

THE NEXUS BETWEEN TEACHING AND RESEARCH: EASIER SAID THAN DONE

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I INTRODUCTION

The relationship between teaching and research within universities has been a subject of discussion over the centuries. Prior to the nineteenth century, research in the form of individual studies, reflections and writings was viewed as a ‘vital ingredient in preparing the teacher for his job — in keeping his mind sharp, his lecture fresh, his students intellectually alert’.¹ Accordingly, the primary rationale for research at this time was its impact on teaching.²

As time passed, however, there was a gradual shift towards universities not only promoting the transmission of knowledge but also encouraging the search for and discovery of new knowledge. This shift can be traced to developments within German universities.³ In the 1810 Charter of the Modern German University, for instance, Wilhelm von Humboldt stated that universities ‘have as their task the cultivation of ... scholarship in the deepest and broadest sense.’⁴ Consequently, academics did not exist merely to supply the knowledge their students lacked. Academics and students had a common goal, the pursuit of knowledge.⁵

The integration of research and teaching was widely promoted and came to be adopted as the norm around the world.⁶ This was certainly the case within the discipline of law. For instance, Justice Holmes stated in 1886 that ‘the business of a law school is not sufficiently described when you merely say it is to teach law, or to make lawyers’.⁷ There is more to a law school than just teaching law. Research should be promoted within the institution because the research expertise of law lecturers enhances the law students’ experience and this, in turn, enables a law school to ‘teach law in the grand manner and to make great lawyers’.⁸

In Australia, law schools have embraced and promoted the integration of research and teaching. A 2010 survey of the institutional strategic plans and teaching and learning plans of Australian universities revealed that 33 of the 39 publicly funded Australian universities aspired to integrate teaching and research.⁹ For example, the School of Law at the University of Western Sydney states that one of its aims is to strengthen the nexus between research and teaching.¹⁰ However, audit reports of the Australian Universities Quality Agency (‘AUQA’ — an audit body recently absorbed into the Tertiary Education Quality and Standards Agency) nevertheless found that in a number of universities the aspiration to integrate research and teaching fell short of being achieved in practice.¹¹ For

example, despite the fact that Charles Darwin University stated that it supported the development of a positive nexus between teaching and research, its AUQA audit report noted that it had not taken any steps or initiated any plans to achieve this nexus.¹² Other universities have started implementing strategies to promote a positive nexus between these two activities, with mixed results. For example, Central Queensland University (CQU) established two new centres — the Learning and Teaching Education Research Centre and the International Education Research Centre — to strengthen research into teaching so as to enhance the practice of teaching and learning. The AUQA audit report of this institution observed that, while AUQA supported such a move, it had some concerns about the manner in which the university was implementing this strategy.¹³ For this reason, it recommended that the ‘University should be clear about balancing the activities of these two [centres] between external facing research and research that address questions of specific interest to CQU.’

The existence of a positive nexus between teaching and research cannot be taken as a given. Many academics appear to assume the existence of such a positive nexus,¹⁴ but the link between teaching and research is not always obvious and the existence of such a link has been contested in recent decades.¹⁵

The central contention of this article is that a positive nexus between teaching and research is possible, but that it has to be constructed through the deliberate adoption of certain strategies. Part II briefly examines the literature regarding the relationship between teaching and research and identifies the various arguments for and against the existence of a positive nexus between the two. Part III describes how a positive nexus between teaching and research can be deliberately achieved by defining research and teaching and then classifying the potential relationship between these two activities. The final part of this paper offers various strategies to create a positive nexus between teaching and research within the discipline of law.

II IS THERE A NEXUS BETWEEN TEACHING AND RESEARCH?

It is widely believed that good teachers make good researchers.¹⁶ However, this perception has been challenged over the last few decades. Cutten, for example, noted that ‘the more books and articles he has written, the better teacher he is supposed to be. But the opposite is more likely to be the case.’¹⁷ Both these perspectives are ‘subjective and undocumented’.¹⁸ However, they raise the question of whether teaching and research are positively correlated. A positive nexus would exist if efforts to improve the quality of one necessarily and automatically result in improvements in the quality of the other.

In the attempt to determine whether a positive nexus between teaching and research exists, a number of qualitative and quantitative studies have been conducted over the past few decades around the world. However, consensus has not been reached as different studies have produced different results.¹⁹ Broadly, the findings may be categorised as follows:

- those that claim that there is a negative nexus between teaching and research (i.e. efforts to improve the quality of one necessarily and automatically result in a reduction in the quality of the other);

- those that claim that there is no relationship between teaching and research; and
- those that claim that there is a positive nexus between teaching and research.

The majority of qualitative studies designed to probe the academic staff perception on the relationship between research and teaching support the existence of a positive nexus between these two activities. However, most quantitative studies illustrate that this perception may be inaccurate, as they tended to find that the nexus between teaching and research may be non-existent or negative.²⁰

A Negative Nexus Between Teaching and Research

Findings from a number of studies support the view that there is a negative nexus between teaching and research.²¹ Different arguments, such as the scarcity model, the different personality model and the divergent reward model, have been offered to explain these findings.²²

1 The Scarcity Model

According to the ‘scarcity’ model, there is a negative nexus between teaching and research because, while universities fulfil teaching, research and service roles, an individual academic cannot carry out all of these roles to an equal degree, and as each of these roles competes with the others for an academic’s time, energy and commitment, academics experience ‘role strain’.²³

It is difficult for an individual academic to balance the different roles that they are expected to fulfil.²⁴ As Moore has commented, ‘given the scarcity of time and energy, the probability of role conflict for the multiple joiners is somewhat more than abstract and hypothetical’.²⁵ For example, research distracts academics from teaching by forcing them to channel their effort and time away from the classroom.²⁶ Due to time constraints, those who are productive in research have a tendency to spend more time on research than teaching. Similarly, those who are more productive in teaching spend more time on teaching than research.²⁷

Ramsden and Moses found that commitment to teaching was negatively correlated with research output.²⁸ Ramsden later explained that:

Teaching and research, far from being complementary activities, appear to be either completely unrelated or to be in conflict with each other. The most productive researchers have the least favourable attitudes to teaching, while the least productive are the most committed to teaching.²⁹

The existence of such conflict may lead to a negative nexus between teaching and research.

