Utilisation of South African Research on Higher Education

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EDITORS

Acronyms

AAIR	Australasian Association for Institutional Research
AEHE	Assessment and Evaluation in Higher Education
AIR	Association for Institutional Research
AJPHERD	African Journal for Physical, Health Education, Recreation and Dance
AJPHES	African Journal for Physical Activity and Health Sciences
AOSIS	African Online Scientific Information Systems
ASAUDIT	Association of South African University Directors of Information Technology
ASSAf	The Academy of Science of South Africa
BRICS	Brazil, Russia, India, China, South Africa
CAGR	Compound Annual Growth Rate
CAMPROSA	Campus Protection Society South Africa
CHE	Council on Higher Education
CHELSA	Committee for Directors of Higher Education Libraries in South Africa
CIRPA	Canadian Institutional Research and Planning Association
China AIR	China Association for Institutional Research
CPUT	Cape Peninsula University of Technology
CREST	Centre for Research on Evaluation, Science and Technology
COP	Community of Practice
CSI	Corporate Social Investment
CUT	Central University of Technology
DfID	Department for International Development
DHET	Department of Higher Education and Training
DHSS	British Department of Health and Social Security
DIA	Department for Institutional Advancement
DoE	Department of Education
DoL	Department of Labour
DSI	Department of Science and Innovation
DST	Department of Science and Technology
DUT	Durban University of Technology
DVC	Deputy Vice-Chancellor
EACEA	European Education and Culture Executive Agency
EAIR	European Association for Institutional Research
ECHEA	Eastern Cape Higher Education Association
EU	European Union
HE	Higher Education
HEDA	Higher Education Data Analytics
HEDSA	Higher and Further Education Disability Services Association
HEIR	UK & Ireland Higher Education Institutional Research Network
HEIs	Higher Education Institutions
HELTASA	Higher Education Learning and Teaching Association of Southern Africa
HEMIS	Higher Education Management Information System
HEMP	Higher Education Management & Policy

HEP	Higher Education Policy
HER	Higher Education Research
HERD	Higher Education Research & Development
HERDSA	Higher Education Research and Development Society of Australasia
HESA	Higher Education South Africa
HEQ	Higher Education Quarterly
HEQC	Higher Education Quality Committee
HEQF	Higher Education Qualifications Framework
HOD	Head of Department
ICCT	Information Communication and Computer Technology
ICT	Information and Communications Technology
IEASA	International Education Association of South Africa
IHE	Innovative Higher Education
IJAD	International Journal for Academic Development
IBSS	International Bibliography of the Social Sciences
IPMS	Institutional Planning and Management Support
IPU	Intellectual Property Unit
IR	Institutional Research
JCSD	Journal of College Student Development
JES	Journal of Educational Studies
JHE	Journal of Higher Education
JHEPM	Journal of Higher Education Policy and Management
KPIs	Key Performance Indicators
LA	Learning Analytics
LDA	Latent Dirichlet Allocation
LDP	Leadership Development Programme
LSSE	Lecturer Evaluation of Student Engagement
M&E	Monitoring and Evaluation
MENA-AIR	Middle East and North Africa Association for Institutional Research
MIS	Management Information Support
MoU	Memorandum of Understanding
MTSF	Medium-Term Strategic Framework
NCHE	National Commission for Higher Education
NDP	National Development Plan
nGAP	New Generation of Academic Personnel
NGO	Non-Governmental Organisation
NMU	Nelson Mandela University
Norw	Norwegian Register for Scientific Journals, Series and Publishers
NPHE	National Plan on Higher Education
NPM	New Public Management
NPPSET	National Plan for Post-School Education and Training
NRF	National Research Foundation
NSC	National Senior Certificate
NSFAS	National Student Financial Aid Scheme
NSI	National System of Innovation
NUFFIC	Netherlands Universities Foundation for International Cooperation

NWU	Northwest University
MEC	Management Executive Committee
MTA	Material Transfer Agreement
MUT	Mangosuthu University of Technology
OECD	Organisation for Economic Cooperation and Development
ODL	Open Distance Learning
ORD	Office of Research and Development
PSET	Post School Education and Training
QA	Quality Assurance
QAA	Quality Assurance and Accreditation
QEP	Quality Enhancement Project
ResHE	Research in Higher Education
RevHE	Review of Higher Education
RHE	Research on Higher Education
RSA	Republic of South Africa
RU	Rhodes University
SAAIR	Southern African Association for Institutional Research
SAACDHE	Southern African Association for Counselling and Development in Higher Education
SAACHS	South African Association of Campus Health Services
SAASSAP	South African Association of Senior Student Affairs Professionals
SABINET	Southern African Bibliographic Information Network
SADC	Southern African Development Community
SAFMA	South African Facilities Management Association
SAHECEF	South African Higher Education Community Engagement Forum
SAIA	South African Institute for Advancement
SAJHE	South African Journal of Higher Education
SAK	South African Knowledgebase
SAMJ	South African Medical Journal
SAPSE	South African Post-Secondary Education
SARHE	South African Research on Higher Education
SARIMA	Southern African Research and Innovation Management Association
SASSE	South African Survey of Student Engagement
SAQA	South African Qualifications Authority
SciELO	Scientific Electronic Library Online
SciSTIP	DSI/NRF Centre of Excellence in Scientometrics and Science, Technology and Innovation Policy
SDGs	Sustainable Development Goals
SEAAIR	Southeast Asian Association for Institutional Research
SHE	Studies in Higher Education
SIAMPI	Social Impact Assessment Methods for research and funding instruments through the study of Productive Interactions
SMU	Sefako Makgatho Health Sciences University
SPU	Sol Plaatje University
SSS	Student Support Services
SU	Stellenbosch University

TAIR	Taiwan Association for Institutional Research
TEAM	Tertiary Education and Management
THE	Teaching in Higher Education
TLAD	Teaching, Learning and Academic Development
TUT	Tshwane University of Technology
UB	University of Botswana
UCDG	University Capacity Development Grants
UKZN	University of Kwazulu-Natal
UNESCO	United Nations Educational, Scientific and Cultural Organization
Unisa	University of South Africa
UCT	University of Cape Town
UFH	University of Fort Hare
UFS	University of the Free State
UJ	University of Johannesburg
UL	University of Limpopo
UMP	University of Mpumalanga
UoT	University of Technology
UN	United Nations
UniVen	University of Venda
UniZulu	University of Zululand
UP	University of Pretoria
USAf	Universities South Africa
USSA	University Sport South Africa
UWC	University of the Western Cape
VC	Vice-Chancellor
VUT	Vaal University of Technology
Wits	University of the Witwatersrand
WoS	Web of Science
WPPSET	White Paper for Post-School Education and Training
WSU	Walter Sisulu University

Evidence-informed policy-making at national level in South African higher education: Myth or reality?

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Herman Visser and Temwa Moyo[1]

Use of analytics is accelerating, and that means more data-driven decision-making and fewer hunches. Evidence-based management complements analytics by adding validated cause-and-effect relationships between policies and effects. (Gibbons, 2015:273)

1 Introduction

Worldwide, including in South Africa, researchers are increasingly making an effort to develop a better understanding of the uptake, use and impact of their research. This trend can also be observed in higher education. Simultaneously, there are increasing awareness and focus among government departments and agencies to use evidence, in the form of research and analytics, to guide and inform policy-making, programmes and interventions. Consequently, there is a need to understand how evidence from research and analysis can be used to inform the development of policies, to assist with the implementation of these policies and to enhance decision-making. However, concerns among government and government agencies regarding the applicability and value of research evidence should also be considered.

The context of policy-making, implementation and decision-making in higher education comprises a complex social environment which is not always considered in research on public policy-making. Cloete and Bunting (2000) observe that a comprehensive policy framework for South African higher education is in place. However, Cloete and Muller (1998:1) point out that while international experts have commended the proposals by the National Commission for Higher Education (NCHE) in 1996 for higher education reform in South Africa, they have also questioned the government's ability to implement these policy proposals. Visser and Skene (2016) emphasise the importance of considering the impact of governance, institutional autonomy and the level of state control on reporting, policy-making, implementation and decision-making in higher education. Thus, it follows that the abovementioned comprehensive policy framework and the relatively high level

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of state control in South African higher education lead to specific challenges during policy formulation, implementation and decision-making. Furthermore, the effective implementation of evidence-informed interventions remains difficult, especially in low- and middle-income countries, also in Africa (Cloete, Bunting & Van Schalkwyk, 2018). Furthermore, in the South African context evidence-informed interventions are complicated by historical backlogs due to apartheid and the fast pace of change in higher education since the advent of democracy in 1994.

