

FY2015 ANNUAL REPORT COVER PAGE

Campus or Unit: University of Missouri – Columbia

Date of Submission: August 7, 2015

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Campus or Unit:	<u>University of Missouri-Columbia</u>
Lever Number:	<u>Lever 1.1</u>
Lever Description:	Grow undergraduate and graduate collaborative and interdisciplinary research and creative activity with faculty
Lever Metric:	<div style="border: 1px solid black; padding: 5px;"><p>Independent faculty-mentored research experience (best in class metric), as demonstrated by number of undergraduates at Spring Research Forum. Baseline: 276. FY14: 307. FY15: 324. Target: 450 by 2018.</p><p>Interdisciplinary engagement (best in class metric), as demonstrated by fall undergraduate enrollment in interdisciplinary courses. Baseline: 4,912. FY14: 4,855. FY15: NA*. Target: 5,500 by 2018.</p></div>

Support for graduate and undergraduate research and creative activity is found in every school and college at MU. Some notable achievements in FY15 include the following:

- With funding from a \$1 million endowment, the Department of Theatre created a new Center for Applied Theatre Research that focuses on interactive theatre research and creative activity with undergraduates, graduate students, faculty and staff.
- The College of Engineering provided \$147,000 funding for undergraduate research in FY15. 294 students participated.
- The College of Education sponsors a service/research experience called Mizzou Ed Weekenders. Mizzou Ed students from across program areas work in teams of 12 to coordinate a weekend of service with a partner school throughout the state of Missouri. During the 2014-2015 academic year, 72 students (up from 12 in 2013-2014) traveled to schools in Kansas City, St. Louis, and Sedalia. Mizzou Ed Weekenders explored pertinent issues in education related to poverty, race issues in schools, charter schools, social justice, school mental health, and community outreach services. To enhance the Weekenders Service Experience from a research perspective, each Mizzou Ed Weekenders team is assigned an undergraduate and graduate research assistant, with supervision from faculty.

In addition to the many programs supporting undergraduate research within the schools and colleges, the Office of Undergraduate Research coordinates campus-wide opportunities for undergraduates. Notable accomplishments this year include a 50% increase in the number of students participating in Undergraduate Research Day at the Capitol (20 in 2014 to 30 in 2015), a 41% increase in the number of students participating in Summer Research Forum (94 in 2013 to 133 in 2014), and 5.5% increase in the number of students participating in the Spring Research Forum. MU also sent one student (the first since 2011) to participate in the Posters on the Hill Event in Washington, DC.

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Mizzou Advantage also sponsors undergraduate and graduate research. Highlights in FY15 include sponsorship of 9 students (1 undergraduate, 8 graduate) at the SEC Symposium and the creation of a new undergraduate research team on early detection of Amyotrophic Lateral Sclerosis (ALS). Mizzou Advantage also supported 14 conferences and colloquia that focus on MU's unique interdisciplinary strengths. Ranging from "Based on a True Story" (documentary journalism) to the annual Interdisciplinary Plant Group's Symposium on the interface between abiotic and biotic stress responses, these events provide graduate and undergraduate students important opportunities to interact with internationally recognized researchers.

*Because of changes in section attributes in SIS, we are currently unable to determine this figure. We expect that the logic will be reworked in September and will report the results at that time.

STRATEGIC PLANNING: ANNUAL REPORT (FY15)

Campus or Unit:	University of Missouri-Columbia
Lever Number:	Lever 1.2
Lever Description:	Implement innovative curricula that feature MU's interdisciplinary approach to problem-solving.
Lever Metric:	Average time to graduate. Baseline: 4.2. FY14: 4.1. FY15: 4.2. Target: 4.1 by 2018.

