Student Theological Research as an Invitation

by William Badke

ABSTRACT: Seminary students, despite having graduated from bachelor’s programs, struggle to make sense of the goals, processes, skills, and resources of research as graduate students. Beyond brief introductions to research, a scattered number of seminaries have developed either a separate theological information literacy course or have taken a through-the-curriculum approach to enhancing the information abilities of students. The former, however, separates information literacy from the curriculum, while the latter is difficult to implement and maintain. Living in a world of information glut, seminary professors are finding that traditional information dissemination models of education are becoming less viable. What is more, such models tend to teach students about a discipline rather than inviting them into it. These problems present a unique opportunity to place the teaching of information literacy at the foundation of theological education. With such an approach, students may be invited into the disciplines of their professors and enabled to practice these disciplines, thus becoming equipped to turn knowledge into praxis.

Introduction

In 1957, Niebuhr, Williams, and Gustafson wrote:

The greatest defect in theological education today is that it is too much an affair of piecemeal transmission of knowledge and skills and that, in consequence, it offers too little challenge to the student to develop his own resources and to become an independent, lifelong inquirer, growing constantly while he is engaged in the work of the ministry.¹

They went on to state:

Certain habits, often unconsciously followed, need to be broken, especially the habit of thinking of education as transmission of knowledge rather than companionship in learning . . . The question is whether teacher and students are companions in inquiry into a challenging subject or whether the teacher conceives himself as retail distributor of intellectual and spiritual commodities.²

While the extent to which this problem has been addressed since that time may be debated, the aspirations expressed are crucial to theological education in any era. This article will propose that theological student inquiry (research) should become an opportunity for seminarians to participate more fully, along with their professors, in the disciplines they are being taught. That is, the aim of student research should be to allow students to become companions in the journey already being taken by the subject experts doing the teaching. While this vision is lofty,

² Ibid.
it is attainable. But we must first address the much more foundational problem that students in higher education in general struggle to understand the nature and methods of the academic research they are called to do.

Numerous studies in recent decades have shown that university students experience significant and ongoing challenges as a result of their limited ability to complete research assignments well.\(^3\) Recently, the studies of Alison Head and Michael Eisenberg of Project Information Literacy (University of Washington) and of the ERIAL (Ethnographic Research in Illinois Academic Libraries) project have provided significant data demonstrating that large numbers of university students in multiple university settings show consistent patterns of weakness in their ability to understand and carry out university-level research.\(^4\)

The real goal of a research project, this paper will argue, is to draw the student into the discipline in order to learn, at least in some measure, how to do the discipline, that is, how to think in a disciplinary way. Students often enter their seminary experience believing that the professor wants them to amass data on a specific body of subject matter in order to report on what has been learned. This idea, however, puts the student at a distance from the methodology required by proper inquiry in a graduate setting. At seminary level, a student should be able to address some problem or controversy within, say, the life of Martin Luther and have the opportunity to think for a while like a church historian, use evidence like a church historian, and to draw conclusions on the basis of evidence, like a church historian.

The movement that has been seeking to address student research difficulties is that of information literacy, a term used primarily among librarians. Information literacy focuses on developing student ability to formulate clear research problems, find relevant resources, evaluate those resources, and use them to advantage to address the problem at hand. The information literacy of graduate students has been studied less than that of undergraduates, although a number of recent studies have demonstrated similar problems among graduate students.\(^5\) While it

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might be surmised that graduate students would have acquired from their undergraduate education the skills needed to do their research with skill, significant gaps have been found in graduate student research abilities. The telling study by Randall, Smith, Clark, and Foster demonstrates the prevalence of haphazard, confused, and inconsistent research methods among students doing doctoral research across a number of disciplines. Other than the mining of existing bibliographies, it appears that none of those subjects had very sophisticated skills in locating information. Few of them were using bibliographic managers to organize their resources, and there seemed to be a general air of trial and error in all of their research methods.

While there are fewer studies of the information literacy of seminary students than of students in other graduate disciplines, similar patterns are being observed. Despite having graduated from bachelor's degree programs, many seminary students struggle to make sense of the goals, processes, skills, and resources of research. The following comment from a student is telling:

I really don't have a clue how to do what you are asking of me . . . On the one hand, you want me to have a well-developed theology that informs what I do as a minister. On the other hand, you want me to stay open, “tolerate ambiguity,” and allow different contexts to inform my theological perspective. I don't think I can do it . . . I don't know how to make the connections you are asking me to make theologically between those two principles.