2 The Different Personality Model

Another model that has been put forward to support the existence of a negative nexus between teaching and research is the ‘different personality’ model. According to Eble, research and teaching are activities that attract different personalities. A researcher is a solitary person. He or she likes ‘to work alone, responds poorly to outside distractions and pressures, is more at ease with the stuff of ideas, facts and materials of a discipline than

with students and learning'.³⁰ A teacher, on the other hand, is gregarious.³¹ He or she 'seeks out company, can handle pressures and distractions and prefers interacting with students to manipulating materials or ideas'.³² Accordingly, the set of attributes associated with teaching and research are contradictory and even conflicting. This, in turn, leads to the creation of a negative nexus between teaching and research.³³

3 The Divergent Reward Model

According to the 'divergent reward' model, universities' reward systems often lead to the creation of a conflict between, and even the separation of, teaching and research.³⁴ In fact, within many universities there is a culture that values and rewards research at the expense of teaching.³⁵ For example, in Australia, the majority of universities do not support the promotion of academics if these academics are not research active, irrespective of the fact that they are excellent teachers.³⁶ A culture of 'publish or perish' reigns.³⁷ This has led to a disarticulation between teaching and research as academics focus on what will get them promoted rather than what may be good for their students.³⁸ Academics are therefore forced to choose between teaching and research, and for an academic to put an emphasis on teaching at the expense of research may have a negative impact on his or her career and salary prospects.³⁹ This position is not unique to Australia. For example, the university promotion and reward policies in the United States have led American law professors to have few incentives to improve their teaching. They consequently pay attention to their teaching only to the extent necessary to prevent complaints by students.⁴⁰

This reward system further leads teaching being viewed by many academics as a default activity: teaching is what an academic does, while research is what makes an academic special.⁴¹ If academics are not research active, they are required to undertake an increased teaching load — that is, teaching is viewed as a punishment.⁴² In addition to the impact that research may have on the career of an academic, receiving research grants may allow academics to 'buy out' their teaching loads; the idea of 'buying out' research to facilitate more teaching is never considered by universities.⁴³ Further, some universities have even emphasised research over teaching by diverting funds from teaching to research; for example, the University of Melbourne has cross-subsidised research projects from other funding sources, resulting in funds previously used for teaching being used to support research.⁴⁴ Such actions send a message at an institutional level that research is more important than teaching.⁴⁵ It is no surprise then that many academics view teaching as 'a necessary evil and an annoying distraction from more profitable ventures'.⁴⁶

B No Nexus Between Teaching and Research

While some studies have found a negative nexus between teaching and research, a greater number of studies have concluded that there is no discernible relationship between the two activities.⁴⁷ In other words, efforts to improve the quality of one do not necessarily lead to any impact upon the quality of the other. Newman, for example, argued that research and teaching have 'distinct functions; they are also distinct gifts, and are not commonly united in the same person'.⁴⁸

At least three arguments — described by Hattie and Marsh as the ‘different enterprises’ model, the ‘unrelated personality’ model and the ‘bureaucratic funding’ model⁴⁹ — have been offered to explain the lack of nexus between teaching and research.

1 The Different Enterprises Model

Teaching and research may be viewed as inherently independent activities, as each deals differently with knowledge. For example, Feldman concluded that ‘the likelihood that research productivity actually benefits teaching is extremely small or that the two, for all practical purposes, are essentially unrelated.’⁵⁰

There are in fact fundamental differences between teaching and research that make any nexus — whether positive or negative — unlikely. In teaching, the academic treats knowledge as something that can no longer be investigated, while in research effort is expended on knowledge that cannot yet be taught as it is still being examined.⁵¹ Teachers and researchers are valued for different reasons: teachers are recognised and praised for the knowledge and competencies they bring to their students, while researchers are valued for what they discover and the theories they may establish; they *expand* existing knowledge.⁵² Teaching is private, integrative and process-oriented, while research is public, specialised and results-oriented.⁵³ Research is a different enterprise from teaching, and the two activities are unrelated.⁵⁴

2 The Unrelated Personality Model

The ‘different personality’ model described earlier insists that the negative nexus between teaching and research is a consequence of the fact that the characteristics of a good teacher conflict with the characteristics of a good researcher and vice versa. The ‘unrelated personality’ model, on the other hand, insists that the lack of nexus between teaching and research is a consequence of the fact that researchers and teachers have very few personality attributes in common.⁵⁵ Rushton, Murray and Paunonen conducted a study into the personality characteristics associated with research originality and teaching efficacy. They found that creative researchers are ‘ambitious, enduring, seeking definiteness, dominant, showing leadership, aggressive, independent, not meek, and non-supportive’.⁵⁶ Effective teachers, on the other hand, are ‘liberal, sociable, showing leadership, extraverted, low in anxiety, objective, supporting, non-authoritarian, not defensive, intelligent, and aesthetically sensitive.’⁵⁷ They concluded that since the personalities of researchers and teachers have very little in common, there is no clash between the personalities. Further, their research noted that irrespective of the academics’ personality, teaching and research productivity were not negatively or positively correlated. Being good, bad or indifferent at teaching has little effect on the research performance of the academic, and vice versa. No nexus between teaching and research exists.⁵⁸

3 The Bureaucratic Funding Model

The ‘bureaucratic funding’ model insists there is no nexus between teaching and research because each activity is funded in a different way. For example, in Australia, the funding of universities covers the separate categories of:⁵⁹

- teaching and learning;
- research and research training;
- improving access and participation; and
- infrastructure.