In this chapter we will explore the policy-making and implementation processes in general and investigate how research evidence can be utilised to inform policy-making, implementation and decision-making at the national level in higher education in South Africa.

2 Research approach

2.1 METHODOLOGICAL CHOICES

The aim of the study is to explore how policy-making, policy implementation and decision-making take place at the national level in the South African higher education system. The Council on Higher Education (CHE) and the Department of Higher Education and Training (DHET) are key role players in this regard. In this chapter, we report the findings of our case study of the experiences of senior management members in the CHE and DHET regarding the use of research and analysis to inform policy-making, implementation and decision-making. We followed a qualitative approach, using face-to-face interviews to collect our data and thematic analysis to analyse the data.

2.2 THE DEPARTMENT OF HIGHER EDUCATION AND TRAINING AND THE COUNCIL ON HIGHER EDUCATION AS KEY ROLE PLAYERS IN NATIONAL HIGHER EDUCATION POLICY IN SOUTH AFRICA

The CHE is a statutory body established in May 1998 in terms of the Higher Education Act (Republic of South Africa, 1997), which is informed by the South African Constitution (Republic of South Africa, 1996). To fulfil its statutory mandate, the CHE collaborates and coordinates with other agencies such as the DHET, the South African Qualifications Authority (SAQA) and professional bodies. In this chapter we will focus on the policy advice mandate of the CHE to the Minister of Higher Education, Science and Innovation only. For the interpretation and execution of its policy advice mandate, the CHE is informed by, among others, the National Development Plan (NDP), the White Paper for Post-School Education and Training (WPPSET), the National Plan for Higher Education, the White Paper for Post-Secondary Education and Training and the Medium-Term Strategic Framework (MTSF) (Council on Higher Education, 2016:11).

The DHET's vision, mission, values, and legislative and policy mandates are set out in its strategic plan (Department of Higher Education and Training, 2020:9) and it is informed by the same national policy documents as in the case of the CHE. Furthermore, the DHET's strategic plan is informed by international commitments such as the United Nations (UN) Sustainable Development Goals (SDGs), the Southern African Development Community

(SADC) and the African Union agreements, such as Agenda 2063. The National Development Plan (NDP) is the broad, strategic long-term framework which provides the vision for 2030 that guides government's choices and actions. The White Paper for Post-School Education and Training (WPPSET) provides the vision for post-school education and training in the country, while the National Plan for Post-School Education and Training (NPPSET) is the implementation plan for the WPPSET.

For our purpose, it is important to note that the CHE and DHET work closely together on national higher education policies, as will be illustrated when we report our findings.

2.3 Qualitative interviews

We used a critical case sampling scheme to select individual top interviews (Onwuegbuzie & Leech, 2007:112). We selected the senior managers of CHE and the Higher Education branch of DHET who are involved in policy-making, implementation and decision-making. Following Kuzel's guideline of six to eight interviews for a homogenous sample (Guest, Bunce & Johnson, 2006:61), we decided not to conduct a "power analysis" because most of the senior managers were interviewed. Overall, we conducted six interviews of a duration between 60 and 90 minutes. As a result, we are confident that we have achieved sufficient data saturation.

The interviews served as the main source of information and were supplemented by a study of supporting documentation and a review of literature on policy-making, policy implementation, decision-making and the use of evidence during the policy process. The interviews were recorded and later transcribed.

2.4 Data analysis

We used Atlas.ti 8 for the coding of the data and the identification of themes and analysis. To ensure analytical consistency, a thematic analysis approach was used, following the steps outlined by Braun and Clarke (2006) and Clarke and Braun (2017). The coding of the transcriptions of the interviews was done separately by the two co-authors, each on their own. The co-authors then discussed the coding and decided jointly on a thematic structure to make sense of the data. Themes and sub-themes were then extracted from the interview transcripts. Similarities and differences in the data provided by the different interviews were compared for consistency and to identify possible outliers. This was done to triangulate and ensure the validity of our findings.

3 Dimensions of the processes relating to policy-making and policy implementation

We will now discuss the nature of policy and the policy-making process, the policy cycle, the nature of decision-making in a policy context, the dynamics and actors in policy-making, and the nature of evidence in order to highlight how these may influence the successful implementation of policy.

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3.1 POLICY AND THE POLICY PROCESS

To determine whether research and analysis significantly contribute to public policy, depends on how the policy process is understood. Almeida and Báscolo (2006:4) identify two main approaches to the public policy process. When the policy process is viewed as explicit, with authoritative decisions by specific public officials, the impact of research results tends to be evaluated based on the direct effect on the decisions. However, another view holds that this does not reflect the nature of public policy in a complex social environment where political processes are strongly influenced by values, opinions and actions. In such processes, it cannot be expected that the results of research will play a central role in a specific decision but rather the nature of the policy issues and the debate surrounding these issues should be considered. In this chapter, we focus on the use of research and analysis in a more complex policy environment, as propagated in terms of the second view.

According to Haddad and Demsky (1995), policies differ in terms of their scope, complexity, range of alternative choices, decision environments and decision criteria used. Inevitably this has an impact on the use of evidence during the policy process, as we will show later in the chapter when we report the findings.

Like 'policy', the term 'policy-making' draws on competing conceptions and assumptions. Policy-making is typically concerned with the setting of priorities and the allocation of scarce resources (Parkhurst, 2016:19). Policy-making and implementation are influenced by the policy process itself (how it is done) and by the actors who are responsible for the various steps in the policy process.

In the last part of this theoretical introduction, we discuss the nature and dynamics of the policy process with reference to the nature of the policy cycle, decision-making during the policy process and the dynamics and actors involved.

3.2 THE POLICY CYCLE

A diagrammatic representation of the policy cycle is provided in Figure 6.1 as a foundation for further discussion. Our intention is not to over-simplify or under-play the complexity of this process or to depict it as simple or linear. On the contrary, interactions between stakeholders at various points during the policy process are not always predictable, as will be illustrated. In principle, the utilisation of research and analysis can take place at each phase of the policy cycle depicted in Figure 6.1. Hence, it is important to acknowledge the complexity of the policy process, and, specifically, how the use of evidence can enhance policy-making during each of the phases in the cycle.

Although there are various versions of the policy cycle in literature with variations in the number of phases and sub-phases, we will base our work on Viennet and Pont's model (Viennet & Pont, 2017). Their version of the policy cycle draws on the widely accepted work of Jann and Wegrich (2006), which we have adapted in this chapter for public policy in the context of higher education policy development and implementation. We expanded the Viennet and Pont (2017) policy cycle model to include some of the factors that are influential in higher education.
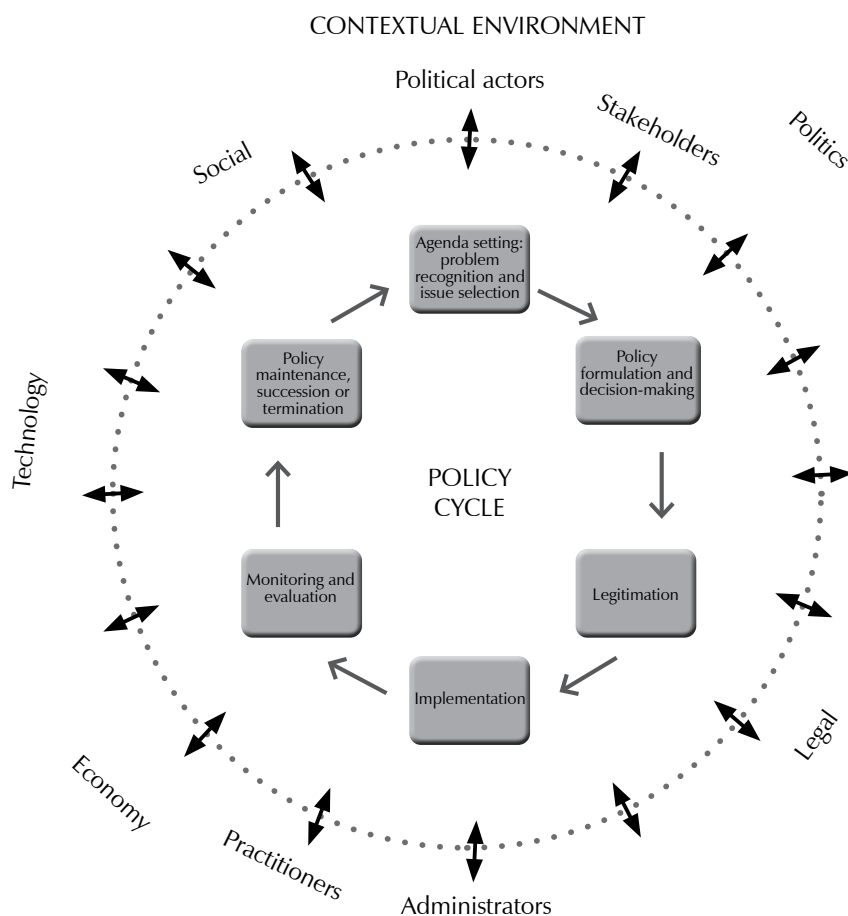
Figure 6.1 *Policy cycle against contextual factors, adapted from Viennet and Pont (2017)*

De Clercq (1997:130) sees the policy process as an interactive, continuous and contradictory process which includes the activities and decisions of different social actors at different stages. The policy process can sometimes return to a previous phase in the cycle and some of the stages can happen in parallel. The interaction between the policy process and actors are further elaborated on in the section on the dynamics of the policy process.