This comment speaks to more than the ability to formulate a research problem and use databases effectively to seek resolution among conflicting voices. It speaks to an inability to grasp the core function of research as a dialogue among scholars, leading to a well-reasoned and evidence-based conclusion.

It appears, from student reports within the studies cited thus far, that many students, even in graduate school, believe that their professors do not spend enough time teaching the research methodologies of the discipline so that the student can function like a skilled practitioner in that subject area. Theological librarians are accustomed to helping struggling students try to navigate the research landscape, which to many of them is more like an

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7 The study by Rosemary Green of doctoral students, however, may appear to cast doubt upon the assumption that graduate students are likely to be information illiterate without specific librarian input. Such students do appear to be able to navigate the research environment on their own. Yet, much of Green's study is based on student self-reporting, and the primary research method observed (along with using Google's tools to a large extent) was “citation chaining,” that is, plundering footnotes and bibliographies for resources. This method shows how the literature is used by scholars in the field but often fails to identify dissenting approaches and newer developments. Thus, Green's assumption that such students, who tend to avoid academic databases, are skilled researchers is open to question. Rosemary Green, “Information Illiteracy: Examining Our Assumptions,” Journal of Academic Librarianship 36, no. 4 (07, 2010): 313-9.


unsolvable maze than a straight path. The result can be a research project that is soul-destroying for the student, because the requisite skills and understanding are not there to make the project succeed. The problem, as we will see, is larger than just unfamiliarity with library databases and other finding tools. It reaches to the heart of seminary education itself.

**INFORMATION LITERACY WITHIN SEMINARIES**

Interest in information literacy (defined as the ability to identify a research problem and then find, evaluate, and use the necessary resources to address that problem) among seminary librarians is high, considering the consistently large attendances for sessions on the topic at conferences of the American Theological Library Association. Yet much of this interest is tempered by a sense of longing, in that librarians continue to find it difficult to impart needed research skills. There is not enough room in many seminary curricula to add information literacy courses or to integrate information literacy instruction significantly into existing courses. With the common view that information literacy is an adjunct to the classroom curriculum, information literacy has yet to be given sufficient priority.

Douglas Gragg, writing about the need for more priority to be given to information literacy in seminaries, has argued: “Few administrators or professors at the theological schools we serve have yet taken adequate notice of these issues. We are more aware of their importance because of the nature of our work as professional managers of information.”

While seminaries may now be showing more active interest in developing the information literacy of their students, there remain significant gaps in student information ability.

For those seminaries that provide more than basic, short-term instruction, two models have emerged: the separate credit course and the through-the-curriculum approach. An example of the former is this author's RES 500 (Research Strategies), a one-credit course required for all programs at Associated Canadian Theological Schools. Having operated the course in a live venue since 1987 and in an optional online format since 2000, this author has seen a significant number of students demonstrate substantial development in research skills.

One disadvantage of the RES 500 course is that all instruction is front-loaded to the beginning of seminary programs rather than distributed throughout the student’s time in seminary. A second disadvantage is that the course is separate from the instruction by disciplinary professors, though these professors regularly show appreciation for what RES 500 is accomplishing. A third disadvantage is that, even though there is similarity among disciplines within a seminary curriculum, there are also disciplinary differences that can be difficult to address in a single course. Still, there is evidence that such courses do provide significant improvements in information literacy.

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The through-the-curriculum approach is not as common as the separate credit course. Douglas Gragg has described such an effort at Candler School of Theology.\(^\text{14}\) Austin Presbyterian Theological Seminary is developing a program of this type.\(^\text{15}\) Essential to all such enterprises is a curricular plan that disperses the teaching of information literacy in stages throughout the student’s educational experience. If successful, this model should result in a student with significantly improved information literacy skills who has a strong sense of how research is to be done in the various seminary disciplines.