Commonwealth funding for universities distinguishes between funding for research and funding for teaching, with the funding for each being calculated on the basis of separate and unrelated criteria. Funding for teaching is provided on the basis of student load,⁶⁰ while funding for research is determined according to a performance-driven formula.⁶¹ This fact contributes to the creation of a schism between teaching and research as each activity is perceived as being distinct from the other. Such a position is not unique to Australia. For example, the United Kingdom has a similar funding model distinguishing between teaching and research.⁶² This approach to the allocation of funds enforces the notion that the two activities are independent.

C Positive Nexus Between Teaching and Research

Despite the existence of many studies questioning the existence of a positive nexus between teaching and research, most academics believe that ‘teaching and research are harmonious and mutually beneficial activities’.⁶³ It is often claimed that ‘teaching contributes to enrichment of research and research contributes to enhanced levels of teaching’.⁶⁴ For example, it has been argued that:

While not all university teachers or even departments needed to be actively engaged in research, a faculty, and still more a university, had to have a strong research mission ... students need to be taught by people who were active players, not passive spectators in their disciplines.⁶⁵

This belief is supported by a number of qualitative research studies.⁶⁶ Two major arguments — the ‘conventional wisdom’ model and the ‘generic underlying ability’ model — are offered to explain such findings.⁶⁷

1 The Conventional Wisdom Model

According to the ‘conventional wisdom’ model, the widespread belief of academics in the existence of a positive nexus between teaching and research is evidence that such a positive nexus in fact exists.⁶⁸ Many academics appear to take it for granted that a positive nexus exists between teaching and research.⁶⁹ Such a link is even described by some as ‘obvious’.⁷⁰ For example, Neumann interviewed senior academic administrators in Australia and found that they all supported and firmly believed in the existence of a positive nexus between teaching and research.⁷¹ Similarly, a survey of academics in Sweden found evidence of a strong belief that teaching and research are mutually supportive.⁷²

Ben-David considered the link between research and teaching to be not only positive but crucial, stating:

The location of advanced research in independent and competing universities, in each of which there has been a constant flow of new researchers, has served effectively to enforce high intellectual standards, to recognize originality and to ensure the circulation of ideals to students, and through them to society at large. Severance of the connection between research and teaching

would eliminate these highly desirable incentives to both intellectual and cultural vitality.⁷³

Thus research and teaching are often perceived as complementary.⁷⁴ They are mutually enriching: efficient teachers are active researchers who use their research to enliven the classroom.⁷⁵ This is welcomed by students, as they expect their teachers to be experts in the subjects they teach.⁷⁶ Students support the linkage of research and teaching — provided that such a relationship does not lead to the hijacking of the curriculum by an academic's research interest.⁷⁷

2 The Generic Underlying Ability Model

The 'generic underlying ability' model is sometimes referred to as the 'G' model.⁷⁸ According to this model, teaching and research both rely upon a set of common characteristics: the capacities of academics for high commitment (hard work, unselfishness), creativity (originality and imagination) and critical analysis.⁷⁹ For example, academics who excel at research regularly organise their thoughts in writing. This preparation and organisation is reflected in the quality of their teaching, as such academics are able to provide a clearer presentation of their subject to students.⁸⁰

Teaching and research are both about disseminating and communicating knowledge.⁸¹ Consequently, learning is an essential link between teaching and research. By being researchers, academics become better teachers, since they are involved in the same activities as learners. This argument establishes a bridge between the process of teaching and the process of research.⁸² Clark noted:

As knowledge is newly created by research, and it is reformulated and repeatedly transmitted in teaching and service, its force continuously bubbles up from within daily operations, right in the palm of the professional hand. The logic, the identity, the very rationality of the academic profession is thereby rooted in the evolving organisation of those categories of knowledge that disciplines and professional fields of study have established historically and carried to the present, producing an inertia that powerfully prefigures the future.⁸³

Teaching and research are not two different enterprises. They are positively correlated.

D What Does This All Mean?

The various studies described above all appear to assume that the nexus between teaching and research — whether positive, negative or non-existent — is automatic and consistent across disciplines. This paper contends, on the other hand, that the nature of the relationship between teaching research is much more complex and is dependent upon a number of factors, including the discipline under consideration. It is also contended that a positive nexus is possible but that it depends upon the deliberate adoption of certain strategies.

1 Complexity

Is a positive nexus between teaching and research a myth? Does the fact that studies continue to be conducted in an attempt to prove the existence of a positive nexus between teaching and research — in spite of the mounting evidence against the existence of such a positive nexus — suggest no more than an unwillingness to accept the reality that there is

very little or no relationship between the two activities?⁸⁴

It is contended that the answer to both of these questions is no. The possibility of a positive nexus between teaching and research should not be rejected because a positive nexus cannot conclusively be documented in every discipline and for every academic.⁸⁵ A positive nexus is worth striving for: such a relationship between teaching and research would not only benefit students' learning, each of these activities would enrich the other. For example, since research demands a deep approach to learning, researchers may be better equipped to implement such a learning approach in their teaching.⁸⁶

While a positive nexus does not automatically exist between the two activities, it can be developed. For this reason, current proposals suggesting the separation of teaching and research through the creation of teaching universities and research universities⁸⁷ should not be supported as implementing a positive nexus between teaching and research is not only beneficial to students but is also beneficial to academics and the institutions themselves.⁸⁸

Most of the studies described above view the relationship between teaching and research in a very simple way: the nexus is positive, negative or non-existent.⁸⁹ The relationship between teaching and research is more complex than this. There are at least nine possible relationships between teaching and research: see Table 1.