De Clercq (1997) believes that to facilitate successful policy implementation in the policy cycle, it is important to consider the forces in favour of and against change and to keep the management of change in mind from the stage of policy development through to the stage of policy implementation. Specific, well-organised, high-salience stakeholder groups can be a powerful force in supporting or opposing educational change. When implications for policy implementation are not borne in mind from the design phase, it can lead to various problems during implementation – as will be illustrated in the presentation of our results. This is one reason why some of the excellent policies discussed by our interviewees were not optimally implemented. Lastly, political factors also play a role, especially where crucial policies are concerned.

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3.2.1 AGENDA SETTING

The agenda setting phase in the policy-making cycle involves the recognition of the policy problem and understanding of the underlying causes and policy issues that need to be responded to during the policy-making and implementation phases.

Agenda setting is the process of structuring the policy issue in terms of potential strategies and instruments that will shape its further development (Jann & Wegrich, 2006). Both the recognition of a policy problem and agenda setting are inherently political processes. Agenda setting involves power relations between various stakeholders acting individually, but also in coalition with other actors. Cloete (2017) supports the view that policy change is mostly initiated by change agents, who developed networks of support for the change initiative that extend the need for change among likeminded stakeholders and then escalate the issue to the public organisation level. Hence, there are several heterogenous actors with possible differences in relative authority, priority and ranking of alternatives. According to Head and Alford (2015), divergent interests and values can lead to conflict about the nature of the policy problem and how to deal with it. To enable appropriate identification and definition of policy problems, divergent contributions need to be shared between actors.

3.2.2 POLICY FORMULATION

Agenda setting is followed by a process of designing and formulating the proposed policy to deal with the identified issue or issues. This phase includes the definition of objectives to be achieved by the policy and the consideration of alternative options to achieve these (Jann & Wegrich, 2006). Actors during this phase typically include those with specialist knowledge, access to policy decision-makers, or those with a position in a relevant government agency or department (Howlett & Geist, 2012).

It is cardinal to find suitable solutions for multiple and competing policy issues and interests. According to Ferretti, Pluchinotta and Tsoukiàs (2019), consideration of alternatives in public policy-making processes should involve both the generation of alternatives and the evaluation of these alternatives. Quality alternatives can enhance the crucial step of policy design and formulation.

Evidence can contribute to better understanding and consideration of the divergent views of actors in the policy process during the negotiations about alternative solutions. In this way, evidence can ultimately lead to an acceptable formulation of the draft policy. Hence, in our view the process of policy formulation is ideally suited for using evidence to identify and evaluate alternatives and for drafting the concept policy.

Once a draft policy has been formulated in response to the identified policy problem, the process of legalising the policy also requires various steps where inputs are requested from stakeholders and the public up to the stage of policy adoption, as will be illustrated in the following discussion of the legitimation phase.

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3.2.3 Legitimation

Before implementation can take place, policy needs to be legitimised. In parallel with some of the other phases in the policy process, there are formal steps required to facilitate the legitimation of policy. To achieve acceptance of a policy from stakeholders, the process should ideally include at least some form of consultation with or involvement from key actors.

The facilitation of policy legitimation in the South African context includes the preparation and publication of Green and White Papers, as well as draft legislation, regulations and proclamations, depending on the nature of the policy (Roux, 2002). Green Papers are discussion documents originating from the agenda setting and sometimes the policy-formulation phases and typically include possible actions, but Green Papers are not official policy documents. White Papers are broad statements of government policy or position papers but are not considered legislation. Later on in the policy-making process, a Bill (often based on a White Paper) is prepared and published as a draft version of an Act.

However, no matter how well an Act is structured, it is not a sufficient condition for successful implementation (Sabatier & Mazmanian, 1979). Since legitimation relates to implementation, the eventual policy decisions are more likely to be accepted if the policy process is regarded as fair by the actors, even if the outcome is not in line with their position. Participation and consultation are important to ensure buy-in.

While the issues related to policy implementation need to be considered from the beginning of the policy-making process, once legitimation has been attended to, the process moves to implementation.

3.2.4 Implementation

Merely deciding on a specific policy as a solution to an issue does not guarantee that the implementation process will follow the aims and objectives intended by the policy-makers (Jann & Wegrich, 2006). The literature on policy implementation is generally rather pessimistic about the ability of important policy initiatives to effect the desired social changes. Some examples include Sabatier and Mazmanian (1979), Nicolaou (2002), Schofeld (2002), Dumas and Anyon (2006), Honig (2006), Khan and Khandaker (2016), Makinde (2017), , Howlett, McConnell and Perl (2017), Derman and Whiteford (2019), and Hudson, Hunter and Peckham (2019). A few of the reasons why some promising higher education policies that emerged in our data were not optimally implemented will be discussed in the findings.

During the implementation stage and thereafter, a policy needs to be evaluated to ensure that the implementation is on track and that the identified issues are addressed.

3.2.5 Monitoring and evaluation

Policy-making should be appraised against the intended policy objectives. Monitoring refers to a continuous process – from agenda setting to implementation – and is intended to "provide management and the main stakeholders […] with indications of the extent of progress and achievement of objectives" with regard to the policy (Organisation for Economic Cooperation and Development [OECD], 2002:27-28). The aim of evaluation is to determine

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the relevance and fulfilment of objectives, and to enhance efficiency, effectiveness, impact and sustainability (OECD, 2002:21-22). However, the evaluation cannot be separated from the policy context. Monitoring and evaluation are intricately linked to policy development and represent an important learning component in the policy process.

Monitoring and evaluation link to the next phase where a policy needs to be periodically reviewed for maintenance, succession (by another policy) or termination.

3.2.6 POLICY MAINTENANCE, SUCCESSION OR TERMINATION

Although the aim of policy is to bring about change, policy is also the object of change in the sense that the policy cycle should allow for the change of policy, its termination or succession by a new policy. This can lead to the setting of a new agenda and start the policy cycle anew.

As the focus of this chapter is on the use of evidence during policy development as well as the uptake, use and impact of policy, we will not discuss this aspect of the policy cycle.

3.2.7 SUMMARY

It is clear that the policy process is not linear, but iterative and complex. During each of the steps in the policy cycle, it is possible to consider evidence in the form of research and analysis to inform the decisions that need to be taken at that stage. It may also be necessary to revisit earlier steps in the policy cycle based on new evidence that can add value to earlier stages in the policy process.

Importantly, decision-making takes place during each of the steps of the policy cycle. In the next section, we discuss the nature of decision-making in the policy context.

3.3 THE NATURE OF DECISION-MAKING IN THE POLICY CONTEXT

Decision-making during the policy process is crucial. Haddad and Demsky (1995:23) point out that decision-making occurs in all of the phases of the policy cycle and is preceded by aspects such as analysis, generation of options and bargaining.

 In policy-making, decision-making often involves multiple objectives and uncertainty about the probability of outcomes. In addition, there are often conflicting interests between the actors in the policy process, which contribute to the complexity of the policy environment. Global rationality is underpinned by the criterion of choice aimed at maximising the outcome of the decision. Due to the complexity of policy-making in higher education, it is unrealistic to expect complete knowledge about relevant issues and anticipated consequences. Simon (1976) identified several ways to allow for the limits of rationality in decision-making such as risk and uncertainty, incomplete information about alternatives, and complexity. Simon calls this less ambitious vision of human decision-making 'bounded rationality', in terms of which the decision-making process and the results can be considered as 'satisficing'. Under this process decision makers 'satisfice', that is, they tend to go with the first satisfactory course of action rather than to continue searching for the best.

