From the Scriptoria to the Printing Press: A Consideration of Scholarship and Library

Margaret Zeegers, University of Ballarat, Victoria, Australia
Deirdre Barron, Swinburne University of Technology, Australia

Abstract: Ancient social systems have exhibited constructs of scholarships based on social configurations and requirements that have involved tribal, temple, village or palace elders teaching and developing their apprentices using oral communication such as storytelling, recitation of recipes, formulas and chants, plus work in the field itself as young people developed as midwives, shamans, carpenters, and so on. While writing is a mighty technological achievement of some 5,000 years ago, perhaps even mightier is that of the printing press about 500 years ago. It is generally held to be the development that marked the end of Medieaval times, and has had an even more profound an effect than the first moon landing, so much did it shake the foundations of society. For one thing, the same elders entrusted with the education of the young were able to use print as part of their education protocols. This in itself enabled a shift in constructs of scholarship, as it was possible to record in print what had formerly been kept in memory. The possibilities that emerged were those of teaching learners how to develop knowledge from information, and not rely on information alone. Such possibilities have not really been taken up until fairly recent times. Emerging new paradigms present scholarship in the light of information work whose dependence on information storage systems has already transformed the relationship between scholarship and libraries to a stage where the dominant partner is the library, scholarship becoming marginalised in the so-called information age. Such a sea change requires a major adjustment on the part of both partners in what has for so long been a most productive relationship. To be able to understand the magnitude and order of the change, it is necessary to take a close look at what has underpinned it for so long.

Keywords: Scholarship, Libraries, Writing, Printing

Introduction

Workers in a Knowledge Age also find themselves constructed as members of the Information Age, where the terms ‘knowledge’ and ‘information’ are conflated, used interchangeably, and taken-for-granted in regard to their meanings. Learned (1924) in the early years of the last century was confident in his idea of knowledge: ‘the whole range of verified scientific fact, matured judgment, and products of the constructive imagination generally incorporated into books’, which is, moreover, inclusive of ‘nearly everything that is clearly known’ and ‘much of the best that has been thought and felt by man [sic]’ (p. 5). The idea of knowledge resonates with concepts of scholarship and scholarly work. Even Wikipedia (2008) is confident in its definitions in this regard:

Scholarly method — or as it is more commonly called, scholarship — is the body of principles and practices used by scholars to make their claims about the world as valid and trustworthy as possible, and to make them known to the scholarly public.

The construction of knowledge as an outcome of scholarship to be disseminated to the world has served to underpin not only academic structures, protocols and procedures but also a whole printing and publishing industry derived from taken-for-granted dimensions of the work of scholars.

The modern university has been constructed as the site where research activities make an authentic contribution to the world’s store of knowledge by virtue of their engagement with authentic scholarship. In this paper we argue that scholarship, constructed as it as being based on research, and working with the conventional view of research as being the generation of new knowledge or using existing knowledge in new ways (itself a generation of new knowledge), has generated its own epistemological discourses. We refer to the work of Boyer (1990) as an example of ways in which these sorts of discourses have been mobilised and taken up, underpinning a particular construction of scholarly activity that conflates research knowledge and scholarship. These discourses have been mobilised and assiduously taken up by universities around the world. Associated protocols of peer reviewed publication of research is the distinguishing factor of academia, as it constructs its own episteme to be negotiated by any who wish to be known as scholars.
Episteme

One way to understand epistemological discourses and the relatedness of scholarship, knowledge and publication of knowledge is through the notion of episteme. Foucault (1973) describes an episteme as ‘a world view that is so comprehensive it is not possible for people in one episteme to comprehend the way people in another episteme think’ (p. 72). The episteme which presents modern scholarship in the light of knowledge generation is still dependent on information storage systems which have their roots in an ancient past. Modern information storage practices, however, have transformed the relationship between scholarship and libraries to a stage where librarianship itself has become a form of scholarship. Such a sea change has required a major adjustment on the part of both partners in what has for so long been a most productive relationship. But it has not always been like this.

Reading and Writing

Writing did not come into prominence in relation to scholarship for some centuries after its invention. The scholars of Ancient Greece eschewed its potential for their work. Indeed, it is only in relatively recent times that scholarship has seen any sort of prominence to writing, for the Ancient Greeks despised this as an inferior form of engaging knowledge. Plato saw it as leading to the deterioration of human memory and a direct flouting of concepts of knowledge as Gee (1990) has described as being internalized and meaningful to each individual. Socrates never learned to read and write, considering it a contemptible pastime beneath his dignity (Zeeegers, 2006). Their idea was that unless one could articulate and defend a point of view in relation to some domain of knowledge, one really knew nothing worth knowing. Scholarship was underpinned by rhetoric, oral skills carefully nurtured, practised and exercised.

