

Assessment of Research Climate

William Paterson University

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G R O U P i & i

Observations on the Research and Research-Funding Climate at William Paterson University

Challenges & Opportunities | Recommendations for Further Growth & Development



By Group i&i Consultancy

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About the Review Team, Group i&i Consultancy

Toufic Hakim, PhD, Senior Managing Principal, successfully served as Professor of Physics and Engineering (Jacksonville University), Assistant to the President (The College of New Jersey), and Senior Research and Grants Officer (Kean University). He was actively involved in promoting undergraduate research nationally, and is a member and President Emeritus of the Council on Undergraduate Research. He was selected as American Council on Education Fellow in 1997 and is a former recipient of the CASE-Carnegie Florida Professor of the Year.

Kathy Wiener, MPA, Senior Principal, is an organization and management development professional with extensive experience in qualitative research, organizational assessment, and grant proposal development. Ms. Wiener has served as Adjunct Professor of Public Administration at Kean University and the Rutgers Graduate School of Public Affairs and Administration. She was a community engagement consultant to the Gateway Center for Regional Development at Kean, and has partnered in the design and delivery of significant capacity-building initiatives including both statewide and nationally.

Group i&i Senior Associate **Eve Wenger, MBA**, and Associate **Ilpa Patel, MPA**, contributed to the development of this report.

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Purpose of Review

Through the Office of the Provost, William Paterson University (WP) has engaged Group i&i Consultancy to conduct a broad review of research funding activities. The overall assessment and this report are direct results of this engagement.

Considering that success in research funding is dependent on prevalent characteristics of the research culture, scholarship, and creative expression at the University, understanding issues affecting research funding becomes critically linked to understanding the overall characteristics of the research environment.

Our primary intent was to examine research opportunities and obstacles and suggest possible solutions for enhancement, consistent with the institutional mission and priorities. Our secondary and significant aim is to help the University compete more effectively for mission-aligned research funding.

Since February 2015, two lead principals, Toufic Hakim, PhD, and Kathy Wiener, MPA, have been involved in this effort. We have gathered data from a number of sources, including extensive conversations with faculty and academic managers, individually and in small groups, as well as students at the 2015 Research & Scholarship Day; a comprehensive institutional asset assessment survey; and extensive review of publications pertinent to faculty and student scholarship and university resources. (Full details in Appendix I.)

What follows in this brief report represents the Principals' best interpretation of data gathered during this phase of the engagement. We offer these views, in a direct and respectful manner, for the sole purpose of supporting WP in its effort to advance its mission as a public, comprehensive, and predominately undergraduate university by helping to invigorate the overall scholarly environment for the benefit of students and faculty alike, the larger community, and the higher-learning endeavor.

Report Map

The report is organized in three sections:

- (A) ***General Context & Setting.*** We will first present the institutional and national context of faculty research, followed by our view of factors generally influencing the state of research, scholarship, and creative expression at the University.
- (B) ***Core Analysis & Recommendations.*** The core of the document consists of observations, informed by data we gathered, about a variety of issues and practices affecting the scope and intensity of research and research funding. These lead to a short list of recommendations, which we offer with the intent to help the University harness its potential and move the research environment toward the next degree of engagement. (Please note that, hoping to improve reading experience, we chose to present the detailed analysis after the listing of findings and recommendations.)
- (C) ***Supporting Resources.*** The report ends with the list of publications cited, university resources (all reviewed for the purpose of this initiative), and various appendices that include additional research notes and commentary not included in the main narrative.

For the sake of brevity throughout the report:

- * We choose the term “research” as a proxy for “research, scholarship, or creative expression,” representing the wide spectrum of scholarly endeavors whose standards are established by academic disciplines.
- * Our use of the term “Faculty” here refers to tenure-track and tenured faculty members and librarians.
- * We refer to The William Paterson University of New Jersey as William Paterson University, the University, or WP.

A. OVERALL SETTING & CONTEXT

A1. Institutional Setting

Historical, social, political, and financial factors influence decisions and developments at the University regarding faculty and student research, be it directly or indirectly.

- ❖ **Predominantly Undergraduate Character.** Six out of seven WP students are enrolled in undergraduate programs. Invigorating their academic experiences is a stated intent of the institution. Considering that the nature of such experiences depends, by default, on the active scholarship of faculty, it may be timely for the institution to consider reshaping the undergraduate learning environment with research as one of its drivers. This paradigm has gained national traction across academic disciplines (CUR, 2016) and an already growing interest at the University.

In addition, the population of minority students is steadily increasing, now accounting collectively for more than 50% of the student body. This development makes research mentorship by faculty scholars, known to be effective with under-represented groups (Hurtado, 2014; Boyd, 2009), an especially promising proposition.

We should also note that a growing suite of graduate degree programs and two doctoral programs require an environment where applied research would need cultivation.

- ❖ **Public Mission.** The University has deep community roots, since its days as a normal school, and a natural tendency for service leadership in the region. Its public character gives it the opportunity and obligation to develop community-oriented research programs and educational resources to address greater needs.

A number of considerations are linked to the institution's public affiliation, with potential effects on the research endeavor, among them: complex—and ever-shifting—funding formulas and declining state funds; collective bargaining arrangements; and a fairly nascent tradition of private funding and development.

- ❖ **Urban-Suburban Locale.** Standing by the city of Paterson, New Jersey's third largest city, the University has strived to respond proactively to the ethnic, educational, environmental, and economic needs of the City's schools, industry, and government.

Its location, within an easy drive of many universities, including dozens of peer institutions and industrial hubs within the state, New York City, and Eastern Pennsylvania, offers opportunities for serious research collaborations and partnerships.

- ❖ **Participatory Governance.** When it comes to faculty research, primarily because of its ties to faculty terms of employment, relation to teaching and learning, and requirements

for external funding, many entities appear to be involved and have a say: the Provost and the College Deans; the Faculty Senate and its Research & Scholarship Council; the Office of Sponsored Programs (OSP); the local American Federation of Teachers (AFT) bargaining unit; the Honors Program; academic departments; and, of course, faculty and students themselves. How these entities interact, and how decisions are made or policies established as a result of their interactions, becomes a critical piece of the research puzzle.

- ❖ ***Relatively New Executive Leadership.*** In the last few years, the University appointed a new suite of executives and academic managers at various institutional levels. The extent of the research activity, how it is measured or supported, and how it may mesh with teaching and learning are strongly influenced by the views of the leadership, which do not yet appear to be fully aligned—or aligned with faculty expectations—regarding the rightful place of research at the institution.

Throughout our assessment, we have kept these factors, be they internal or external, in full sight—albeit as images appearing in our rear-view mirror.



A2. National Context for Research & Scholarship

The national dialogue about the role of research and scholarship has remained vigorous for over two decades, especially at Carnegie M1 institutions of the WP type (Carnegie, 2013). These are institutions that have historically placed highest priority on student learning and struggled with issues around faculty roles and rewards.

Broadened definitions of scholarship, the paradigm and practice of undergraduate research, and new holistic views of academic departments stand out as concepts that are highly pertinent to our review of the WP research climate.



- ❖ ***Broadened Definitions of Scholarship.*** It has been elegantly and compellingly argued that “active scholarship is intrinsically related to excellence under the teacher-scholar model” (Pardie, 2011). There is a clear distinction between active and passive forms of faculty scholarship: active scholarship goes beyond staying abreast of one’s field of study or teaching profession; it refers not only to inquiry but also to the intent to “discover answers” or produce creative works to inform that inquiry where none existed previously; and it leads to “original contributions,” revealing new levels of understanding and appreciation.

Active scholarship underscores the generation of new knowledge or clinical approaches or works of art (answering new questions; addressing old questions in new ways; posing new questions; creating new works of art or music, or new versions or interpretations of existing works). As a process, it requires three essential milestones: identifying the method of inquiry; applying that method to generate new knowledge or works; and verifying the method and outcome by a community of academic or professional peers (Wilber, 1998). Active scholarship then involves “knowledge generation and quality assurance when conducted with integrity” (Pardie, 2011).

The teacher-scholar model has thrived in liberal arts colleges (Ruscio, 2011) and been embraced by many state comprehensive universities (FHSU, 2014). Teacher-scholars “model the habits and intellectual values of inquiry” necessary if students are to “succeed and be lifelong learners” (LMU, 2012). The ultimate focus here is on education—but scholarship matters! In such a model, the attempt to connect education and scholarship is genuine.

The teaching-scholar model emanated from competition between research and teaching, which had inspired the work of Ernest Boyer during his tenure at the Carnegie Foundation for the Advancement of Teaching. The Boyer definitions of faculty scholarship move us away from the “*research versus teaching*” debate and “give the term

scholarship broader and more capacious meaning, one that brings legitimacy to the full scope of academic work" (Boyer, 1990).

These definitions (application, teaching, integration and discovery; see Appendix III) suggest both (a) a balanced, unified view of *learning* at the interface of teaching and research; and (b) a new model of faculty work—with emphasis on the sum of knowledge acquired through “research, synthesis, practice and teaching.” They suggest rigorous and vigorous engagement by members of the institution in intellectual or creative endeavors. These in turn offer to enliven the overall experience of students and faculty alike, establish connections with the regional community, and position the University, through efforts of its faculty scholars, as a regional and national resource.

There is significant overlap among the definitions, and active faculty scholars are commonly involved in more than one chosen area of scholarship. No matter the type of engagement or overlap, “the true scholar, working at the edge of the unknown, invokes the skillful and yet creative application of the methods in his or her discipline to answer the call of the inquiry” (Pardie, 2011).

We learned that lively conversations about the Boyer model were hosted at WP a few years ago. It may be time to reconsider the model and look for ways to incorporate it into the overall teaching-learning endeavor.



- ❖ ***Undergraduate Research.*** While graduate students are both important beneficiaries of, and potential contributors to, the research endeavor, active engagement in research is just as significant, and possibly more transformative, for undergraduates. A thirty-some-year movement around undergraduate research has swept higher education and appears to have rejuvenated learning across all types of institutions, from the research-intensive university (Snow, 2010) to the community college (Hensel, 2014). While much more needs to be done to expand undergraduate research, such efforts, coordinated by national organizations, centers, and conferences (e.g., Council on Undergraduate Research, Project Kaleidoscope, and the National Conferences on Undergraduate Research), have affected course curricula and student experiences across all disciplines (Karuktsis, 2007; Bettison-Varga, 2006). They have further led to institution-wide initiatives (Hakim, 2000) and the establishment of centrally-coordinated offices across universities of all types (Kinkead, 2012).

Undergraduate research stands at the interface of teaching and learning. It conjures up many meanings: a research mindset in teaching; intensive original research by students, supported by faculty; and student-faculty collaborations—an inclusive definition and a rigorous standard established by the academic discipline. Standards for course-based

undergraduate research have been established to evaluate and ensure rigor, as shown in Appendix IV (Auchincloss, 2014).

Critical here is the nature of the student-faculty scholarly interaction and mentorship, allowing for all modes of knowledge transfer to be activated (Nonaka, 1996). WP has a good spattering of these examples across its academic departments, especially in the natural and social sciences, and is well positioned to take this effort to the next level and create stronger linkages between undergraduate research and many aspects of the student experience.

This effort does at once ride on a number of key institutional core values: academic success, creating knowledge, and student engagement. It could also serve as a solid bridge between the research, teaching, and service activities in which faculty must engage. Taking the undergraduate research activity to the next level may require deeper thinking about values, research, and the role of the faculty at the University. This is not a surface enhancement: serious considerations of evaluation and rewards are necessary. However, making the real shift requires more a new mindset than simply a new strategy. Characteristics of excellence in undergraduate research have now been proposed to assist institutions in incorporating undergraduate research more fully in to the academic experience (Appendix IV).