The most significant challenges to a through-the-curriculum approach are the need for strong administration/faculty support and the ability to sustain the program over time. The academic support issue is compounded by a consistent lack of appreciation for information literacy among non-librarian faculty across higher education. This has been well documented\(^\text{16}\) and is often explained as a difference in academic culture between teaching faculty and academic librarians.\(^\text{17}\) It is difficult for academics, intent on covering large amounts of content, to find a place for regular doses of information literacy instruction and assignments in multiple courses. It may be that professors do not often enough observe, first hand, the difficulties their students face in the research process. They receive the research project but are not always directly involved to any large extent in the student’s process of research and writing.

The second challenge—sustainability—is a significant deterrent to implementing such programs. Not only do instructional goals need to be translated into learning experiences, but courses need to be identified for inclusion and proper instruction implemented over time, despite the changes in personnel and curricula that inevitably occur. An early vision for a through-the-curriculum information literacy program can be lost within only a few years of implementation unless there is a strong will throughout the institution to keep it going.

On every front then, the development of information literacy instruction in seminaries has long been a difficult prospect, though it is mandated by the accreditation standards of the Association of Theological Schools.\(^\text{18}\) Seminary librarians appear hopeful that their institutions will respond to their pleas for such instruction, yet implementation remains limited, primarily due to insufficient time within curricula to do the work required and a lack of strong institutional and academic support to develop more rigorous information literacy programs.\(^\text{19}\) At the same time, seminary students struggle with understanding the research methodology of the disciplines they are studying.\(^\text{20}\)


\(^\text{15}\) Austin Presbyterian Theological Seminary, Information Quality (IQ), http://www.austinseminary.edu/page.cfm?p=556&pback=291.


\(^\text{18}\) Association of Theological Schools, Standards of Accreditation (Pittsburgh, PA: The Commission on Accrediting of the Association of Theological Schools, 2010), Section 5.2: Contribution to learning, teaching, and research.

\(^\text{19}\) The findings of Christine Wenderoth of both low estimation by faculty of student research and a lack of impetus among faculty to improve student research ability are instructive: Christine Wenderoth, “Research Behaviors of Theological Educators,” Currents in Theology and Mission 35, no. 4 (August 2008): 287-292.

\(^\text{20}\) See, for example, Robert J. Sherman, “What ‘Great Cloud of Witnesses’? Isn’t My Own Religious Experience Enough?” Teaching
The disciplinary distinctions within theological education demand that the aims of the academic specialists in the fields of biblical, theological, and pastoral studies (along with any other subjects taught) be recognized. Biblical and pastoral research are not the same. As Gragg has pointed out, “As in the case of medicine, law, engineering, or any other field of professional specialization, achieving information literacy in theological education includes mastering methods, traditions, and practices of research and practical reasoning related to a particular form of professional practice.”

We are thus left with a dilemma. While librarians are showing strong interest in developing theological information literacy in their seminaries, the programs that would make information literacy integral to the theological curriculum are limited, both in number and scope. Information literacy instruction remains peripheral rather than truly being a key element of theological education itself. Christine Wenderoth, a former president of the American Theological Library Association, has argued that “Faculty have largely given up concerning student research behaviors.” While this may be overstated, there is a sense in which a direction forward to improve student research has not been articulated within theological education to the extent that it has among theological librarians. If faculty are not aware of, or have not seen the importance of, the information literacy movement, the status quo of weak student research will continue.

It is time to overcome the research-training/content-instruction split that has librarians essentially doing their instruction in isolation from the curriculum. At the same time, librarians should take care to alleviate any perceptions on the part of teaching faculty that librarians are intruding into their territory. To make such a reconsideration of this split possible, we must ponder the tasks and methods of theological education itself. In the discussion that follows we will look at newer, information-age-driven educational trends in which the classroom becomes a more active learning environment. Within such a trend toward more student involvement in learning, information literacy can become integral, even foundational, to the entire educational experience of seminarians.

**Educating in an Era of Cheap Information**

We live in an age in which the knowledge that seminary professors seek to impart to students is becoming a cheap commodity. By this is meant that never in the entire history of humankind has so much information (of varying quality) been so readily and inexpensively/freely available to so many people. The content of our lecture notes, or approximations of it, can be found, not just in textbooks, but online through academic websites and even Wikipedia. For the average seminarian, if education were simply a matter of absorbing relevant information, we would have students demanding the opportunity to memorize on their own and pass some sort of qualifying exam in order to get their degrees. They would never need to enter a classroom.

