The Engaged University and Student Success:

The Foundations of Intellectual, Personal, and Professional Growth at Miami University

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As Miami approaches its Bicentennial, it is an important moment to reflect on where we have been, who we are now, and what we aspire to be. It is a time to assess those attributes that have been most enduring and meaningful over our long history and to contemplate how we might better carry out our mission in a world of even more rapid and profound change. Looking back, it is clear that a dominant theme throughout our history has been our focus on student success. For nearly 200 years we have produced graduates of uncommon quality because of the dedication of our faculty and staff and their deep engagement with our students. We have accomplished this success because we have understood the importance of developing the whole person, of strengthening both intellect and character. We have embraced and encouraged the total student experience, including both curricular and co-curricular activities, because we have intuitively understood the importance of intangibles like work ethic, initiative, social skills, leadership, and personal values to the lifelong professional and personal success of our graduates.

This approach to the student experience is as relevant today as it has ever been, in fact, even more so. However, to achieve higher levels of excellence, it is critical that we approach our core mission with greater clarity and with an understanding of the possibilities of contemporary education. At the heart of this approach is a reconceptualization of what we expect of our students - the historic view of a student as a receiver of knowledge can now be replaced by a view of the student as a creator of knowledge, a view that fundamentally changes how we think about students and, more importantly, how they think about themselves. It changes how we approach teaching and learning. As William Butler Yeats noted, “Education is not the filling of a pail, but the lighting of a fire.”

This reconceptualization can lead to superior student outcomes as we more intentionally and consciously focus all aspects of the Miami Experience on this goal. Academic life, naturally, is at the center of developing the notion of what we term the “student as scholar”. To be a scholar requires subject knowledge and methodological skill, the elements of all approaches to teaching and learning. However, to be a scholar also requires an additional element that is critical to success, namely a high degree of intellectual maturity and motivation. Significantly, students typically begin college at a lower level of intellectual maturity and leave with only modest improvements because higher education has not been designed to consciously develop this critical quality.

Armed with a deeper understanding of student development theory, we can create a better curriculum that progressively and intentionally builds this capacity. We can also more purposively link other critical aspects of the Miami student experience – residential life, co-curricular activities, student employment, etc. – to this development. In turn, with this growth in intellectual maturity will come more personal and professional maturity, as our students develop those “intangibles” that lead to greater personal and professional success.

Few universities can match the breadth and depth of Miami’s historic strengths in curricular and co-curricular activities that together provide an exceptional foundation for total student development and a rich context for developing the student as scholar. Our goal is to more consciously link these activities together to yield even more capable graduates because of their

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immersion in an environment centered on their intellectual, personal, and professional growth. More specifically, these activities include:

- our focus on liberal education and the four principles of the Miami Plan - thinking critically, understanding contexts, engaging with other learners, and reflecting and acting;
- our commitment to close student-faculty relations inside and outside the classroom (as shown in the many ways faculty interact with students— as advisors of research, student organizations, fraternities and sororities, fellow members of intramural sport teams);
- our dedication to helping our students undertake leadership both inside and outside the classroom as well as on campus and beyond (Wilks Leadership Institute, Miami's Leadership Commitment, Office of Community Engagement and Service, Scholar Leader Halls, SocietyWise, Collegiate Mock Trial Team, Forensics Team, or the dining awards won almost every year by our students);
- our emphasis on diversity in its broadest sense as an educational resource (as shown in the Center for American & World Cultures, our many diversity initiatives, the many thriving interdisciplinary programs, and the recent Global Miami Plan and US cultures requirement);
- our belief in the power of learning within a community (evidenced by our long-standing commitment to a residential living-learning environment, the summer reading program, as well as key centers that use students as peer tutors and educators such as the Howe Center for Writing Excellence and the Rinella Learning Assistance Center);
- our practice of advancing student scholarship (as shown in the Undergraduate Summer Scholars Program, the Undergraduate Research Forum, DUOS – Doctoral-Undergraduate Opportunities for Scholarship, a strong honors program, and the many publications and presentations students produce at the national level every year); and
- our dedicated residence hall and housing and dining staff who provide personal support and mentoring to students and student employees.

While all of these activities are important elements in defining and advancing the Miami Experience, the class-based academic experience is the most central activity. Thus, in this paper we focus primarily on creating a curriculum that develops the student as scholar. We describe how changes in technology provide us with new opportunities to extend our intellectual engagement with students with the student-as-scholar model, how this engagement aligns with liberal education, and how understanding the personal development of traditionally-aged university students can better shape what we do inside and outside the classroom.

We begin with a description of the changing academic context that we work in today and introduce the student as scholar model as an organizing framework for extending the learning paradigm into the discovery paradigm. We show how the application of this model is possible now because of changes in technology, though the impulses for the model reach far back into our history and align especially well with the goals of a first class liberal education. We then turn to a description of how students typically develop over the traditional college ages, and how this relates to learning and success. Finally, we present a tiered approach to education that advances the student as scholar model by connecting the Discovery Paradigm with student development theory. To illustrate the progressions embedded in the three tiers of learning and development of the model, we provide examples from current Miami courses.
The Changing Academic Context

During the past decade an amazing degree of change has occurred in our approach to higher education. Much of this change stems from the seminal work of Barr and Tagg (1995) who brought coherence and energy to the study of mainstream collegiate education, calling for a move away from the Instructional Paradigm and toward the adoption of a Learning Paradigm. At a minimum, the Learning Paradigm calls for a more open approach to student learning, with an emphasis on engaging students, adopting multiple learning formats, and assessing outcomes. Tagg’s (2003) subsequent book, *The Learning Paradigm College*, both solidified the fundamentals of this approach and provided a wealth of examples of the application of the paradigm from colleges and universities throughout the nation.

Three years after Barr and Tagg published their original piece, the Boyer Commission (1998) issued its report, *Reinventing Undergraduate Education: A Blueprint for America’s Research Universities*, that took research universities to task for their neglect of undergraduates and pushed for a “radical reconstruction” of the approach to undergraduate education focused on research-based learning. The Commission offered ten suggestions for changing undergraduate education that directly draw from the mission of research universities, and build on the Learning Paradigm by emphasizing an inquiry-based freshman year.

The Boyer Report offers a powerful vision of undergraduate education, but as presented and implemented, its recommendations fall short in three critical ways. First, research-based learning is not just for research universities, as the Commission implies; rather, if properly conceived, it should structure undergraduate education at almost all four-year institutions of higher education. Second, in response to the Boyer Commission, most universities have conceived of the undergraduate research experience only as an isolated component of the student’s education, or as suitable for only some of the most advanced students. Third, both the Learning Paradigm and the research-based learning proposed by the Boyer Commission overlook the importance of student development theory in helping us to position research-based learning appropriately in the progression from first year to senior status.