MU's investments in innovative new curricula have focused on those with high potential to attract new net students, to improve our retention of existing MU students, to meet industry and state work-force needs, and to improve the preparation of our students to face tomorrow's challenges. Particular emphases and accomplishments in FY15 include the following:

1. Creation of several new interdisciplinary graduate certificates, including Qualitative Research, Sustainable Energy and Policy, and Global Public Affairs.
2. Creation of a new MS degree in Dietetics. This coordinated BS to MS program responds to national needs in healthcare (particularly in regard to obesity and related diseases), while also providing strong employment opportunities for graduates. The job outlook for dietitians exceeds growth across all fields with the Bureau of Labor Statistics predicting 21% growth from 2012-2022. Because there will be no tuition or fee waivers for this program, it is designed to generate new net revenue. Surveys of current undergraduate students indicate strong interest in this program. The MS in Dietetics was approved by CBHE in April 2015.
3. Creation of a new BA degree in Digital Storytelling: Digital Storytelling combines narrative with tools for digital environments to reach audiences for artistic, educational, and commercial purposes. People with these skills are in high demand across business, government, nonprofit and research sectors. The new BA in Digital Storytelling (approved by CBHE in April 2015) is a collaboration among faculty across campus, including the College of Arts and Science (which will be the academic home for the degree program), the School of Journalism, the College of Human Environmental Sciences, and the College of Education. This program builds on the growing regional identity and economic emergence of Kansas City as a Midwest center for digital storytelling through developing partnerships with local and regional firms.
4. MU continues to make progress on creation of a Data Science and Analytics master's degree program. In 2014 Mizzou Advantage awarded Professor Chi-Ren Shyu and his research team \$80k to aid them in designing this new degree program. The project was part of a NSF proposal that was awarded a \$600k grant in October of that year. Building on that momentum, Professor Calyam Prasad made a subsequent successful bid for \$400k in NSF funding to hire expertise to support the data-intensive research and education component of the project.

We will continue to track enrollment in these new degree programs.



Campus or Unit:	<u>University of Missouri-Columbia</u>
Lever Number:	<u>Level 1.3</u>
Lever Description:	Recruit and retain the best traditional, non-traditional and distance students
Lever Metric:	<div style="border: 1px solid black; padding: 5px;"><p>First-year retention rate. Baseline: 83.6%. FY14: 83.5%. FY15: 86.2%. Target: 85% by 2018.</p><p>Average ACT for First Time College Students. Baseline: 25.7 (FY13). FY14: 25.9. Target: 26.0 by 2018.</p></div>

Many factors influence MU's success with recruiting and retaining students, including strong academic programs, an appealing campus, rich co-curricular activities, and appropriate facilities. One of the key strategies regarding recruitment and retention is managing and addressing the varying needs of different student populations, including graduate, undergraduate, resident, nonresident, international, transfer, first-time college (FTC), high-ability undergraduates, students from underrepresented groups, etc. MU's strategies for recruitment are increasingly targeting these different populations.

Overall, MU's goal is to grow to 38,000 students, with particular emphasis on increasing the number of transfer students, graduate students, and international students. Continued focus on FTC students remains a critical piece of our strategic priorities.

Between Fall 2013 and Fall 2014, MU's total enrollment grew from 34,658 to 35,441, representing a 2.3% increase. The chart below provides more detailed information about growth within particular demographics of students:

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Lever 1.3
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Comparison of Total Fall Enrollments by Student Level