Table 1: Possible Relationships Between Teaching and Research

		<i>Influence of Teaching on Research</i>		
		<i>Positive</i>	<i>No influence</i>	<i>Negative</i>
<i>Influence of Research on Teaching</i>	<i>Positive</i>	<i>strong positive nexus</i>	<i>weak positive nexus</i>	<i>mixed nexus</i>
	<i>No influence</i>	<i>weak positive nexus</i>	<i>no nexus</i>	<i>weak negative nexus</i>
	<i>Negative</i>	<i>mixed nexus</i>	<i>weak negative nexus</i>	<i>strong negative nexus</i>

As can be seen, the positive influence of research may flow one way only, with research having an effect on teaching and not the other way around. In other instances, teaching may have a positive effect on research while research has no influence or a negative influence on teaching. Consequently, the nexus between research and teaching may not be simply described as being positive, negative or non-existent. The nature of

this nexus will vary depending on a number of factors.

2 Factors Influencing the Relationship

If nothing else, the varied conclusions of the studies conducted to date into the existence of a nexus between teaching and research suggest that a number of factors are likely to influence the relationship between these two activities.

One such factor is the nature of the discipline. In 1973, Biglan classified various academic disciplines along different dimensions, one of them being the distinction between hard and soft disciplines. Disciplines that tend to be experimental, be predictive or rely on quantitative data are classified as hard disciplines. Examples of hard disciplines include the physical sciences, engineering and medicine. Disciplines that rely on qualitative data or that are generally non-experimental or non-predictive are classified as soft disciplines. Examples of soft disciplines include history, sociology and law.⁹⁰ This distinction may impact the existence of a nexus between teaching and research.⁹¹ Colbeck noted:

The knowledge and social structures of hard disciplines appear to define faculty work behaviour more rigorously than the knowledge and social structures of soft disciplines. Faculty in hard disciplines, therefore, may have fewer opportunities to integrate teaching and research than faculty in soft disciplines.⁹²

On this theory, since law is classified as a soft discipline⁹³ — legal academics use new lenses to explore intellectual territories already studied by others⁹⁴ — law has more opportunities to create a positive nexus between teaching and research than other disciplines that may be classified as hard disciplines.⁹⁵

Other factors influencing the relationship between teaching and research include the academics themselves (for example, their willingness or otherwise to embed research in their teaching) and the level of institutional support (for example, the university's promotions policy or funding policy).⁹⁶

Accordingly, the nature of the relationship between teaching and research will vary depending on the institution, the discipline and the academics themselves. A positive nexus cannot be assumed and will not emerge automatically. To successfully achieve a positive integration of teaching and research, strategies need to be deliberately implemented at both the institutional level and the level of the individual academic. One of the first steps is for institutions to support the adoption of broader and more inclusive definitions of teaching and research.

III BROADENING THE CONCEPTS OF TEACHING AND RESEARCH

To be able to create a positive nexus between teaching and research, there is first a need for institution to clarify what is meant by these two activities and the relationship between them.⁹⁷ The definitions of 'teaching' and 'research' tend to be taken as given.⁹⁸ However, each activity may be defined in a range of ways, and the definitions employed will have an impact upon the type of relationship that can exist between them.

A Teaching

Teaching can be defined as encompassing all activities that directly relate to the delivery of an undergraduate or postgraduate (by coursework) program. These activities include the delivery of lectures, tutorials, seminars, assessments, quality assurance and preparation of course materials.⁹⁹

This is a very narrow definition of teaching, limited to the delivery of knowledge to students: teaching is reduced to the act of lecturing.¹⁰⁰ If an institution adopts such a definition, there will be little scope for the integration of research.

Consequently, teaching can and should be defined much more broadly to include 'studying students' learning'.¹⁰¹ Adopting a constructivist model, learning is an active process whereby learners construct new knowledge based on existing knowledge.¹⁰² Teaching is then about deepening the knowledge of students by refining their understanding of the way different concepts are interlinked.¹⁰³ This may lead to the implementation of deep rather than surface approaches to learning.¹⁰⁴ Teaching is further concerned with changing students' view and their understanding and experience of the world around them.¹⁰⁵ Additionally, teaching is the rectification of misconceptions that students may have regarding different issues by tackling the 'critical barriers to students' learning'.¹⁰⁶ Accordingly, the emphasis of teachers should not only be on ensuring students' understanding of all the concepts covered in class, but also on ensuring students' ability to assess and evaluate those concepts.¹⁰⁷ In law, such a goal is crucial to develop critical thinking in learners.¹⁰⁸

As Aristotle noted, 'teaching is the highest form of understanding'.¹⁰⁹ The individual academic should not only know the subject being taught by her or him but should also have mastery of it. This will allow him or her to teach ideas rather than just information.¹¹⁰ In turn, this would improve the legal research skills of that academic's students, as they would have to research concepts taught in class and reflect on them. If institutions adopt such a broad definition of teaching, there will be more scope for the integration of research into teaching. Research-teaching tools can be designed to help law students organise a legal research project, for example, and analyse 'the fact situation, identify the issues, determine the research tools needed, and integrate authority and analysis in legal problem solving'.¹¹¹

To achieve a positive nexus between teaching and research, institutions should encourage individual academics' teaching practices to be informed by the substantial literature regarding learning and teaching. A number of institutions in Australia have started implementing this approach, for example by requiring their new academic staff to complete the 'Foundations of University Learning and Teaching' program.¹¹² This move highlights the willingness of institutions to nurture the establishment of a positive nexus between teaching and research.