- ❖ ***Emerging Views of “Holistic” Departments.*** Comprehensive universities have been deliberately reimagining faculty work and evaluation with the teacher-scholar/Boyer model in mind (Weiner, 2015). The approach being considered is one that treats the academic department as a “whole,” one in which faculty engagement is motivated by flexibility and equity, with consideration to individual interests and talents, rather than the same cookie-cutter approach for every faculty member (see Appendix V for further details). This view of the academic department, which appears to have lost some of its scholarly status, could help reposition it as a scholarly hub where faculty’s collective activities and contributions produce a multiplier effect rather than merely a discrete sum of individual results.

The traditional modular view of faculty performance and productivity in areas of teaching, research, and service is steadily shifting toward a more integrative model. These three areas need not remain distinct. Opportunities for overlap could be found and seized; more strategically, however, one could think about them holistically. In fact, research has shown that faculty members are capable of achieving, and have demonstrably achieved, goals across teaching and research simultaneously (Colbeck, 1998). At institutions that have adopted broader definitions and assessment models,

there is engagement in integrative activities between “research and classroom-oriented teaching” more often than at institutions where this was not the case.

When the institution emphasizes one area over the other rather than the integration of two or more, the level of faculty engagement in the unsupported area(s) diminishes, with the prospect of a more invigorated academic experience for faculty and students withering as a missed opportunity. The issue often stems from confusing the process of engagement in these roles with the product of engagement and institutional goals (Malachowski, 2012)—more in Appendix V.

Faculty evaluation studies suggest that it would be more beneficial for student learning in the long run, while perhaps more challenging, if faculty members were to conceptualize their work roles as blended roles rather than operate and “categorize their activities as singularly teaching, research or service” on activity reports (Colbeck, 2002).



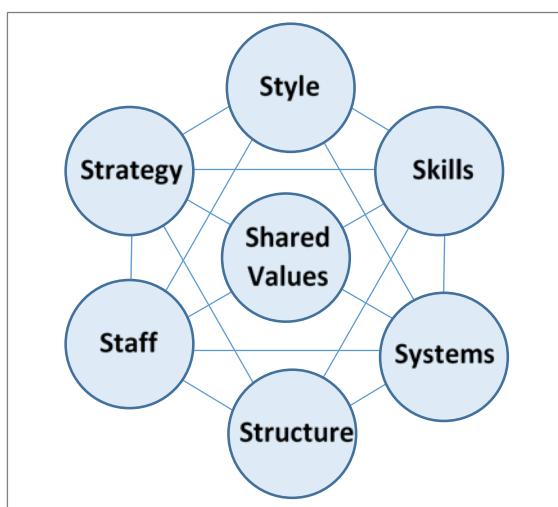
Actual change happens in small steps, not all areas moving in sync and often falling behind the national dialogue on higher learning. The destination is set, however. Taken as a whole, efforts of comprehensive universities around the country appear to be moving toward:

- * Adopting new, clear definitions of scholarship, widely understood and embraced, which seek balance and integration rather than isolation.
- * Repositioning the faculty as drivers of scholarship and students as their participating beneficiaries, and establishing stronger connections across all aspects of the academic experience—for both faculty and students.
- * Developing flexible, forward-looking reward systems that are consistent with both the institutional mission and its desired scholarly culture.

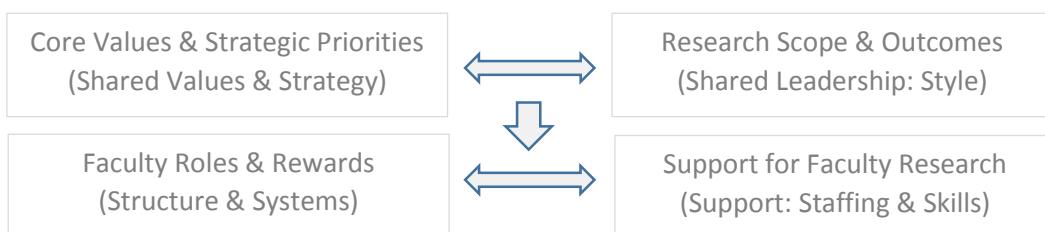
B. CORE ANALYSIS & OBSERVATIONS

B1. Framework for Achieving “Excellence in Mission-consistent Research”

The model we chose for assessing the overall research activity at WP is inspired by the McKinsey 7S Framework for Organizational Excellence (Peters & Waterman, 1982). It posits that organizational effectiveness is driven by shared core values, which over time inform and influence organizational style (university context, culture and leadership), skills (individual and collective; specialists vs. generalists), systems (processes), structure (coordination, collaboration and accountability), staff (faculty and students; intrinsic talents and competencies), and strategy (priorities and plans of action).



We modified the above framework, as depicted below. The adapted model guided our assessment survey and interviews; we applied it to the “embodiment of faculty research” at the institution, treating it as an “organizational whole.”



B2. Synthesis of Findings Relating to WP's Research Culture

Our interviews, online surveys, and archival research provided information and gathered perceptions from a wide variety of stakeholders throughout the University about its culture of research, scholarship and creative activity. Following is an overview of our key findings and observations, organized in line with the modified 7S framework.

Shared Values. There appears to be a common view of the central importance of faculty research and student engagement in research to a vibrant University culture.

However, with regard to specific norms and standards within the institution that guide individuals' behavior and actions, there was a distinct lack of consensus as to whether, or to what extent, WP shares a culture that values research and research-related grant activity. Opinions differ widely about whether faculty research is effectively encouraged, acknowledged, supported, appreciated, and rewarded including whether research is, or should be, visible in the surrounding community.

Strategy. There was general awareness that the term "research" is referred to throughout the University's 2012-2022 Strategic Plan; but there does not appear to be a shared definition or understanding of its meaning or a holistically shared concept of the relationship between teaching, research, and service. Opinions about how or whether the Strategic Plan is translated into action in each department are not consistent, nor did we hear a well-articulated university-wide or college-wide strategy (between and within) to further research and research-related grant activities. Mention of the importance of research in decision-making was generally limited to its consideration in new faculty selection.

Shared Leadership. WP leaders and top-level managers (administrators, academic deans, department chairs) clearly value research. However, they do not appear to share a common vision or convey the same messaging about the value of research to the University. Nor did we observe any indication that this leadership consistently expresses how the value of research supports the organization in realizing a cohesive, long-term strategy.

There appeared to be a lack of a unified, proactive commitment promoting research at the level of the University, the College, or the Department. Rather, each department takes its own idiosyncratic approach to research-related activity with little, if any, system-wide collaboration or coordination apparent.

Structure. While, many throughout the University are actively engaged in research and research-related activity, it is not clearly discernable which entity and/or individuals, if any, are responsible for overseeing WP's overall research agenda and how these responsibilities are differentiated and coordinated. The Office of the Provost, OSP, Institutional Advancement, the Faculty Senate, various Colleges, and the AFT local make significant contributions to research efforts, but none are able to describe clear lines of authority for

decision-making, communication, or accountability for results. This includes the apparent absence of specific, research-related actions undertaken to operationalize the University's Plan. When asked to describe the planning and coordination of research in general, respondents often used language such as "there is no one connecting the dots."

Systems. Resources for Assigned Release Time for Research (ART) are recognized as highly valuable, but opinions about the program's effectiveness varied widely, with some asserting its many benefits and others concerned about issues of quality and accountability. Support for summer research engagement, sabbaticals, and student participation is considered less than optimal. In terms of organizational processes, policies, and procedures, which guide how decisions about research and research-related funding are made, they are not consistently agreed upon and understood throughout the University. This includes a lack of clarity with regard to start-up funds, summer research, support for conferences and presentations, and student engagement. There was also significant mention of the lack of connection between tenure and promotion decisions and challenges achieving an appropriate balance in faculty time and energy devoted to teaching, research, and service. Many of those interviewed, especially newer faculty members, referred to an overall sense of confusion, mixed messages, or absence of clear expectations or rewards for their performance in research.

Foundational Support. While expressing appreciation for institutional support for research that is available, many of those interviewed were concerned that the University may not have adequate human resources to ensure quality support and create a vibrant culture of research. Some made specific mention of insufficient support for research and research-related grant activity within their own academic departments or through OSP. Limited research-related collaboration within WP and/or external colleagues is noted. However, there does not appear to be a strategic, systematic effort to build institutional capacity for successful and sustained research and research-related funding, engage significantly more students in research, or consider research as a factor in faculty development.

B3. Suggestions & Recommendations for Consideration

In our interpretation, it is widely desired by WP stakeholders that a series of important enhancements vis-à-vis research, scholarship, and creative expression be considered. These enhancements, gathered from our data, point to a series of potential outcomes, which can be achieved over time if the institution embraces a shared vision and a strong will to move deliberately toward that vision. Recognizing that such outcomes can only be affirmed or refined through continuing university-wide conversations, we present them below and view them as areas of significant development and growth at WP:

Philosophical

- * Full alignment of faculty research with institutional core values
- * Broader definitions of research at the institutional and discipline-specific levels, consistent with the University's mission and goals

Cultural

- * Better balance and tighter connections across areas of teaching, research, and service
- * Greater clarity of expectations vis-à-vis meaning and measures of research productivity
- * Stronger research collaborations among faculty and students
- * A more strategic engagement with the community

Operational

- * Effective coordination of—and among—research activities across the University, without necessarily the risk of creating a central bureaucracy
- * Greater consistency in managerial decision-making related to advancing faculty scholarship and research
- * More robust and reliable support to advance research by faculty and students.



Based on our findings and in view of the above preferred outcomes, we offer one overarching recommendation and four high-level recommendations, in parallel, with a sampling of more specific suggestions. Our suggestions might prove helpful, even if adopted in a piecemeal fashion; however, we urge the University to take the macro-view and cleave the “research” crystal along axes of clarity, congruency, and connectedness—these three themes emanated from our data. Adopting an overarching, wholesome approach would add greater value and help guide the institution on a path toward a more vibrant research culture, consistent with its mission.

[Our analysis, which informed the findings, appears in section B4. We provide more comments and data tables in the appendices.]



Overarching Recommendation: We advise the leadership to engage key constituents in an inclusive, collaborative and “research-focused” strategic review and planning effort whose goal is to address as explicitly as possible a series of significant questions (presented in the table below) and reach common understanding around them.

Definitions, shared vision, process strategies, and outcomes that result from this important activity would include joint faculty statements from multiple (preferably, all) academic disciplines, as appropriate, about various aspects of student engagement in research, faculty scholarship, academic excellence, service to the community, and specific tactics for building a strong interface between teaching, research, and service.

(While we acknowledge the difficulty of mobilizing campus-wide conversations in the face of time constraints or limited interest in having debates about abstractions, we consider it significantly beneficial and time well spent for faculty and academic staff and managers to engage in such a long-term effort. It is our assessment that these dialogues would lead over time to greater convergence and clarity about how institutional values and priorities can operate in practice.)

Vis-à-vis the practice of research and research funding...		
How could greater CLARITY and shared understanding around research be achieved?	How could higher CONGRUENCY in decision-making be reached?	How could stronger CONNECTIONS be established and maintained?
<p>In terms of:</p> <ul style="list-style-type: none"> * Institutional values, vision, and priorities * Meaning of faculty research and student scholarship * Faculty work expectations * Anticipated outcomes of faculty research (student advancement, community development, creation of knowledge or new works) <p>... in statements, speeches, and actionable decisions.</p>	<p>When it comes to:</p> <ul style="list-style-type: none"> * Extent of internal support * Securing of external funds * Coordination of research * Measurement of faculty engagement and productivity * Recognition of success <p>...in relation to institutional beliefs and vision.</p>	<p>Within and between:</p> <ul style="list-style-type: none"> * Research, Teaching (learning), and Service Activities * Faculty research and student scholarship and learning * Faculty research within/ across disciplines, at WP or with peers beyond * Disciplinary interests of departments or colleges and institutional mission * Processes/systems for seeking and managing public and private grants.

