internal reporting requirements: More work or can it assist to relieve pressures?



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Background

- LoGrasso (2016) highlights the increase in external reporting as one of the areas of growth in the evolving role of institutional researchers.
- Efficient and accurate external reporting processes, in particular by public higher education institutions, is pivotal to successful submissions by those institutions to the regulatory bodies set up by the state.
- External reporting is impacted on by the balance between governance, autonomy, transparency and accountability issues.
- Internationally and also locally the pressure and requirements to provide external reporting to an ever expanding range of stakeholders are increasing.



Background (continued)

- Mandatory statutory external reporting, of which HEMIS is a prime example in South Africa, is often all that we think of.
- However, there are also several other forms of external reporting by South African institutions.
- Apart from the range of external parties requiring information, the specifications of what is required is also increasing.
- At the same time, institutions are experiencing pressures on their resources which further aggravates the situation.



Fundamental questions

- How can we address this increasing demand for more information by external bodies?
- How can we manage the institutional resources available for reporting optimally?

In order to answer these questions, it is important to understand the nature of some of these external requirements and how these relate to HEMIS information and other institutional information.

SOME EXAMPLES OF INCREASED EXTERNAL REPORTING REQUIREMENTS

**As illustration,
do not represent all such requirements**



External requirements by DHET not part of HEMIS reporting

- Enrolment planning and management
Important for funding as universities are largely financed based on the share of their planned enrolments as proportion of the systemic planned enrolments (as agreed on by Councils and Ministry of Higher Education).
 - Targets and agreements with Ministry are at a fairly high (summarised level)
 - In order to manage enrolments effectively, institutional information needs to be aligned but must be in more detail, e.g. by qualification/programme



External requirements by DHET not part of HEMIS reporting (continued)

- Teacher training
 - Because of the importance of schools in the education systems DHET annually requires additional information about teacher training
 - The information about school subjects may be readily available or may have to be mapped from courses (modules). Similarly other requirements may be readily available or not
 - This information needs to balance with HEMIS submissions



External requirements

- Internal reporting that needs to align with external reporting
 - Enrolment planning per qualification/programme
 - Student success
 - Throughput
- Information requirements of professional associations
- Information requirements for global rankings
- Country reporting – UNESCO, OECD and the World Bank
- Etc,

Master dataset



Master dataset

- It is international best practice to make use of a master dataset from which reporting can be done in a controlled way.
- Create from operational data with appropriate flags.
- Start with mandatory requirements, e.g. HEMIS specifications
- Add other external reporting requirements, e.g. employment equity, HEQC/QEP
- From the base data, data marts or views can be created for various external and internal requirements.

EXAMPLE OF HOW INTERNATIONAL STANDARDS CAN FURTHER BE USED TO ENRICH OUR DATA



Occupations

- The International Labour Organisation (ILO) occupational classification – latest version ISCO 08 (2012).
- This takes a hierarchical form which can be drilled down to the required level of detail:
 - Occupation major group (mapped to skill levels)
 - Occupation sub-major group
 - Occupation
- When combined with economic activity, the classification provides a rich classification system especially when combined with economic sector:
 - Economically active
 - Unemployed
 - Not economically active



Occupation major groups: Economically active

- Managers (Major group 1)
- Professionals (Major group 2)
- Technicians and associate professionals (Major group 3)
- Clerical support workers (Major group 4)
- Service and sales workers (Major group 5)
- Skilled agricultural, forestry and fishery workers (Major group 6)
- Craft and related trades workers (Major group 7)
- Plant and machine operators, and assemblers (Major group 8)
- Elementary occupations (Major Group 9)
- Armed forces occupations (Major group 0)



Occupation major groups: Unemployed and Not economically active

- **Unemployed**
 - Unemployed, want to work
- **Not economically active**
 - Full-time students
 - Other not economically active (Homemakers; Labour-disabled persons - 15-65 years old; Pensioners; and Not economically active persons not elsewhere classified)



Occupation sub-major groups

Example: Managers (four sub-major groups)

- Administrative and commercial managers
- Chief executives, senior officials and legislators
 - Legislators
 - Managing directors & chief executives
 - Senior government officials
 - Senior officials of special-interest organizations
 - Traditional chiefs & heads of village
- Hospitality, retail and other services managers
- Production and specialised services managers



Mapping of Major-groups to Skill levels

- The use of ISCO-08 categories to assist in defining the four skill levels does not mean the skills can only be acquired via formal education.
- Where formal education and training requirements are used as part of the skill level of an occupation, these requirements are defined in terms of ISCED-97 (UNESCO)

ISCO-08 skill level	ISCED-97 groups
4	6 Second stage of tertiary education leading to advanced research qualification
	5a First stage of tertiary education – 1 st degree (medium duration)
3	5b First stage of tertiary education with short or medium duration
2	4 Post-secondary, non-tertiary education
	3 Upper secondary level of education
	2 Lower secondary level of education
1	1 Primary level of education

E.g. Major group 2: Professionals is mapped against skill level 4

Economic sector

Economic sector	ISIC code	Economic sector	ISIC code
Accommodation & food services	I	Information & communication	J
Extraterritorial organisations & bodies	U	Manufacturing	C
Household goods & services	T	Mining & quarrying	B
Administrative & support services	N	Other service activities (not elsewhere)	S
Agriculture, forestry & fishing	A	Professional, scientific & technical	M
Arts, entertainment & recreation	R	Public admin & defence; social security	O
Construction	F	Real estate activities	L
Education	P	Transportation & storage	H
Electricity, gas, steam & air conditioning	D	Water supply; sewage, waste management	E
Financial & insurance activities	K	Wholesale & retail trade; repair motors	G
Human health & social work activities	Q	Not applicable (pensioners, unemployed)	V



Disabilities

UN Statistical Service/ HEMIS disability status	HEMIS code	Internal disability status
Not disabled	00	Not disabled
Communication (talking, listening)	03	Communication and speech problems such as stuttering
Emotional (behavioral or psychological)	06	Mental health problems/mental disorders/phobias/chemical imbalances
Hearing (even with a hearing aid)	02	Deaf
		Hearing disability: study material on audio cassette should be transcribed
Intellectual (difficulties in learning)	05	Cerebral Palsied
		Dyslexia and other learning disabilities
Physical (moving, stading, grasping)	04	Cardiovascular diseases, such as heart diseases and blood pressure
		Diabetes
		Epilepsy
		Kidney and blood deficiencies
		Muscular/skeletal/joint/limb deficiencies/diseases such as polio and muscular dystrophy
		Other neurological diseasases such as multiple sclerosis
		Paraplegic
		Quadruplegic
		Serious chronic diseases
		Stroke/brain disorders
		Wheelchair
Sight	01	Visually impaired: not blind. Can study through reading. Do not need study material on audio cassette.
		Visually impaired: not blind. Find it difficult to read printed text. Cannot study through reading. Need help such as audio casetets, enlarged print, computer discs for computers with voice synthesizers.
		Visually impaired: blind
Multiple disabilities	07	Multiple disabilities
Disabled but unspecified	09	Disabilities not mentioned



Conclusion

- Apart from the mandatory and statutory function of HEMIS reporting, institutions and in particular institutional research / Management information / HEMIS offices are experiencing significant and increasing pressure to provide internal and external information.
- By working from a master data set to extract information for HEMIS reporting and for other external reporting and even internal reporting, the internal and external reporting processes can be aligned and optimised.
- By further making use of international standards, the reporting processes can be further enriched.



Thank you

Questions and discussion

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