B Research

Research may be defined as the creation of a body of knowledge. It can be characterised by and measured through the publication of books and articles, as well as by

citation counts and the receipt of grants.¹¹³ While this makes for an easy assessment of the performance of an academic, such view also limits research to output only. It forgets that the creation of knowledge takes time to reach fruition and cannot always be measured by an output.

Research can and should be defined more broadly to facilitate the integration of teaching and research. Research is not just about outputs. It is also about the process of discovering information.¹¹⁴ It relates to the development, as well as the dissemination, of knowledge. Such knowledge may aid and improve an academic's teaching. Researching concepts and ideas, as well as publishing findings, deepens the academic's knowledge of the subject. This, in turn, enhances his or her teaching.

Brew, for example, noted that:

Research is a process of learning. Indeed research is the process whereby much learning proceeds. This is as true of the three year old discovering the garden for the first time as for the analytical chemist or the quantum physicist in their sophisticated laboratories. Research is learning. This is almost truism; it is obvious.¹¹⁵

Such a perspective focuses on the activity of inquiry. If institutions encourage academics to embed such activities within the curricula, they will allow for the creation of a positive nexus between teaching and research as students will be engaged in various forms of investigation.¹¹⁶ Further, academics may investigate the learning that takes place in their subjects with the aim of enhancing their own teaching.¹¹⁷ Research conducted into pedagogy may ultimately improve an individual academic's teaching practices.

The adoption of a broader definition of research as a process of learning and inquiry, instead of one that is linked to output, will facilitate a positive nexus between teaching and research.

C The Great Divide? Closing the Gap

A positive nexus between teaching and research has to be supported by the institution for it to flourish.¹¹⁸ Without institutional support, teaching and research may be viewed as different enterprises. This is especially the case if teaching and research are treated as distinct, fragmented activities.¹¹⁹ As emphasised above, research should not simply be defined by Universities in terms of output, and teaching should not simply be defined as the transmission of knowledge. Nor should the relationship between teaching and research be oversimplified. Several possible relationships exist between the two activities. Institutions may establish a nexus by promoting the common traits between the teaching and research.

The nexus may, for instance, be built on the fact that both research and teaching have a common characteristic: they are both about learning.¹²⁰ Beveridge proposed that researchers remain students all their lives.¹²¹ Similarly, Westergard noted:

We read, scan, dig into sources, calculate, ponder, disentangle others' work and our own, try to put it together again to different effect; deconstruct, reconstruct, tear our hair over the intractability of the worlds — natural, technical, cultural, social — that it is our business to try to grasp. This is a case for teaching and research.¹²²

Considering teaching and research to be about learning will allow Law Schools to

send the message that the two activities are positively correlated. This in turn will permit legal academics to explore existing knowledge and build on it through the development of their teaching and research capabilities. This is possible as both teaching and research involve ‘the pursuit of intellectually challenging ideas’.¹²³ Institutional support through an adoption of a broad definition of teaching and research may also diminish the conflict that may exist between teaching and research as the two activities will be viewed as complementary and not competing activities.

This institutional support will additionally result in a change in the culture of universities taking effect. In fact, the concept of ‘scholarship’ promoted by universities will then not just be limited to the scholarship of discovery that is research.¹²⁴ Rather, as Boyer noted, it may and will be extended to other types of scholarship, including the scholarship of teaching.¹²⁵ It is important to remember that teaching both educates and entices future scholars.¹²⁶ To teach effectively, an academic must not only understand and master the concepts being taught, but also plan and implement the right pedagogical procedure for effective delivery of the subject. Scholarship then is more inclusive of research and teaching.¹²⁷

If such an interpretation of scholarship is adopted by universities, the notions and the activities of teaching and research are more likely to be positively correlated.¹²⁸ This adoption will also have an impact on the reward system, including the promotion policy, of Law Schools. Equal weighting in career advancement would then be given to the scholarship of teaching and the scholarship of discovery. This would further allow the specialisation of academics in the scholarship of discovery, the scholarship of teaching or both. Academics could then focus on the scholarship of teaching without worrying about any negative implication that such a choice might have on their career.

The adoption of such an inclusive notion of scholarship might also remove the current negative bias that exists regarding publishing in legal education.¹²⁹ Universities may, for example, encourage their law academic staff to publish in the *Legal Education Review* and other education journals.

Institutional support is essential to the deliberate creation of a positive nexus between teaching and research, but it is also necessary for individual academics to take the necessary steps on a personal level to integrate teaching and learning within the subjects being taught.¹³⁰ These steps are described in the final section of the paper.

IV STRATEGIES FOR CREATING A POSITIVE NEXUS BETWEEN TEACHING AND RESEARCH

As explained earlier, there is a widespread expectation that academics will be involved in both teaching and research.¹³¹ However, individual academics may experience role conflict¹³² since the concepts of teaching and research — especially if narrow definitions of each activity are adopted — may conflict with each other.¹³³ Further, this reality may be exacerbated when an academic is teaching in an area outside their research interest. In such a situation, the time, energy and commitment of the academic may be directed toward understanding the topics taught, rather than their research. The acceptance by institutions of the notion of scholarship of teaching may minimise the conflict an

academic may face when teaching a subject outside their expertise.

Positive integration between teaching and research in these situations can be achieved by adopting certain strategies. These strategies fall into two broad categories:¹³⁴

- curriculum development to integrate research into teaching; and
- development of a culture that supports and values the scholarship of teaching.

Adopting such strategies may lead to the integration of research and teaching, which may further reduce the conflicts suggested in the scarcity model. The following paragraphs describe each of these categories and strategies in detail.