Please note that, while our data and analysis were informed by the 7S Framework, the themes of clarity, congruence, and connectedness emerged as an organizing paradigm.

In line, or in conjunction with, the overarching recommendation, we offer four others to the University's academic management and faculty for consideration, along with a series of unprioritized operational suggestions in support of these recommendations.

❖ *Improve the coordination and stewardship of research across the University.*

A Sampling of Suggestions:

- Assign the oversight and coordination of internal research support and activities at the University to a single individual or entity, to be serving in the capacity of a one-stop service center or center for excellence.
- Engage the Deans' and Chair Councils in ongoing conversations about research and scholarship.
- Host university-wide ongoing forums and conversations about research as a process within the WP setting and as a collaborative activity among faculty and between faculty and students.
- Continue celebrating research success, from publications to research funding, in various university communications to elevate research visibility and generate greater internal institutional confidence.
- Expand the program for recognizing research accomplishments and production of creative works.

❖ *Be more attentive to research needs of junior faculty.*

A Sampling of Suggestions:

- Work to expand ART's funding criteria to give a greater weight to research potential and productivity.
- Identify and engage research and research funding mentors to work closely and intensively with junior faculty members to help them develop research agendas and write up grant-funding plans and proposals.
- Support more actively the development of research grant proposals, where pertinent, by developing incentives for seeking research funding.
- Incorporate more extensive research-development themes during orientation of new faculty and extend the orientation to include forums and build a natural support system for research throughout the year.

❖ *Work strategically to strengthen the culture of research funding.*

A Sampling of Suggestions:

- Enhance coordination and collaboration between OSP and the WP Foundation around the development of all competitive grant proposals, especially those relating to faculty or student research.

- Engage the WP Foundation in significantly raising support for research-related start-up and professional engagement funds for research-related travel and dissemination of research findings.
 - Develop and sustain a research-funding mentoring and coaching program, to be possibly administered through OSP. (This recommendation stems from our engagement in supporting faculty members in developing research grant proposals and is presented in a separate report.)
- ❖ *Endeavor to make the WP work environment more hospitable for research.*

A Sampling of Suggestions:

- Work to reposition academic departments as hubs of research and scholarship and important partners in improving the research environment
- Encourage the “protection” of non-tenured faculty members from too much service and advise them to be selective in terms of service activities.
- Recognize demonstrated regional or national service to the profession more readily in the promotion process.
- Encourage and recognize research that spills into the classroom, by giving it significant weight.
- Consider giving faculty a promotion in academic rank concurrently with when tenure is granted.
- Give special considerations to faculty “output” activities when submitting research proposals, working with students on research projects, engaging in interdisciplinary research, or partnering in community-oriented research.
- Expand measures of research productivity to account for:
 - Research proposal submissions, as well as funding and completion as a relatively important measure of research activity.
 - Engagement of students in research through formal coursework or summer activities.
- Seek to increase support for student-faculty research in the summer.
- Expand the “sabbatical” program in support of research.
- Revisit teaching schedules to make them less fragmented for those involved in research to allow for uninterrupted blocks of research immersion.

B4. Overview of Analysis & Observations

In what follows, we present highlights of data that informed our findings across six themes: core values, institutional priorities, research in support of students and/or community, coordination of research activities, research rewards, and financial support for research.



- ❖ ***On Research & Core Values.*** Students appear at the heart of each of five core institutional values, lead among them notions of *academic excellence* and *creating knowledge*. In line with the institutional public mission, service to the larger community is also affirmed. As stewards of research, members of the WP faculty would then need to operate within this value system and support both student learning and the larger community (more in Appendix VI-A).

Observations: Our data sample indicates with confidence that various constituents and entities within the institution embrace these principles. We note, however, that their interpretations seem to differ; the size and rules in the “playing field” of faculty research may not be consistently known or equally understood by members of the faculty and academic management.

Nor can we report that such beliefs are informing, fully or with clarity, the definition and support of research, or the measurement and recognition of research productivity:

- * Repeated references in interviews and survey responses (by faculty and academic managers) suggest that “valuing research is not a shared culture” and “it is difficult for faculty to serve *two masters*: research and teaching.”
- * One eloquent faculty response captures what appears to be the consensus: “research activities are very important to our university’s mission...but they are not a significant element of the mission *per se*” (more in Appendix VI-B).

This is seen as reality; the College Deans independently shared that they commonly “do what they can within their authority to help faculty manage this reality.”

Our data suggest that notions of *academic excellence* and *creating knowledge*, clarity of language notwithstanding, and the meaning of faculty research that they reflect, have not been broadly discussed, keeping them open to assumptions and interpretations.



- ❖ **On Research & Institutional Priorities.** The 2012-2022 Strategic Plan explicitly lists strategies and initiatives designed to advance faculty research in the context of enhancing the University's intellectual vitality and educational quality, among them: attracting outstanding full-time faculty; providing research incentives for faculty; engaging students in research; and seeking to gain strategic advantage in research (more in Appendix VI-C).

These are signs of institutional commitment to research. The message may not be very explicit or assertive; but it points to an intent to broaden and deepen, through vigorous faculty research, the impact on student success, community advancement, and contributions to academic disciplines.

Observations: There seems to be no consistent view among faculty members, between faculty members and deans, or even among academic managers regarding the reach of these stated strategies or how they translate into action (more in Appendix VI-C):

- * One in three of our survey respondents perceives faculty research to be an important factor in the setting of institutional policy and decision-making.
- * There is wide agreement that stated priorities remain important, but their implementation has not been highly methodical or consistent, timelines and funds have not been identified, nor have results been achieved to the extent desired.

We are unable to ascertain what the situation looked like prior to launching the Strategic Plan, whose development and significance were widely recognized and appreciated. Nevertheless, it is our view that progress has been made regarding recruitment of faculty with strong scholarly records and support for junior faculty. Areas where progress has received mixed reviews include extent of summer support, research recognition, and growth opportunities for creating knowledge.

Our observations affirm what the WP Research and Scholarship Council noted in its 2015 survey report about "significant discontent among faculty about the current state of research, scholarship, and creative expression." The nature of faculty discontent that we sense is with ambiguity, lack of specificity, and inconsistency around priority for research—a sense of disconnect between stated phrases and actions, as well as possible misalignment in terms of expectations. Our interpretation is that, while there are concerns about the current situation vis-à-vis research, there is also recognition of forward movement, albeit not in lockstep and not toward a pre-determined destination.



- ❖ ***On Desired Effects of Research.*** Active faculty research would ideally lead to:
(a) advancing student learning; (b) serving key needs of the community or humanity; or (c) deepening knowledge in one's discipline. While these ideals are commonly embraced; there is no shared perspective regarding which of these outcomes is valued by the institution, what connections may be sought among them, and to what levels of depth and intensity knowledge creation should be facilitated.

(a) Observations Regarding Research & Student Learning: Members of the faculty and administration independently echoed the importance of—and agreed that there was some support for—establishing strong connections between research and teaching.

Our data affirm that there has been serious activity and interest in: (a) bringing research into the classroom/ laboratory/studio; and (b) involving students, undergraduates in particular, in faculty research. The missing piece may be what such connections might look like within or across disciplines, by what standards they get measured, and what sort of added support is adequate to sustain them.

Research with—and by—undergraduates has been taking place across the campus:

- * Research is required in the Honors College and expected in select science programs.
- * The Independent Study program supports one-on-one faculty-student scholarship. Concerns have been raised about recent reductions in its scope.
- * Competitive funding for students during summer months is now available. Faculty members would like to see it more broadly promoted and funded.

In terms of opportunities for students to present their findings, longstanding programs continue to grow steadily: the University-wide Research & Scholarship Day (now called *EXPLORATIONS*) will be extended to two weeks this academic year; and the tri-state area Undergraduate Research Symposium for the Biological and Chemical Sciences will be hosted for the tenth consecutive year (data in Appendix VII).

A number of faculty interviewees and 70% of our survey respondents raised doubt about whether student engagement in research is considered an important element of classroom teaching. They recognize that mentoring students is a time-consuming and rarely proportional to the research output desired. This may depend on the discipline; but the process of engaging students in meaningful research will take time, has to be thought through and implemented collaboratively, and needs to be an integral part of the reward and support systems.

(b) Observations Regarding Research & Community Needs: The WP Faculty is a rich resource for the local, regional, or state communities. In its latest Economic Impact

Report (Impact, 2013), the University acknowledges that university research benefits the public at large (more in Appendix VIII).

The issue we note is that faculty research, when they serve the community, appears to be often driven by faculty interests rather than by community needs. There is room for both models; but community needs are not being identified systematically nor is responsiveness to them strategically planned. Efforts to sponsor research collaborations to help support needs of the community around themes, including immigration, education and Autism, public health, and the natural environment, are noted. It is not clear how far these initiatives have gone:

- * There is wide interest in faculty research supporting the wider community.
- * One in three faculty respondents to our survey thinks faculty research is not visible within the community.

Working closely with the community would require internal partnerships and departmental commitment to build disciplinary and cross-disciplinary competencies that go beyond curricular objectives.

(c) *Observations Regarding Research & Knowledge Advancement:* Faculty members recognize they are free to decide which research questions or works of art to pursue. The leadership appears supportive of a diversity of research interests and explorations that feed faculty's scholarly curiosity or creative drive. However, as a practical matter, the institution cannot equally fund or give equal priority to every research project, inquiry, or production (see notes in Appendix IX).

There appears to be more institutional affinity for research that involves students or is done in benefit of the community than for entirely independent scholarly work by faculty. This, we believe, may have led to tensions around inadequacy of research funding that stem primarily from mismatched expectations about which category of research can be centrally or internally funded, at what levels, and whether time for free inquiries can be carved out within the faculty's portfolio. This relates to philosophical questions that were voiced quite a few times: What is the true value of "pure" scholarly work for the institution? What kind of research is worthy of attention and support? And to what extent is the institution willing to nurture it?



- ❖ ***On Coordination of Research Activities.*** The administration of research or support programs appears to be scattered across the University. Different individuals or entities are involved in one or more ways, among them: Office of the Provost, the College Deans and Department Chairs, OSP, the Faculty Senate’s Research and Scholarship Council, and the local AFT, and University Honors College. For none of them is “research oversight” a big element of the portfolio nor is “building a vibrant research environment” an objective.

Observations: Among our survey respondents, 68% stated there was (a) no entity responsible for overseeing the overall research activity (with shared agreement among faculty and academic management); (b) no alignment among the various offices or departments; and (c) no effective communication among those responsible for research or research-related grant funding.

Clearly, no one “owns” research, just like no one “owns” teaching—and properly so on both counts. Research may rightfully belong within the academic disciplines, nurtured in the space of faculty-faculty or faculty-student interactions; however, we note lost potential in the absence of active, strategic research stewardship, advocacy, coordination, and communication on behalf of the university community, and in the presence of only limited connections or interactions among various internal programs funding research.

Having moved away from the graduate school approach, where research administration is commonly housed at peer institutions; the University may have inadvertently left a void. Another common model is to link research with sponsored programs—hence the standard name: Office of Research and Sponsored Programs. In similar fashion to the WP Center for Teaching Effectiveness, such entities involve faculty fellows and offer leadership as well as coordinated services and programming in support of research.



- ❖ ***On Motivating & Rewarding Research.*** In similar fashion to its sister institutions in the collective bargaining system, the University’s measurement and rewarding of faculty work are dictated by two separate agreements and practices: reappointment and tenure; and promotion to a higher rank.

Among WP full-time faculty, 94% are tenured or on tenure track—a sign of its commitment to ensuring the recruitment and retention of high-quality research-active faculty, in the midst of growing resistance to tenure in some higher educational settings.

It is well understood that WP full-time faculty members are expected to engage in three general categories of activities: teaching, research, and service—with teaching given

highest priority. Faculty responsibilities and productivity along these three dimensions set the stage for quality, scope, and breadth of research in which members of the faculty can engage, individually or collaboratively, with research colleagues or students.

