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LYN ALDERMAN

# Illuminative evaluation as a method applied to Australian Government policy borrowing and implementation in higher education

Any government deciding to invoke widespread change in its higher education sector through implementation of new policies impacts on every institution and all staff and students, often in both the time taken up and the heightened emotions caused. The central phenomenon that this study addresses is the process and consequences of policy changes in higher education in Australia. The aim of this article is to record the research design through the perspective (evaluation research), theoretical framework (program evaluation) and methods (content analysis, descriptive statistical analysis and bibliometric analysis) applied to the investigation of the 2003 federal government higher education reform package. This approach allows both the intended and unintended consequences arising from the policy implementation of three national initiatives focused on learning and teaching in higher education in Australia to surface. As a result, this program evaluation, also known in some disciplines as policy implementation analysis, will demonstrate the applicability of illuminative evaluation as a methodology and reinforce how program evaluation will assist and advise future government reform and policy implementation, and will serve as a legacy for future evaluative research.

## The problem

In 2002, the Australian Government held a review of higher education entitled *Higher Education at the Crossroads* (Department of Education, Science and Training 2002). In 2003, the government responded to this review with a reform package called *Our Universities: Backing Australia's Future* (Nelson 2003). The sharp focus within the 2003 government reform package was the policy implementation of three national initiatives: the Learning and Teaching Performance Fund, the Australian Learning and Teaching Council, and the Australian Universities Quality Agency. However, in 2008 another change of government leadership triggered another government review of higher education called *Future Directions for Tertiary Education* (Bradley 2008). If all Australian Government reviews were considered to be interventions that are enacted through policy implementation that subsequently impact on all institutions, staff and students, and ultimately citizenry,

then there was only a seven-year window of opportunity to evaluate whether the three national initiatives were successful or unsuccessful in meeting their objectives. What is currently unavailable in the public domain is: (a) an evaluation of the 2003 government reform package for outcomes or impact; (b) whether the 2002 and 2008 government reviews of higher education were interdependent or independent of each other; and (c) why these interventions, or reviews, were implemented with no systematic archival mechanisms in place to document their introduction to Australia.

As argued by Rog (2012), an examination of a government review of higher education has merit on three levels: (a) governments apply a review as a formative evaluation strategy to determine merit, uncover issues and tensions, and elicit new directions for policy (Department of Education, Science and Training 2002); (b) a government review may be regarded as an intervention (Rog 2012); and (c) an evaluation of the impact of a government review, with a government review focused



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and students, often in both the time taken up and the heightened emotions caused. The central phenomenon that this study addresses is the process and consequences of policy changes in higher education in Australia. Each change appears to have been triggered in reaction to the previous administration's perspective on the purpose or governance of higher education. This alignment to the political cycle meant that policy implementation driving change in higher education has been short-lived, with little or no independent evaluation to determine worth, success or influence. This issue is further compounded by the tendency of governments to borrow educational policy from overseas, with mixed evidence of any previous success of the elements of such an agenda. Ultimately, when this has an influence on educational quality, it will also influence the citizenry and the country. Given this level of significance, it is perhaps wise to enhance understanding of government reviews as change agents and, in the case of this investigation, to consider whether an investigation of one government reform package, as a case and point in time, can contribute to the broader knowledge and understanding of government reviews as a whole.

on learning and teaching, offers an opportunity to guide future government reviews.

The purpose of this study (Alderman 2014) is to conduct a program evaluation on the three national initiatives focused on reinforcing the value and place of learning and teaching within higher education in Australia during the period 2002 to 2008. This program evaluation, also known in some disciplines as policy implementation analysis, will assist and advise future government reform and policy implementation, provide a legacy for future evaluative research, and document the 2002 government review of higher education and the 2003 government reform package as an archive.

## Background

In education, borrowing policy from one context and implementing it in another context is standard practice. However, because something is standard practice does not mean that one size fits all and all borrowing is successful. As explained in more detail below, the purpose, migration and consequences arising from policy borrowing and implementation require serious consideration by policy decision-makers.