Discontinuities

As Foucault (1980) might ask, how did it happen that reading of the written forms of knowledge, and thus the book, came to the fore as far as scholarship is concerned? Taking up this question in light of Foucault’s work, modern scholars would examine just what might have been possible and what might have been impossible to think (Foucault, 1973, p. xv). They may find out just how things do happen. They would not regard ‘the point in time where we are now standing as the outcome of a teleological progression which it would be one’s business to reconstruct historically’ (Foucault, 1980, p. 50). They would rather regard it as part of a series of discontinuities marked by very brief periods that are distinct from another, which would then suggest possibilities for an analysis of their own areas of interest in relation to the possibilities of discourses. Even then they would ask how it was that particular discourses that interested them so much emerged rather than others. Informed by this sort of analytical tools, they would open up areas for examination, rather than closing them off with prescriptive methodologies that would serve to limit rather than expand.

Recourse to libraries by scholars is one thing that happened, as people found that buttonholing people in the Agora was not the most effective way of making the results of their intellectual wrestling with issues of universal truths known to a scholarly public. Plato (1956) himself wrote down Socrates’ arguments so that they would not be lost to others, but this was not seen as a substitute for that individual engagement with the great questions of philosophy.

Libraries

There had been libraries for centuries, of course. The first known clay books of Mesopotamia 3,000 years ago included poetry and prayer books along with those of household and commercial accounts served to provide the first library-building impulses that we know. These have been found in repositories that we would recognise as libraries. A 7th Century BCE library of Ninevah contained some 25,000 tablets, apparently highly organised with labelling and cataloguing (Battles, 2004). Private libraries filled with books in the form of papyrus scrolls dominated the scene in Rome until Augustus Caesar built his Palatine Library adjoining the Apollo Temple and opened it up for public access, a move emulated by subsequent emperors that saw the spread of libraries throughout the Roman world in a unique flourishing of libraries (Battles, 2004). Papyrus itself formed part of the technology that made for the production of the scrolls, something which at the time revolutionised the art of book production, just as parchment did in the production of the Mediaeval book (Thompson, 1967). The great Library of Alexandria established a reputation that has lasted through the centuries on the basis of its ‘grand mission’ (Battles, 2004, p. 30) to compile and store all existing knowledge in the world. It had the advantage of Alexandria being the world centre for papyrus production, reinforced with its ban on the export of papyrus. The decision of Ptolemy I to make the world centre of scholarship saw scholars such as Euclid being invited to take up a financially rewarding and intellectually satisfying residence there. After all, it was to contain possibly 700,000 books in the form of scrolls (Manguel, 2008; Battles, 2004; Bowen, 1972; Thomson, 1967).
Bowen (1972) points out that while Athens remained the locus of competing schools of philosophy and rhetoric in the prevailing verbal style, the Museum of Alexandria established not just a place of Hellenistic learning but also provided in its collection ‘all in the standard form of the papyrus roll, treating of all subjects and by all known authors’ (p. 143). These were translated from their original languages into Greek, those in Greek into Arabic and Hebrew, and catalogued, edited, often in need of restoration, and especially authentication. The Alexandrian episteme was made possible by the conditions of the Egyptian city itself as a trade centre, especially as the exporter of writing material (Bowen, 1972; Brundige, 1991). All Greek learning and literature may have been designed to be spoken and heard, and when read, to be read aloud, but the ‘prodigious intellectual activity of the Greeks throughout the previous centuries had produced an enormous body of learning and written culture’ (Brundige, 1991, p.141). Such bodies of literature may not have of themselves formed a substantial element in what was considered learning or knowledge, but the means of their production in the form of slave copyists who possessed none of the higher levels of understanding beyond that of reproduction of the works before their eyes, the production of perhaps suspect manuscripts ‘led to the development of scholarly activities previously unsophisticated—philology, textual criticism and systematic grammar’ (Bowen, 1972, p. 143). At the same time, the Library moved more towards the physical sciences, eventually to the establishment of independent specialist sciences such as medicine, and away from the Athenian model of the axiomatic and the deductive towards that of empirical and deductive in approach. It still underscored the attempt at finding the absolute truth regarding man’s (not woman’s…she was never considered in such terms) relationship with the physical world rather than mere explanations of the physical world unlinked to human experience. That aspect of the Greek episteme was certainly not lost.