In this paper we argue that technological advances have made research-based learning possible now in ways that were unimaginable in previous generations. Such learning can, and should, be at the center of the total undergraduate experience and across most institutions of higher education. We then combine research-based learning with student development theory to offer a more comprehensive model for effectively organizing undergraduate education. Our aim is not simply to advance undergraduate research and creativity, but more importantly, to cultivate the “Student as Scholar,” where scholar is broadly conceived as an attitude, an intellectual posture, and a frame of mind derived from the best traditions of an engaged liberal education. Although some students will produce original scholarship in their discipline or field, what is more crucial is that they gain the internal value system, intellectual maturity, and foundational competencies of their discipline and a liberal education to succeed in today’s complex, ever-changing world.

Developing the Student as Scholar Model requires a fundamental shift in how we structure and imagine the whole undergraduate experience. Not only does it transcend the boundaries of the traditional classroom by leveraging the vast amounts of raw material now available to
undergraduates, but it also requires a culture of inquiry-based learning infused throughout the entire liberal arts curricular and co-curricular experience that starts with the very first day of college and is reinforced in every classroom and program. Put another way, the Student as Scholar Model represents the far end of the educational spectrum, specifically progressing from an instructional paradigm that emphasizes telling students what they need to know, to a learning paradigm that emphasizes inquiry in shaping how students learn what they need to know within the traditional academic context, and culminating in a discovery paradigm that encourages students to seek and discover new knowledge, emphasizing inquiry with no boundaries (Table 1).

Table 1
Traits of Instruction, Learning and Discovery Environments

<table>
<thead>
<tr>
<th>Instructional Environments</th>
<th>Learning Environments</th>
<th>Discovery Environments support all traits of Learning Environment, plus</th>
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<tbody>
<tr>
<td>Focus on covering disciplinary content and grading on content knowledge</td>
<td>Focus on student learning and outcomes assessment</td>
<td>Focus on students’ capacity to discover, by promoting their intellectual, personal development</td>
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<tr>
<td>Require students to verify information previously communicated</td>
<td>Encourage students’ questions, voices, and ideas</td>
<td>Offer authentic questions and problems necessitating ongoing and serious engagement</td>
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<tr>
<td>Assume students will learn the nature of disciplinary discovery implicitly</td>
<td>Assume students learn through active engagement</td>
<td>Assume students have the potential to construct new ideas and knowledge</td>
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<tr>
<td>Ask students to execute imposed lessons and inquiries, thus promoting the false idea that inquiry is a linear process and does not involve errors and uncertainty</td>
<td>Expose students to the recursive process of inquiry; invite them to reflect on learning</td>
<td>Promote the goal of students creating their own inquiries and knowledge by steadily increasing level of challenge and promoting discovery inside and outside the classroom</td>
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At its core, this is a vision of undergraduate education that offers students sustained and consistent emphasis on their identity as learners and as scholars, gradually blurring the distinction between the two; and it provides opportunities to develop meaningful connections to faculty, staff, and other students in campus environments that establish and support vibrant learning communities. In placing this emphasis on students as scholars and meaningful connections among faculty and students, we must understand the way that students develop, and we must design our learning environments to assist their movement from a more passive, externally motivated learner to the active, internally-motivated posture of a scholar.

In this section of the paper we first define the Student as Scholar Model. Then, we examine how the changing context of technology and scholarship makes the Discovery Paradigm possible now and increasingly so in the future. Finally, we position the Model in the context of a liberal education, describing how it creates a natural and highly effective focus for a liberal education framework. We then turn to exploring how an understanding of student development can

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purposefully guide curricular and co-curricular activities to build student capability progressively throughout the college years and offer concrete examples of practice.

The Student as Scholar

“Student as Scholar” refers not only to those who have absorbed skills critical to conducting scholarship, such as identifying and practicing appropriate methodologies, engaging with multiple perspectives on an issue and understanding the inquiry process, but even more importantly to those who have cultivated a particular attitude, intellectual posture, or frame of mind. Essential to this “frame of mind” are core elements, including internal motivation for learning, a belief in one’s capacity to do original research or creative practice, reliance on personal authority, accepting responsibility for one’s work, and the self perception of being a peer in the larger community of scholars. All of these attributes (Table 2) contribute to the success of the Student as Scholar Model and provide guideposts or specific goals for a curriculum, an individual course or co-curricular activities. In the broadest sense, the Student as Scholar Model provides an integrating vision of student success and development that we explore in this paper.

Table 2
Attributes of the Student as Scholar

**Active Critical Thinking**
- Accepts responsibility for learning (active vs. passive)
- Uses answers as an opportunity to ask more questions; is not constrained by the specific requirements of a course or project
- Understands multiple perspectives
- Has the ability to self critique

**Research Skills**
- Lays out appropriate methodologies for scholarship generating or using original material
- Is able to use writing (and speaking) to critically evaluate arguments and evidence
- Understands how to work collaboratively, even in a geographically dispersed team
- Integrates learning both within and across disciplines

**Self-Authorship**
- Is internally motivated, not needing external pressures (like grades!) to initiate work
- Believes he/she is capable of authoring new knowledge
- Judges new information based on personal values and belief system, rather than relying on external authorities
- Sees oneself as a member of a larger community of scholars and looks to peers in order to share viewpoints and contribute to the quality of critical dialogue

The Student as Scholar Model, set in the context of the emerging Discovery Paradigm, extends the Learning Paradigm in three significant ways in order to build the attributes of a scholar. First, it obliterates the boundaries of a traditional course, infusing in students the sense that the
course is a platform on which they launch their search for understanding, a platform that does not impose limits on their learning and discovery. Second, it emphasizes the integration of learning across both the curricular and co-curricular environments. Third, and perhaps most essentially, it instills in the student the belief that she or he can be the author of new knowledge.

Technology as the Enabler of the Student as Scholar

The adoption of the Discovery Paradigm and the Student as Scholar Model as frameworks for education is possible now, in ways that were nearly impossible before, because the nature of scholarship, and access to the raw material of scholarship, have changed so dramatically in the past few years. Quite simply, the ability of scholars, and students, to access, process, and explore primary source material has taken a quantum leap forward, primarily due to the enormous changes in technology.