## Policy implementation to invoke widespread change

Any government deciding to invoke widespread change in its higher education sector through implementation of new policies impacts on every institution, all staff

## Policy borrowing through migration

The migration of the learning and teaching quality agenda can be followed from the United States of America, to Europe, through the United Kingdom and eventually to Australia. Being able to trace this migration assists decision-makers and policymakers to understand the success of this migration (Dale 1999). Such policy migration is also known as policy borrowing (Halpin & Troyna 1995). In many situations, educational policy is not developed in isolation but rather is borrowed or transferred from one context to another (Dale 1999; Halpin & Troyna 1995; Steiner-Khamsi 2006). This trend in cross-national education policy borrowing often: (a) concerns the legitimisation of political views for success, although it requires a degree of synchrony between education systems (Halpin & Troyna 1995); (b) would benefit from consideration of timing for implementation (Steiner-Khamsi 2006); and (c) requires consideration of the economics of policy borrowing in order to aid successful implementation (Steiner-Khamsi 2006). Furthermore, before policies are borrowed it is important to understand whether the policy was successful in its original context and to determine what adaptations may be required for application in its new context (Lingard 2010; Lingard & Garrick 1997). If a policy is borrowed, implemented without sufficient modification for the local context, and then subsequently found to be unsuccessful, it may be deemed a 'managerial fad' (Birnbbaum 2000; Ponzi & Koenig 2002).



### Policy borrowing without evidence of prior success or modification

Within the context of quality assurance and the different ways in which governments control their higher education sectors, Birnbaum (2000) and Ponzi and Koenig (2002) present a cautionary note concerning the speed in which managerial processes emerge, are enacted and then fade away. Building on the work of Pascale (1990), Birnbaum investigated the life cycle of academic management processes over the period 1950 to 1990 and identified two dozen such processes adopted by higher education institutions that turned out to be managerial fads (Birnbaum 2000). The management innovations considered included strategic planning, total quality management, continuous quality improvement and benchmarking. A fad was defined as: (a) usually borrowed from other settings; (b) applied without full consideration of its limitations; (c) presented as either complex or deceptively simple; (d) reliant on jargon; and (e) with an emphasis on rational decision-making (Allen & Chaffee 1981; Birnbaum 2000). Despite good intentions for institutional improvement, the introduction of a new managerial fad was also found to enhance the risk of institutional disruption and the potential for employees to develop cynicism and resistance to change. Within the study, Birnbaum (2000) demonstrated that, although a fad may have huge success in one or two instances of application at a higher education institution, it often fails dismally at the sectoral level. What was disturbing about this notion of cycles of managerial fads, which sweep through higher education on a regular basis, was the overwhelming faith of governments and managers in these models to offer improvement, while the literature continued to suggest a paucity of data to prove their worth (Ponzi & Koenig 2002).

### Selection of evaluation methodology

Evaluation is found in all societies where informal evaluation and judgement methods are adopted to determine the worth or quality of something (Worthen, Sanders & Fitzpatrick 1997). Evaluation has enjoyed a relatively stable history from its inception in the early 1940s until today, with its original purpose to make a periodic check on the effectiveness of an educational institution (Tyler 1942) or the degrees to which curriculum intervention actually changed behaviour (Clarke 1999; Tyler 1949). By its very nature, the research emanating from an evaluation is descriptive, with the description being necessary to ensure that the stakeholders understand the context and situation in which the specific social intervention has taken place (Rog 2012; Tyler 1942, 1949).

Since the 1940s, evaluation has increasingly been defined as the systematic examination of a planned social

intervention (Clarke 1999) and has developed into a type of social policy research designed to assist organisations to make wise choices about interventions in the future. *Program evaluation* was defined by Patton (1975, 2002) as the examination and judgement of accomplishments and effectiveness. When this examination is conducted systematically and empirically through careful data collection and thoughtful analysis, then this is defined as *evaluation research* and the inclusion of qualitative methods offers the opportunity to tell the story (Greene 1994). This mode of evaluation was frequently called *program evaluation* (Maggetti, Gilardi & Radaelli 2012; Rossi 1982; Rossi & Wright 1984; Weiss 1983) or also referred to as *implementation analysis* (Ryan 1999). Program evaluation is not to be confused with instrumental evaluation, which involves the testing of humans against certain criteria using a specially designed instrument or survey (Terwee et al. 2003).

Bearing in mind that policy borrowing and implementation requires serious consideration by decision-makers where both the intended and unintended consequences may occur, this background shaped the way in which the author went about the selection of an evaluation methodology.