The process of review consists of identifying outputs for each of the three buckets (teaching, research, service), with apparently limited flexibility for combination or integration. Nor is there special consideration given to engaging students, preparing and submitting grant proposals, or efforts to bring research into the classroom. The review appears much more skewed toward rewarding products or results research, with limited acknowledgment to the actual research processes and activities that benefit the institution in significant ways.

Observations: The College Deans lead the reappointment and tenure reviews and, to the extent there is leadership continuity, messages to faculty appear consistent. It is apparent to us that these messages are not necessarily consistent across colleges. Deans, however, are not as involved in the promotion review, which is a peer-reviewed university-wide process.

Academic departments play critical roles in both processes; as such, consistent views about the meaning and place of research productivity, especially in its relation to teaching and service within and across departments, become critically important.

Some bright spots and some concerns:

- * Promotion to a higher rank is detached from the granting of tenure, rather than being a parallel process, as seems to be the preference.
- * We learned of informal peer mentoring efforts in some academic departments. Peer guidance to navigate the faculty-work system is valuable; but even more so is the need for effective coaching around building sustainable research agendas. Junior faculty members do not feel very connected when it comes to research activities, partly because there may not be colleagues on campus with similar specialties with whom they can engage; but also because there does not yet appear to be a support system in place around research engagement (guiding them on how to seize research opportunities and overcome obstacles).
- * A small number of collaborations between WP faculty members and researchers at other institutions caught our attention. Collaborations within the University or with peers at sister institutions exist but are not common. We note that there is disagreement among our survey respondents about whether research collaborations at WP are actively encouraged. Only one in three faculty

respondents states this is the case; while 72% of responding academic managers see collaborations as being encouraged.

- * First-year faculty members participate in an orientation program whose research themes revolve around compliance issues and available resources and services—including grant funding. However, it does not seem to go far enough to engage faculty past the sessions at the semester's opening.
- * Our surveys and interviews affirm the shared concern that involvement in university service has commonly been the largest competitor of research and the traditional practice of course scheduling, with its related fragmentation of time. These concerns, affirmed by the R&SC report, would present a significant obstacle to research productivity.



- ❖ ***On Funding Support for Research.*** Internal and external sources of funding finance research, with a notable, heavier dependency by the faculty on the former. The University has invested significantly in internal support of faculty and student research. Considering trends in state funding and expensive capital projects, striking better balance between internal and external support funds and redefining boundaries between them are advisable strategies.

Observations on Internal Funding: WP has maintained and even grown a series of internal awards, granted with varying degrees of competitiveness, in support of research for faculty and students. However, only one in four respondents to our survey reports that “support programs are adequate for advancing research activities.” That there is support is acknowledged; the question posed is “how adequate.”

These awards cover the gamut from assigned time for research—reassigned from teaching—to funds for equipment, travel, or summer stipends for students or faculty. They are independently managed by various entities, as shown in Appendix XI, and are funded based on separate selection criteria.

Here is what was learned from our review regarding a select few institutional funds:

- * ***Reactions to the Assigned Release Time (ART) Program:*** ART represents the University’s largest campus-wide financial commitment to research. Faculty members in their first two years at the University recognize the value of an automatic reduction in their teaching assignment to build and launch a research agenda.

From the management’s point of view, this is a significant commitment of financial resources to support research, with 214 funded in 2015-2016, in addition to faculty

members in their first two years. The perspective of some is that this is considered an obligated operating cost, spent at the expense of teaching, rather than an investment in vitalizing the scholarly environment.

The faculty appears to embrace ART as an “essential driver of research, scholarship, and creative expression at WP” [R&SC, 2015]. Concerns we heard: ART awards are low-threshold grants, not treated as seed funds, heavy-loaded on the application side, with limited consideration for prior research productivity or follow-up.

- * *Reactions to the Faculty Research and Travel Incentives (RTI) Program:* While the Program is well received as a mechanism to “support full-time faculty travel related to research,” we were informed that the limiting funding cap exerts major accommodation constraints on faculty members’ ability to network with peers. Some colleges disseminate their own funds to complement this program and faculty members often have to make their rounds to finance their research dissemination.
- * *Reactions to the Summer Undergraduate Research Program (SURP):* This program has possibly fueled a higher level of engagement by students in research. Faculty members embrace it, especially in departments with traditions of undergraduate research; but they recognize the time-consuming nature of mentoring student research. For some, this is accepted as the “price of success.”
- * *Reactions to College-based Funding:* Academic colleges provide their own competitive funds to summer research, be they start-up funds for incoming faculty or summer stipends—the latter appear to be in demand, considering that the faculty is on 10-month employment contracts. These programs are well-received and providing good fundraising campaign themes for the institution, if the overall “research” program is to be seen as a vehicle to advance student learning and the community.

Observations on External Funding: Two independently operating entities assist faculty in competing for external funding: OSP and the WP Foundation. It was relayed to us that faculty researchers have to engage with both units instead of one when looking for research funding. Steps have been taken to establish stronger linkages between them and the collaboration could be enhanced in terms of joint planning, closer communication, and the process of competitively seeking and managing private grants for research. What ultimately matters for the faculty and institution is the outcome that funding is secured and much less which entity was responsible for securing it.

- * *Reactions to Present Support for Public Grant-Seeking:* There is generally high satisfaction with the engagement of OSP with faculty. OSP administers the IRB process, grants compliance, and Research & Scholarship Day/Explorations. The unit

receives counsel from an advisory group of faculty and administrators and has established strong relations with faculty and academic managers; its director is an ex-officio member of the Research and Scholarship Council.

When it comes to research, OSP is often in a reactive mode, supporting faculty members who initiate conversations about research in their efforts to submit grant applications. In most cases, owing to its charge and staffing model, OSP provides support to help applicants meet proposal guidelines set by the funding agency, establish and manage the planning timeline, prepare the budgets in collaboration with the faculty, and shepherd the internal review process through to submission.

- ✓ Faculty members seem to want enhanced support and increased attention in the planning and development of the proposals.
- ✓ Fewer than 20% of our survey respondents perceive that there is adequate staff dedicated to support faculty research and research-related grant activity.
- ✓ Over 63% acknowledge there are opportunities at the University for enhancing research-funding skills. In fact, we have worked intensively over the last nine months, and closely with OSP on a program conceptualized by its director, to provide four faculty members with counsel, coaching, and assistance in the development of research applications (by now all submitted applications to two private and two public sources).

Faculty researchers in the sciences in particular have been active in submitting competitive federal grant applications. There is a keen interest in increasing the rate of success for research grants, as well as the number of submissions.



B4. Closing Comments & Macro-view

For WP faculty members to be scholarly active in research and successfully produce meaningful results, they require (a) dedicated blocks of time; (b) opportunities to stay connected within their field of training and/or research; (c) adequate funding, from internal and external sources; and (d) a system that sets clear expectations and defines transparent ways for measuring and recognizing success. The institutional plan does not reach this level of tactical action, which may have been left for the colleges and departments to explore. Gone unaddressed, the issues listed above can possibly lead to confusion, growing tension, unfulfilled objectives, and unrealized visions.

As our findings affirm, faculty involved in research need to achieve three milestones:

1. Staying informed about directions and developments in their academic discipline—both generally and, more closely, within their specialty.
2. Contributing at certain levels, based on academic readiness and personal choice, in support of community needs or to growth in their own field of training (or feeding their own curiosity, or fascination with beauty and truth)—through additions to the collective knowledge, dialogue, creative works, applications in the field, and bridges across other fields.
3. Synthesizing and sharing pertinent ideas, works, or information from their field or profession directly with students or peers, experientially or through existing delivery methods, as a way of introduction, to expand their view, or to guide them as they join or consider joining this professional community.

The latter activity focuses on student learning as an outcome and clearly depends on the first two. All three activities and, particularly, their combination require an institutional environment in which the love for ideas and passion for creating, as well as the diffusion of this enthusiasm and its outcomes, are constantly fueled. The pursuit of academic excellence is what takes place when such an environment is built and sustained by all units and stakeholders at the university. Of course, the actual challenge lies in the acts of specifying and agreeing as a community on the details of a blueprint design for such an environment, as institutions operating under the banner of *academic excellence* have come to realize.

One way to manage this very challenge of supporting knowledge creation, in ways that align with the mission of WP, would be to establish, and continually maintain, stronger linkages between faculty scholarship and student learning.

Many institutions that share WP's institutional values of academic excellence and student engagement have made strides in building strong bridges between the teaching and research activities—treating the separation as a false dichotomy, working to establish strong

connections between the two activities, and putting policies and programs in place consistent with this view. Research using National Survey of Student Engagement and Faculty Survey of Student Engagement data showed positive relations between active inquiry by faculty and student engagement in learning (Umbach, 2005; Kuh, 2007).

Research has a way to spill over into the teaching classroom, laboratory, or studio if done with the anticipated outcome of advancing the learning and teaching environment.

As stated earlier, the growth of the teacher-scholar model (ACLS, 2007) and the practice of undergraduate research, the latter notably active at WP, have repeatedly affirmed that institutional focus on student-centered development can be maintained through an institutional commitment to building an active research environment (Hensel, 2012).

Irrespective of the extent to which liberal education lies at the center of a university's mission, there may be little disagreement that the learning outcomes for all undergraduates is to "master inquiry and innovation" (AAC&U, 2007), an outcome that requires a research-active and engaged faculty.

By paying greater attention to such "research-management qualities" at the macro-level, it is our opinion that the institution would take significant steps toward developing the vigorous scholarly climate commonly desired by members of the community.

The University has a good research foundation to build upon. The potential for enhancing and expanding the overall WP research experience for the benefit of students, community, and human knowledge is vastly promising.

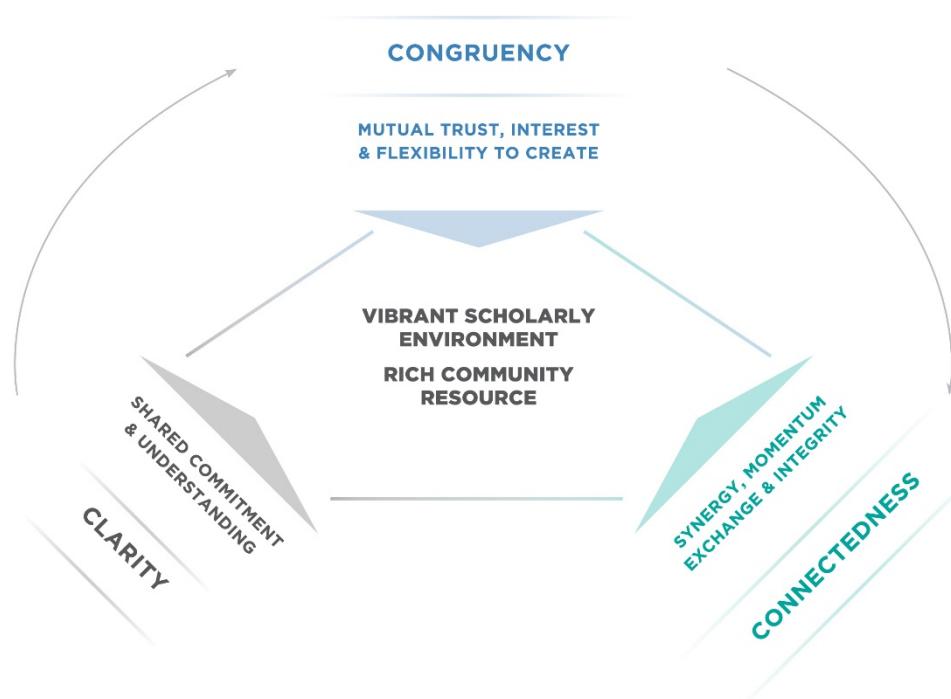


We end this report by presenting a conceptual design, realized *a posteriori*, for a research vibrant environment, consonant with the University's values.