A Curriculum Development: Embedding Research in the Curriculum

Regardless of the discipline, a positive nexus between teaching and research is easier to implement at the postgraduate level than at the undergraduate level.¹³⁵ For example, the interests of academic supervisors and students completing either a master's degree by research or a doctorate of philosophy are clearly linked. The research experiences of the supervisor will be essential to guide the students' research,¹³⁶ and students will take active part in the discussion and the research.¹³⁷ In these situations, the integration of teaching and research is obvious. However, at an undergraduate level, such integration is not as straightforward.¹³⁸ Legal academics need to reflect on ways to combine their teaching with their research within the curriculum. Griffin proposed a number of ways to embed research in a person's teaching even if the person is teaching a subject they do not specialise in.¹³⁹ For example he noted that teaching can be categorised in three ways:¹⁴⁰

- *Research-led*: Under this model, the content of the teaching is informed by the research conducted by the academic teaching the subject and others in the field. Students learn about the research findings. Such a model is more likely to be implemented if the academic is teaching in a subject they specialise in.
- *Research-oriented*: Under this model, students learn about research processes. Therefore, the curriculum is not just focused on the transmission of content of the subject but also promotes the processes by which knowledge may be produced. Academics may then promote a research ethos through their teaching.
- *Research-based*: This model is based on inquiry based learning. The class is organised in a way that develops the students' generic research disposition. The curriculum is consequently based and designed around inquiry based activities.

Healey adds to these three categories another model: research-tutored teaching. Under this last model, the curriculum is designed to push learners to be participants. This will emphasise students' writing and analytical skills.¹⁴¹ The risk that arises from this strategy is that the academic may run the risk of being accused of relying on their students for free research assistance or that they are taking students' ideas and publishing them as their own. Consequently, care needs to be taken when implementing this model.

These four models are represented in Figure 1. Figure 1 highlights the fact that each of the four models may have a different emphasis. Some emphasise research content while others focus on research processes and problems. These models may, further, be student or teacher focused. Lastly, the learning and teaching practices of academics may be a mixture of these four models.¹⁴³

1 Curriculum Informed by Contemporary Research

In order to be admitted to practice as an Australian lawyer, the Bachelor of Laws (LLB) undertaken must include the Priestley 11 subjects.¹⁴⁴ In a number of subjects taught in an LLB, particular topics must be covered, making the curriculum rather prescriptive.¹⁴⁵ However, this does not mean that the content of the Priestley 11 subjects cannot be informed by contemporary research relating to those subjects. As Terenzini noted, ‘learning occurs best when it is “situated”, when the challenge encountered has real meaning in a real context’.¹⁴⁶

An academic’s teaching should not be solely oriented toward transmitting the content of a subject to students. It must also be explicit about the conceptual context and the manner in which new knowledge complements existing knowledge.¹⁴⁷ This will be easier to achieve if the academic has conducted research in the area he or she is teaching in and has a good grasp of the concepts being taught. This, in turn, will encourage authenticity in teaching, as such authenticity is developed with the experience that the academic gains over time.¹⁴⁸

Cranton noted that for an academic to become an authentic teacher, ‘we first must understand our Self — our basic nature, preferences, values, and the power of our past experience.’¹⁴⁹ To develop this set of elements of ‘Self’, the specialisation of academics is necessary as the knowledge gained from such specialisation may allow the academics to discover who they are and how they are different from others. A sense of self is then developed and it may empower the academics to present themselves authentically in the classroom. This will help them be more open to engage in discourse and to accept other alternatives as they have a good grasp of the subject they are teaching.¹⁵⁰

In law, this is particularly important, since the law changes with ‘changing times’.¹⁵¹ Consequently, it is essential for academics to discuss and for students to understand not only the content of the law at any given time, but also the theories and policies that may shape any future reforms. For instance, the content to be covered in the subject of company law is specifically outlined in the Priestley 11. However, keeping students informed of the latest research developments in this area is crucial as the laws regulating corporations, like other laws, keep evolving with changing times and circumstances. For example, when teaching the topic of directors’ duties, discussing the latest cases, proposed law reforms or latest research papers may provide the students with an insight into the development of the law in this area and future reforms that may affect directors. Further, it will help students link the legal concepts taught in class with practical application of those concepts. This may provide students with an in-depth analysis of the different issues that may arise from application of the law. The students’ approach to learning may also move from a surface approach to a deep approach, thereby equipping them with the necessary tools to ‘cope with the rapid rate of change that characterises many areas of the law’.¹⁵²

Such a mode of teaching may start off as being research-led. The curriculum content may be dominated by the academic’s research interest, and information transmission may be the main mode of teaching.¹⁵³ However, this method of teaching may move towards research-based teaching if the academic adopts a student-centred approach to teaching.

For example, inquiry-based teaching may be embedded within the curriculum. Students will then learn from inquiry-based activities.¹⁵⁴ In such instances, the integration between teaching and research will be even greater as a consequence.¹⁵⁵

2

Developing Research Skills in Learners and Engaging Students in Research

In some cases, the research conducted by an academic will be very specialised, which means that the academic will be less able or perhaps not at all able to share his or her research findings with students.¹⁵⁶ However, this should not be viewed as an impediment to integrating teaching and research, as the research experience of the academic may nevertheless be drawn upon to develop his or her students' own research skills. For example, Vygotsky noted that, through a teacher's guidance, students can perform tasks that they could not achieve on their own. This relates to the concept of the 'zone of proximal development', which bridges the gap between the existing knowledge of a person and the discovery of new knowledge.¹⁵⁷ Consequently, the academic may build on students' existing knowledge to develop their research skill.