### Evaluation research from Patton's perspective

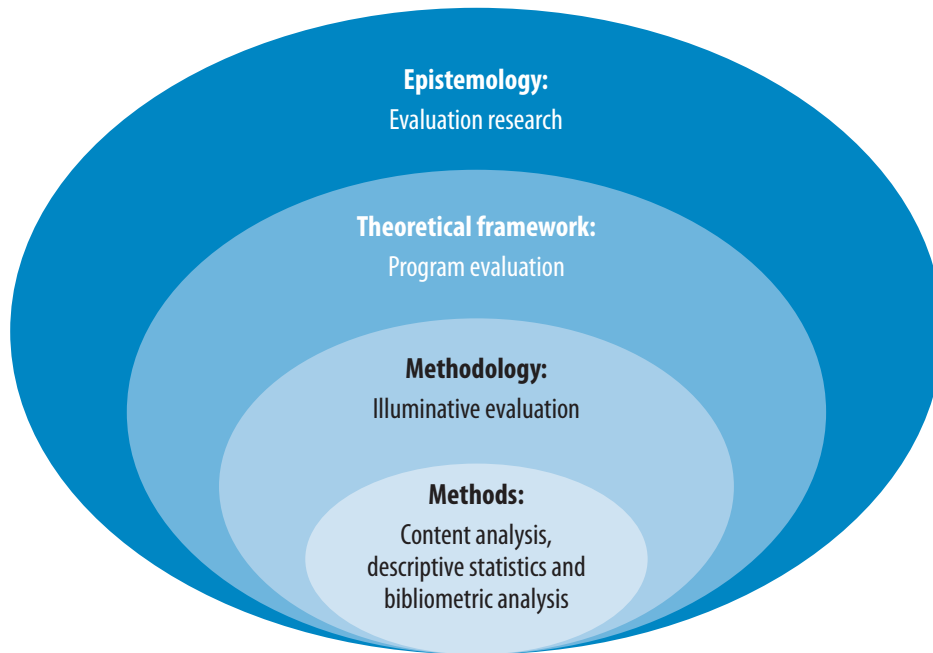
This investigation is firmly located within evaluation research (Patton 1975, 2002) and adopts Crotty's (1998) four-layered view of the world through the lens of Patton (see Figure 1). Located mainly within qualitative inquiry, the perspective adopted for this study is evaluation research, and the theoretical framework is program evaluation, also known as implementation analysis (Ryan 1999). The methodology is illuminative evaluation (Parlett & Hamilton 1972, 1976) that investigates both the intended and unintended outcomes, and the methods are content analysis, descriptive statistical analysis and bibliometric analysis. This notion of a global view was particularly relevant as the discipline under investigation is higher education, which Scriven (2013) considers interdisciplinary and for which researchers are encouraged to adopt an interdisciplinary approach (Adkins 2009). Further, the perspective for this study is evaluation research, which Scriven (2013) considers to be transdisciplinary and, therefore, central to every discipline.

### Program evaluation as a theoretical framework

Within the management literature, the term *implementation analysis* is used when a researcher is interested in determining outcomes of the implementation of a policy (Ryan 1999). From an evaluation research perspective, this type of investigation is called *program evaluation*, particularly in education, where policy deployment effectively works as an intervention (Owen



FIGURE 1: GLOBAL VIEW OF PROGRAM EVALUATION (ADAPTED FROM CROTTY 1998 AND PATTON 1975, 2002)



& Rogers 1999). For the purposes of this current study, the term program evaluation will be used as it strongly aligns with evaluation research. In particular, program evaluation is intended to assist decision-makers, in this case the Australian Government, to make a record of the times and events, and provide a useful guide to the future (Kogan 2007). Decision-makers are being asked to plan more carefully and reflect more critically to be able to justify the decisions made (Owen & Rogers 1999). However, program evaluation is often linked to policy borrowing in education, where a policy is borrowed from one setting and implemented in another. This notion of policy borrowing in education is outlined in the following section.

### Methodology

The selection of the methodology is determined by the problem and the purpose of the program evaluation. How illuminative evaluation was selected as the methodology is outlined below.

#### Selection of Illuminative evaluation as the methodology

Program evaluations may be conducted with various foci, including *process evaluation*, impact (or outcomes) evaluation and illuminative evaluation. Process evaluation is defined as being focused on the process of how an intervention is implemented in comparison with the designed intervention (Patton 1975, 2002) and to determine what elements of an intervention worked

or not (Suchman 1967). Of particular interest in process evaluation is the investigation of why an intervention is successful for one societal group and yet unsuccessful for another (Linnan & Steckler 2002). For the purposes of this study, process evaluation would not allow the rich contextual story of the period in which the government review was conducted to be explored. *Impact evaluation*, also known as outcomes evaluation, is defined as the investigation of the relationship between the effort and activities of a program and any outcomes of the said program (Mohr 1995). Impact evaluation is often found applied within the health discipline, as demonstrated by Patton (1975) when he evaluated the impact of 25 health programs. Another example is where Mattila (1999) evaluated the impact of culture in the area of service. Within the education discipline, it is difficult to make strong causal relationships between professional development for teachers and the direct impact on their classroom practice at a sectoral level. One doctoral study by Keady (2007) applied impact evaluation methodology and followed five classroom teachers in an action research learning intervention, specifically designed to alter and adapt their assessment practice to accommodate changes in curriculum. While, for the purposes of this study, impact evaluation would reveal direct causal relationships, again the rich contextual story would be missed.