Seminary educators, of course, insist that a theological education is not merely about absorbing content. It is about becoming useful servants of God, about having all the skills required to minister effectively in today’s world. Yet professors commonly come close to contradicting this goal by devoting a great deal of their teaching time to lecturing. The lecture, a product of many centuries past, originated at a time when information was expensive and

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relatively inaccessible. The only people who had the world’s best knowledge were the most highly educated, or the richest, members of society. Thus it was the task of the educated to impart that knowledge, via the lecture, to the uninitiated. Scarcity of information produced the dissemination model which has since guided higher education.

In an age of information glut, we no longer have a significant disparity between professorial and student access to information. Students can reproduce many a seminary lecture simply by compiling readings from available information on the Internet. Thus the lecture, unless it is something more than information dissemination, is increasingly becoming an anachronism.

This is not to say that teaching faculty should dispense with lecturing but that seminary educators need to rethink what they are doing with it. When one begins a process of reevaluating existing methods, it is crucial to remain grounded in the ultimate goals those methods have sought to attain. To abandon the goals that have sustained the enterprise is to make a change of method a reckless, even dangerous, act. In the case of seminary education, we can imagine two learning goals. First, we may seek to create graduates with a strong knowledge base that they can reproduce at will, that is, we want pots filled with knowledge. For example, a student in an Old Testament class may learn to explain the documentary hypothesis and articulate the structure of suzerainty covenants, repeating facts learned at will. Second, we may seek to develop critical thinkers who not only know things but are able to work effectively with their knowledge base, using the process skills most valued in our disciplines and applying their knowledge effectively in ministry settings. In accordance with this goal, the student may seek to identify the elements of Old Testament thought that make contemporary the struggles and evolution of the Israelites so that Israel’s story becomes our story. This still calls for a knowledge base, but views that knowledge as a means rather than an end, as a way of thinking in context rather than as something to be recited. The latter of these goals is preferable to the former, a view supported by the recent studies of theological education noted previously.24

If research studies of information behaviors among seminary students are to be given credence,25 student research is often an exercise independent of the classroom experience in which students are primarily left to their own devices, with professorial guidance limited to brief (and not always sufficiently understood) instructions in syllabi and little more until the final grading process. The following pattern emerges: professors provide knowledge through their teaching, and students provide evidence that the knowledge has been understood and applied through their research papers and other research-based products.

When there is a disjunction between the classroom (passive reception of knowledge) and the student’s assigned research process (active acquisition of knowledge), the student may not only be left without sufficient guidance, but the disjunction also serves to keep the student on the outside of the discipline, looking in.26 Inherent in the traditional lecture is the idea that the professor, as knowledge expert, will teach the student about the discipline. This is an elitist notion, which Freire referred to as “an act of depositing, in which students are the depositories, and the teacher is the depositor.”27 In fact, the very essence of expertise is the idea that I have what you cannot attain, and thus I am able to sustain myself as an expert by teaching you. I am the professor and you are not. You are unlikely ever to be able to enter my environment fully unless you too obtain the advanced degrees that I have.

In our present world, however, knowledge can be obtained easily by multiple means, so the notion that only experts

24 See the many affirmations of this in the works cited in note 23.
25 See note 9.
26 Paul H. Seely, “The Lecture and Superficial Scholarship,” Theological Education 4, no. 2 (December 1, 1968), 619-622.
can impart knowledge is becoming increasingly less viable. In an era in which information is cheap and plentiful, the traditional ways of disseminating information are not only out of step with reality but miss an opportunity to invite our students more fully into seminary disciplines by teaching them how to do disciplines rather than merely learn about them. The elitism found in the “scarcity of information” model we have had since the Renaissance or earlier has kept our students from discovering disciplines from within.

We have an opportunity to dispense with the elitist model of education by providing the tools and guidance that could actually have students participating in the discourse of the discipline. Such student participation will not become a reality without significantly greater professorial help.

**The New Information Environment and Theological Education**

The abundance of information in our age further complicates matters by creating a situation in which making sense of the multiple sources of “knowledge” is becoming exceedingly difficult. Neil Postma cogently argued that:

> Like the sorcerer’s apprentice, we are awash in information without even a broom to help us get rid of it. Information comes indiscriminately, directed at no one in particular, in enormous volume, at high speeds, severed from import and meaning. And there is no loom to weave it all into fabric. No transcendent narratives to provide us with moral guidance, social purpose, intellectual economy. No stories to tell us what we need to know and what we do not need to know.