Teaching students research processes may be beneficial, as this builds on their existing knowledge and provides them with the necessary tools to discover new concepts and develop a better understanding of the legal theories that may apply to particular scenarios.¹⁵⁸ As Bond and Le Brun pointed out:

Thus the learning in Law is not simply the transmission of content or the facilitation of learning. It involves our active intervention to help students learn. If we wish to help students become skilled, lifelong learners who seek a transformative approach to their learning, then we must model a transformative approach in our teaching. We must set up a learning context in which students may challenge our conceptions and their own: one in which they construct their own knowledge frameworks.¹⁵⁹

Adopting a research-oriented approach may emphasise the processes by which knowledge is produced,¹⁶⁰ which may in turn allow learning to be conducted in the 'zone of proximal development'.¹⁶¹ This may provide the students with an opportunity to become familiar with the content of the law and may ultimately lead them to develop their capacity to critically analyse certain concepts. Teaching is accordingly viewed as a process of facilitating students' construction of knowledge.¹⁶²

If an academic takes a more student-centred approach, students may additionally experience active learning by relying on the research skills they have acquired to conduct research in a particular area.¹⁶³ This may be achieved through the adoption of a research-tutored approach to teaching.¹⁶⁴ To ensure that this takes place, learning activities that encourage critical thinking about legal issues may be developed through the introduction of innovative forms of assessment.¹⁶⁵ Such types of assessment may be aimed toward reflective practices.¹⁶⁶ They may be designed to achieve engagement of autonomous learning with a view to developing students' understanding 'in the context of their previous experience, knowledge values and beliefs'.¹⁶⁷ Accordingly, developing the students' research skills and allowing the students to conduct research will enable learning to take place in the 'zone of proximal development'. Such an approach may also allow research practices to be embedded within the curriculum.

B Cultural Change: Valuing the Scholarship of Teaching

While a number of studies have argued that research enhances teaching, only a handful have considered the ways teaching may enhance research; certain studies find that while research influences teaching the influence is only one way.¹⁶⁸ As noted in Table 1, it is possible for teaching to have a positive impact, a negative impact, or no impact on an academic's research, regardless of the impact of the academic's research upon their teaching. A negative impact may be likely if the academic considers teaching to be a routine function that may be carried out by almost anyone.¹⁶⁹ If this is the case, an academic's teaching is unlikely to inform his or her research. This would be especially likely if research output is seen as an end in itself, and a narrow definition of teaching is adopted. Such interpretations of research and of teaching may lead to an erosion of the positive nexus between teaching and research.¹⁷⁰

However, as explained previously, teaching can instead be seen as a scholarly enterprise that 'builds bridges between the teacher's understanding and students' learning'.¹⁷¹ When institutions encourage academics to view teaching as a form of scholarship as valuable as research, a positive nexus between teaching and research is more likely to be achieved.

1 Teaching Informing Personal Research

An academic can choose to view teaching not as a chore but as a way to improve his or her research. To teach effectively, a person must research the area that she or he is going to teach. Accordingly, an academic's preparation of lectures may inform his or her research as questions may be raised regarding different issues that may lead to further research and even publication.¹⁷² Further, being required to teach a topic or subject area that is not familiar may broaden the mind of the academic, encouraging them to research new areas or connect new ideas to their existing research.¹⁷³

In addition, the necessity of explaining and communicating information to students may push an academic to explain things more clearly than she or he might otherwise have done, which may in turn provide the academic with a better grasp of a concept.¹⁷⁴ In such instances, academics may be able to transfer their knowledge into teaching as well as having a research outcome.¹⁷⁵

Encouraging students' engagement in class may also be beneficial, as it may provide students with an opportunity to challenge the concepts being taught. This, in turn, can lead to the raising of original questions that may open a new line of enquiry for the academic to pursue in their research. For example, as one legal academic has noted:

Of course, sometimes the students would ask questions that your research colleague would not ask, sometimes there are good questions. Sometimes they force you to think about something.¹⁷⁶

Consequently, instead of viewing teaching in a negative light,¹⁷⁷ academics should embrace teaching for the possibilities it offers for indirect enhancement of their research.

Teaching Informed by Research: Developing a Scholarship of Teaching

Trigwell, Martin, Benjamin and Prosser described five possible approaches to the scholarship of teaching:

- A The scholarship of teaching is about knowing the literature on teaching by collecting and reading the literature.
- B The scholarship of teaching is about improving teaching by collecting and reading the literature on teaching.
- C The scholarship of teaching is about improving student learning by investigating the learning of one's own students and one's own teaching.
- D The scholarship of teaching is about improving one's own students' learning by knowing and relating the literature on teaching and learning to discipline-specific literature and knowledge.
- E The scholarship of teaching is about improving student learning within the discipline generally, by collecting and communicating results of one's own work on teaching and learning within the discipline.¹⁷⁸

These authors note that one strategy to facilitate a positive integration of teaching and learning and develop a scholarship of teaching is for an academic to conduct research into the literature regarding teaching. This research is crucial for effective teaching as it permits an academic to identify his or her main pedagogical goals. It is very different from the traditional approach, according to which 'the defining characteristic of pedagogical accomplishment was knowledge of content'.¹⁷⁹

Such research will in turn help the academic to develop the learning activities and assessments that he or she may wish to introduce into a subject.¹⁸⁰ A review of the teaching literature will also allow the academic to evaluate, on a regular basis, whether the teaching methods adopted are enhancing the students' experience.¹⁸¹ The academic may be able to develop a 'body of systematic knowledge' which may be relied on when teaching; the development of such a framework will allow the academic to acquire 'a more comprehensive and reflective understanding of practice'.¹⁸² This will further allow the academics to publish their findings and they will then be able to turn their knowledge and research into an output.