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Weiss (1982) supports Simon's view and holds that many policy decisions emerge through processes very different from the traditional decision-making model. She argues that policies, even crucial ones, often take shape through processes that are vitally different from the conventional understanding of decision-making. Because of the complexity of policy-making in higher education at national level, it is assumed that bounded rationality applies since complete knowledge is impossible and the consequences of each policy choice cannot be anticipated when a policy decision is made.

Additionally, according to Cloete (2017:102), "[p]olicy decision-making is inherently normative, and especially political in nature, and it is impossible to depoliticise politics. As a result, it is naïve to think and demand that policy-making should be fully based on scientific evidence". This is an important consideration during all the phases of the policy cycle. In public policy-making there is tension between rational decision-making and the political nature of policy-making. We discuss this in the next section on the dynamics of policy-making.

3.4 Dynamics of policy-making

3.4.1 The role of actors in the policy process

Apart from the policy process and the nature of decision-making during policy development, public policy-making is further complicated by the various actors involved. As mentioned earlier, these agents may have different relative authority, priorities and ranking of alternatives and they can be cooperative, adversarial or indifferent.

Coburn (2016:465) suggests that "[a]ll theories of policy implementation have at their root assumptions about the nature of human action". She describes how various theories about human action can assist with a better understanding of the policy process such as principal-agent theory, social network theory, sensemaking theory, institutional theory and critical theory. These theories present different accounts of the nature of human agency – ranging from unrestrained individual choice to conditioned agency to heavily socialised views where actions are determined by the social structure. Policy can thus be regarded as one aspect of social structure. Consequently, the various aspects of the policy are fundamentally about the relationship between social structure and agency. At national level, the policy cycle is an instrument of government and is therefore an important part of the social structure.

Head and Alford (2015) highlight the importance of finding common ground between competing stakeholders with conflicting expectations and underlying values. It is necessary that stakeholders support the policy sufficiently to ensure its successful implementation. Elements of this are also evident in the examples used in sections 5 and 6. When major change is required in a policy area, the role of actors becomes even more important to ensure successful policy change or reform.

Viennet and Pont (2017) mention an increase in the number and a change in the type of actors involved in education policy. Even if they are not directly affected by the policy, actors may exert political leverage over education policy. De Bruijn and Ten Heuvelhof (2002:232-233) point out that performing analysis may be difficult when conflicting interests are at stake. This is even more so during a decision-making process in a policy network

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where all actors have conflicting interests but are interdependent and where none of them can impose their problem definition, aims and information on others or make a unilateral decision. Making a collective decision in such situations always results from a process of consultation and negotiation between the relevant actors. Many conflicts are thus settled through direct negotiation among the stakeholders. During this process threats, promises, discussion of issues, and trade-offs are used. In such instances the aim is less focused on reaching a rational decision but rather on working out an arrangement that will at least minimally satisfy the key interests of each party.

3.4.2 The link between the policy cycle, actors and policy-makers

Because neither the process dimension nor the actor dimension of policy development fully capture the dynamics of policy-making on their own, Haddad and Demsky (1995:19-22) developed a comprehensive model for policy-making with the actor dimension on the horizontal axis and the process mode on the vertical axis, as the topography in Figure 6.2 illustrates.
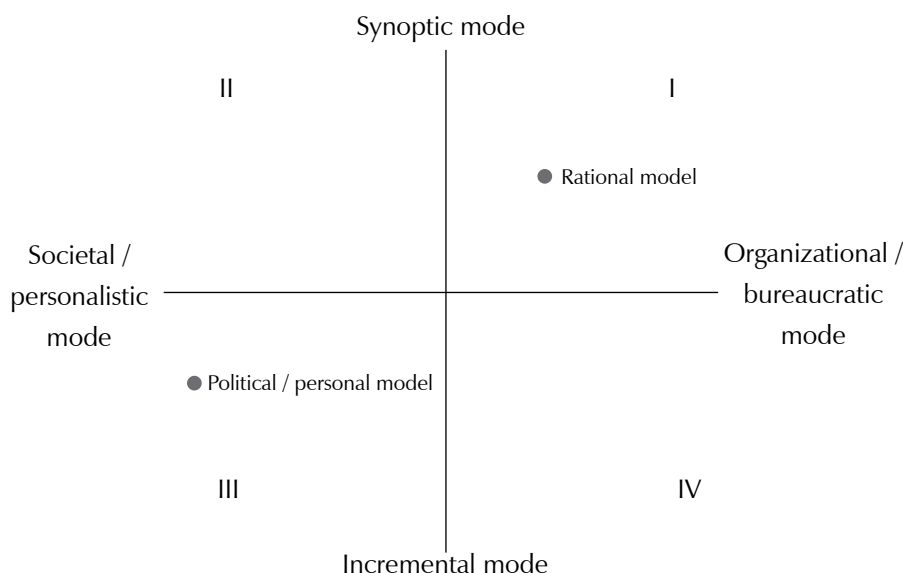
Figure 6.2 *Dimensions of policy-making (Haddad & Demsky, 1995:21)*

The societal/personalistic mode, where decisions are reached by negotiation among various interest groups, is placed on the one end of the horizontal actor axis, while the organisational/bureaucratic mode, where decisions are made within the organisational entity, is placed on the other end. Similarly, the process of policy-making is placed on the vertical axis ranging from the incremental approach, where policy-making relies on interaction rather than a complete analysis of a situation to develop a blueprint for solving problems, to the synoptic approach, where one unitary planning authority develops one integrated planning process that makes interaction redundant. Combined, these two dimensions provide a topography which can be used to explain the dynamics of policy-making.

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For example, the rational model, which is a composite of the synoptic method and the organisational/bureaucratic mode, is in Quadrant I of the model. Decision-making at this extreme is unitary, rational, centrally controlled, completely technical and focused on maximising value. On the other extreme, the political model, which is a composite of the incremental method and the societal/personalistic mode, is in Quadrant III. In this model, policy-making is a political activity characterised by political bargaining, self-interest of the actors, value judgements and multiple rationalities. As indicated by Amara, Ouimet and Landry (2004), apart from rational decision-making (mostly resulting in instrumental use of evidence) and political decision-making (mostly resulting in symbolic use of evidence), other forms of decision-making can be located between these extremes. For instance, the bargaining-conflict model of decision-making is located closer to the political model (typically leading to symbolic use of knowledge) and the garbage-can model (more unpredictable than the rational model). Amara et al. (2004) also point out that social science research is more often used conceptually than instrumentally by government agencies. Analytical techniques in ignorance of political, social and bureaucratic realities, and unsystematic political decisions loaded with own interests of the actors, will both lead to chaos. We therefore agree with the view of Haddad and Demsky (1995) that a balanced perspective of policy-making which places analytical reality within the context of political and institutional realities is a better option. This perspective can also be regarded as the most appropriate for education.

However, understanding the link between the policy process and actors as described above is not enough. It is also important to consider other dimensions such as keeping the policy audience in mind, considering timing, making use of windows of opportunity, and engaging with real-world policy-making rather than waiting for a rational and orderly process to appear (Cairney & Kwiatkowski, 2017).

3.5 SUMMARY

We have considered key dimensions of the processes relating to policy-making and policy implementation such as the policy process, the policy cycle, the nature of decision-making in the policy context and the role of various actors during the policy-making process.

We emphasised that neither rational decision-making, which ignores political, social and bureaucratic realities, nor political decision-making, which ignores evidence, are ideal and that specifically in higher education, a balanced approach is required where evidence is considered both from the political and the rational perspectives.

Next, we will discuss the policy process in South African higher education at national level against the background of the theoretical considerations discussed above as well as the findings from our interviews with CHE and DHET officials.

4 The policy process at national level in South African higher education

In this section we discuss the policy process at national level in South African higher education, including the policy cycle, the dynamics of the policy process (comprising stakeholders and decision-making), and the use of evidence to inform national higher education policy.

4.1 THE POLICY CYCLE AT NATIONAL LEVEL IN SOUTH AFRICAN HIGHER EDUCATION

4.1.1 AGENDA SETTING

In the South African higher education context, agenda setting is normally initiated by the Minister of Higher Education and Innovation (as the ministry is called since 2019), or the DHET, or by means of a Ministerial request for advice addressed to the CHE, or an initiative of the CHE itself (Republic of South Africa, 1997). In the South African context this opens the process for the use of evidence to set the policy agenda. Activism for change can originate from a variety of sources and groups inside or outside the education sector. The impact of the #FeesMustFall movement during 2015-2016 is discussed in section 6 as a recent example of how students played a role in agenda setting. Interviewee DHET_1 provided another example: "principals and heads of departments saying there's something wrong with new graduate teachers coming out of the system. They're not transitioning effectively into the workplace". That was an impetus for the DHET to review the policy on teacher training in the country.