As captured in our next diagram, the preferred state of research management is one in which the University benefits from:

- * Clarity of values, priorities, and expectations would lead to shared commitment and understanding among faculty, students, and managers.
- * Congruency in decision-making would help establish mutual trust, sustained interest, and a metaphorical space for faculty to engage in the act of creating.
- * The ability to make connections rather than separations among various aspects of research and various units involved in supporting it would likely bring about synergy, integrity, and an enthusiastic sense of movement. In turn, an even more vibrant scholarly atmosphere would ensue and the University could become an even richer resource for its community. (For an elaborate statement, see Appendix XIII.)

As stated earlier in the report, while the 7S-Framework guided our data gathering and analysis, the three themes of clarity, congruency, and connectedness appeared across all seven pillars in the framework as an organizing paradigm for the research culture.



C. SUPPORTING RESOURCES

Appendix I. Works Cited and Reviewed

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Appendix X. Notes on WP Policy Regarding Academic Centers

Appendix XI. Notes on WP Internal Funding Awards

Appendix XII. Notes on Faculty Roles & Responsibilities

Appendix XIII. Macro-Framework for Excellence in Managing Research

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Appendix II. Sources of Data

Between the end of February 2015 through the first week of March 2016, we gathered information about research and research funding from various sources:

- * Extensive discussions about research practices with 35 members of the university community, individually and/or in small groups (17 faculty members, including two academic chairs; members of the Research and Scholarship Council; the five College Deans and two Associate Deans; OSP staff, as well as the Provost and Senior Vice President; and one of the Associate Provosts. (Names are listed in Appendix II-A.)
- * Casual conversations with several WP students presenting research posters at the Spring 2015 Research & Scholarship Day.
- * An online survey, referred to research asset assessment survey, sent to all individuals with whom we had extensive conversations capturing their perceptions regarding various aspects of the research environment (Appendix II-B). There were 22 full responses, 17 from faculty members and five from members of the management staff or executive team.
- * Self-assessment regarding individual readiness for grant-funding, completed by 12 faculty members who were engaged in a separate mentoring program, which we offered, and which involved preparation and submission of four research-focused grant applications to two federal agencies, a private foundation, and a grant program managed by a professional society. (This program, the scope of our involvement, and related analysis are described in a separate report.)
- * Close examination of a large number of documents, including: the University's Strategic Plan, Middle States self-study report, policies on faculty tenure and promotion, report of the faculty survey by the Research & Scholarship Council Survey, grant funding and ART reports. (See Appendix II-C for full list).
- * Overview of national trends, promising practices, and research studies on faculty scholarship and student learning at peer predominantly undergraduate institutions.

Appendix II-A. Members of the WP Community Interviewed

Throughout the review process, we held extensive conversations with, and conducted surveys among: 17 faculty members, including two academic chairs; members of the Research & Scholarship Council, including a librarian; five college deans and two associate deans; OSP staff; the Provost and Senior Vice President; and one of the Associate Provosts.

Focus Group

- * Elizabeth Haines, Brenda Marshall, Carrie Masia, Daria Napierkowski, David Snyder and Pam Theus; Research Funding Mentorship Program's Introductory Session
- * Jorge Arevalo and David Gilley, Then-Co-Chairs, Research & Scholarship Council
- * David Gilley, Lucy McMahon, and Pamela Theus, Lisa Warner; members of the Research and Scholarship Council (R&SC)
Bernadette Tiernen, School of Continuing Education (and member of OSP Advisory Council) with R&SC
- * Lourdes Bastas (no longer at WP), Associate Provost Steve Hahn, Maureen Peters, and Director Martin Williams; multiple times together and in smaller groups, representing the Office of Sponsored Programs

Individual conversations

Faculty

- * Banu Chauhan, Chemistry (Chair)
- * David Gilley, Research & Scholarship Council
- * Jay Foley, Chemistry
- * Mihaela Jitianu, Chemistry
- * Kate Makarec, Psychology (Then-Chair)
- * Emmanuel Onaivi, Biology
- * Holly Seplocha, Education
- * Yu Yan, Communication Disorders (no longer at WP)

Administration

- * Candace Burns, Dean, Education
- * Dorothy Feola, Associate Dean, Education (with Dean Moore)
- * Steve Hahn, Associate Provost
- * Loretta McLaughlin-Vinier, Associate Dean, Arts & Communication (with Dean Burns)
- * Daryl Moore, Dean, Arts & Communication
- * Kara Rabbitt, Dean, Humanities & Social Sciences
- * Warren Sandmann, Provost & Senior Vice President
- * Siamak Shojai, Dean, Business
- * Martin Williams, Director, Office of Research & Sponsored Programs
- * Kenneth Wolf, Dean, Science & Health

Appendix II-B. Asset Assessment, based on the 7S Framework

Adapting the McKinsey 7S Framework of organizational excellence to a research culture, we identified criteria under each element to guide our assessment.

STRATEGY is clearly articulated, takes a long-term view, and specifically targets the limited number of things an institution will do exceedingly well in order to achieve its mission.

- Research activities are considered a significant element of the University's mission.
- Support programs are in place adequate for advancing research activities.
- Potential research achievement is considered a significant factor in selecting faculty members.
- Research priorities are reflected in university/college/departmental budgets.

SHARED LEADERSHIP represents various unit leaders taking initiative with a proactive commitment to promoting the value of research at many levels.

- University-wide.
- Through the five colleges.
- Through academic departments.
- Through OSP.

STRUCTURE is the way in which work is divided, communicated, and coordinated, including who is accountable to whom and for what specific functions.

- There is an entity responsible for overseeing the overall research activity.
- All of the essential research and research-related grant functions are effectively performed.
- There is effective communications between those responsible for related grant functions.
- There is alignment between various offices/departments engaged (colleges, academic affairs, foundation, OSP).

SYSTEMS are processes, procedures and policies that guide how decisions are made and work is accomplished.

- Research is an important factor in setting policy and decision-making.
- Promotion and tenure systems reward faculty supervision of student engagement in research.

- Resources supporting dissemination of research findings are adequate.
- Faculty teaching course assignments take research productivity into account.

SUPPORT refers to the capacity (skills) of people (staff) who are recruited, trained, motivated, and rewarded to ensure that an organization's strategy is successfully achieved.

- There is adequate staff dedicated to supporting faculty research and research-related grant activity.
- There are opportunities to help faculty members enhance their research-funding skills.
- Research collaborations at WP are actively encouraged.
- Research is considered a viable theme in planning faculty development programs.

SHARED VALUES are the norms and standards that form and inform an organization's culture and guide people's behavior and actions.

- WP has a shared culture that values research and research-related grant activities.
- Research activities are acknowledged, supported, appreciated, or rewarded.
- Student engagement in research is considered an important part of classroom learning.
- Research by WP faculty is sufficiently visible in the surrounding community.

CULTURE OF SCHOLARSHIP – Supportive elements of a culture of scholarship and research

At the Macro Level

- Cohesive communication patterns amongst faculty
- Adequate resources
- Environment that encourages faculty interaction

At the Micro Level

- Research support past the initial few years based on prior research productivity
- Traditional classroom courses configured to incorporate research elements
- Peer research mentoring among faculty
- Incentives for integrating processes of research, service, and teaching activities
- Department chairs serving as strong advocates for professional engagement

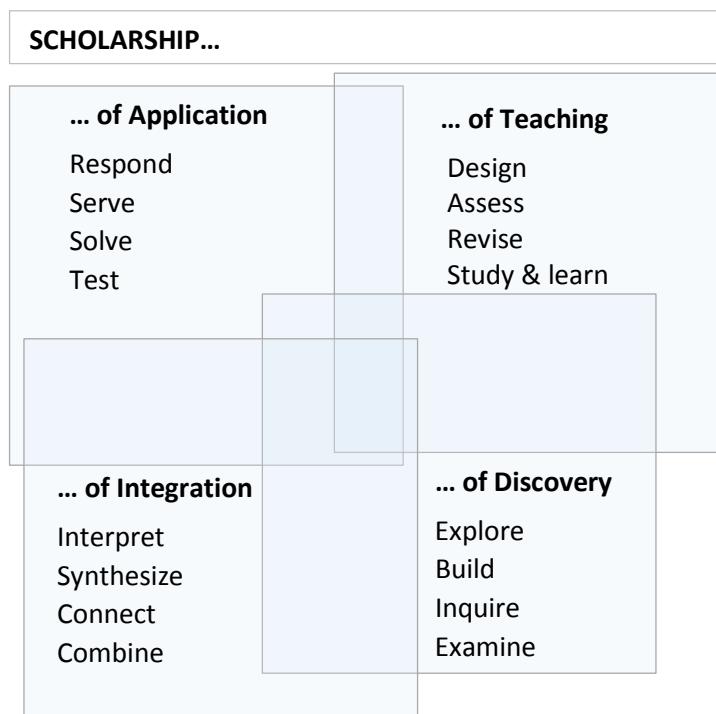
Appendix II-C. University Resources Reviewed & Consulted

We reviewed quite a few university documents, in print or online. Among them:

- * University's 2012-2022 Strategic Plan and colleges' plans posted online
- * Faculty Resource Guide – Fall 2015
- * ART Agreement (with Articles 1 and 2, Final Report Guidelines)
<http://cms.WPnj.edu/faculty-and-staff/ART-Agreement.pdf> (Accessed 3/15/15)
- * Faculty Research and Travel Incentive Program
- * Faculty Retention and Promotion – Clarified Criteria (Appendix III)
Retrieved on 1/15/16 from <http://www.WPnj.edu/dotAsset/288773.pdf>
- * 2014 Survey of Faculty Needs for Research, Scholarship and Creative Expression;
Report the Research & Scholarship Council (and minutes of R&S Council's meetings
since Fall 2014, accessed via the Faculty Senate's page: <http://WPnj.edu/senate/>)
- * College of Science and Health's Center for Research Faculty Summer Research Program
(and list of technical reports) -
<http://www.WPnj.edu/cosh/cfr/CfR+fac+guide++Fall+2015.pdf>
- * Faculty and Professional Staff Handbook, with special attention to policies and
procedures dealing with faculty retention and promotion
- * AFT Local 1796 Website and links therein: <http://www.aft-local-1796.org/> (Accessed
4/20/15)
- * Research & Scholarship Day Programs (2010 through 2015).
Accessed on 4/21/2015 at <http://www.WPnj.edu/osp/explorations.dot>
- * Honors Week Student Research Programs (2010 through 2015)
Accessed on 2/15/2016 at <http://www.WPnj.edu/honors-program/studentresearch.dot>
- * Annual Undergraduate Research Symposium in the Biological and Chemical Sciences
Accessed on 2/15/2016 at <http://www.WPnj.edu/cosh/departments/biology/urs/>
- * University Economic Impact Report – March 2013
Retrieved on 2/25/2016 from
<http://www.WPnj.edu/community/assets/EconomicImpact72.pdf>
- * University Fact Book 2015-2016.
Accessed on 2/10/2016 at <http://www.WPnj.edu/ira/FACTBOOKS/FB15/Index.dot>
- * Guidelines for Academic Centers & Institutes (no date). Accessed on 11/15/2015 at
<http://www.WPnj.edu/dotAsset/309dc486-d2fb-43ce-9914-dd644e849288.pdf>

Appendix III. The Boyer Scholarship Model

The Boyer scholarship model suggests four categories of engagement, as displayed in the diagram below (Boyer, 1990).



As our four text boxes above attempt to suggest visually, there is significant overlap among the four areas of engagement. Active faculty scholars are commonly involved in more than one chosen area of scholarship. No matter the type of engagement or overlap, the true scholar, “working at the edge of the unknown, invokes the skillful and yet creative application of the methods in his or her discipline to answer the call of the inquiry” [Pardie, 2011].