In contrast to the previous two approaches, *illuminative evaluation* takes into account both the wider contexts in which educational programs function and





the specific outcomes. Parlett and Hamilton (1976, p. 84) elaborated that:

Illuminative evaluation, rooted in social anthropology, seeks [rather] to describe and interpret, and takes account of the contexts in which educational innovation must function. Central concepts are the instructional system and the learning milieu.

Illuminative evaluation as conceptualised by Parlett and Hamilton is made up of a three-stage framework of observation, additional inquiry and explanation, with the investigational focus evolving as the research progresses. Parlett and Hamilton also identified the notion of the learning milieu defined as the context and environment surrounding a social intervention as being central to the methodological approach of illuminative evaluation. Through the theoretical framework of program evaluation, illuminative evaluation as the methodology for this study applies to qualitative inquiry, including qualitative and quantitative data streams where outcomes are shaped by the extent and richness of the data sources (Patton 1975, 2002).

A valuable example of illuminative evaluation applied in a higher education setting in Australia is found in the D-Cubed project funded by the Australian Learning and Teaching Council Grants Scheme (Hinton et al. 2011). The D-Cubed project analysed an extensive number of projects to synthesise the dissemination strategies used within each project. The application of illuminative evaluation enabled Hinton et al. to document the context surrounding the strategies and capitalise on both the intended and unintended outcomes of the projects.

### **Illuminative evaluation methodology**

There are four design stages in the program evaluation methodology applied to this study and these correspond to both the latest policy recommendations by the Department of Education, Training and Employment (2012), Queensland, and research guidelines for illuminative evaluation methods by Parlett and Hamilton (1972, 1976). The design stages outlined below include: Stage 1: Design the evaluation; Stage 2: Collect data that counts; Stage 3: Prepare evaluation report; and Stage 4: Communicate findings. Each stage is outlined in detail below.

#### **Stage 1: Design the evaluation**

This is the most critical step for illuminative evaluation. It is imperative that the design stage is carefully crafted, that the research questions are clear, and that the data sets will support the research questions. Patton (1975, 2002) recommends a carefully crafted research plan designed to deal with the complexity of learning and teaching (Compayre 1886) and guided by Rog's contextual parameters (2012).

Figure 2 illustrates the initial research design stage for this study and reads in ascending order from the research questions towards the review milestones and through to the illuminative evaluation foci. The first level shows the three research questions designed to nest beneath the relevant government review milestones. These milestones read from left to right in chronological order with respect to the deployment of the review. The third level indicates the outcomes, with the fourth and highest level being the interventions; the 2003 government reform package is the one under evaluation, with the 2008 government review signalling a new intervention.