4.1.2 POLICY FORMULATION

In South African higher education, the process of considering alternatives and drafting a concept policy typically takes place in the form of task teams where expert opinions, research and analysis are considered. This is apparent from the fact that the Minister places high value on research and consultative investigations as basis for policy formulation and therefore established a number of Ministerial Task Teams (MTTs) and Ministerial Committees to support the process of policy review and formulation (Directorate: Research Coordination, Monitoring and Evaluation, 2014). The CHE also performs much of their work through task teams, as evident from our interviews. Interviewee CHE_1 stated: "we mobilise the best experts, credible experts whose voices are respected". Interviewee CHE_2 said that much of their work is performed by building on expertise in the sector with a lead writer. The work of task teams/reference groups is translated into advice by the CHE for presentation to the Minister (CHE_2).

Task teams typically involve representatives from the CHE, DHET, and experts on the relevant policy issues:

> we advise the Minister on any aspect at our initiative or on request of the Minister. So, this covers a wide spectrum, it can be policy, it can be strategy, it can be the performance of the system, it can be a particular problem area. (CHE_1)

According to the same interviewee, the purpose of the CHE is to "give the Minister independent, well-researched advice, which he/she can act upon", adding that "a body like the CHE can turn its mind to deep enquiry, broad and wide benchmarked enquiry and then

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formulate advice based on that" and that it is "research-based advice that informs policy, planning and strategy" (CHE_1). The same interviewee further highlighted the "importance of an independent body to provide advice and the necessity of allowing different versions to enhance understanding about the policy issues and policy perspectives that can bring us closer to the truth via contestation and debate without fear of political interference" (CHE_1).

With regard to the CHE's advice to the Minister, an interviewee from the DHET pointed out that:

> essentially providing advice to the Minister means providing advice to the department around a whole range of issues. The CHE normally does that through an evidence or a research-based approach, for example, the four-year degree that was proposed a few years ago. (DHET_1)

It is clear that the advice from the CHE is grounded on evidence and taken seriously by the DHET and the Minister. Hence, our data supports the idea that the political, economic and social consequences of particular policy alternatives are considered during the policy formulation.

4.1.3 LEGITIMATION

In the South African context, evidence plays a role in informing the final policy product of the legitimation process. Gumede (2008) describes the first step in the legitimation process as the publication of a discussion document, the Green Paper, drafted by the Minister or the responsible department (DHET in the case of higher education), often informed by task team reports (Moja & Hayward, 2000). Such a discussion document provides an idea of the general ideas and principles that will inform a policy. This discussion document is then published, inviting comments, suggestions or ideas from a broad range of stakeholders. This leads to the development of a more refined discussion document, called a White Paper, which is a broad statement of the government policy, drafted by the DHET. The relevant parliamentary committee may propose amendments or make other proposals to a White Paper. The document is then sent back to the Ministry for further discussion, inputs and final decision-making. A Bill, which is a draft version of a law, is then prepared by the DHET or by a relevant task team. The Bill must be approved by the Cabinet before it can be presented to Parliament. It is thus clear that the process of legitimation of policy starts early with the publication of a Green Paper and includes various steps and sub-steps before culminating in an Act.

Even during the early stages in the policy process, such as conceptualisation and design, the implementation of the policy needs to be considered. After the legitimation phase, the actual implementation or operationalisation of the policy begins.

4.1.4 IMPLEMENTATION

Following the legitimation process, a policy can be implemented or actioned. Implementation is the responsibility of the relevant government department (the DHET in this case). The importance of policy implementation is discussed in more detail in sections 5 and 6.

4.1.5 Monitoring and evaluation

The CHE plays an important role in providing evidence for the monitoring and evaluation of policies. Examples provided by an interviewee from the CHE (CHE_2) include the higher education discussion series *Kagisano*, the annual *VitalStats* publications and more recent monitoring briefs, titled *Briefly Speaking*. There are also research reports, typically used to inform task teams. However, the DHET also provides evidence to be used for monitoring and evaluation. Regular examples of reports produced by the DHET include the annual *Statistics in Post-School Education and Training in South Africa* and *First-Time Entering Undergraduate Cohort Studies for Public Higher Education Institutions* as well as ad hoc reports such as *An Assessment of 10 Years of Education and Training in South Africa*.

While these reports play an essential role in monitoring and evaluation, it is of concern that despite certain differences in focus, there is some degree of overlap, for instance, between the annual reports of the CHE (*VitalStats*) and that of the DHET (*Statistics in Post-School Education and Training in South Africa* and *First-Time Entering Undergraduate Cohort Studies for Public Higher Education Institutions*). Although both these reports largely use Higher Education Management Information Systems (HEMIS) information as a basis, it is not always clear to users what the purposes of the reports are and why there are differences in the underlying assumptions, for example, with cohort studies.

4.1.6 Summary

From the preceding discussion, it is clear that evidence plays an important role during the development of higher education policies at national level in South Africa. However, as will be explained in the next two sections, there are certain aspects in the policy process in South African higher education that can be improved.

4.2 Dynamics in the policy process at national level in South African higher education

4.2.1 Actors in the policy process at national level in South African higher education

Cabinet, specifically the Minister of Higher Education, Science and Innovation, is the primary actor in the policy-making process together with Parliament. The CHE, in its role as advisor to the Minister, and the DHET, as the responsible department, through their senior managers also play an important role in the national policy process. Task teams, where research and evidence are instrumental in considering alternatives as well as proposing and advising on concept solutions, also play a prominent role. Additionally, during the public comment phase, other actors can also provide inputs.

4.2.2 Policy dynamics at national level in South African higher education

Policy decisions are often required when there is conflict between actors. Because of the complexity involved and the political nature of public policy-making, serious implications for evidence-informed policy-making become apparent.

The tension between rational and political approaches to policy-making as described in Haddad and Demsky's (1995) model (see section 3) was confirmed by almost all the interviewees. The impact of politics on policy and the fact that political considerations are always playing a role (to a lesser or larger extent), are illustrated by the following extract from one of the interviews:

> It's a quest for the truth, and it's the best representation of the truth that you can arrive at, would be the best enquiry and the best information you can mobilise. And also, it's a recognition that this isn't an absolute truth. And it's in the contestation and the debate over what is counting as truth and what interest it's serving, what are the politics behind it. And there are always politics behind it, the way in which we represent things. So, let's be careful not to represent these as absolute regimented truths. (CHE_1)

The interviewee then further reinstates: "advice and policy to government is very political, very politicised" (CHE_1). This supports the view of Cloete (2017) that policy decision-making is inherently political in nature.

However, these complexities and the political nature of public policy-making also mean that the use of evidence is difficult when complex problems are concerned, especially when conflicting opinions are involved.

Before we consider some recent examples of major policy initiatives, we will briefly look at some historical examples for comparison purposes.

5 Historical examples of attempts to inform South African higher education reform initiatives with evidence

Because of the complexity involved and the use of evidence in the cases of the De Lange Commission and the National Commission on Higher Education (NCHE), these two historic attempts at educational reform in South Africa are compared with the more recent examples from our case study that will be presented in section 6.

5.1 DE LANGE COMMISSION

According to Kahn (1995:442), the first attempt at educational reform in South Africa after the Soweto revolt of 1976 was the De Lange Commission of 1981. In 1980, the state appointed the Commission of Inquiry into Education (commonly known as the De Lange Commission) under the auspices of the Human Sciences Research Council, with the purpose of exploring a future education system for South Africa.

As pointed out by Wessels and Pauw (2018), the case of the De Lange report is significant. The members of the De Lange Commission included researchers from different ideological backgrounds. This proved useful for generating alternatives. Wessels and Pauw (2018) investigated the influence of the interaction between the investigation team and policy-makers to determine whether the mixed reception of the report could be ascribed to the fact that the researchers could not convince the policy-makers about the value of the research

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results. They found no evidence that the reception issues could be ascribed to an evidence-policy gap. Wessels and Pauw also focused on the degree to which the spirit of the time or divergent policy agendas hampered or promoted the acceptance of the recommendations in the De Lange report. They found that notwithstanding the fact that the report was of high scientific integrity and the researchers and policy-makers were closely linked as former academics, the uptake of the research was not entirely positive. Evidence shows that divergent policy agendas in the ruling party and the fact that the principal member was a relatively junior cabinet member had a negative impact on the reception of the findings (Wessels & Pauw, 2018). This eventually meant that some of the recommendations were not implemented and others were modified to fit with the political rhetoric. The conclusion can thus be made that despite excellent research, politics played an important role in the less-than-optimal uptake of the research underpinning this report.