How should such a reality influence what educators do? Simply this: Today’s information environment demands far less that educators impart knowledge than that they impart the expertise to work with knowledge effectively. Academics need to become best known for sense-making, for weaving disparate threads into a meaningful fabric. This is where a system of teaching that acknowledges that information is easily obtainable by students, but expertise in handling information is not, will succeed much better than the traditional dissemination-of-information model. If we begin thinking of professorial value as lying in the expertise of handling disciplinary information well rather than merely infusing information into students, we can move more toward an active learning model in which students become participants in doing disciplinary work rather than serving as mere sponges soaking up knowledge. As McGrath has argued:

> In our digital age, it is not the memorization of facts that is crucial, but the cultivation of the skills needed to locate and identify reliable sources of information and the ability to discern what is worthwhile in the midst of the overwhelming flood of information that cries out for our attention.

Let us unpack this assertion and look at its components. The task of a researcher is to articulate a research problem, identify the sorts of information needed to address that problem, locate that information, evaluate it for quality and relevance, and then apply that knowledge to the problem at hand. The concept of “information literacy” is best seen more broadly than is often the case, as the teaching of research processes, a concept that can be used to help us develop students as disciplinarians, people who can do the discipline rather than merely absorbing its knowledge base.

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28 Landrum’s finding that students who get lecture notes from their professors are less likely to attend class is one indication of the difficulty of lecturing in an era of information abundance: R. Eric Landrum, “Faculty and Student Perceptions of Providing Instructor Lecture Notes to Students: Match Or Mismatch?” *Journal of Instructional Psychology* 37, no. 3 (September 2010): 216-221.


An approach to theological education that would take into account the current informational reality would give student research a status at least equal to that of the dissemination of information in the educational endeavor. The educational goal would be to have our students think and operate as practitioners of a discipline, using the information available to them with skill in order to address the deep issues of our age. Every discipline is based on multiple conversations that use the discipline's knowledge base to discover and debate, thus advancing understanding. Students need to learn how to do disciplinary work by identifying relevant issues and using disciplinary knowledge effectively to confront those issues. This demands that information literacy move to the very foundation of theological education, because effective research is at the heart of actually doing a discipline. It is in discovery and problem-solving that disciplines foster change, weeding out the useful information from the useless, answering deep questions, and thus making sense in the larger world.

The classroom should become less a center for information transfer and more an avenue for critical thinking and problem solving. This assumes, as most seminary professors do, that the goal of education is less to acquire information than to be able to use acquired information in the context of ministry praxis.

To begin along these lines, teaching faculty first need to do a significant amount of personal reflection on the nature of their respective discipline and its work—Where does its knowledge base come from? What is considered useful or reliable knowledge and why? How does one argue, debate, or analyze within the discipline in order to overcome problems and advance knowledge? Why are some forms of evidence valued over others? What are the goals of the use of expertise within the discipline? Professors, who work with disciplinary information on a daily basis, generally do not often think consciously about such matters, because they have become intuitive. For students less versed in seminary disciplines, answering questions like these is essential.

We might consider an example from the field of systematic theology. Within a seminary setting, it is a given among most theologians that simply knowing one’s theology or engaging in abstract discussion of theological ideas is not sufficient to bind theological thinking to vocations among our graduates. While there is much to know, and many key theologies/theologians to understand, the theology student must learn to use mature theological thinking to address crucial human issues and to deepen the faith of parishioners.

For example, in the study of God, there are some theologians who argue for a fairly static deity while others see God as process-oriented. What if, instead of merely lecturing to our students about the views of the various theologians on this topic, faculty were to assign content reading to their students and then devote classroom and research assignment time to dealing with factors like the following: How did this debate originate? What is the nature of the evidence brought to bear in the various positions proposed? What are the worldviews of the theologians taking those positions? By what methods are the arguments made and how effective are those methods and the resulting arguments? What are the consequences for our view of God that result from each of the approaches taken? What are the consequences of our theological position for life and ministry? None of these questions negate the student’s own responsibility to acquire content but build upon content by putting it within its methodological context.