#### **Stage 2: Collect data that counts**

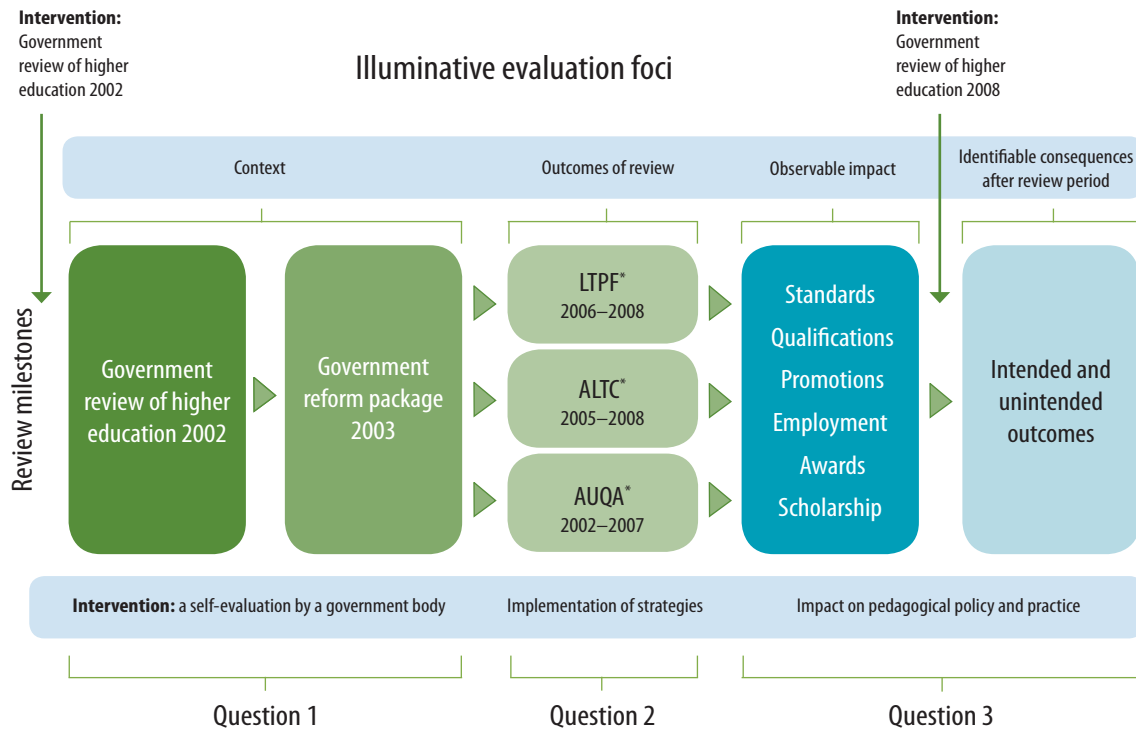
The second stage of evaluation research design involves collecting data that matters. The data within this study is based entirely on primary sources of data emerging from the government review milestones and sourced from publicly available documents or websites. The datasets were selected to provide evidence of the relationship between the 2003 government reform package and the learning and teaching agenda of higher education providers.

The dimensions of impact, adapted from Renner (2003), identify the influences of change in six dimensions: (a) sector engagement in national initiatives; (b) qualifications in learning and teaching; (c) employment practices; (d) promotion practices; (e) educational research; and (f) capacity building in higher education. As stated by Renner, these dimensions include external drivers for change, national initiatives and internal practices, such as sector engagement, that may, given the autonomous nature of higher education providers, adopt or work against the drivers of change. In addition, a number of datasets were identified as offering benchmarking opportunities to determine impact from the 2003 reform package focused on learning and teaching.

The methods of analysis detailed later in this article used a number of public data sources. The major datasets that emerged from the 2003 government reform package include the first cycle of three national initiatives: (a) the Learning and Teaching Performance Fund; (b) the Australian Learning and Teaching Council; and (c) the Australian Universities Quality Agency. In addition, the third category endeavours to measure the impact of this intervention through: (d) government higher education sector statistics; (e) higher education providers' website home pages, promotion criteria, learning and teaching plans, and learning and teaching qualifications; (f) *The Australian* newspaper for employment and targeted scholarship of discovery opportunities for the academy; and (g) learning and teaching literature located through the Institute for Scientific Information's (ISI) Web of Knowledge (now Thomson Reuters Web of Science).<sup>1</sup>



FIGURE 2: LOGIC MODEL FOR THE EVALUATION OF A POLICY IMPLEMENTATION ANALYSIS



**Stage 3: Prepare evaluation report**

The third stage of illuminative evaluation research design involves the preparation of an evaluation report. As this study sits within the perspective of evaluation research and the theoretical framework of program evaluation, it is first and foremost a research report that identifies the critical findings related to the research questions against a theoretical underpinning. Illuminative evaluation then offers the advantage of examining both the intended and unintended outcomes of the implementation of an intervention. However, when conducting a traditional evaluation there should also be an evaluation report designed to provide practical feedback to the decision-makers.

**Stage 4: Communicate the findings**

The fourth stage of illuminative evaluation research design involves preparation of a set of recommendations to the Australian Government to inform future development and deployment of government reviews in higher education as an intervention. The communication of findings forms the final outcomes in this study and all publications emerging from this study will contribute to scholarship in the field of higher education. This article represents the first article arising from this study.

**Methods to collect data that counts**

Within the perspective of program evaluation as the theoretical framework and illuminative evaluation as a methodology to evaluate an intervention (Patton 1975, 2002), this study is located within the broad field of social research and combines a comparative set of methods systematically to produce further knowledge on higher education issues and developments in society (Neuman 2000; Wysocki 2004). The validity of this illuminative evaluation is enhanced through the application of triangulated research methods of content analysis, descriptive statistical analysis and bibliometric analysis designed to strengthen this evaluation. Quality is further supported by an inclusive method of analysis to code all components within each dataset, with the boundaries clearly defined in the scope. The three methods adopted by this study are detailed below.