General assessment criteria, proposed as a follow-up to Boyer’s work (Glassick, 1997), have been developed and adopted by a number of institutions around this model to ensure quality and rigor. They are generally consistent with the WP evaluation approach; however, they place on an equal footing diverse forms of scholarship.

ASSESSMENT CRITERIA

Goals for the work

Adequate preparation in terms of training and knowledge in the field

Appropriate methods or approach

Results of value or significance

Reflective evaluation or critique of the work’s validity and quality

Appendix IV – Notes on Undergraduate Research

- A. Criteria for Course-Based Undergraduate Research
- B. The SECI Cycle of Knowledge Transfer
- C. Assessment of Undergraduate Research
- D. Characteristics of Excellence in Undergraduate Research

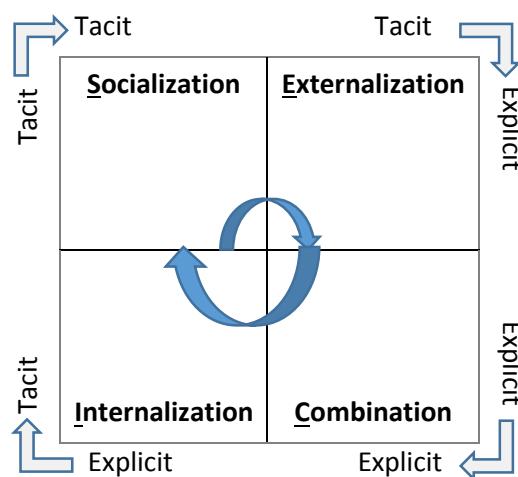
IV-A. Criteria for Course-Based Undergraduate Research

Criteria in the table below were adopted from the NSF-funded work of Lisa Auchincloss et al. (2012). Even though this was an assessment of courses in the biological sciences, the concept is transferrable with proper modification to other disciplines.

Engagement in the use of ***multiple practices*** established in the field
Discovery of new knowledge or insights (through rigorous, evidence-based approaches)
Broad relevance or importance of the work
Collaboration—toward greater intellectual or communication skills and encouraging meta-cognition
Iteration: design or interpret and repeat or revise

IV-B. The SECI Cycle of Knowledge Transfer

For the faculty-student engagement to be fruitful, it has to be deliberate, persistent, and stretching beyond simple transfer of information. After all, knowledge transfer is not a simple exchange of goods. Knowledge management research has identified four modes or patterns for dynamically creating and exchanging knowledge—where knowledge can be defined as tacit (informal, in one's mind) or explicit (formal, documented): Tacit to tacit (mentoring), tacit to explicit (communicating), explicit to explicit (synthesizing), explicit to tacit (internalizing) [Nonaka, 1996].



The act of transferring faculty learning to student learning starts with close, intellectual faculty-student interactions in any number of settings and evolves into a full spiral spanning all four quadrants in the model (known as the SECI Model). For more than two decades, and consistent with the shared values of student engagement, such interactions have been facilitated at WP by encouraging student-centered teaching and undergraduate research, scholarship, and creative expression, which has continued to expand over time.

IV-C. Undergraduate Research Environmental Scan

A simple, informal environmental scan of undergraduate research was developed and used at a number of institutions (Hakim, 1996). The survey questions or statements may differ, based on the institution.

Given fifteen statements, respondents are asked to complete the table below. For each statement, they answer three questions:

- ❖ Does this statement accurately portray the current state at our institution?
Yes (Readiness Index: +1), No (RI: -1), or Not sure (RI: 0)
 - ❖ Do you envision this occurrence as a desirable outcome at your institution?
Yes (Vision Index: +1), No (VI: -1), or Not sure (VI: 0)
 - ❖ Do you consider this scenario to be compatible with your core institutional values?
Yes (Compatibility Index: +1), No (CI: -1), Not sure (CI: 0)
1. Advancing undergraduate research is stated as a priority of one or more of the top academic leaders.
 2. The expression “undergraduate research,” or an equivalent reference that means supervised participation in original discovery or creation, is mentioned explicitly in the institution’s mission statement, strategic plan, or undergraduate education.
 3. Opportunities are available at the institution or through the institution for any undergraduate student to be involved before graduation in serious, original research/scholarship or creative activity.
 4. Senior projects or theses are required by one or more undergraduate major programs.
 5. Scholarships or summer monies are available for students to be engaged in undergraduate research.
 6. The institution sponsors and/or rewards students who present papers at professional meetings or exhibits, or who publish works in professional journals.
 7. The activity of supervising undergraduate research counts positively toward faculty’s workload, merit pay, promotion and/or tenure.
 8. Candidates for new faculty positions are asked to describe how they plan to engage undergraduate students in research projects.

9. The institution expects members of the faculty to publish their scholarship regularly in refereed journals.
10. Faculty members have applied for, or received, grants in support of research projects that involve students.
11. The institution offers its faculty start-up funds, matching funds, internal grants and/or seed money to help build research programs and attract external funding.
12. Departments where students work closely with faculty on original discovery and creative activity are rewarded through budget increases, well-maintained facilities, or other concrete ways.
13. The University or College holds a student symposium, publishes a student journal, and/or sponsors student travel to conferences to highlight undergraduate research activities.
14. The institution has an office that administers undergraduate research activities at the departmental or institutional level.
15. There is a program in place to evaluate the effectiveness of undergraduate research at the departmental or institutional level.

Statement	Readiness Index	Vision Index	Compatibility Index
Use =1, -1 or 0 for Index: Yes (+1), No (-1), or Not sure (0)			
1.			
.....			
15.			
TOTAL			

Results can be plotted on three-dimensional axes (or 3 pairs of axes), or total them in tables: Readiness Index vs. Vision Index vs. Compatibility Index. Sort them by their positive or negative signs. One of eight possibilities applies.

IV-D. Characteristics of Excellence in Undergraduate Research

In order to inspire the development of an Undergraduate Research Culture, the Council on Undergraduate sponsored the development of institutional characteristics of excellence, referred to as COEUR. The process, which was done with broad input from hundreds of practitioners across diverse types of institutions, led to 12 characteristics of excellence, compiled and organized by R.S. Rowlet, L. Blockus, and S. Larson (see Hensel, 2012).

For each, the institution would:

- * Rate it based on how many of its criteria are met (many, some or few).
- * Identify a marker of excellence or improvement and how to measure it.
- * Determine what evidence it needs for a given component to be considered an institutional priority or what actions are needed to achieve it.

Characteristic of Excellence – Council on Undergraduate Research | www.cur.org**1. Recognition**

- * Promotion and tenure guidelines
- * Campus awards

2. Campus mission and culture

- * Institutional commitment
- * Scholarly faculty
- * Faculty commitment
- * Broad disciplinary participation
- * Accessible opportunities for undergraduates
- * Integration with other engaging and high-impact opportunities

3. Administrative support

- * Internal budgetary support
- * Startup funding
- * Faculty load credit for supervising undergraduate research
- * Reassigned time for research-related tasks
- * UR administrative support including UR program office, space, support
- * Travel and other student funding
- * Research grants office

4. Research infrastructure

- * Space
- * Instrumentation and equipment
- * Library resources
- * Computational resources
- * Other research resources
- * Research oversight structures
- * Support, administrative, and technical staff

5. Professional development opportunities

- * Research leaves
- * Research training opportunities
- * Non-research-related professional development
- * Mentorship training for faculty, graduate students, and postdocs

6. Recognition

- * Promotion and tenure guidelines
- * Salary review
- * Campus awards
- * Prominent publicity for research accomplishments

7. External funding

- * Faculty research funding
- * Institutional funding for research

8. Dissemination

- * Peer-reviewed publication, exhibition, or performance
- * Presentation at professional meetings
- * Student research conferences
- * On-campus symposia

Characteristic of Excellence – Council on Undergraduate Research | www.cur.org

9. Student-centered issues

- * Opportunities for early, sustained involvement
- * Establishing and communicating expectations
- * Developmentally appropriate expectations and intellectual ownership
- * Community of scholars
- * Peer mentoring, teamwork opportunities
- * Expanding and integrating student research opportunities with other engaging experiences

10. Curriculum

- * Research-supportive curricula: content, scheduling, integrating teaching and research
- * Additional training opportunities and workshops
- * Student course credit for research
- * Requiring undergraduate research

11. Summer research program

- * Research-supportive teaching calendar
- * Faculty compensation
- * Student compensation
- * Student housing and access to facilities and student services
- * Student programming
- * Summer research symposia
- * Coordination among multiple programs
- * Hosting visiting students

12. Assessment activities

- * Assessment of student learning
- * Program assessment and evaluation

Appendix V. Notes on the Notion of Holistic Department

The concept of a holistic department depends closely on the department's willingness to build and operate as a "community of scholars."

Moving toward such an objective calls for: an atmosphere of critical inquiry among faculty about what they do; a common understanding of faculty work that include mutual trust and the sharing of work plans; differentiated faculty work (flexible, responsive, optimized for impact); and shared understanding that the department add "real" value to the institution (Wergin, 2004).

Basic tenets of a holistic department (Weil, 2015)—list captured almost verbatim:

- * Department is seen as an organic whole.
- * Department works as a team to ensure student-learning objectives and a vital scholarly environment.
- * Department is committed to shared governance and shared responsibility.
- * Department supports and rewards faculty for doing differentiated work.
- * Department makes an effort to respond to changes in lifestyles or career paths of its faculty members.
- * Faculty work plans are negotiated and made available to all to build community, trust and transparency.
- * Department recruits new faculty members for curricular support and for a variety of other academic experiences.
- * Department is committed to a culture of critical inquiry, faculty mentoring, and share obligations.

Process-oriented Evaluation versus Product-oriented Evaluation

The distinction between evaluations that focus only on faculty-focused outcomes and evaluations that include students and community in such outcomes is captured below, in the framework of student research (Malachowski, 2012). A simple extrapolation can bring in community-leaning research. Such distinctions are but first steps in the effort to build holistic academic departments.

PRODUCT ORIENTATION	PROCESS ORIENTATION
Faculty are rewarded for publication or production record. There is a diminished relationship between students and faculty. Students interfere with the faculty's "real" work. Research is counter to the "student-centered" mission of the institution.	Faculty are rewarded for working with students. Students are still viewed as partners in the intellectual process. Students contribute to the faculty's research. Students remain central to faculty lives. Research supports the "student-centered" mission of the institution.

Appendix VI –

- E. More on Core Values**
- F. More data on Mission**
- G. More data on progress regarding strategic priorities**

VI-A. Notes on Core Values

- * “Students are our reason for being” is stated as a key principle, intended to drive institutional development and shape organizational culture.
- * The institution “seeks to model and impart to students the highest standards of knowledge [and] inquiry...” and “strives to expand the boundaries of knowledge and creative expression in and outside of the classroom,” encouraging innovative solutions to social, economic, ecological, and ethical issues regionally and beyond.
- * Students, faculty, staff, and alumni are challenged to “recognize their responsibility to improve the world around them, starting locally and expanding globally” and offer their “critical expertise” and apply their “scholarship to address public needs” of New Jersey and the region.

VI-B. Notes about views of consistency between research and mission

- * More than two thirds of 22 respondents to our survey see research activities as a significant element of the University’s mission (with no statistical difference between faculty and management respondents). Others either regard it as an element of the mission, but not a significant element; or are ambivalent about its rightful place. In the view of one faculty member: “there is no broad buy-in to the research mission of the University; to some, research activities seem to be in conflict or incompatible with its pedagogical mission.”
- * Perceptions go beyond interpreting language in the statement of the University’s mission, which places scholarship and research at the service of students’ heightened intellect and “expanded awareness of what they can accomplish.”