At the same time as this was happening, Hebrew scholars were engaged in their own knowledge-based pursuits, actively decrying the myths and legends of the past and attempting to discern the will of their god as their guide to earthly existence. Their pursuits never achieved the dominance of the Greeks as their conceptualisations came in the form of very personal interpretations of the covenant made with their god through Abraham, and a life centred on a synagogue as a spiritual symbol rather than a political system. Hebrew scholarship is in such ways constructed on religious social life based on the synagogue and the abstraction of Jewishness, conditions which, while mainstream in relation to Jewish scholarship, would marginalise such knowledge in relation to Greek epistemes.

The implications for scholarship are not inconsiderable. With the Alexandrian library it is possible to see the sort of discontinuities that mark a particular point of distinction of one period from another. It is a point of departure from rhetoric as the means by which knowledge is produced and made known, for it indicates what Battles (2004) describes as an acquisitive approach to the value of knowledge. It was, moreover, a library to be used by scholars as well as those of royal or noble families. It was not a private establishment for the delight of a bibliophile, such as Cicero, for example.

The goal of the first Ptolemy, taken up by his successors, to have the library hold all knowledge—regardless of source or authority, its fame or obscurity, ancient or current, or even in the process of being produced—constructs the results of scholarship as a resource or commodity, intellectual capital that could be acquired and even hoarded by a political regime (Battles, 2004). It effectively builds teams of the best minds in the world working with all the knowledge available to them in one place, controlled by virtue of royal patronage, combined to establish a monopoly on all knowledge and the power that this brings. Knowing, or having access to, all that is to be known of medicine, theology, engineering, astrology, philosophy, mathematics, and so on, is a powerful position to hold, and one worth maintaining.

The attempted monopoly was not as successful as might have been hoped, despite the decree that all books coming into Alexandria be surrendered, or confiscated, for copying for the library (the suggestion is that originals were not always returned but that the copies were) and the ban on papyrus export. Pergamum simply invented parchment for its scribes and copyists to use in the production of books, but the concept of scholarship as providing intellectual capital and based on the technology of the book as a powerful tool in political systems had been established. Nobody knows what happened to the Library of Alexandria. It may have been carried off as part of war plunder; it may have been burned; there may have been some sort of natural disaster; it may just have degenerated; or it may have been lost as a result of all of these. Battles (2004) suggests that it most likely suffered its fate because of indifference to the knowledge it contained with the rise of Christianity.

Christianity

With this rise we have another one such discontinuity marking off one period from another, for the Christian aversion to all things pagan meant that the libraries of Greece and Rome, and indeed the very forms
that their books took in the way of scrolls, were looked upon with ardent disfavour. Parchment and the codex form of the book are most strongly associated with Christianity as it turned from what it considered to be pagan knowledge. It is also a departure from the concept of all knowledge being of value, as adopted by the Ptolomies. As the book takes on a new form, so does the knowledge contained within it, and the scholarship associated with it. It is another episteme. Indeed it is an episteme so strongly embedded that it could ignore all of the mathematics and science of the classical world, of the Jews, and of the Arabs, as it embraced a monastic system that was integral to the production of books to support it. The Jewish reverence for books meant that they were never destroyed by them, with the geniza—the ‘grove of written things’—in effect the place that books go when they die (Battles, 2004, p.192). The new Christian tradition ignored Talmudic traditions of scholarship as knowledge acquired from books as a gift from God, or early Islamic tradition that maintained that ‘one scholar is more powerful against the Devil than a thousand worshippers’ (Manguel, 2008, p. 91).

Nonetheless, the religion of the new Christians was as much based on a book as the Jewish religion out which it grew, with its focus on the Old Testament, and it did draw on the classical grammar, literature, history and philosophy for its own learning and teaching, but it developed a complete theoretical system based on developed understandings of the convictions of the early disciples as formulated, discussed, and defended (Thompson, 1967). But a religion and indeed a political system based on a book needs copies of that book if it is to flourish. The monastic system based on the Rule of St Benedict positioned the Bible as central to all monastic life, and the copying of it and associated liturgical and sacred works as central to Scriptoria activities. The massive volumes produced by monks have been described as an unremitting treadmill of scribing and illustration (see Zeegers, 2006). These same volumes were constructed within scholarly discourses, with the books regarded as containing what St Benedict has described as the true meaning of the Word of God that could only be properly understood with the help of the work of the scholars trained and endorsed by the church. That, of course, put all other work outside of consideration.