Because the De Lange report was an attempt at large-scale strategic change, the political focus during implementation could be expected in the light of our earlier discussion of the complexity of the policy process.

5.2 National Commission on Higher Education

Another important historical example of the use of evidence in the policy process was the work of the National Commission on Higher Education (NCHE) in 1996, which led to significant reform via the National Plan on Higher Education (NPHE) (adopted in 2001). The report of the NCHE was informed by sound research but there were problems with the implementation of certain recommendations. Jansen (2002:204) points out that in cases where the emphasis of policy-making is simply on the production of the next set of policy and legislation documents, substantive coherence between the different documents cannot be expected. As an example, he mentions the prominent role of international consultants in the formulation of the NPHE's policy proposals. This matter also raises the problem of transferability of policy solutions between countries and jurisdictions.

De Clercq (1997:132) sees the first wave of post-apartheid education policy as mainly concerned with the development of an open, democratic and equitable policy framework to restructure the education system in response to the socio-political demands of the majority who were largely excluded during the pre-democratic dispensation. According to her, the first wave of post-apartheid education policy work was not based on research or practice-based knowledge of South African educational dynamics. She maintains that although it was claimed that these ideas were adapted to South African concerns about efficiency, redress and equity, it borrowed heavily from the international (mostly Western) comparative policy literature and experience – without any serious attempt to learn from the instructive experiences of societies in transition, with socio-political democratic agendas and aspirations similar to those of South Africa.

On the other hand, Jansen (2002) points out how the focus on political symbolism of the intended reform aided in achieving legitimacy for the NPHE. According to him: "[t]he making of education policy in South Africa is best described as a struggle for the achievement of a broad symbolism that would mark the shift from apartheid to post-apartheid society" (Jansen, 2002:200). He is of the view that in most cases, implementation was not on the policy

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agenda at all. The reason for this can likely be attributed to the importance of illustrating a departure from the ways of the past and a lack of understanding of the bureaucratic processes required for implementing policy. He further highlights the emphasis on the symbolic role of policy – as manifested in the substantial attention paid to formal participation in the policy process, irrespective of the final outcomes. Here the focus on inclusivity and representation of working groups led to unequal power and expertise of participating groups. Jansen (2002) uses the example of students who were marginalised and points out that participation was at times introduced where the policy framework had already been decided. Hence, it can be argued that the reforms proposed by the NCHE were of a symbolic nature. However, although not all of the ambitious objectives were achieved, considerable changes did take place as a number of the objectives were accepted based on the evidence and consensus achieved. The aspects not accepted or implemented were mainly related to controversial facets where consensus could not be achieved. Although this is an indication of the impact of politics in policy-making, it is also encouraging that evidence and research can still play an important role in such circumstances.

5.3 Summary

Because large-scale strategic changes such as those proposed by the De Lange Commission and the NCHE are very complex, the focus in these cases is often on the identification of issues and specifically on policy design. That was indeed the case with both the De Lange and the NCHE reports. In the case of the De Lange report, the consensus on the recommendations (among the members of the Commission) was reduced and even overturned by different political agendas which led to the disappointing reception of the recommendations, even though they were based on evidence and consensus. With the NCHE report, the controversial aspects where consensus could not be achieved were eventually revised and modified in the Green Paper and the White Paper. Despite the evidence-based approach, the generation of more alternatives for controversial aspects likely did not receive sufficient attention and too little attention was given to aspects of implementation due to the main focus being on an open, democratic and equitable policy framework, which was understandable considering the context and the timing. The De Lange Commission and the NCHE serve as historical backdrops to the more recent examples where issues were experienced with policy implementation, as we will discuss below. These historic examples suggest that symbolic use and conceptual use of knowledge often play a more important role in policy-making at national level than instrumental use, especially where the issues concerned are more political. Furthermore, the impact of politics, especially in education reform and other highly politicised policies, is an important factor that cannot be ignored in the policy-making process. While there are various barriers that make the use of evidence in policy-making difficult, there are also enablers that contribute to successes. Ultimately, a mixture of these contribute to the mixed results reported below.

6 Recent initiatives to inform higher education reform with evidence

Two more recent examples of informing higher education reform with evidence will be discussed next. We will look in detail into the recent funding reform and undergraduate curriculum reform.

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6.1 Funding reform

Various authors (Steyn & De Villiers, 2006; De Villiers & Steyn, 2007; Wangenge-Ouma & Cloete, 2008) described the context that eventually contributed to the breaking point during the 2015 academic year and the emergence of the #FeesMustFall movement. This included a decline in government funding over several years and higher-than-general inflation increases to input costs of universities, which further contributed to higher-than-inflation increases in student fees. De Villiers and Steyn (2007) highlight the decrease in public funding of higher education as a proportion of the GDP as an important reason why universities had to increase student fees. One interviewee from the CHE (CHE_1) provided further insight: "[w]e have a far more complex system, a more diverse system. At the same time, the demographic shifts have been enormous and far-reaching. The student diversity alone, in the sector, imposes a huge problem at the institutional level and at the systemic level". Combined, these factors forced universities to increase student fees and third-stream income to ensure financial sustainability and to maintain quality education. However, this meant that fees became unaffordable to poorer students. This challenge was further aggravated by the necessary growth in student enrolments in line with the National Plan (National Planning Commission, 2012; World Bank, 2019). The resultant fiscal pressure meant that the increase in National Student Financial Aid Scheme (NSFAS) funding by government did not keep pace with the increase in fees. To curb this, government considered placing limits on the increase allowed for student fees. In addition, NSFAS only funds students in cases where the family income is less than a specified amount. However, despite an increase in the allocation of funding to NSFAS, the available funds were insufficient to assist poor students adequately. Furthermore, the exclusion of students from the "missing middle", who do not qualify for NSFAS allocations but who do not qualify for bank loans either, aggravated the situation. As unemployment in the country increased, the situation worsened further when debt recovery from student fees decreased. Combined, these aspects led to a sustainability crisis. While the protests truly erupted in 2015 and 2016 led by the #FeesMustFall movement, disputes over study fees were a standing matter for many years in the run-up to the events of 2015 and 2016. As suggested in the World Bank's "South Africa Economic Update", "[t]he policy agenda of expanding the Post School Education and Training (PSET) sector clearly illustrates the trade-off between maintaining fiscal restraint and addressing key structural constraints that may be costly to the fiscus. In South Africa, acquiring skills through PSET is the best guarantee of escaping poverty" (World Bank, 2019:vii). A further concern raised by De Villiers and Steyn (2009) was the fact that the decrease in funding was the likely culprit in the decrease of outputs due to staff numbers remaining relatively stable while student numbers increased. As a result of trying to cope with the higher teaching loads, research outputs declined.

These issues were also raised by one interviewee from the CHE (CHE_1), who suggests that "[t]he National Student Financial Aid Scheme (NSFAS) increased from R1,3 billion post-democracy to approximately R10 billion, which is a huge shift". However, this shift is argued not to be sufficient, as the interviewee ascribes the backlash from students to the fact that

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> the poor and marginalised in society were holding onto the promise of prosperity through Higher Education but they come in and can barely afford to pay their fees, they don't have money for books, accommodation, food, clothing, transport and socialising, which are some of the enabling conditions for success. (CHE_1)

More recently, these conditions also enhanced the need for devices and access to data due to the growing importance of online resources. This was further emphasised during the Covid-19 pandemic when all South African higher education institutions had to move to online platforms. According to an interviewee from the CHE (CHE_1), the pressures are a result of inequalities in society in general, not only the higher education and training sector, and are aggravated by graduate unemployment and underemployment. This suggests an increased need for evidence to support policy-making and the consideration of various alternative solutions.

Nevertheless, an interviewee from the DHET (DHET_2) suggested that decisions are largely driven by planning and the political environment. The interviewee provided the example of the artificial fee environment after the #FeesMustFall protests when the President announced a 0% fee increase, which largely subverted the governance structures of institutions. Because of the considerable differentials in the system, the government needs to balance the affordability levels of fees and the effective funding of higher education. However, due to the massive policy shifts over the last few years, this interviewee was of the view that governance was affected as councils can no longer make independent fee decisions. In this instance, the political factors appeared to overshadow the available evidence.

In response to the issues mentioned above, the President established the Heher Commission of Inquiry into Higher Education and Training in January 2016 with the purpose of adding to the body of knowledge and evidence informing government's decision-making processes regarding a sustainable solution to higher education funding. The terms of reference also included making recommendations regarding the feasibility of fee-free higher education in South Africa.