Students would thus be learning, not just what theological positions have been proposed but how theological thought is carried out, how the discipline is done, and what the implications are for their coming vocations. They would, in fact, be encouraged to enter the debate themselves, critiquing the arguments and the relevant

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31 For a valuable analysis of what is required for students to become disciplinary experts, see Dacia Dressen-Hammouda, “From Novice to Disciplinary Expert: Disciplinary Identity and Genre Mastery,” English for Specific Purposes 27, no. 2 (2008), 233–252.

32 See note 23.
evidence, and perhaps suggesting alternatives. Their research projects would demonstrate the degree to which they were attaining genuine critical and disciplinary skills. Professorial critique of their submitted projects, not just of content but of method, would enable them to improve their disciplinary skills. While it might be argued that acquisition of content is a prerequisite to students even being able to do intelligent research, content and method can be taught together if done carefully.

We are arguing that, while the acquisition of knowledge is important, of equal significance is the ability of students to use knowledge within the methodological conventions of a discipline. Thus conceived, “research” is doing the discipline. If students, rather than merely learning how to find information, are learning how to address the information world of each discipline with skill, information literacy will be intertwined fully with the goals of professors as they teach their subjects. Rather than merely hearing about their disciplines, students take a much more active role in doing their disciplines through research, which may be anything from discussing and critiquing central writings in class to doing research projects that enable students to learn how to function like practitioners in their disciplines.

The essence of such an approach is that professors are letting their students enter their world rather than merely teaching about it. Far from losing the power of expertise by doing so, professors can engage the current information glut by asserting that expertise is less what we know than what we can do with what we know. Thus faculty members, experts at knowing what to do with what they know, become guides to their students, and students discover how to do their disciplines. Research, rather than being an adjunct to assimilating content, becomes foundational and constitutes an invitation to do disciplinary work, with students becoming practitioners rather than merely knowledge assimilators.

**LIBRARIANS AS FULL PARTNERS**

The role of academic librarians in helping to develop such a model of theological education is crucial. While subject professors are knowledge experts and have an insider’s understanding of disciplinary methodology, librarians have a profound grasp of the needs and processes involved in handling information. The concept of an “information professional” is not a mere euphemism but expresses expertise in navigating the many varieties of information and working with them effectively. Not only are librarians able to teach search techniques, but they have a learned appreciation for the nature of information sources (both traditional and emerging) and experience in assisting students with translating the professor’s requirements into thoughtful and critical research.

Rather than merely working in isolation from the central educational endeavor, through separate research courses or attempting to insert information literacy into existing courses throughout the curriculum, librarians in partnership with subject faculty can help develop a new educational philosophy. This approach is distinguished from the through-the-curriculum approach by the development of new patterns of instruction. The classroom as a training ground for expertise in doing the discipline requires both content and process expertise. Librarians can become crucial partners in dealing with the process factors.

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The research paper is a good means to capture the essence of what students need to accomplish in working within the discipline, but only if educators move away from seeing the research paper merely as a product (content) to viewing it as a means to do the discipline (content and process intertwined). What scholars themselves most value in the scholarly writing that they read is the ability of the author to make a case for something or address a problem with skill. That is what seminary educators want to engender in their students. Librarians, with their strong process orientation, are uniquely suited to work with professors to identify the process skills students need to acquire as they engage in research. What makes a good research question or thesis? What informational finding tools are available to the student? Which of these tools are preferred for acquiring needed information, and how can they be optimized? How does a student organize and evaluate the resources found, both for quality and for relevance to the problem at hand?

While it might be assumed that such questions are the territory of professors, there is a strong body of research that shows that many academics are not owning this territory and that librarians are seeing a dramatic gap in student information handling ability that is either ignored or not apparent to faculty members. Thus far, it has been the librarians who have been the strongest voices for an increased recognition of the need for students to ponder the process of research. If a new information-focused foundation for theological education is to become a reality, librarians need to be integral, both in motivating professors toward such a change in educational approach and in providing support for implementing it.

A Vision of Integrated Information Literacy

The theological classroom that makes research foundational to education will have the following features:

1) A shift of responsibility for knowledge assimilation from faculty to students. This will not demand that all lecturing cease but that lectures be shorter and deal with more complex aspects of the subject matter. Students will be more responsible to acquire their knowledge base outside of the classroom.