The most obvious technological changes revolve around the development of the internet and the concomitant increases in the amount of original data/material readily available to students. Whether it is the Human Genome or images of rare documents, digital output from the Sloan Digital Sky project or galleries of art, vast sets of demographic data or collections of historic maps, students today can readily access original materials that in years past were available only to the most advanced scholars who had privileged physical access to those materials. For students of only a generation or two ago, learning occurred by reading summaries or conclusions that others put forward, with, at best, very limited access to the raw data underpinning journal articles and books. Thus the possibilities of encouraging student research were highly constrained, and student involvement in original research, especially research authored by them, was the exception.

Figure 1 displays the connection between technology change and the evolution of educational paradigms. With the availability of information limited and heavily filtered, the Instructional Paradigm provided a reasonable approach to education. With increases in information availability, and improvements in the tools to examine that information, the Learning Paradigm, with its emphasis on inquiry-based education (even if constrained by prepared sets of data) became both more plausible and more effective. The explosion of technical capability in the past decade has dramatically changed the foundations for learning, with exponential increases in access to significant primary material for research purposes. Thus, it is more possible than ever before, for the motivated student, ignited by a question posed in a class, to generate new questions and seek answers that realistically might also turn out to be new.

Figure 1
Technology and the Evolution of Educational Paradigms
Technological change has also dramatically altered the availability of research equipment. It is now common for sophisticated equipment, such as a DNA synthesizer, to be available in advanced undergraduate courses, and it is not unusual for undergraduates to have access to high-end NMR’s as part of a research team. Through the use of this sophisticated equipment in controlled environments, the students learn how to use cutting edge devices, but even more importantly, to imagine questions that require their use. We do not mean to over-emphasize the experience of students in the sciences in this regard. Certainly, new technological advances, such as global positioning systems and new electronic design and multimedia software have revolutionized other disciplines such as geography, communication, creative writing and architecture. What is now possible for students to undertake in a wide range of disciplines and fields is simply breath-taking.

Although the availability of new technologies and equipment does not automatically yield student-generated scholarly work, it makes the adaptation of the Discovery Paradigm and the Student as Scholar Model easier to achieve. Even more significantly, the access to vast amounts of raw material provided by technology fuels in the student the belief that independent scholarly and creative work are possible.

**Liberal Education and the Student as Scholar**

In recent years, there has been a resurgence of interest in liberal education, including the launch of Liberal Education and America’s Promise (LEAP) by the Association of American Colleges and Universities (AAC&U). LEAP argues convincingly of the relevance of liberal education to modern society, a position that we most emphatically embrace. Whether a student majors in a liberal arts discipline or not, the skills, perspectives, and self-identity that come from a liberal education are foundational to all advanced education and success in life.

LEAP (AAC&U, 2007) affirms that
Liberally educated students are curious about new intellectual questions, open to alternative ways of viewing a situation or problem, disciplined to follow intellectual methods to conclusions, capable of accepting criticism from others, tolerant of ambiguity, and respectful of others with different views. They understand and accept the imperative of academic honesty. Personal development is a very real part of intellectual development. (p. 23)

We build on LEAP by arguing that the Student as Scholar Model both draws on, and adds to, the impact of a liberal education on durable and long-term student learning. By combining key aspects of the Learning Paradigm - e.g. establishing goals, assessing outcomes, and making learning an active process - and the philosophical foundations of a liberal education through the mental frame of the Student as Scholar (and the Discovery Paradigm), we can create an extraordinary student experience with superior learning outcomes.

Without offering detailed elaborations, Table 3 showcases the remarkable complementarities between a liberal education and the Student as Scholar Model. Developing skills to ask important questions and using tools to find, critically evaluate, analyze, and synthesize information forms the bedrock of a liberal education and the Student as Scholar Model.

Table 3
Student as Scholar in the Context of Liberal Arts Education

<table>
<thead>
<tr>
<th>LIBERAL EDUCATION GOAL</th>
<th>STUDENT AS SCHOLAR LOGIC</th>
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<tbody>
<tr>
<td>Critical inquiry and reasoning</td>
<td>Evaluate validity of evidence; construct and test hypotheses; seek to understand the perspective of stakeholders</td>
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<tr>
<td>Written and oral communication</td>
<td>Effectively communicate research results; use writing and presentation to interrogate understanding; communicate clearly with respondents during face-to-face research</td>
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<tr>
<td>Ethical judgment</td>
<td>Exercise responsible scholarship; assume personal responsibility for results</td>
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<tr>
<td>Civic responsibility</td>
<td>Understand one’s self as the agent of action; analyze personal biases as they impact research and relationships</td>
</tr>
<tr>
<td>Scientific and technological literacy</td>
<td>Develop ability to ask meaningful questions and conduct appropriate research</td>
</tr>
<tr>
<td>Quantitative analysis</td>
<td>Explore relationships with statistics using standard packages</td>
</tr>
<tr>
<td>Information literacy</td>
<td>Determine how to find relevant information, filtering out unwanted material; sort, analyze and describe relevant data</td>
</tr>
<tr>
<td>Cross-cultural and global learning</td>
<td>Think creatively, inspired by alternative points of view</td>
</tr>
</tbody>
</table>
Collaborative problem solving | Work productively in diverse teams; develop sense of peer contributions
Integrative learning | Look beyond the obvious boundaries of a problem; think creatively and expansively to synthesize knowledge

Ultimately, the capacity to undertake original research rests not only on the skills achieved and foundational knowledge acquired, but also, and most emphatically, on the extent to which a student understands his or her own capacity to author original ideas. Here, again, the linkages between the Student as Scholar Model and a liberal education are exceptionally strong. One of the most enduring goals of a liberal education is to create “the educated person.” The Student as Scholar Model provides an organizing framework precisely for this important goal.

Building a Bridge to an Internal Foundation: Using Developmental Theory to Shape the Curriculum

The attributes and skills comprising the Student as Scholar Model do not emerge automatically. To foster these outcomes, educators must design learning environments that offer appropriate levels of support and challenge that are attuned to students’ particular abilities and needs. We argue that an understanding of student development can aid in the construction of developmentally-appropriate curricular and co-curricular activities that build student capability progressively throughout the college years.

We place college student development in the context of personal development theory (Baxter Magolda, 1992, 2001; Kegan, 1994). In this framework, individuals move from reliance on external sources to developing their own internal voices to make meaning of the world. College students typically rely on external sources to make meaning of knowledge, themselves, and their relationships. Within the prototypical time frame of the traditional four-year higher education experience, the (usually unachieved) goal is to develop one’s internal authority, or become self-authoring (Baxter Magolda, 2004b; Love & Guthrie, 1999).

Students initially follow external formulas that have helped them succeed in schooling. They have a strong reliance on external authorities in forming their beliefs, values, and personal identity. The Instructional Paradigm, in which students passively receive knowledge from expert faculty, reinforces reliance on these external formulas.