With reference to comparative research on considering alternatives to manage the funding reform, an interviewee from the CHE (CHE_1) used the example of a regulatory framework for student fees:

> We looked at about seven or eight different jurisdictions. And so, we looked at what's happening in fee-free, or relatively fee-free environments, like in Germany, for example, and then we looked at other European countries and we looked at some African countries. So that's very important, because you want to look at comparative jurisdictions, and look at the consequences, politically and economically, socially, for particular policy alternatives. And then, very importantly, was affordability as well because the big debate at the time, when we initiated this process, was higher education on a private route, and therefore, political. It's not justifiable to give a disproportionate amount of the public resources to a small narrow elite, especially the huge amounts that are required to fund a single individual.

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This observation underscores aspects of the earlier critique against the NCHE and NPHE regarding the relevance of research and its utilisation. The interviewee also confirms once again the political nature of many crucial South African policies.

Apart from the impact of politics on the funding reform policy, the importance of timing is also illustrated by the work of the Heher Commission on fee-free Higher Education and Training (Republic of South Africa, 2017) and the work of the Task Team on the Fee Regulatory Framework. This task team provided carefully considered, internationally benchmarked advice to the Minister of Higher Education, Science and Innovation on a regulatory framework for fees. Similarly, the Heher Commission also made extensive use of evidence-based advice to underscore its findings and recommendations. However, as an interviewee from the CHE (CHE_1) indicated, more than two years after the Heher Commission made its recommendations, only some portions of the advice on a regulatory framework have been used. As the same interviewee stated:

> It would have been political suicide for the Minister at the time, because the Minister was already under pressure from the forces that were attacking him. So, if he went and announced, while the President has announced the Commission, a regulatory framework, it would have caused mayhem.

Thus, if the Minister had announced a regulatory framework while the President had announced the Heher Commission, it would have caused pandemonium because wanting to regulate fees implies that there must be fees in the first place, which makes the consideration of fee-free education in good faith impossible. As this interviewee from the CHE aptly puts it:

> While the research-based, evidence-based advice might be the rational thing to do, given the political dynamics at institutional level, sectoral level and nationally, you have to tread very carefully because you are walking in a minefield. (CHE_1)

The above extracts vividly illustrate the complexities involved in national policy-making and suggest why in many cases, despite excellent research providing substantial evidence to inform a policy being available, it is not always used. On the one hand, it must be borne in mind that evidence is only one of the factors that affect the final policy. However, as corroborated above, this points to a need for a more balanced situation where rational decision-making based on evidence can play a more important role and where policy decisions are not made based on political pressure alone.

6.2 UNDERGRADUATE CURRICULUM REFORM

Another example of the utilisation of research in policy-making mentioned by our interviewees was the undergraduate curriculum reform. South Africa has a pressing need for graduates to contribute to social and economic development and the current graduate output is regarded to have major shortcomings in terms of overall numbers, equity and the proportion of the student body who succeeds. Therefore, the CHE appointed a task team to perform a fundamental systemic review of the undergraduate curriculum (Council on Higher Education, 2013). As an interviewee from the DHET (DHET_1) explains:

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> [The Task Team] did a whole lot of research, involved the sector, and pulled together a whole lot of information to make a case for or against a four-year degree, and provide advice to the Minister on that. So, I think that's a key role in the system, and they based that on research.

The resulting CHE report documented the analyses of the undergraduate performance in the South African higher education sector, obstacles to student success, and the role of curriculum structure as a variable affecting student performance. These analyses then formed the basis of the processes to identify and document the policy issues at hand. Alternative solutions to deal with the policy issues were considered and modelled. An analysis of the viability of the task team's proposal in terms of cost to the government and students, implications for higher education policy and regulation, as well as academic staff and institutional responsibilities were also documented. This is a clear example of how evidence can be used in agenda setting, formulation of the problem and consideration of implementation aspects. After the research was completed, the advice was provided to the Minister. However, according to one interviewee from the CHE (CHE_1), this did not lead to any action. The interviewee indicated that this failure to use the evidence and implement the proposed policy was due to political considerations, timing and funding issues that were more critical at the time. In this case, it is important to remember that according to the Higher Education Act (Republic of South Africa, 1997), the Minister has the prerogative to fully or partially accept policy advice or to ignore it, because this is only one of the inputs to be considered. However, if rejected, reasons need to be provided. It is of some concern that the advice is not necessarily rejected but may for various reasons be delayed, such as with the curriculum reform, or it is partially accepted and implemented, as with the funding reform. A possible explanation for the delay of undergraduate curriculum reform was criticism against the proposed solution (Lange, 2017; Shay, Wolff & Clarence-Fincham, 2016). This example suggests that despite the available research and the report that was produced by the task team, further evidence may be required to address any criticism before a decision can be made and the policy can be finalised.

6.3 Summary

As illustrated in the examples presented in sections 5 and 6, it is possible to consider evidence, in the form of research and analysis, to inform the decisions that need to be taken at any phase of the policy-making process. However, our findings suggest that the use of evidence to inform higher education policies could be enhanced. Our findings show that understanding various competing views during the agenda setting, development of alternatives, choice, and legitimation phases require evidence as an input for optimal functioning. In addition, aspects related to the political dynamics of policy-making also need to be considered.

7 Possible explanations for the mixed results regarding the use of evidence to inform higher education policy

From the theory and the examples provided above, a number of reasons emerge as to why evidence is used successfully to inform policies in some cases and why there may be stumbling blocks to the use of evidence in others.

7.1   FUNDING CONSTRAINTS

It is important to bear in mind that sufficient funding is necessary for the implementation of education policies. These include whether there is funding available, the source of the funding, whether it is earmarked or not and who decides how to allocate it. The lack of sufficient funding in higher education was apparent in more than one of the CHE interviews and the annual report of the CHE (Council on Higher Education, 2019). In particular, the following quotes from the interviews illustrate this point:

> It's very frustrating to have a very big mandate and a very complex mandate, and then you don't have the resources. So, each time you get asked for some advice by the Minister, then she has to first go and find money […] So that limits the amount of advice we can give. It limits the depth and the quality of the advice, and it actually threatens the credibility and the sustainability of the CHE. […] [T]here's a huge gap between those expectations and the resources and capacities at our disposal. (CHE_1)

The lack of funding was also confirmed by another CHE interviewee (CHE_2) who indicated that ten years ago the Monitoring and Evaluation Directorate had six staff members and currently it has only two and three-quarter staff members. This clearly limits the capacity of the CHE to fulfil their mandate properly and decreases the CHE's ability to provide evidence-informed policy advice to the Minister.

7.2   CAPACITY

The CHE, especially, as indicated by all three managers from the CHE (CHE_1, CHE_2, CHE_3) and some of the Chief Directors at the DHET (DHET_2 and DHET_3), are experiencing a lack in sufficient capacity due to funding constraints. Hence, apart from the impact of financial constraints on capacity in the CHE and DHET, as mentioned above, there are also other capacity-related issues that can often lead to less-than-optimal use of evidence in the policy process. This was highlighted by the CHE (2019:14), stating that "[r]elated to budgetary constraints is the issue of human capacity". Our interviewees further indicated that the CHE struggles to attract and retain staff, particularly at senior levels. Additionally, the CHE lost four senior staff members, including a director, in 2018 and 2019.

An interviewee from the DHET (DHET_2) also raised the issue of the lack of staff members. The interviewee indicated that the DHET had only three employees in one Directorate, as well as the impact of acting Chief Directors and Directors. In a particular Chief Directorate, two of the three Directors were acting at the time, which further hampered their work. The interviewee (DHET_2) indicated that "the utilisation of research on a regular basis is quite thin, and it's very ad hoc". However, on the other hand, the same interviewee (DHET_2) also suggested that the Chief Directorate regularly makes use of HEMIS information and the cohort studies prepared by another Chief Directorate. The interviewee described the CHE as a major source of evidence for policy-making and mentioned a "Labour market intelligence project" as an example of evidence used by the Directorate of Monitoring and Evaluation. Nevertheless, this interviewee believed that the main reason that research uptake was not good could be ascribed to capacity issues. The inability of researchers to disseminate their

research in a way that is meaningful to policy-makers was further mentioned by two DHET interviewees (DHET_1 and DHET_2) as another capacity issue. However, as pointed out by Visser and Barnes (2016), there is also an increasing need to build capacity with managers to interpret research.