The earliest processes and protocols for book production and storage adopted existing Roman models of libraries existing within or near temples, as scriptoria were established in monasteries and the books produced housed there rather than elsewhere, but their indifference to anything that was not firmly entrenched in the religion, such as the Bible itself, Psalters, prayer and service books, meant that the sort of knowledge that scholars might access from the classics was effectively lost to them. Ecclesiastical control of the episteme meant that for centuries, developments in the Arab and Asian worlds were closed to all who would follow their scholarly enquiry into areas. It meant access only to those devoted to Church-prescribed forms, especially given that anything else was proscribed with threats of eternal damnation, which could be arranged before one was even dead by way of excommunication and thereby denial of any access to grace that would save an immortal soul (see also Zeegers, 2006).

This is a very personal feature of what it meant to be a Christian, and a Christian scholar at that. One could even lose one’s immortal soul in relation to the books themselves, for severe spiritual penalties were involved in stealing a monastic library book (De Roover, 1967 (1939)), ranging from a simple statement of the worst of all possible consequences for any Christian, such as, ‘Whoever steals or alienates this book, or mutilates it, be anathema’, to the more articulate:

May whoever steals this book let him die the death; let him be frizzled in a pan; may the falling sickness rage within him; may he be broken on the wheel and hanged (p. 608).

Lerner (1999) has a similar example of a curse displayed by the Cistercians of Vaux-de-Cernay:

If any one attempts to carry away one of these books by theft, by fraud, or in any other manner, let his name be struck from the book of the living, that he be not inscribed with the just but instead, delivered to the fire of hell, be tormented endlessly (p. 88)

The practice of anathema was condemned at the Council of Paris in 1212, and even so, chaining the books could be seen to be as effective as psychological trauma. One can sympathise, given the labour intensive nature of this type of book production in cloisters unheated in winter, with no artificial lighting, no breaks from labour in allotted scriptoria time without permission from the abbot himself, where one monk describes it as where, ‘Three fingers hold the pen but whole body toils’ over an estimated 166 days per book in the cold, or the heat, with cramped fingers, and so on. There are stories of monks who in exquisitely beautiful script have written on their pages, ‘Thank God it will soon be dark’, or ‘O, that a glass of good old wine were by my side’, or ‘St Patrick of Armagh, deliver me from writing’ (De Roover, 1967, p. 606). One story in particular is redolent with human interest. It is the story of one monk, who put in a note at the end of his labours
over a tome, ‘Jacob wrote this’. After this is written in another hand:

A certain portion of this book is not of his own free will but under compulsion, bound by fetters, just as a runaway and fugitive has to be bound’ (De Roover, 1967, p. 601).

It is an exercise in supporting scholarship that is prescribed, proscribed, confined and constrained in the name of detection and prevention of heresy. Because of this, it is scholarship constructed as replicating existing knowledge rather than generating any new knowledge, for it is considered that all that there is to be known by humankind is to be found in the works being produced at such cost to institutions and individuals involved.

On a grand scale, scholarship is shaped, named and framed within a Christian episteme that constrains scholarly thought. Christendom as the political entity of Christianity sees the exercise of extraordinary political authority wielded over other political entities ruled by nobles and royalty in the guise of spiritual concern for the people concerned. It is a theocentric context manifest in the Mappa Mundi (De Bello, circa 1300), so different from anything that Mercator might dream up, which places Jerusalem at the centre of the world that is called Christendom, as shown in a detail of the map below:

There is no Europe, there is only Christendom. There is no European; there are only Christians. There is no world outside of the church, not even down to the smallest details: ‘They wouldn’t say, “Here’s a red flower”. They’d say, “Red for the blood of Christ, thorns for the pains of the devil, green for the emerald of sincerity” and so on…The whole of nature was nothing but a kind of giant, holy cryptogram, to be decoded by the faithful’ Burke (1988, in Patterson, 1997, p. 32). The nett result is wholesale rejection of scholarly tradition from ancient times, and a control by a powerful religious organisation in the form of the church of what constitutes knowledge, and of the producers of that knowledge, that is certainly as powerful as that of the Ptolemies in Alexandria. It is not a position to give up easily. Unlike the Ptolemies, and after them the Muslims, who were eager to embrace and support the generation of new knowledge, the mediaeval church blocked every move in that direction, as indeed Galileo and others like him found, to their cost.