Self-authoring individuals, by contrast, rely on their own internal authority. The shift away from reliance on external authority requires opportunities to encounter multiple perspectives, understand that knowledge is contextual, and learn to critically evaluate relevant evidence to decide what to believe. Barr and Tagg’s Learning Paradigm, with its emphasis on active student engagement, supports students in moving through the developmental crossroads to help them begin to develop their internal voices. Our aim, however, is even more ambitious. We argue that the Student as Scholar Model challenges students to evolve from a reliance on external authority to the internal authority of self-authorship.
The challenge for higher education, Kegan (1994) explains, is to consciously build an evolutionary bridge, that “fosters developmental transformation” leading from reliance on others to internal self-authorship. Kegan (1994, p. 332-33) urges educators to “fashion a bridge that is more respectfully anchored on both sides of the chasm, instead of assuming that such a bridge already exists and wondering why the other has not long ago walked over it.” Put another way, educators must gauge the level of support students need while they are “in over their heads” with challenging and transformative educational experiences.

One effective approach to Kegan’s evolutionary bridge is the Learning Partnerships Model (LPM) that emerged from Baxter Magolda’s (2004a) longitudinal study of college students. The model supports students in learning to construct knowledge and challenges them to achieve self-authorship during college. From a developmental perspective, learning involves actively making sense of one’s experiences (King & Baxter Magolda, 1996). This sense-making, and concomitant knowledge construction, helps students grow their own personal identity and academic capability. The opportunity for students to author their own educational experience is critical to the development of the Student as Scholar Model. Indeed, Baxter Magolda (2004b) advocates for self-authorship as a central goal of higher education. For her, possessing an internal foundation, that is, a foundation based on internal rather than external motivation and authority, “yields the capacity to actively listen to multiple perspectives, critically interpret those perspectives in light of relevant evidence and the internal foundation, and make judgments accordingly” (2004, p. xxii).

Most faculty and staff tend to view the distinction between lower level and upper level courses primarily as a matter of complexity – more skill and experience are required for advanced courses than for beginning courses – without actively considering, or even recognizing, students’ developmental capacities. As a result, “what teachers expect students to understand might be different from what they are, in fact, capable of understanding…” and thus, “our job as instructors is both to gain a ‘reading’ of where our students are and then to reach out to them in a way that helps them move beyond where they are to where they want to be” (Tinberg and Weisberg, 1998, p. 46). In the Student as Scholar Model, designing a curriculum becomes a two dimensional problem in which both the complexity of the material and students’ developmental capacities are considered (Figure 2).
To achieve this end, educators must let go of their power of authority in traditional educational practices and empower students to see themselves as authorities and creators of knowledge. Rather than imposing the educator’s internal authority on the educational curriculum inside and outside of the classroom, we should more consciously support the development of the students’ internal foundations and sense of agency. Indeed, to foster self-authorship, students must consistently be immersed in learning experiences inside and outside the classroom that steadily build in scope and complexity. In short, we educators must cultivate not only an integrated learning environment where all members work toward the same goal of self-authorship, but also a sequenced one where students are steadily offered higher levels of intellectual and personal challenge.

To achieve this end, the roles and responsibilities of students, as well as faculty and staff, must shift. Tagg has underscored that in the Learning Paradigm College, the roles of all members of a University community “begin to blur. Architects of campus buildings and payroll clerks alike will contribute to and shape the environments that empower student learning.” In particular, he calls for faculty to move from perceiving themselves as “disciplinary experts who impart knowledge” to “designers of learning environments” (1995, p. 20). Certainly, the changes in roles he describes must occur to enact the Student as Scholar Model, but we would emphasize the need to conceive all of our roles as contributing to the developmental process. Not only do students’ roles and expectations evolve as they become more independent thinkers and learn to engage in mutually interdependent relationships, but so do the roles and expectations of faculty and staff, given that they must be attuned to students’ fluctuating developmental needs (Figure 3).
Historically, Miami University has been known for its student-centered approach to undergraduate education. Our faculty and staff are known for their ability to take care of students, form lasting faculty-student bonds, and provide helpful answers to students’ and their parents’ questions. Nonetheless, with the Student as Scholar Model, we must imagine new ways to relate to students and each other so that we are promoting in students the capacity necessary for critical thought, research skills, and self-authorship. While we intend to maintain our traditional focus on students and their well-being, we now understand that this focus must be adjusted to promote student maturity—an adjustment that sometimes puts us in uncomfortable situations---as we move away from our traditional roles of authority and assist students in making, and accepting responsibility for, their own ideas and decisions.

On one level, this model sounds simple. As students gain intellectual and personal maturity, educators relinquish more authority and empower students to assume greater agency over the discovery process and learning environment. Yet, in practice, this model requires intentional design, a shared sense of ownership among all faculty, staff and students, and continuous critical reflection on the part of all involved. The next section offers guidelines and concrete examples for how to put the Student as Scholar Model into practice.

Creating the Student as Scholar Experience in a Tiered Curriculum

As we argued earlier, to be truly successful, the Student as Scholar Model should apply to the entire undergraduate experience and take into account the ongoing development of students. To illustrate how this might be accomplished, we offer several examples from Miami for each of three different points on the “developmental bridge” in a two dimensional, three tiered curriculum.

Foundational courses and co-curricular experiences anchor one end of the bridge. At the beginning level, students have a limited vision of themselves as legitimate authors of new

<table>
<thead>
<tr>
<th>Students’ Undergraduate Years</th>
<th>Level of Authority in the Learning Experience</th>
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<tbody>
<tr>
<td>1st Year</td>
<td>0</td>
</tr>
<tr>
<td>2nd Year</td>
<td>1</td>
</tr>
<tr>
<td>3rd Year</td>
<td>2</td>
</tr>
<tr>
<td>4th Year</td>
<td>3</td>
</tr>
</tbody>
</table>

**Figure 3 - Faculty-Student Relationship**

- **Faculty**
- **Student**

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knowledge and rely on external authority for discipline, guidance and approval. They tend to look at knowledge in absolutist terms, and are learning to ask questions, gain foundational competencies, and recognize multiple perspectives. As students move to the middle of the bridge, they are involved in courses and co-curricular activities that include projects that are more open-ended, often involve collaborative work, and draw on multiple skills, methods, and points of view. Less external authority is needed, although some structure remains valuable to student success, and they are learning how to engage in authentic scholarly practice, negotiate multiple points of view and become less dependent on others for answers and ideas. At the far end of the bridge, advanced students have the opportunity to create their own research questions, develop their own methodology or plans of action, and direct their own educational experiences, believing that their goal is to provide original contributions to their field of study or practice. They understand that motivation and authority come from within. They see themselves as peers in the larger research and creative community. And, of course, they are more skilled in discovery.