VI-C. Notes about perceptions regarding consistency between current research climate and institutional priorities

The Strategic Plan identified the following priorities in support of the research:

- ❖ Attracting outstanding full-time faculty
- ❖ Providing faculty with professional growth opportunities to create knowledge, among other professional contributions
- ❖ Strengthening the research culture through improved research incentives for both junior and senior faculty
- ❖ Recognizing published research and creative works

- ❖ Providing summer support for creating knowledge
- ❖ Exploring new ways to engage undergraduate and graduate students in research
- ❖ Seeking to gain for the University a strategic advantage in research

We observe that there has been concrete progress in certain areas:

- * Classes of faculty with strong scholarly records or high scholarly potential have consistently joined the University. A sample review of faculty reports, combined with our conversations, reveals that faculty members are bringing to the institution respectable research records, post-doctoral experiences, and, in limited cases, prior grant-funding success. The University boasts of growing numbers of Fulbright and Guggenheim Fellowships and competitive research and applied community service grants received by faculty, the latter with the help of the Office of Sponsored Programs. However, there is an untapped potential, especially with the right infrastructure in place, for much higher rate of funding success and level of funding.
- * Support is available for junior faculty members, in particular, and is at least sustained through a family of programs for tenured faculty. A stronger research culture is expected as a result, but not known at this time. We should note, however, that 65% and 56% among 228 faculty respondents to the 2014 Survey by the WP Research and Scholarship Council did not consider that incentives for scholarship to be adequate for senior and junior faculty respectively [R&SC Report, 2015].
- * Summer support for research is competitively available in certain colleges for faculty and across the campus for students. Here too, two thirds of the faculty responding to the R&SC survey did not consider the summer support available. In our opinion, the disagreement may be about the level of available support.
- * Faculty publications or creative productions are now receiving growing public recognition. Half of the R&SC survey respondents disagree with this observation; here again, it may be a difference in expectations of definition or scale of recognition.
- * Three among every four R&SC survey respondents do not see such a “strategic advantage for research at this point.” The survey further suggests that faculty members desire greater engagement by students in their research. This is a positive sign in the sense that, financial support aside, it is faculty’s own scholarly enthusiasm and interest that is a key factor in recruiting student researchers.
- * At least two colleges (Science and Health; and Humanities and Social Sciences) have set as strategic goals the involvement of undergraduates in scholarly research, which allude to the need for active faculty research agendas within various disciplines without specifying how these will be encouraged or supported.
- * In both colleges, most faculty members seem to agree that there is an active research culture at WP (68% and 72% of respondents to the R&SC survey somewhat or

strongly agreeing respectively), with some differences between tenured and untenured faculty.

From our interviews and survey data:

- * One in three of our survey respondents perceives faculty research as an important factor in the setting of institutional policy and decision-making; the difference in perception among faculty and management is intriguing: seven among 15 faculty respondents concurred; compared to only one among seven academic managers.
- * Interviewees, academic managers in particular, confirm that the stated strategies listed above remain important priorities for the institution. It is not known to us, however, how or when they will be implemented or funded.
- * Stated research priorities, according to survey respondents, are not explicitly reflected in university budgets (three in four faculty members share this perspective; five among seven academic managers).
- * There is wide agreement that implementation of strategies has not been highly methodical or consistent, nor have results been achieved to the extent desired.

Not surprisingly, rolling these strategies out takes time; so does the process of achieving outcomes and shaping common perceptions that align with reality.

Research Note: It is not clear what is actually meant by “strategic advantage in research” and how it will be achieved.

Appendix VII – Images of Undergraduate Research Engagement @ WP

Here are highlights of undergraduate research activities at WP:

- * Student research is a requirement in the Honors College; honors students develop a final thesis or project, which they present during Honors Week—with more than 60 students sharing the productions, compositions or results of their research for each of the last three years (see Table VII-A).
- * In a number of academic disciplines, especially within natural and social sciences, communications and public health programs, students are either required or encouraged to participate in research as part of select courses or alongside faculty members. Such student-faculty scholarly collaborations have been taking place with more frequency and students appear to be recruited in earlier years of enrollment.
- * Independent Study credits have traditionally been used as another mechanism for engaging students in one-on-one research, making it possible for them to incorporate research into their path toward graduation. How faculty members are compensated for these efforts, which may require time-intensive mentoring, appears to be an area for further discussion among faculty and academic management. There have been recent concerns, shared with us, that the reduction in the available number of independent study opportunities may be problematic and not reflective of university commitment to student engagement in research. Here again, we recognize the importance of addressing the issue of independent study; but doing so in isolation of other elements of the research environment would not be optimal.
- * The University has initiated a program to fund student research and research travel, which faculty members perceive, based on our interview and the R&SC report, has not been widely promoted and whose expansion they have advocated. Suggestions have been voiced that increased engagement of undergraduates and graduate students in research is desired and would require support. In our view, what is needed is an approach that balances quality with quantity, allowing for diversity of approaches and giving expanded faculty scholarly flexibility in the process.
- * For nine years running, the University has hosted a large Undergraduate Research Symposium in the Biological and Chemical Sciences, in which students from nearly 30 universities in the tri-state area have participated. The 2016 event will have presentations and posters under seven disciplinary subjects.
- * An annual gathering of student and faculty researchers has been taking place on campus for several years. Posters displaying student research are showcased and presented by students and breakout sessions are organized for faculty (by faculty or guest speakers) around research content and process issues of shared interest (Table VII-B). The Research & Scholarship Day, overseen by the Research and Scholarship

Council and administered by the Office of Sponsored Programs, is being rebranded as EXPLORATIONS and expanded for 2016 to be a week-long event, across campus and across disciplines, and coordinated closely with Honors Week.

Table VII-A. Honors Research		
Research Presentations at Honors Week		
Year	# of Presenters	# of Disciplines
2015	63	11
2014	66	11
2013	72	11
2012	56	10
2011	32	10
2010	21	10

Table VII-C. Research & Scholarship Day			
Year	Number of Student Posters	Number of Presentations(*)	Sponsored Presentations/Posters(**)
2010	16	33	39
2011	20	44	48
2012	22	28	47
2013	27	36	61
2014	33	38	62
2015	31	15	52
2016	68	-	104

(*) Not a part of a sponsored session or poster
 (**) In sponsored sessions

Examples above illustrate existing vehicles for student scholarly engagement and a snapshot of outputs. Implicit in the list is the potential for student learning to be harnessed with greater institutional coordination and a serious effort to establish stronger links between faculty research and student scholarship. There is prevalent doubt, however, about whether student engagement in research is considered an important element of classroom teaching, as shared by nearly 70% of our survey respondents. We heard a wide range of opinions from our faculty interviewees about the extent to which mentoring students in research is time-consuming, ongoing, and not always directly proportional to the research output desired. This is a concern, in some disciplines more than others; however, the process of engaging students in meaningful research is known to take time and has to be thought through and implemented collaboratively.

What is clear is that the leadership is seeking sustainable ways to engage students in applied learning. Talking broadly about civic engagement and out-of-classroom applied

learning, the President has underscored this connection in her speeches to the WP community, stating that faculty-student interactions seek to create “opportunities for students, both inside the classroom and out,” which can serve as “the foundation on which they build successful careers, businesses, and personal lives” [Waldron, 2016]. From a student perspective, then, the belief that “engaged students are more successful students” [Waldron, 2015] is noted as a deep-set principle underpinning institutional policies and practices.

Appendix VIII – Notes on Research to Advance Community

In its latest Economic Impact Report [Impact, 2013], the University acknowledges the effects of research that is ongoing at the University on the public at large. The report singles out research on beach grass, honeybees and agriculture, violence against women, the local Great Falls national park, and programs to reducing substance abuse. These clearly contribute to solutions to problems that transcend the immediate community and are truly national scope.

A review of ongoing faculty projects, supported through ART, reveals a myriad of scholarly inquiries taking place across fields of knowledge nurtured by WP faculty, from the philosophical and mathematical, to the historical and financial; and from the scientific and literary to the pedagogical, musical and artistic. Within the mix are numerous applied scholarly projects, with an orientation to benefiting community or humanity, which promise to:

- * Inform new treatments related to physical or mental health (e.g., reducing social anxiety in schools; medical volunteering; challenges of living with stem cell transplant; cardiovascular-care self-interventions; colorectal cancer screenings; brain imaging and emotional regulation).
- * Deepen common understanding of local to global social, political, or business issues (e.g., human rights in the Americas; political apathy among low-income minority young adults; issues faced by multiracial Americans; management of dissent in Hong Kong, corporate social responsibility; leveraged exchange-trade funds; corporate social media).
- * Improve educational practices and teacher trainings (e.g., examining the Common Core; addressing special questions around educating students with Asperger's and Autism Spectrum Disorder; looking deeper at individualized educational plans).
- * Contribute to scientific knowledge (e.g., through research projects in biochemistry and neurobiology involving ants, bats, and genetically-modified mice).
- * Support greater balance with nature (e.g., weathering of soli in post-fire conditions).

Throughout our conversations, we heard about leadership interests and intent to facilitate university connections and collaborations among faculty researchers in a number of cross-disciplinary areas with an eye to the external community. Ultimately, partnerships could be forged with the local leadership in government and industry to solve local challenges, building on exiting relations that the University already has in the areas of workforce development and civic engagement. Applied research themes that were mentioned include: immigration, education and Autism, public health, and the natural environment. Early conversations on one or more of these areas have already started; but it seems too early to evaluate their effect.

Appendix IX – Notes on Research to Advance Knowledge

Regardless of what research outcomes are (for student and community advancement), faculty members have great leeway when deciding which research questions or works of art to pursue, either inspired by trends in the discipline or a simple attempt to satisfy one's intellectual curiosity in search for beauty and truth. Even so, it is evident that not every research project, inquiry, or production will fit in one or both of these two categories. The environment can nurture continued diversity in approaches and directions.

Tensions around inadequacy of research funding, as alluded to below, stem primarily from mismatched expectations about which category of research can be centrally or internally funded and at what levels. Aside from carving out meaningful time for faculty members to engage in independent research, even if it does not involve students or link with community needs, and reasonably supporting its dissemination, the University may not (or ever) have funds desired for that purpose. In such instances, faculty members may need to be resourceful and entrepreneurial as they seek financing for their agendas. Of course, the operative phrases are adequate time and adequate funds for dissemination.

In support of the Strategic Plan and as a vehicle for encouraging the growth and sustainability of long-term research agendas, the University has established a clear policy on developing academic centers (focused function) and institutes (multi-functional and multi-disciplinary). The policy also includes a five-year review system, as well as provisions and procedures for dissolving such entities. These entities are often initiated by a faculty member's own scholarly interests or a group's interest, but may also be responsive to the community. It is clear that the academic leadership of the University will be involved in approving and overseeing these entities, whose organizational structures will vary based on the purpose and goals. By default, the notions of a center assume collaborations among faculty (or faculty and students) within WP and with other colleagues sharing similar or complementary interests and skills. It is not clear to us at this stage what "content" criteria are used to determine the viability of such centers; nor have we reviewed any of the formal centers or institutes already in place that have been approved through this process.

As a related comment, we report that while we came across collaborations between some WP faculty members and research colleagues at other institutions, be they former research mentors or research peers at research intensive universities or research institutes, we have not noticed but a handful of collaborations within WP or with faculty at similar institutions. Respondents to our survey disagree in reaction to whether research collaborations at WP are actively encouraged. Only one in three faculty respondents states this is the case; while 72% of responding academic managers see collaborations being encouraged.

Appendix X - Notes about Effects of Research: Academic Centers

Notes on Funding “Pure” Scholarship

We note no discord in the view of a current reality that the institution cannot—nor should it—support faculty research with little regard to its purpose. This would require a depth of resources that are unavailable and unsustainable, and might detract from the stated mission. Nurturing an active faculty scholarship is subject to various pressures, forcing the institution to make strategic choices in addressing whether and how a public regional university, with all its fiscal constraints, can become a place in which scholars freely engage in inquiry—be it for a tangible application or for the sake of inquiry—and can be adequately supported in their endeavors. The tighter these answers fit within the confines of the institutional mission, the better faculty scholarship can be nurtured and protected. How consistently and effectively the University defines, values, supports, measures, and recognizes this aspect of faculty engagement becomes critical in its effort to build an intellectually vigorous and scholarly environment.