**Content analysis approach**

The type of approach described here is content analysis, which is defined as the study of different aspects of information found within a document, film or other communication (Copes, Brown & Tewksbury 2011; Gall, Gall & Borg 2005; Kolbe & Burnett 1991). Content analysis was selected for its inclusivity to examine a large volume of qualitative material and attempts to



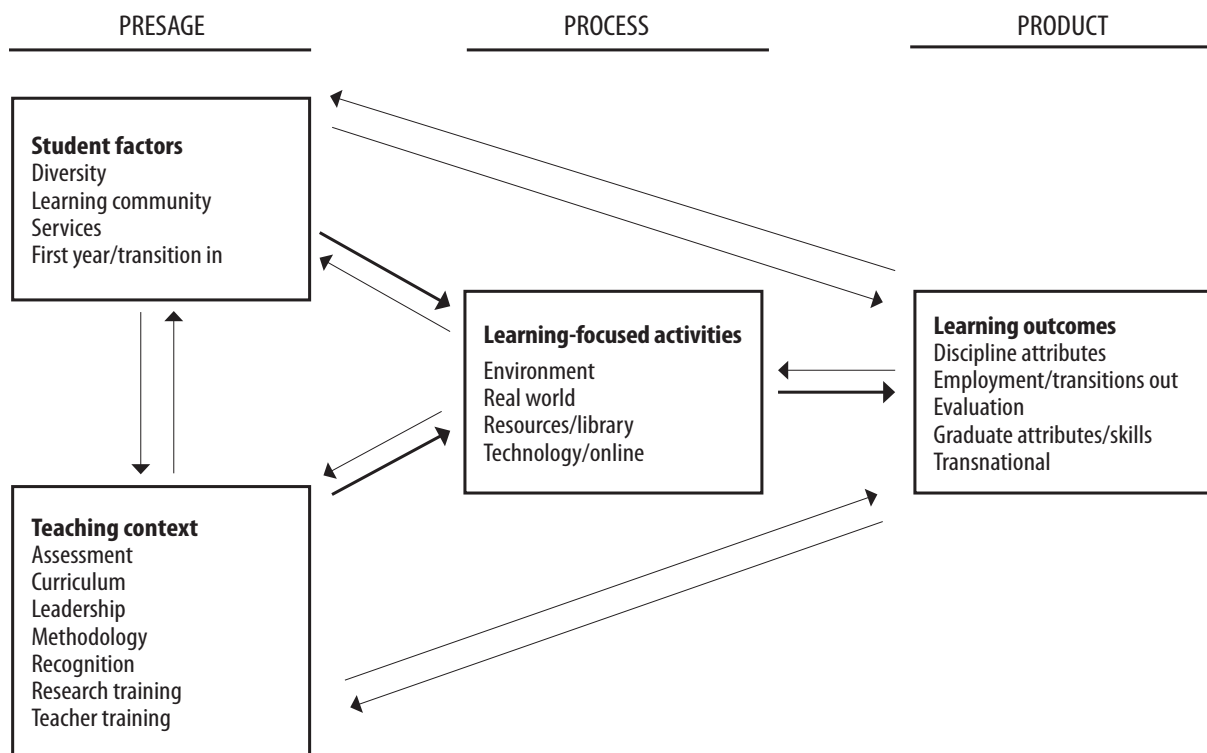
identify core consistencies and meanings (Patton 1975, 2002). This study focuses on a range of qualitative data and applies content analysis through coded content mapped against Biggs’s *Model of Teaching and Learning* (1996), to determine the extent of the impact of the 2003 government reform package on learning and teaching in the higher education sector in Australia within the shifting landscape. Content analysis is applied to documents, mapped against the coding analysis framework. The use of content analysis provides an empirical starting point to generate new research evidence about the nature of how the focus placed on learning and teaching is implemented (Kassarjian 1977).

It is imperative to be objective when applying content analysis, and this often involves establishing and procedures developed by a team of researchers (Copes et al 2011 Gall, Gall & Borg 2005; Kolbe & Burnett 1991). As this study was conducted by a single researcher, a number of steps were employed to reduce researcher bias of the sampling at all levels. These are: (i) define terms used within the study; (ii) code all data available from the time period without judgement for exclusion; (iii) develop descriptive statistical datasets to strengthen the qualitative analysis; (iv) map all primary sources against the coding analysis framework and develop hierarchical categories

within the framework to support the volume of data; (v) utilise a *miscellaneous* category as a holding bay for coding at a later time; (vi) utilise the coding properties of NVivo software to code data in a repetitive cascading style; and (vii) use both formal and informal mechanisms to promulgate decision-making within the content analysis methodology, and invite and utilise feedback (Copes, Brown & Tewksbury 2011; Gall, Gall & Borg 2005; Kolbe & Burnett 1991).