For each of the three curricular tiers (positions on the developmental bridge), we describe the characteristics of students, the role of faculty, and the learning outcomes goals. We describe courses at Miami that we believe effectively demonstrate how the curriculum can be constructed for each tier. We also describe examples of co-curricular activities that provide developmentally appropriate experiences adding to the growth of our students.

Foundational Learning: Stepping out onto the Bridge

Educators can fail to provide support “by neglecting to build a bridge out of and beyond the old world and by expecting individuals to take up immediate residence in the new world” (Love & Guthrie, 1999, p. 75). The foundation learning experiences thus begin with understanding students’ current developmental traits, which include viewing knowledge as certain and viewing parents and professors as the creators and disseminators of knowledge.

Theatre 191 at Miami University is a general education course that introduces non-majors to all aspects of the theatre art. Historically, this course—like many introductory survey courses—used a traditional lecture format focusing on addressing the key moments in theatre history and dramatic literature. Recognizing that the lecture format reinforces the faculty as expert and the student as passive learner, the Theatre faculty at Miami University decided to transform this course into a student-centered, inquiry-based class that allows students to understand concepts central to theatre through hands-on activity.
Instead of a teacher-directed lecture, the 200 students enrolled in THE 191 collectively experience a master class once a week, designed to offer them an insider’s perspective into the art and craft of theatre. In these weekly master class meetings, working actors, directors, designers and scholars share first-hand knowledge and varying perspectives on theatre production and then involve the students in an interactive exercise that reinforces basic concepts of design and performance. On another day each week, students work in small teams to write and produce their own ten-minute plays, applying concepts presented in the master class, as well as outside readings and videos. Graduate student teaching assistants facilitate these break-out sections, guiding students to generate their own scripts, design elements, staging, and character developments and to relate those elements to their own personal experiences and beliefs.

Similar to THE 191, PSY 111, “Introduction to Psychology,” is a general education course designed to welcome students into the world of disciplinary inquiry. After being introduced to the scientific method, students work through each of the steps of the scientific method (from formulating hypothesis and considering how data might be collected and analyzed to identifying possible venues for sharing findings) to respond to a question they have about human behavior.

Throughout the duration of the course, students participate in an online discussion board. Early in the semester, they post responses to faculty-generated questions that foster students’ critical thinking (e.g., identification of a problem and multiple perspectives on it, recognition of key assumptions, marshalling supporting evidence, and drawing conclusions). Later on, after their understanding of psychological concepts and their capacity for critical thinking have deepened, students use the discussion board to lead the class in a scientific discussion of a question of their own choosing. The course’s focus on authentic scholarly questions values students’ perspectives, invites them to bring their interests into the scientific process, and offers opportunities to share authority. Most importantly, PSY 111 students begin to think like a scholar and to see themselves working with peers to discover new understanding.

Similar to the shift in THE 191 and PSY 111, the Office of Residence Life (ORL) transformed their living learning communities to student-centered, inquiry-based learning environments. Rather than lecturing passive students at an all-hall meeting about residential policies, ORL adopted the national Community Standards Model to actively engage students in learning how to negotiate relationships with others who are different from themselves. This model is consistent with ORL’s residential curriculum learning goals of effective community engagement, personal growth, and cultural proficiency. Hall staff work with residents from the start of the semester to set community standards, the shared agreements that define mutual expectations of how residents
will relate to and treat each other (Piper & Buckley, 2004). The staff guide the standard setting process, yet they encourage students to use their own experiences to generate the standards. Inevitably, once standards are set, someone violates them. This initiates the second phase of the Community Standards Model – community problem solving. Staff again facilitate as they bring members of the community together to discuss the issue, further refine the standards, and reinforce their expectations of each other. A third phase of the process is initiated when residents wish to address behavior violations of a particular resident. These accountability meetings, again facilitated by staff but emphasizing active dialogue among the residents, focus on helping the offenders modify their behavior to make it consistent with community expectations. Although students are not given the authority to change university policy within this model, giving them the authority to shape their living environment, and to hold themselves and others accountable, assists them in developing their internal authority (Piper & Buckley, 2004).

In the introductory or foundations stage, educators model the behavior of a “self-reflecting practicing scholar,” employ active learning approaches and information technologies to encourage students’ hands-on engagement with course material, cultivate a climate where honest exchange of student voices is welcomed, provide multiple perspectives on the topics studied, and provide thoughtful and timely feedback on students’ work (Table 4).

### Table 4
Summary of the Foundations Stage

#### Student Traits (entering)
- Uncritically accepting external authority for knowledge, values, judgment
- **THROUGH SUCH OUTCOMES AS:**
  - Analyzing multiple perspectives on a topic
  - Explaining phenomena
  - Predicting outcomes
  - Estimating and measuring
  - Drawing inferences and conclusions
  - Identifying variables
  - Gaining key collaborative skills (listening, goal-setting, compromising)
  - Reflecting on learning and goals for college

#### Educator Role & Expectations
- Assuming the role of the “Self-Reflective Scholar”
- Helping students ask relevant questions, identify multiple perspectives, gain foundational knowledge
- **THROUGH SUCH ACTIVITIES AS**
  - Interactive demos of the discovery process
  - Role-playing real-life scenarios and various theoretical perspectives
  - Guided inquiry (structured by educator)
  - Analysis of authentic cases, problems, discoveries
  - Exposure to “insider’s” view of discovery and scholarship, including the uncertainties, pitfalls

#### Desired Student Outcomes
- Learning to question authority
- Realizing need for developing own internal authority

**Intermediate Learning: Crossing the Bridge**

Once students have successfully completed their foundation learning experiences, they should find themselves in the middle of the “bridge” (although research suggests that many college
students fail to reach this point before graduating). At this stage in their undergraduate careers, students should engage in intermediate-level experiences – experiences which take them “beyond the book” and challenge them to try out the role of a practicing scholar—that is, to undertake discovery tasks and methods, apply knowledge to authentic issues and problems, make connections within and across disciplines, and work collaboratively with others. Through these intermediate experiences, students develop the capacities necessary to judge new information based on their own personal values; they spend less time looking to external authorities for answers (and may recognize that absolute answers may not exist at all), and they feel a part of a larger community of scholars – one where they can look to their peers for support and challenge. As a result of these new capacities, students are more intrinsically motivated to generate original ideas and work.