The University Capacity Development Grants (UCDG) are one way in which policy development is related to the development of capacity in universities. The approach followed with these grants is holistic across the career continuum. The aim with this initiative is to break down silos in the development of academic staff (focusing on teaching only, research only or management only capacity) and to increase capacity that not only develops new and existing researchers but also academics in the broader sense, for instance, as leaders and managers. The interviewee (DHET_2) mentioned that academics, while transitioning into leadership and management positions, still remain in academic portfolios, for instance, as deans and heads of schools. Specific emphasis is also placed on the development of leaders, for example, in the case of the Higher Education Leadership and Management (HELM) project. Projects such as these clearly make an important contribution to capacity development in the South African higher education sector.

An interviewee (DHET_1) mentioned that it is difficult to draw on available research to inform policy because the DHET does not have the capacity to fulfil both the research performance and the consolidation roles. This was mainly seen to be caused by tight deadlines associated with DHET work. Hence, the interviewee observed that research is often not 'packaged' in a way that is useful for a government or policy audience.

7.3   Policy mobilities

"National governments often use evidence to argue that a policy intervention which proved successful in one local area should be emulated in many others" (Cairney, 2016:1). According to Gulson, Lewis, Lingard, Lubienski, Takayama and Webb (2017:224), the presence of new policy networks and relationalities (i.e. regional dimensions of political practice) means that educational policy-making and governance are no longer simply occurring within the boundaries of the nation state but now involve a diverse cast of actors across new policy spaces. It seems that some lessons have been learnt. For the South African context, it is important to consider BRICS (Brazil, Russia, India, China and South Africa) and other developing countries rather than developed countries. The significance of this was confirmed during the interviews where one CHE interviewee (CHE_1) indicated that the CHE and DHET have several initiatives that are informed by what is happening in the BRICS countries due to this relationship being important politically, and vice versa the BRICS countries are making large investments into South Africa. According to this interviewee, it is consequently essential that policy research by the CHE must also reflect the prerogatives of the BRICS cooperation to align with these political initiatives. The following examples from the interview with participant CHE_1 serve to confirm this:

> Because that's the link between government policy and actual research that we undertake. So that we can see whether we're making progress, or whether it's a drain on our resources without value added. It's very important politically and it's very important [for] scholarship.

> It's just huge promise, especially with China and being so advanced as an economy […] But also, there, just the higher education system and how they've been able to develop it to serve the economy and to serve society. So, we can learn from that.

Similarly, the importance of the links with Brazil and India due to the similarities in "socioeconomic conditions and political challenges, corruption, and dysfunctionality in the state" (CHE_1), as well as "the gap between the rich and the poor" (CHE_1) were highlighted. The interviewee (CHE_1) thus concludes that "[w]e have more to learn from these counterpart countries than we have from European countries. So, our gaze should be shifting". As argued by Gulson et al. (2017), it is important to consider how policy mobilities can be applied in globalised education policies because the local context needs to be considered. It is therefore important to use research from countries with similar contexts, as illustrated above.

7.4 COMPLEXITY

There is widespread agreement between researchers that policy-making and practice happens in a messy and complex social environment. This messiness is even more pronounced at the national level of policy-making, implementation and practice. This is confirmed by the examples of the De Lange Commission, NCHE, as well as the student fees and undergraduate curriculum reforms discussed earlier. These policy initiatives are clear examples of the so-called 'wicked problems' − issues with multiple interests and values of stakeholders. As Head (2008:103) suggests: "[m]ere disagreement among stakeholders does not make a problem wicked, but when serious disagreements are combined with complexity and uncertainty we have crossed a threshold". Although better information is often a valuable contribution to evidence-informed policy and to achieving consensus during negotiation between various stakeholders, more research evidence is usually not enough to solve these wicked problems. In an environment of constrained or bounded rationality such as in public policy, lack of consensus reflects differences in values and experiences for which evidence will seldom generate acceptable solutions (Head & Alford, 2015). In this regard the dynamics of the policy process should also be considered.

According to Viennet and Pont (2017:8), there is little evidence on whether education reforms have an effect because educational impacts are challenging to assess and are seldom evaluated – and even when reforms do have an impact, stakeholders are easily dissatisfied with the outcomes and tend to hold policy-makers accountable. Although this is not the case for all reform initiatives in the South African context, the doubling of enrolments from previously disadvantaged groups is one example where a reform initiative identified in the National Plan clearly had an impact. However, this is not the case for all the reform initiatives identified in the National Plan. As educational reforms can be classified as "wicked problems" which are complex, often unpredictable and open-ended, these issues clearly require a different approach. Although complex issues obviously require more information than usual, evidence on its own is not necessarily sufficient to provide an acceptable policy solution.

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8 Conclusion

The development of a dynamic theory of social change remains a major challenge. There is a clear need for the reorientation of the social sciences towards policy issues. The use of evidence to inform policy-making is a key aspect of social change.

Policy-making is generally complex, with many variables interacting in non-linear ways that are not always understood. It would therefore be naive to expect a linear relationship between evidence and policy. Furthermore, apart from the complex interactions of the most important variables that influence policy change, the policy cycle is also influenced by the role of policy actors with sometimes divergent motivations and underlying assumptions and drivers for change that do not necessarily support evidence-informed decision-making and policy-making. To further add to this complexity, all of this takes place in a multifaceted environment with many unknown external influences. These include change enablers and barriers affecting internally driven change processes at various levels, and policy actors at the internal, group and systems levels.

Evidence from research has the potential to significantly improve the effectiveness of higher education policies and programmes. However, the translation of evidence from research into higher education policy and practice remains an ongoing and commonly reported challenge. Similarly, lack thereof means that extensive investments in research activities could potentially go to waste. There are increased expectations for accountability regarding the impact of research and an increased emphasis on measuring its wider impacts, as well as understanding how it is used in planning and decision-making processes. In this chapter we attempted to contribute to the debate about how research and analysis can (or cannot) inform policy and decision-making and the extent to which evidence is used in South African higher education at the national level.

Evidence-informed policy-making is widely regarded as the optimal approach because it has the best potential to result in impartial, fair and equitable outcomes for all stakeholders (Cloete, 2017:99). The assumption is that such a rationally considered approach will potentially provide a more successful policy outcome than policies based on emotions, instincts or ideology-laden considerations (Cloete, 2017:109). However, it is difficult to achieve because of the significant explicit and subconscious impacts that subjective emotional and normative drivers of human behaviour have on human decisions (Cloete, 2017:99). This clearly influences the behaviour of actors and the dynamics of policy-making.

The four dimensions of policy-making (Haddad & Demsky, 1995) discussed in section 3.4.2 provide useful insights to consider in which quadrant of Haddad and Demsky's (1995) framework a particular policy would fall. The bigger role of politics in crucial policies becomes evident when applying this framework to our case studies.

From the discussions in section 3 and the findings in sections 4 to 6, it is clear that evidence can play a role during all the phases of the policy cycle. However, it is important to guard against information overload of policy-makers.

The issue of timing was highlighted in section 4 and the examples in section 6 demonstrate the crucial role it plays in the policy process. This supports the views that research impact

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may not be immediate and can sometimes take several years before it becomes evident. Especially in crucial policies where politics play a larger role, such as those intended to bring about educational reform, the utilisation of research is largely symbolic (as in the case of the De Lange report and the NCHE), even if a significant amount of research is used to provide evidence in support of the policy process. Conceptual use of evidence is also evident and plays an important role. However, as pointed out, it is important to bear in mind that evidence is only one of the components, although an important one, informing policy-making. As expected, our findings suggest that instrumental use of evidence is at best observed only in cases of simpler policies with limited contestation.

In conclusion, it would be easy to criticise the lack of strong evidence-informed policy-making in the historical and recent cases we presented, but we maintain that it would be an oversimplification to conceptualise policy-making as informed or influenced by evidence and rational decision-making alone. It is clear that considering the value of pragmatism and consensus building is important. Research and evidence should be combined with the values and assumptions of stakeholders because public policy-making is essentially a politically-driven activity.

Despite the complexity of the environment and the policy-making process, the principle of evidence-informed policy-making is sound. Encouraging successes of the use of evidence in the realm of national higher education policy processes in South Africa were reported. It is also reassuring that the managers interviewed were positively predisposed to the use of evidence in policy-making. It was evident that managers were aware of the environment in which public policy-making and the policy process take place. Nevertheless, the full potential for policy decisions to be informed by available evidence has not been achieved yet. An important opportunity exists in enhancing future policies with increased and improved utilisation of evidence as one of the essential inputs in the policy process. With this chapter we aimed to enhance the understanding of the policy process on the systemic level in South African higher education and to achieve a more nuanced understanding of the policy-making process, bounded rationality in decision-making and how evidence can inform policy-making over time.

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