The coding framework is illustrated in Figure 3. Within the first level of coding, all criteria and statements from the datasets were coded against the Biggs’ *Model of Learning and Teaching* (1996) framework to the level of learning and teaching, research and institution. As learning and teaching is the focus of this study, all statements within this section were coded a second time against Biggs’s model (1996, 2003) to determine whether attention was paid equally across learning outcomes, learning-focused activities, student factors and teaching context. Biggs’s *3P Model of Learning and Teaching* offered specific categories that were extensive in terms of learning and teaching, and offered tight parameters for coding decision-making. This model presents a three-step process of *presage*, *process* and *product* and is built on a substantial set of literature (Entwistle & McCune 2004;

FIGURE 3: ADAPTED FROM BIGGS’S 3P MODEL OF LEARNING AND TEACHING (1996)







Issacs 2001; Jones 2002). Therefore, Biggs's 3P Model (1996, 2003) encompasses learning and teaching in higher education in a way that offered a conceptual model to investigate the range of documentation arising from the intervention through content analysis.

### Descriptive statistical analysis approach

The type of approach described here is descriptive statistical analysis (Babbie 2002; Creswell & Clark 2011), which is defined as the collection, examination and interpretation of numeric data to elicit trends, patterns or themes from within the data. This method provides an opportunity to: (a) portray the contextual environment of the higher education sector through the government statistics (Department of Education, Employment and Workplace Relations 2008); (b) count the instances and funding outcomes of the Learning and Teaching Performance Fund and the Australian Learning and Teaching Council national strategies; (c) understand recruitment practice through the employment statistics; (d) determine the disciplinary differences offered through targeted scholarship-of-discovery opportunities; and (e) elicit any observable change over time. In addition to the analysis by scheme or institution, the data was also analysed by institutional affiliation (for example, Australian Technology Network) and by state (for example, Queensland).

### Bibliometric analysis approach

The type of analysis described here is bibliometrics (Budd 1988, 1990, 1992; Yeoh & Kaur 2007), which is a method used to analyse the literature in a systematic, rigorous and structured manner. Thereby, it is an appropriate methodology to analyse the literature for observable change. For the purposes of this study, Bradford's Law (Yeoh & Kaur 2007) was selected to investigate the patterns in research purpose and topics to aid the meaning and value or utility of such studies.

However, in some fields of research, such as humanities and social sciences, textbooks, government-oriented research or agency-funded research may go under the radar and therefore not be identified by this style of examination of the literature (Matthews et al. 2006). This method uncovers patterns or trends in a systematic and structured manner that offers rigour in this space. For example, as the purpose of the 2003 government reform package was to place a focus on learning and teaching in higher education, it stands to reason that there should be some impact on the literature in this field of research as the levels of activity increase.

A number of sources were considered, including: (a) Education Network Australia, an online resource for Australian educators<sup>2</sup>; (b) a website devoted to bibliometrics at the Australian National University called

Innovation ANU<sup>3</sup>; (c) a journal article (Matthews et al. 2006); (d) a government report (Phelan, Anderson & Bourke 2000); (e) HEDBIB: International Bibliographic Database for Higher Education<sup>4</sup>; and (f) the ISI's Web of Knowledge. As a result of this investigation, the ISI Web of Knowledge was selected as an appropriate database for bibliometric analysis within this study.

Another way to analyse the literature was to determine the purpose of the research. Gall, Gall and Borg (2005) describe the purpose of educational research as being grouped under four different genres: (a) *descriptive* to make careful, highly detailed observations on educational phenomena; (b) *explanation* involves the statement and cause-and-effect relationships; (c) *intervention* seeks to determine whether a phenomenon can be controlled or improved by a particular *intervention*; and (d) *predictive* to determine whether data collected at one point in time can predict behaviour or events that occur at a later point in time.

A further way to analyse the literature was through the work of Doyle (1987), who classified research in teaching and teacher education through three main areas of topic interest: (a) *Teacher characteristics* focus on personal qualities such as intelligence, experience, attitudes, expectations, knowledge and beliefs; (b) *Methods research* in teaching was well known to curriculum developers, teacher educators and teachers, and was another way to answer questions of effectiveness; and (c) *Teacher behaviour* research is synonymous with research on teaching effectiveness and the emphasis is on establishing prescriptions for teachers by relating behaviour measures to some criterion of effectiveness. Figure 4 demonstrates the relationship between the topics of research papers (Doyle 1987) as applied to the purpose of educational research (Gall, Gall & Borg 2005) within the Learning and Teaching Bibliometric Matrix.