Tim Greenlee, a marketing professor at Miami University, employs a pedagogical approach he calls “the inverted classroom” in a 300-level marketing course which is particularly appropriate for the intermediate student. As in many traditional classrooms, Greenlee assigns his students a group research project, but in the inverted classroom, activities that traditionally take place inside the classroom, such as the course lecture, happen outside the classroom, via technology. Activities that traditionally take place outside the classroom, such as group work, happen inside the classroom, allowing for more peer-to-peer exchange and careful guidance and feedback on the collaborative inquiry process from the professor. Because many students have never engaged in such an open-ended collaborative process, Greenlee structures the in-class activities to steadily enable them to use authority appropriately within a team context. For example, to keep teams on track, he offers them a daily agenda to guide their interactions. He also helps team members to build trust and camaraderie by offering quizzes – “opportunities” as he calls them. Students work in groups throughout the semester to assist each other in preparing for these opportunities, and each group member’s opportunity score is averaged together for a team score. Through these strategies, Greenlee has transformed his role from transmitter of knowledge to that of facilitator of student discovery. The outcomes of this kind of experience are increased critical thinking, communication, problem-solving, and responsibility, all of which align with the outcomes of a liberal education, as well as the Student as Scholar Model. Perhaps most significantly, as the students work in their groups on self-selected research projects, they are cultivating one of the main attributes of a scholar: taking ownership of one’s own learning.

Student research projects also serve as the focal point in an organic chemistry course at Miami University. In this course, four to six person student groups take on a specific research task,
namely to produce a new carbon-carbon bond based on a green version of the Suzuki-Miyaura reaction. The process is required to adhere to several chemical constraints, with a limited budget, and produce a coupling that has not appeared in the literature under the proscribed solvent and catalyst conditions.

The student groups develop the project over the course of the semester in carefully sequenced segments. The groups form early in the semester and perform literature searches and prepare an initial draft of the research proposal. The instructor reviews the proposal and may require up to two revisions; however, instructors attempt to play a minimal guiding role in the revisions, so that students understand that the project is drawn from their own reasoning. By the end of the semester, groups create a professional journal-style paper.

This project provides an exceptional example of a constructive experience in the middle of Kegan’s evolutionary bridge. The problem, as set out, challenges the students to create a process that is both new and potentially valuable, in other words, to be the authors of a discovery. It provides a terrific experience with the whole research process, from problem definition, to proposal, to experiments, to write-ups, each stretching the research skills of the students. Not all of the projects turn out to be successful in terms of actually producing the expected outcome, but even highly flawed proposals, when fully executed, have proven to be a great learning experience for the students. As the instructors describe the project design, “Students at the sophomore level can generate their own ideas, write worthwhile proposals, and perform independent research with substantial results if they are guided effectively and provided a structure to work within” (Novak, et al, 2007, p. 417, emphasis added).

A similar transformation can occur outside the traditional classroom walls. In Miami’s Urban Leadership Internship Program, students spend eight weeks in an urban location pursuing and reflecting on internship and service learning experiences that they selected and arranged on their own, based on their personal learning goals and career aspirations. For example, because of her interest in international studies, migration, languages and social justice Megan, a rising junior, elected to work at the state office of Columbus Refugee Services and Community Refugee and Immigration Services, where she taught English to mostly Somalian refugees. The coordinator of the Miami program, Katie Egart, communicates regularly with students, both in person and electronically, encouraging them to probe more deeply with each passing week. By providing prompts for their journal entries that steadily increase in complexity and that increasingly become more open-ended, she invites students to reflect on their personal and academic goals and how they relate to their practical experiences in the field, steadily gaining greater ownership over their internship experience. In an early e-journal entry, Megan wrote, “I tend to be very shy and not say much, but I really admire and enjoy the company of the people I’ve been working with this far . . . I think that they’re all nice enough to bear with me as I try this out. So far, I think I’ve been doing pretty well and have gotten lots of positive feedback (it seems like).” A journal entry written after two months in the field demonstrates a remarkable transformation:

I’m still not sure that I have a stronger sense of what “my calling” is, but I feel like I’ve found good ways of getting that sense. Rather than just being a leaf in the stream being carried along by the current I’ve resolved to direct myself more purposefully. Simply working every day with the people I was with and getting such a variety of experiences
really led me to realize how important directing yourself and keeping a firm fix on your goals can be. . . The work has made me feel reinvigorated and has better prepared me to go back to school and be ready for whatever comes my way. . . Overall this summer has been a great learning experience and it has been a case where the total is greater than the sum of the parts. It wasn’t just the experiences or the work itself, but the things that our activities and journals made me think of and the new perspective it has given me on my life, service and my future. It has made me think more about who I want to be and has made me appreciative of all the gifts I have been given in life.

Although Megan has not yet solidified an internal system of beliefs to guide her decisions, she is no longer following others’ formulas or feeling like “a leaf in the stream.”

Megan’s development and that of other students’ in this intermediate stage is facilitated by their faculty and staff educators who are steadily sharing more authority with students as these students’ undergraduate careers advance. The educators in these intermediate learning experiences have adopted an approach akin to what Palincsar and Brown (1984) and Alvermann and Phelps (1998) have called “reciprocal teaching,” which is a special kind of cognitive apprenticeship where students gradually learn to assume the role of the teacher in helping peers construct meaning from course readings. Instead of focusing solely on reading comprehension, the faculty members at Miami are serving more as “reciprocal scholars,” in that they use appropriate levels of discipline and guidance to gradually prompt students to take ownership over the inquiry process (Table 5).

### Table 5
**Summary of the Intermediate Stage**

<table>
<thead>
<tr>
<th>Student Traits (entering)</th>
<th>Educator Role &amp; Expectations</th>
<th>Desired Student Outcomes</th>
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<tbody>
<tr>
<td>Learning to question authority; realizing need for developing own authority</td>
<td><strong>Assuming the role of the “Reciprocal Scholar”</strong>&lt;br&gt;Helping students practice authentic discovery methods and tasks; assigning complex problems that require teams with diverse capacities assisting students process problems and generate solutions</td>
<td>Developing internal authority to form beliefs and guide actions</td>
</tr>
<tr>
<td><em>THROUGH SUCH OUTCOMES AS:</em>&lt;br&gt;Acquiring and processing data&lt;br&gt;Defining variables operationally and controlling them&lt;br&gt;Designing investigations&lt;br&gt;Developing models&lt;br&gt;Practicing qualitative and quantitative methods&lt;br&gt;Focusing on aligning actions with values&lt;br&gt;Operating on a diverse team</td>
<td><strong>THROUGH SUCH ACTIVITIES AS:</strong>&lt;br&gt;Bounded inquiry (educator provides general parameters)&lt;br&gt;Internship with ongoing reflection&lt;br&gt;Field work&lt;br&gt;Community-based projects&lt;br&gt;Student-led classes and co-curricular programs&lt;br&gt;Team-based research and discovery projects</td>
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Along the developmental bridge of the Student as Scholar Model, the capstone experience provides the highest level of freedom and challenge for students. In a capstone experience students extend their learning in a particular area of focus by evaluating information according to their own values and belief system, applying learning and integrating across disciplines, and designing their own inquiries to, hopefully, discover new knowledge. Capstone experiences like this, Project DEEP (Documenting Effective Educational Practice) (2005, p. 188) found, “contribute(s) to the high levels of academic challenge.” If properly prepared, students are now at the fourth order of consciousness, no longer requiring as much outside support or discipline as in the foundation or intermediate stages.