**Rise of Islam**

Bowen (1972) describes Europe by 600 ACE as a society ‘intellectually and culturally barren’ (p. 1). According to him, such learning as had survived the first six centuries was ‘conservative, encyclopedic and degenerate’ (p. 1), confined as it was almost exclusively to monasteries and cathedrals. The Scriptoria collections were usually inaccessible to
scholars as they were locked away in the monasteries across Europe, silent testimonies to the glory of the Christian god and not subject to any sort of uniform cataloguing systems. It was not possible to know even of the existence of any particular works, a significant factor in preventing their use for scholarship. In any case, as Jones (1997) points out, the books were simply too valuable to make available for such purposes.

That is not the whole story of scholarship at this time, though. It was under the spread of Islam that the world experienced the greatest growth in libraries that it had ever seen. The religious impetus is there, certainly, for it is seen as Allah’s instructions, so that followers might be able to read the Quran and believe it. The corollary to this is that people must also become literate (Battles, 2004), a further fillip to scholarship. The European Church may have imposed bans, endorsed its rituals and educated its clergy accordingly, but the Eastern Church established its own educational discourses that placed it at the forefront of intellectual activity. It drew adherents who had fled the European Church dominance and who continued their work, and its site of activity was alongside that of the rising assertion of an Islamic episteme where Ancient Greek continued to be read and translated into Eastern languages without being subject to the normalising strictures possible under its interpretation of Holy writ.

The space created in the East by the decline of the Roman Empire gave Islam the space to expand apace, by means of conquest throughout Africa, with each fighting man constructed as a religious subject. It meant that the scholarship associated with the religion was vigorously promoted and defended, in itself an extension of the power that Islamic knowledge produced. Given the number of possible epistemes of the time, it meant that in relation to producing knowledge, Islamic epistemes were able to achieve dominance by means of its dissemination through conquest and the rituals associated with its practice. The Jews, like the Christians, were still confined by the conditions of their episteme as intensely personal and private engagements with their own personal pacts with their god as established by Abraham so long ago, while Moorish forces fought the battles that laid claim to much of Africa and eventually parts of Spain.

Islamic scholarship had embraced, translated into Arabic and thus preserved the works of philosophers of antiquity, especially those of Aristotle, and it is largely because of this that they may be accessed in the 21st century. Islam during those first centuries of the Common Era (CE) established its own episteme, its own break with the Greek notions of what constituted learning and knowledge. The Quran initially was not written, but passed by word of mouth through the generations until its written form emerged, collected into a continuous book in 633 CE, that is, after Muhammad’s death (Padover, 1967). Islamic scholarship incorporated Ancient Greek, Hindu and Persian learning in an episteme that enlarged and enriched their endeavours, as opposed to constriction and confinement through bans and contraband knowledge of the monastic system in Europe. Within a generation of the Prophet’s death, a school was established at Medina and by the 3rd century CE the system of attaching a school to each mosque for the instruction of every boy and girl from the age of five years, made affordable by the charge of a trifling fee (Bowen, 1972). The emphasis was on religion—what it meant to be a good Muslim—much as the early Christian emphasis was on the imitation of the life of Christ, but the knowledge generated under this episteme was underpinned by the ability to read and write in Arabic for the purpose of study of the Quran. Arithmetic and mathematics were introduced to the curriculum later.

There was a concept of higher education for the higher social classes, and this curriculum comprised algebra, logic, biology, law, history, grammar and theology, with the greatest emphasis on this last. State-supported madrassahs, or colleges, became intellectual shrines for all scholars from all over the world, Muslim theologian or no. The books produced by scribes and copyists were housed across the Muslim world, including Spain, with 70 libraries which lasted for some 500 years, and all this almost at exactly the same time as Europe was living through its Dark Ages (Lerner, 1999). Indeed, it is the perhaps one of the greatest achievements of Arabian scientific knowledge contained in the libraries that it established so widely that it spread so far across the world. Toledo may be seen as the chief place for the dissemination of Arab knowledge in Europe, where by 1200 CE the whole corpus of Greek medical knowledge was available, as well as Ibn Sina’s Canon of Medicine (Padover; 1967; Battles, 2004). This is how scientific scholarship found its way into the western episteme, but it was not an easy road.