3 Teaching Practices Leading to Publications

Shulman described teaching as a community of conversation and evaluation.¹⁸³ Academics should not view teaching as an isolated activity, and the status of teaching must be changed from 'private to community property'.¹⁸⁴ A greater willingness by teachers to share details of their teaching experiences will result in the publication of more general or personalised accounts of teaching. An academic who writes about their teaching is not only able to study the research about teaching but is also able to produce original knowledge about it.¹⁸⁵ Kift described this experience as follows:

I was comforted also that I was contributing to my own discipline's 'pedagogical content knowledge'; the pedagogy of legal education.¹⁸⁶

Opportunities to publish one's insights and findings regarding one's own teaching will not only mean that teaching is informed by research; it will also mean that teaching is 'research at all levels'.¹⁸⁷ Academics can translate their teaching practices into academic

writing. As a consequence, the activities of teaching and research will no longer be deemed to be two different enterprises, competing for each academic's time, energy and commitment; instead, they will complement each other.

V CONCLUSION

The existence of a positive nexus between teaching and research cannot be assumed. Instead, a positive nexus must be deliberately constructed and embedded within the culture of law schools. It is not enough for law schools to merely claim that they support the existence of such a nexus between teaching and research. The positive integration of research and teaching requires institutions and academics to be proactive.

In seeking to achieve the integration of teaching and research, one of the first steps that can be taken is for an institution to adopt broader and more inclusive definitions of teaching and research. This can lead to recognition of the value of the scholarship of teaching, which in turn can lead to a change in the reward system of the institution as more emphasis is put on teaching and its importance within academia. Teaching and research can be further integrated by introducing the latest research and the development of research skills into the curriculum, and by encouraging academics to recognise the connections between their research and their teaching, and to engage in research about their teaching.

In the end, it is up to the institutions and the academics to take deliberate steps to create a positive nexus between teaching and research. In the ongoing academic conversation about the teaching-research nexus, the focus should no longer be upon whether a positive nexus exists between these two activities. The new focus should be upon how a positive nexus between teaching and research can be implemented and enhanced.

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- 118 Australian Learning and Teaching Council, above n 97, 8; the institutional support will encourage academics to link their teaching and their research. Further, this will allow the individual academic to develop practices to enhance teaching and research.
- 119 Colbeck, above n 23, 647.
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- 121 William Beveridge, *The Art of Scientific Investigation* (Norton, Digital Book, 1957), 1.
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- 124 Charles Glassick, Mary Taylor Huber and Gene Maeroff, *Scholarship Assessed: Evaluation of the Professoriate* (Josey-Bass, 1995), 9.
- 125 Boyer, above n 109, 16.
- 126 Ibid, 23.
- 127 Ibid, 23.
- 128 Glassick, Taylor Huber and Maeroff, above n 124, 9, 10.
- 129 For instance, the *Legal Education Review* in the Education List was ranked as A* which is the highest ranking available. However, when the re-ranking was completed for the Law List, the same journal received a C ranking, which is the lowest ranking available. This downgrade highlights that research in legal education is not encouraged.
- 130 Australian Learning and Teaching Council, above n 97, 10.
- 131 Colbeck, above n 23, 649.
- 132 For more information about this notion, see Robert Biddle, 'Recent Development in Role Theory' (1986) 12 *Annual Review of Sociology* 67.
- 133 Jacob Getzels and Egon Guba, 'Role, Role Conflict and Effectiveness' (1954) 19(2) *American Sociological Review* 164, 166.
- 134 Other strategies may additionally be embedded within the culture of universities to assist in integrating teaching and research, but these two steps will be the focus of this article; Paul Trowler and Terry Wareham, 'Re-Conceptualising the Teaching-Research Nexus' (Paper presented at HERDSA, Adelaide, Australia, 8 — 11 July), 3–5; Patricia Easteal, 'The Legal Education Academic: Research-Led Teaching', Sally Kift et al (eds), *Excellence and Innovation in Legal Education* (LexisNexis, 2011), 531, 532, 540.
- 135 Mohammad Zamar, *Review of the Academic Evidence on the Relationship between Teaching and Research in Higher Education* (January 2004) UK Department of Education, 5, <<https://www.education.gov.uk/publications/RSG/publicationDetail/Page1/RR506>>; Alan Jenkins, *A Guide to the Research Evidence on Teaching-Research Relations* (December 2004) The Higher Education Academy, 28, <http://www-new1.heacademy.ac.uk/assets/documents/research/id383_guide_to_research_evidence_on_teaching_research_relations.pdf>; Angela Brew, 'Research and Teaching: Changing Relationships in a Changing Context' (1999) 24(3) *Studies in Higher Education* 291, 291.
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- 137 Svein Kyvik and Jens-Christian Smeby, 'Teaching and Research: The Relationship between the Supervision of Graduate Students and Faculty Research Performance' (1994) 28 *Higher Education* 227, 228.
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- 140 Ibid.
- 141 Healey, above n 117, 70.
- 142 Ibid.
- 143 Alan Jenkins and Mick Healey, 'Institutional Strategies to Link Teaching and Research' (2005), 21, <http://textweb.livjm.ac.uk/partnership/collab_partner_docs/pf_jan_07_martyn_stewart_jenkins_and_healey

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- 146 Patrick Terenzini, 'Research and Practice in Undergraduate Education: And Never the Twain Shall Meet' (1999) 38 *Higher Education* 33, 35.
- 147 Shore, Pinker and Bates, above n 100, 22; Roger Lee, 'Research and Teaching: Making or Breaking Links?' (2004) 12 *Planet* 9, 9; Brew and Boud, above n 82, 268.
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