At Miami University, “each Capstone emphasizes sharing of ideas, synthesis, and critical, informed reflection as significant precursors to action, and each includes student initiative in defining and investigating problems or projects” (http://www.units.muohio.edu/led/Capstone). The core of the capstone experience involves evaluating information according to one’s own values and belief system, asking intriguing questions, and authoring responses to those questions. Students with an understanding of their internal authority utilize their self-awareness to be self-evaluating, while learning to share their ideas as a peer of other scholars.

The course “Senior Design Project” is a capstone in the School of Engineering that, as its name suggests, asks students to create a major open-ended project involving a real problem that may be defined by an external client. The professor and clients expect students to model the professional behavior of design engineers working in a multidisciplinary team. The syllabus makes it clear to students that they will be asked to utilize and stretch the skills they have learned and to reflect on those skills and the process of creation throughout the course. There are no regular lectures. Instead, teams meet weekly with their advisor and maintain careful logs on their interactions, tasks, and progress. Grades are assigned to the work achieved, presentation of the work, participation, and reflection.
In a recent senior design project, engineering students worked to construct an operational tabletop Inertial Electrostatic Confinement (IEC) Thermonuclear Fusion Reactor, a device that could be used to produce biomedical isotopes useful for detecting cancer in a PET scanner, wherever and whenever they might be needed. Reflecting the level of maturity that we hope to see at the far end of the evolutionary bridge, the team leader and originator of the project idea explained, “I wanted to pursue a project that would be challenging yet achievable, and at the same time relatively impressive and noteworthy. While our faculty advisor did help with suggestions and recommendations as needed along the way, this project is one that we students conceived of and accomplished ourselves. It is our vision and dream that has now come true.” Adding to the experience, a second team of students from the business capstone course, “New Product Development,” joined forces with the engineering team for the semester. Not only did the two teams learn to communicate their ideas across the disciplinary divide, together they continued beyond the course to pursue venture capital to make the dream a reality. Clearly, these students did not see their capstone course merely as an exercise to be completed. They grasped fully the sense of possibility that comes with self-authorship.

In an even more ambitiously constructed senior capstone experience, the Miami University Interdisciplinary Technology Development Challenge invited teams of undergraduate students to “develop and demonstrate a technology at the laboratory scale, to provide fiscal projections that indicate financial viability, and to identify policy issues that incorporate esthetic and societal concerns.” The contest posed a challenge to develop a microorganism-based approach to create biomass for energy. Teams were required to have at least one student each from engineering, science, business, design, and a department that studies societal concerns around new technology, and they were required to solicit a faculty advisor to work with them. The winning teams shared a $5,000 prize.

Five teams initially entered the competition with two finalist teams invited to construct a working laboratory scale prototype, a business plan that included societal issues along with the normal business plan, and a technical plan that included technical specifications and production data along with scale-up costs and issues. One team focused on bio-hydrogen production in a photo-bioreactor, and the other developed a plan to synthesize ethanol from switch grass. Because both projects were so outstanding, the evaluators deemed them both winners.

This capstone contest challenged students to organize their efforts outside the friendly confines of a course. Such a contest demands self-authorship, not to mention self-organization, and it demands an exceptional degree of interdisciplinary collaboration. The problem was deliberately defined in very broad terms, leaving great opportunity, and uncertainty, to the teams’ strategies. At the conclusion of the contest, the students must have perceived themselves as having moved beyond the curriculum. They had become, in the truest sense of the term, scholars, possessing

Example of Co-Curricular Capstone Experiences

A group of business majors spearhead a team of students to develop a student-made video on college life which is posted on a university website for prospective high school students.
the habits of mind – critical thinking, research skills, and self-authorship – that will prepare them for a life of inquiry.

As in the other stages, students can also move toward self-authorship in learning experiences that are inspired by classroom learning but occur outside the classroom. While pursuing a series of American Studies courses tied to the Wilks Scholars Program, Angela Van Horn, Christine Bruns, Jamie Viars and several other students became fascinated by the impact of global trends on their local environment, and particularly, the new global migration trends which were resulting in a growing Latino population in Butler County. Their curiosity led them to collaboratively develop a plan for offering English language and cultural programming to recent immigrants. Their initial educational program was so successful that the students decided to found their own student organization so that they could better meet the critical needs of this community and better ensure that their efforts would be sustained even after they graduated. As one student noted, “This project will prove to be a constant reminder to look beyond what you see—for example, to look at a non-English speaker as a nuisance or a drain . . . but instead to probe to understand why they are here, why they may not have learned our language, and what has happened globally to push them here. My involvement with this exchange has shaped who I am as an individual and the lessons I learned will be with me for the rest of my life.”

To aid students in reaching the far end of the bridge, faculty and staff members assume the role of colleague, research advisor, and mentor (Table 6). They propel students to this stage by cultivating learning climates akin to graduate seminars where faculty and students engage in respectful, in-depth dialogue to explore differences of opinion and mutually construct new understandings of topics studied. With ongoing advice from the faculty, students design and implement their own inquiries which includes: formulating the question or problem, articulating outcomes and criteria for quality work, designing a method of inquiry, analyzing data, sharing findings and reflecting on what was learned and how the inquiry relates to one’s values and career goals.

Table 6
Summary of the Capstone Stage
Conclusion

As we noted at the outset, our goal is to increase student success at Miami by formalizing and extending our traditions of an engaged academic community through the student as scholar model. Dramatic technological advances provide an unprecedented opportunity to encourage and reward student curiosity and initiative, and, pedagogically, to move from the learning paradigm to the discovery paradigm. The successful move from the learning to the discovery paradigm, however, also requires a deeper understanding of student development theory in order to develop a tiered curriculum that appropriately advances students’ intellectual maturity. The Student as Scholar Model provides an especially effective framework for undergraduate education. It places scholarship at the center of the undergraduate experience, shaping the curriculum from the very first class and residence hall meeting through the capstone experience. It directly addresses the need to incorporate models of student development, explicitly recognizing that a student’s ability to learn is much different when he or she is 18 compared to 22. It is not, as most of us in the professoriate believe, simply a matter of experience that separates first year students from seniors. Rather, and most importantly, those differences in capabilities also reflect differences in personal development and maturity and differences in the way educators interact with them. The tiered curriculum accounts for these differences by purposefully creating a developmental bridge across the curriculum, starting from a perspective in which external authorities prominently prevail, to a level where students are internally motivated, believe that they are capable of producing original knowledge, and see themselves as peers in the world of scholarship.