2) A concentration on the sources of information in the discipline – what they are, why they are regarded as valuable, who are the major players, how they came to become such, and so on.

3) A classroom emphasis on practicing the discipline rather than learning about it from the outside.

4) A great deal of work done in class with the primary sources and key secondary resources to demonstrate the best practices for evaluating texts, the argumentation patterns of notable practitioners, and the methodologies that work most effectively to advance the discipline. The display of the professor’s disciplinary expertise in this manner invites students to participate as increasingly able practitioners who can inform their vocational understanding by virtue of their ability to address the issues important to a discipline.

5) Research papers take on a new prominence in such a context. They are not merely adjuncts to information dissemination but actually form an integral part of the invitation to students to practice the discipline. To enhance student abilities in this practice, the now common practice of breaking research

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papers into separately submitted components\textsuperscript{36} can be a useful tool, in that each submission can provide the professor an opportunity to critique and further their students’ method.

The submitted components might look like this:

First, students identify a concise, problem-based issue to address. The research problem should be stated in a single sentence as a research question or thesis statement. While professors have expertise in the sorts of questions that will succeed in a discipline, librarians are helpful as process experts in guiding students to hone and focus their questions.

Second, students maintain some sort of log of the information acquisition process. Once students have had instruction from librarians on the tools of research available to them, they will chronicle the process they followed in using the relevant databases and other tools. Which efforts were successful? Which were less so? Co-evaluation of student submissions by faculty and librarians will be particularly fruitful in identifying both good efforts and gaps in student skills so that a solid critique can be produced. For this component, students should know that they may be asked to resubmit revised material, based on the critiques that they receive. While resubmission may seem onerous, it will result in a much better stage three.

Third, students submit a bibliography, which should be reasonably complete before they begin the actual writing process. The bibliography must, of course, have high quality works in it, but also needs the following characteristics:

1) Inclusion of primary sources when required by the subject matter.

2) Inclusion of the works of the key secondary scholars in the field.

3) Inclusion of citations with a high level of relevance to the issue at hand. Here, bibliographies filled with resources that cover the topic more broadly than does the research problem statement, or bibliographies that deal with the topic with great diversity, will be less successful.

4) Balance—equitable and sufficient representation of all the relevant points of view.

Fourth, students submit the finished paper, which should be graded, not just on content and format but on the expertise with which the concepts are presented and argued. Does the author use good and valid evidence and argumentation? Are the resources the student actually used comprehensive, representing all significant points of view as well as being of recognized high quality? Are certain views or counterarguments avoided? Is there bias that stands in the way of fair presentation? Does the author make a case or merely present data?\textsuperscript{37}

The key to teaching through the assignment of research papers is to provide fairly extensive critiques of the process as well as the content. Students whose assignments do not display an adequate grasp of both content and process may have their papers returned with suggestions for improvement and then given an additional opportunity to develop their skills by revising their work and resubmitting it.

\textbf{Theological Information Literacy as an Invitation}

I have argued that theological education in an age of information glut requires a movement away from content as supreme to process as an equal player with content, a shift from teaching students about our disciplines to teaching them how to participate in our disciplines, from impartation of knowledge to an emphasis on knowledge-based

\textsuperscript{36} For a recent example in the setting of theological education, see Lincoln and Lincoln, “From Intention to Composition,” 63-65.

\textsuperscript{37} Lincoln and Lincoln, “From Intention to Composition,” 63-65, suggest a similar approach to breaking assignments into components, though their component structure differs from this author’s. Their discussion on the need for such a component approach is significant.
praxis. As such, an emphasis on teaching method along with content represents a way of engaging students more fully as well as enabling them to learn actively rather than passively.

If theological information literacy can be viewed more broadly than it has been, as the teaching of research processes within subject disciplines, then it can become integral to student education. For too long our students have learned about our subject matter but have not been given sufficient invitation or skills to practice seminary disciplines maturely. To be sure, students beginning in theological study will not have the expertise of their professors. But if their professors, working with librarians, can invite seminarians into their world, allowing their students to make the best use of information to advance knowledge, we will have critically thinking practitioners who graduate with the capacity to do theological work ably within their vocations.