Every traditional Islamic city possessed public and private libraries and some cities like Cordoba and Baghdad boasted libraries with over 400,000 books (Battles, 2004). These could best be compared with being run along the same lines as those of 20th century municipal free libraries. The practice is marked by an absence of constraint that is remarkable only if examined alongside that of early Christianity, and by incorporation of knowledge generated through a more wide-ranging scholarship than the European Christian church allowed, an apparently inclusive rather than an exclusive activity. In sharp contrast with the epistemes of European Christian education,
Muslim epistemes were based on geometry and algebra learned from the Greeks and Hindus, and chemistry and pharmacy. Ritualistic hygienics produced its own knowledge in relation to medical properties associated with health care, so that the properties and production of medicaments such as sedatives and anaesthetics meant that medicine was a legitimate and laudable practice rather than flying in the face of Divine Will, producing the reputedly finest doctors in the whole of the known world, as well as druggists subject to state examination before being allowed to practise (Meyer, 1972). The major limiting feature was the religious ban on dissection, in common with the Christian taboo and indeed with many cultures, that hindered the development of surgery. Yet the Ibn Sina Book of Healing and Canon of Medicine could be produced and become the leading world medical text right up to the seventeenth century (Battles, 2004). It is still in use in certain Islamic countries such as Pakistan. Books supported the Islamic episteme, and generated new knowledge as part of its activities.

The Printing Press

Books before the middle of the 15th century CE were those produced by scribes and copyists. By the 8th century CE, Islamic knowledge of paper production brought from China had meant that books could be produced more cheaply than with vellum or parchment and most mosques, as natural centres for learning, developed different types of libraries. Paper meant that books could be produced more cheaply, but even so, Christendom remained ignorant of its existence in its firmly looking inward and resisting all attempts at change. The printing press could, and did, combine with the use of paper and make the books even cheaper to produce. It could not, though, impact upon the episteme that framed scholarship as reproduction of existing knowledge. For that a Martin Luther was necessary, and with him a whole reform movement that challenged the episteme, even in the face of excommunication and eternal damnation. The first book that Gutenberg printed was a Bible, after all, and he printed it on parchment. Its appearance is that of the old manuscripts, and this is quite deliberate. It has the look of respected books.

The rise of Humanism is the real challenge to the episteme of the mediaeval scholar, and just as parchment manuscript forms of the book underpinned the scholarship of the Mediaeval scholar, the book printed on paper underpins the reforms in scholarship of the 15th century CE. Books were unchained, were produced in forms that made them portable, and affordable to scholars, but more than this, they were not subject to the heavy hand of ecclesiastical strictures. As an apparatus of new ways to approach scholarship in relation to the production of new knowledge, the printing press was invaluable. What really had an effect similar to the moon landing, though, was the opening up of the world to human investigation, to science, and to the generation of new knowledge that came with Humanism. Let us give some consideration to Manguel’s (2008) injunction, ‘The power of readers lies not in their ability to gather information, in their ordering and cataloguing capability, but in their gift to interpret, associate and transform their reading’ (p. 91).

What we have now is not the book as the repository of the knowledge generated by the sorts of scholarly activity with which we are now all familiar, but the scholarly journal. Guédon (1996) argues that the greatest paradox of printed scholarly journals is that they act more like archival and legitimising tools; that what is printed there acts like a form of official sanction for scholarship. Digital technologies, however, make information readily available, more easily accessed. Digital technologies have in effect narrowed the gap between the capabilities of the publisher and scholar. As a consequence scholarly communication is moving to a position where the scholar is the publisher (Hunter, 1990).

While advances in digital technologies may raise issues for publishers and academia in relation to retaining control over the intellectual property of scholars that publish their research work in this form, opportunities for knowledge sharing that are opened up have positive implications for teaching learners how to develop knowledge from information, and not rely on information alone. The technologies that have allowed scholars to produce and consult books, journals and electronic sources of information, and the Libraries that contain these resources that they call upon, are part of the apparatus that underpins scholarship. But perhaps the Ancient Greeks were right. Ultimately scholarship exists within the individual that embraces it.

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**About the Authors**

*Dr. Margaret Zeegers*

Dr. Margaret Zeegers lectures in language, literacy and language arts in the School of Education at the University of Ballarat. She has considerable experience teaching and researching in these fields in Australia and abroad.

*Dr. Deirdre Barron*

Dr Deirdre Barron is the Associate Dean of Research and Research Studies in the Faculty of Design at Swinburne University of Technology. Her research focus is on higher degree research policies and pedagogies.