The adoption of the Student as Scholar approach and the construction of a two dimensional tiered curriculum have the potential to dramatically improve the impact of universities. First and foremost, they can lead to graduates who will not only be better educated, but who will also have
the confidence, as well as the ability, to perform at a much higher level immediately upon graduation, thus positioning them to be life-long learners.

Second, as Bok (2006) and others have argued, we can create a much more effective educational system by being more purposeful in setting and pursuing our basic goals. By merging developmental understanding with a liberal education in the context of the Discovery Paradigm, the tiered curriculum provides a framework that colleges and universities can use to set goals across the entire curriculum, with a better understanding of what is necessary to achieve those goals. This framework is summarized in Table 7.

<table>
<thead>
<tr>
<th>Table 7</th>
<th>Summary of the Evolutionary Bridge</th>
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<tr>
<td><strong>Stage</strong></td>
<td><strong>Student Traits</strong></td>
</tr>
<tr>
<td><strong>Student Traits</strong></td>
<td>Reliant upon external formulas</td>
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<tr>
<td><strong>Faculty Role</strong></td>
<td>Reflective Scholar</td>
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<tr>
<td><strong>Key Goals</strong></td>
<td>° Ask relevant questions</td>
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<td></td>
<td>° Identify multiple perspectives</td>
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<td></td>
<td>° Gain foundational knowledge</td>
</tr>
<tr>
<td><strong>Sample Assignments &amp; Activities</strong></td>
<td>° Simulations</td>
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<td></td>
<td>° Role-playing different perspectives</td>
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<td></td>
<td>° Structured reflections</td>
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<td></td>
<td>° Case studies, authentic scenarios</td>
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<td></td>
<td>° Multidisciplinary panels</td>
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</tbody>
</table>

Third, the Student as Scholar Model offers a powerful path to reducing the boundaries that separate the core higher education missions of teaching, research, and service. The “fusion of learning” brought about by the Student as Scholar Model not only reduces the boundaries, it in fact actively reaches across those boundaries to draw energy for building the attitudes and competencies required to be a successful scholar. We view the integration of these functions as one of the most exciting potential outcomes of the approach.

Similarly, we see this approach leading to much greater integration across the functions of the university. Student affairs, and co-curricular activities, become even more central to student achievement. Student employment, no matter what kind of employment, can be viewed as contributing directly to this mission, and life in residence halls can be programmed with greater purpose, especially with the introduction of the sophomore residency requirement at Miami.
Having now stated this, the adoption of a Student as Scholar Model poses many significant challenges. The most direct challenge is to construct a curriculum that embraces the Student as Scholar Model at every level. We have begun this process on a more systemic level at Miami by launching the Top 25 Initiative that seeks to adopt the Discovery Paradigm in the largest first year and lower division courses. Although the initiatives are generating exciting approaches to creating inquiry-driven, student-centered, and active education, implementing these ideas is challenging and demands a great deal of the supporting context. Changing one course in isolation is difficult; trying to synchronize all of the relevant moving parts is daunting. Everything from student services to libraries affects the success of the initiatives. Thus it is critical to view these changes as truly foundational, broad-based, and transformative.

One of the key contextual variables contributing to the success of the student scholar approach is developing a deeper understanding of student development in the faculty. Most faculty have little training in pedagogy, let alone student development theory, yet the successful adoption of the Student as Scholar Model requires a deep understanding of the bridge needed to achieve success (Table 7).

How do we build that expertise? Moving to the Learning Paradigm and then to the Discovery Paradigm requires faculty to take on different and new roles in the classroom and staff to adopt new postures out of the classroom. Instead of holding the power, they are now empowering the students to take control of their education and author knowledge as well. To move in this direction requires probing self-assessment in how faculty and staff view themselves and their relationships with students. Consequently, the usual one-day or one-hour faculty development or staff training workshop will not suffice. We must re-envision our approaches to faculty and staff development to help them reexamine their roles and relationships.

The successful bridge also requires a better melding of the curricular and the co-curricular realms. Students learn, learn how to learn, and develop the confidence to learn and discover on their own through the full range of college activities. How, then, do we more purposively encourage faculty and staff to partner with one another to develop and link co-curricular activities to the ultimate goal of the student as scholar? What new communication structures and partnership incentives can we invent to spark new synergies among our staff and faculty?

Similarly, as we work hard to spread an appreciation of the power of a liberal education to the broader public, we need to see the Student as Scholar Model as providing a motivating clarity to those values of a liberal education that we hold most dear. The Student as Scholar Model provides a sharper image of what it means to be “an educated person.” While it may not provide all of the breadth that many would associate with this label, we believe that it energizes and coalesces many of the most essential elements of a liberal education.

The top 25 Initiative launched Miami on a path to the broad implementation of the Student as Scholar Model, focusing on the first and second year curriculum and drawing on resources and experience from across the campus. In order to broaden that effort, and to connect the many potential contributors together, two additional efforts have been organized and launched by a diverse group of faculty and staff. The first effort is the creation of an interactive website, www.muohio.edu/engagedlearning, devoted to engaged learning, including every aspect of
Miami student life, from academics through co-curricular, to student employment. The second effort is to create a broad community of faculty, supervisors, advisors, and others interested in intensifying Miami’s efforts to more intentionally advance our efforts to become the Engaged University. Information on the Community of Practice on Engaged Learning, COPEL, can be found on the website. I urge all who are interested to consider becoming a part of this extraordinary effort.

This is an exciting time in higher education. We have unprecedented opportunities to engage our students in their learning in new ways. We know more about how students develop, what enduring skills are most critical, what motivates students, and how to provide students with virtually unlimited access to original raw material that they can explore with “attitude.” It is this attitude, this frame of mind that fundamentally changes how students can think about their education. We believe that this attitude can lead to deeper, increasingly motivated, and more enduring learning, not only during the years of formal study, but also throughout a lifetime of informal and formal learning in an ever-changing world. And there is no university better prepared to undertake this challenge than Miami. We have the history, the tradition, and the talent, across the entire university, to transform the student experience and improve student success.
REFERENCES