To identify a specific set of papers, several key terms were required to query the ISI Web of Knowledge database: 2002 to 2008; Australia; higher education; education; and educational research. The *year*, *address*, *topic* and *subject area* were derived from the scope and context of the research project. The next stage in the process involved developing a database to store the citations and then recording the following attributes against each citation within the author's database: (a) ISI Web of Knowledge: *citations*, *year* and *times* cited at the point of collection; (b) *study locale*, *participants*, *methodology* and *instruments*: identified within the papers; (c) *research paradigm*: classified by author; and (d) *research purpose*: classified by author.

There is a limit to the extent to which the results arising from the application of this Learning and Teaching Bibliometric Matrix may be viewed. The aim in the current study is to determine whether the intervention under examination had impact on the scholarship of



FIGURE 4: LEARNING AND TEACHING BIBLIOMETRIC MATRIX

Learning and Teaching Bibliometric Matrix		Research studies according to topic classification (after Doyle 1987)		
		Teacher characteristics	Methods research	Teacher behaviour
Purpose of educational research (after Gall, Gall & Borg 2005)	Descriptive			
	Explanation			
	Predictive			
	Intervention			

teaching. The extent to which the published works represent quality or depth of knowledge will require further study in the future.

**Discussion**

As described throughout this article, program evaluation has a strong theoretical background whereby the selection of the methodology and methods is determined by the initial problem and purpose. In the case presented in this article, illuminative evaluation was selected as the methodology, and content analysis, descriptive statistical analysis and bibliometric analysis were determined as appropriate methods to support this investigation. The decision to use datasets that are available in the public domain may pose some limitations to the outcomes of this investigation. For example, full access to public and private documents associated with the 2003 government reform package may have provided information that would allow different trends to be determined. However, one outcome of this investigation is the difficulty in locating the public information, including the poor search functionality available to locate this information across diverse locations in which government information is stored. This applies particularly to information that is linked to past policy initiatives.

A strong message from this article is how illuminative evaluation offers evaluators the opportunity to review both the intended and unintended consequences.

Even when considering a single government review of higher education and a subsequent reform package as an intervention, reflection on the planned or intended outcomes will benefit future decision-making. However, a critical element of learning lessons from the past is being able to determine if there were any unintended consequences that could be avoided in the future. For the future efficacy of the Australian higher education sector, future decision-makers should be encouraged to draw upon lessons learnt from their predecessors to inform new policy development and implementation. As will be discussed in a future article, the three national initiatives under examination in this study demonstrated success in terms of achieving their objectives, whereas the Learning and Teaching Performance Fund exhibited the features of a managerial fad and this was considered an unintended consequence of policy implementation.

**Conclusion**

This study adopted evaluation research as the perspective, program evaluation as the theoretical framework, and illuminative evaluation as the methodological approach to an evaluation of a large-scale program of change. This program of change in its focus on learning and teaching is unique, and this evaluation investigated the degree to which specific intervention, a government review, actually changed practices within the higher education sector, in terms of learning and teaching policy and teaching



practice. As the two reviews mentioned in this study were close together—2002 and 2008—and triggered by political cycles with the intended impact to change the practices of all institutions, academic staff and students, the development of an interrelationship between reviews through program evaluation would appear to offer an interdependent mechanism to allow each review to build on the previous review. This will then provide an evidence-based platform to inform future decision-makers of the importance of identifying both intentional and unintentional consequences of interventions, and how the efficiency and effectiveness of a government review process can maximise its outcomes.

### Notes

- 1 Thomas Reuters Web of Science (formerly the ISI Web of Knowledge) is a research platform to help users analyse and share information in the sciences, social sciences, arts and humanities. For further information refer to the Web of Science website at <http://thomsonreuters.com/thomson-reuters-web-of-science>.
- 2 The Education Network Australia (EdNA) was a Commonwealth-initiated online resource for Australian educators that provided a single point of entry for high-quality electronic resources. EdNA was closed in 2012.
- 3 Further information about Innovation ANU can be found at <http://innovation.anu.edu.au>.
- 4 The International Bibliographic Database for Higher Education (HEDBIB) is published by the International Association of Universities. For further details refer to <http://hedbib.iau-aiu.net>.

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