Notes on Academic Centers

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These entities are often initiated by a faculty member’s own scholarly interests or a group’s interests; but may also be responsive to the community. It is clear that the academic leadership of the University will be involved in approving and overseeing these entities, whose organizational structures will vary based on the purpose and goals. By default, the notions of a center assume collaborations among faculty (or faculty and students) within WP and with other colleagues sharing similar or complementary interests and skills. It is not clear to us at this stage what “content” criteria are used to determine the viability of such centers—nor have we reviewed any of the formal centers or institutes already in place that have been approved through this process.

Appendix XI – Notes on Internal Awards Programs

A sample list of internally funded grants appears in the table below.

Support Program	Responsible Entity	Some Features
Assigned Release Time (ART)	University ART Committee	Annual University-wide
Research & Travel Incentive Program (RTI)	Provost and Senior VP	Open Individual Basis
Center for Research Awards	Dean, Science & Health	College of Science & Health
Summer Undergraduate Research Program	Provost and Senior VP	Annual University-wide
Start-up Funds	Dean, Science & Health	Open Individual Basis

Some commentary on ART & RTI:

- * *The University ART program* represents the University's largest campus-wide financial commitment to research. Governed by an April 2010 agreement with the American Federation of Teachers Local that refers to the faculty's "right to participate in research and creative activities," the program is designed to "encourage the highest standards of research, scholarship, and creative expression and the continual professional growth and development of faculty members as well as librarians."

The University has instituted within its ART program an important research-supportive provision for probationary faculty. In their first two years at WP, members of the faculty are guaranteed an ART award: they automatically receive a reduction in their teaching assignment in the amount of 3 credit hours per semester in order to dedicate time for building and implementing a research agenda. Past that point, single- or multiple-year awards are applied for through a transparent process for 3 credits per semester, with input from academic chairs and deans, to an elected university-wide committee that reviewed proposals and makes recommendations to the Provost.

From the management's point of view, this is a significant commitment of financial resources to support research, with 214 funded in 2015-2016, in addition to faculty members in their first two years. The faculty too embraces ART as an "essential driver of research, scholarship, and creative expression at WP" [R&SC, 2015]. Overall, there is strong satisfaction with the clarity of the process and the value of the program among those receiving the awards, especially non-tenured faculty.

We heard a few concerns from faculty applicants:

- * The ART awarding process is presumably competitive; but it seems relatively less so in reality as the great majority of applicants receive assigned time to do research.

- * Preparing the proposal is time-consuming (there is a full proposal required on the front end and a final report on the back end listing goal of research, outcomes, and assessment of progress); such time may be better spent doing the research and working on publishable papers or external proposals.
- * The review, which is frequently conducted by WP peers, does not consistently appear to fully consider research progress and outcomes achieved to date—pointing to a possible accountability concern that needs to be addressed.
- * The award focuses on short-term achievements, breaking down a research effort into smaller steps, and may not fully take the long view of research. Each award supports a project rather than a longer-term agenda.
- * Additional concerns were noted about the rigidity of the program as it now stands; e.g., the current award structure does not allow for intensive work on research to be done in one given semester; multi-year awards are not common. Suggestions were made regarding the possibility of consolidating 6 credits into one semester if the applicant considers it to be helpful.

While of significant value for active researchers, this arrangement is a reminder of the political tension that exists between research and teaching at the University, especially in terms of faculty conditions of employment. It appears to serve as a concrete, temporary mechanism for addressing a core teaching-based measurement issue (i.e., the common struggle at peer state universities of the 4/4 teaching “load” versus 3/3). Naming conventions that inadvertently conjecture images of teaching as a burden aside (e.g., load, release), ART may represent a deliberate, strategic approach for supporting research for those who choose to be active past the tenure decision; but it may seem to be a fast—possibly expensive—solution to a political labor-management concern.

- * **The Faculty Research and Travel Incentives (RTI) Program** is “intended to support full-time faculty travel related to research,” for faculty members who have an established research agenda or are developing such an agenda. Administered by the Provost and Senior Vice President, on an individual basis with a fast turn-around decision, the awards place funding priority on presentations of research and are in most cases capped at \$1,000 per applicant. While appreciative that travel funds were available, faculty members still expressed concern that funding was limited or restrictive, requests often have to be made through multiple channels.

Appendix XII. Notes on Faculty Responsibilities & Rewards

Research Responsibilities. *The WP Faculty and Professional Staff Handbook* sets the process and procedures for faculty advancement. It states that a faculty member's contributions (publication performance, presentation, etc.) are placed in the research bucket based on two main criteria: (1) occurring within the individual's area of expertise; and (2) meeting the normal standards of professional accomplishment.

There is an explicit acknowledgment that the notion of scholarly activity has been broadened to encompass beyond "discipline research, which results in the discovery and dissemination of knowledge, other accepted forms of scholarly activity, including applied research or application of theory and knowledge to the human agenda." Without being named such, the scholarship of teaching is recognized on the list.

For purposes of retention, tenure, and promotion, documented achievements are presented by the faculty in the form of writing, presentations, creative work, community-applied research, and pedagogical innovations—when the latter cuts the muster of scholarly activity. It is stated that leadership roles in one's profession as well as securing grants or fellowships would be further acknowledged.

The Handbook presents a long list of specific policies and procedures regarding course instruction with relatively less specificity vis-à-vis research. As has been traditional at peer institutions, there are two separate processes for retention and promotion.

- * **Probationary Period.** The reappointment of tenure-track faculty is based on a review of professional performance (teaching), professional growth (scholarly achievements in, and contributions to, one's teaching field), and potential contributions to the University (service to department, college, and university community).

Specific allocation of effort among these three areas is not explicitly suggested; but while teaching effectiveness is a high priority at the University, efforts have been made to provide an environment for new faculty members to transition well into teaching and research. For instance, first-year faculty members are exempt from serving on committees if they prefer. They also receive, for two consecutive years, an automatic reduction in the number of teaching credits to carve out time to develop or expand their research agenda. In fact, we were told that, in some departments, chairs encourage junior faculty members not to be involved in service for a few years. They are advised to invest this time otherwise in strengthening their teaching competency, building their research agenda, and engaging students in their work. This is helpful, as long as the department as a whole is on board and there is no political repercussion for lack of early participation in committee work and departmental initiatives.

Members of departmental Retention Committees evaluate the performance of their probationary colleagues and are expected to “aid and advise” them in view of annual retention decisions. In essence, the college dean is the main retention guide or gatekeeper, making a critical appraisal of faculty performance and retention recommendation to the Provost.

Each academic dean is responsible for interpreting retention criteria, especially research, and clarifying for newcomers what the retention expectations are. This requires that academic departments and their search committees hold views about research that are aligned with the views of the pertinent college deans. The extent of this alignment affects the clarity about research characteristics and potential accomplishments sought for faculty candidates, and influences their likelihood of success at WP.

We noted that faculty research expectations and perceptions of the research reality vary among colleges. This is stated in the R&SC survey report, but it also came through in our interviews and was identified in our survey responses. Statements were made, for example, that “some deans make research a priority, but others do not” and that “some departments look more closely at research accomplishments for new faculty hires than others.”

Variations among departments and colleges on this issue might be a concern. In situations where expected level of research productivity is not clarified, differing views among departments and colleges may negatively affect the promotion process—the latter being managed outside the college.

It is important for academic deans and department chairs to work collaboratively in advising junior faculty to stay on track and assist them along the way, especially in their early attempt to balance their research, teaching, and service portfolios. Assigning a large number of new courses for junior faculty, especially in the first two years, which we heard happens occasionally, may run counter to what is intended, risking the loss of research momentum in play upon arrival to WP. Of course, this issue depends on the department and the ratio of major courses to faculty; this issue may require some attention.

- * **Promotion & Post-Tenure.** Four factors govern decisions regarding faculty promotion of faculty members to a higher faculty rank: effective teaching, scholarly and/or creative achievements (research), contribution to university and community (service and instruction-enhancing professional activities), and overall fulfillment of professional responsibilities (with focus on teaching and service, and professionalism).

Here again, while “no set weighing scheme is suggested, proficiency in teaching is considered essential” [Faculty Promotions Policy, 2009]. Specific criteria for teaching

are clearly delineated (e.g., knowledge, preparation, presentation, enthusiasm, fairness); however, consideration of publications, exhibits or musical compositions resulting from scholarly activities is critical but less precisely specified. Standard expectations are not formulated by quantity or quality (e.g., number of publications in high-impact journals). Instead, scholarly engagement is broad, while deemed in alignment with the teacher-scholar model. It is measured by the level of contribution to the field and profession, professional experiences, and potential for continued growth, as assessed by the Department's and University-wide Promotion Committees (against the two criteria mentioned above), in one or more categories of scholarly writings, scholarly talks, creative works, or applied scholarship.

Unlike the retention review process, academic college deans are not directly involved in the evaluation process for promotion. Furthermore, out of sync with preferred practice, tenure and promotion are not linked up. Faculty members are often approved for tenure at the institution, but are not simultaneously granted promotion to the next rank.

Research and research supervision require blocks of uninterrupted, focused time. The current course scheduling approach and other on-campus requirements may not be consistent with the University's intent to strengthen the research climate. Faculty members have expressed concerns about "scheduling inflexibilities" and a "cookie-cutter" approach in setting courses, advising, and committee work regardless of the faculty member's level of research activity. In our interviews, the notion of fragmented time for research was alluded to as an impediment to significant progress; this was identified by 82% of R&SC survey respondents as a limitation to scholarly productivity.

Appendix XIII – Conceptual Framework for the Management of Faculty Research

Through faculty research, our interpretation is that the University is seeking to shape an academic environment that is scholarly and vibrant—one in which faculty and students are engaged in a process of open inquiry, with the intent to advance learning, be it toward an applied outcome or for the sake of intellectual development, and serve collectively as a rich resource for the larger community.

Achieving this desired outcome calls for strategies and dispositions at all levels of planning, operation, and communication that are (a) firmly based on institutional values; (b) highly consistent with these values; and (c) synergistically all assets and systems of the University.

- ❖ **Clarity.** Sharp clarity of view among faculty and management, vis-à-vis stated core institutional values, priorities, and vision, as well as meaning of research and commensurate expectations regarding faculty work productivity, would likely lead to a deeper understanding of, and commitment to, the institution's purpose, and to its unique character and significant mission, that is widely shared by key university constituents.
- ❖ **Congruency.** Such clarity would support making deliberately consistent decisions around internal and external support, coordination of research activity, and measurement as well as recognition of faculty productivity. In turn, the consistency of these decisions would likely facilitate a scenario where there is mutual trust among various constituents around motives and intentions, and fuel strong interest by faculty in being contributing members of the whole. These are ripe conditions for generating vigorous intellectual participation, made possible by a deep sense of calm in otherwise heavy political storms (anxiety, second-guessing, and defensiveness within the organization having been somewhat tamed), to proceed apace with their knowledge creation and learning with freedom and flexibility.
- ❖ **Connectedness.** With clarity of values and congruency in decision-making, natural connections would be built among various aspects of faculty activity and collaborations would be sprung among various institutional entities (offices, departments, colleges), now keenly attentive to reconfigured notions of research, and scholarly groupings expanded among faculty and students. Greater synergy would result from such developments among the various parties involved, likely leading to a greater sense of confidence, movement, and integrity.



G R O U P i & i

Group i&i Consultancy | www.Groupi-i.com
626 Chestnut Street, Union, NJ 07083
t. 908.258.0043 f. 908.845.0222 e. info@groupi-i.com

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