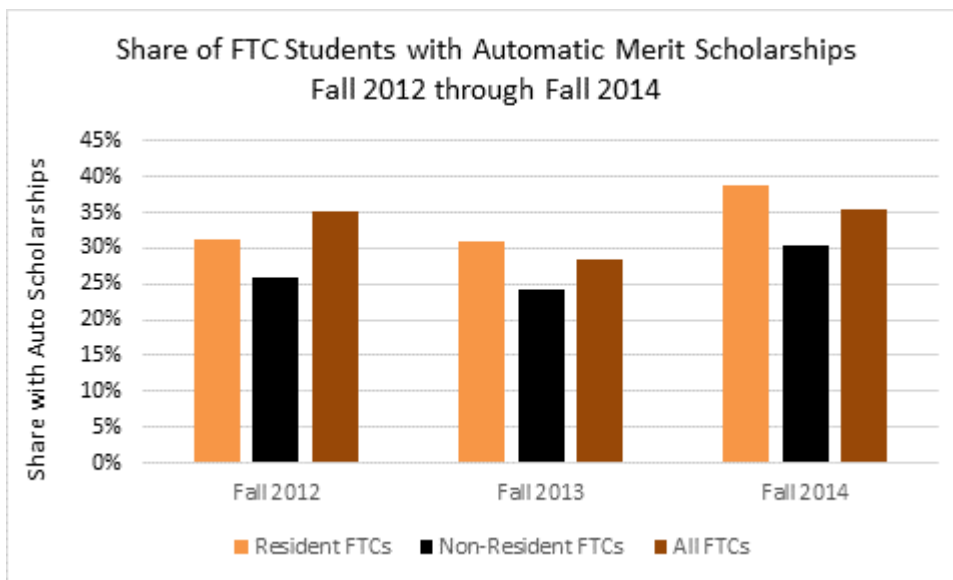
	<u>2013</u>	<u>2014</u>	<u>'13 to '14</u>	<u>'13 to '14</u>
			<u>Difference</u>	<u>% Change</u>
<u>Undergraduate</u>				
First-Time-College*	6,194	6,515	321	5.2%
Transfer	1,208	1,277	69	5.7%
2nd Bachelors	198	214	16	8.1%
Freshman	7,544	7,864	320	4.2%
Sophomore	6,065	6,206	141	2.3%
Junior	5,869	6,055	186	3.2%
Senior**	7,487	7,529	42	0.6%
Total	26,965	27,654	689	2.6%
1st Professional	1,254	1,222	-32	-2.6%
<u>Graduate</u>				
Masters	3,726	3,820	94	2.5%
Ed Spec	124	121	-3	-2.4%
Doctoral	2,589	2,624	35	1.4%
Total	6,439	6,565	126	2.0%
Campus Total	34,658	35,441	783	2.3%

Recognizing that we will continue to face increased competition from other large public institutions in our primary markets and a continued decline in number of Missouri high school graduates, MU recently convened a high-level committee focused on achieving our enrollment goal of 38,000. Led by Deputy Provost Ken Dean, this committee includes representation from schools and colleges, undergraduate and graduate studies, student affairs and residential life, admissions, and international programs.

Throughout FY15, MU continued its efforts to reach particular populations of students. Special efforts in FY15 included attention to our scholarship policy for high ability students. As we reported in our February 2015 semi-annual report, our enhanced scholarships for high ability students proved effective. From Fall 2013 to Fall 2014 we increased the number of very high ability resident students by 127, outperforming our goal of 100. The number of high ability nonresident students increased by 274 (goal of 275).

Looking ahead, one area of concern is the projected diminishing yield on the scholarship for students with a 27-30 ACT, both resident and non-resident for fall 2015. We are encouraged, however, by the projected continuing positive impact on yield for those students eligible for our highest scholarships, both resident and non-resident. Overall, our estimates for fall 2015 indicate a smaller incoming FTC class, but the percentage of those enrolling with high ACT scores will increase slightly.

The below chart shows the increase in the percentage of students who entered with an automatic scholarship for Fall 2014, the semester the enhanced scholarships were implemented. We will be watching this closely for fall 2015 to see if the scholarships are still effective. Our goal is to maintain a level of 35% of our incoming class to enter with an automatic scholarship, but we will not know if this has been sustained until we receive the fall enrollment data.



We maintain our commitment to being a diversified campus, with a growing interest in the recruitment of undergraduate international students. While we have made significant gains in numbers of FTC international students over the last 5 years, our growth leveled out this year, so we are analyzing the impact on yield for that group that an enhanced scholarship might bring.

Lever 1.3
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Recruitment of under-represented students also remains a strong focus, and we have been pleased with a growing number of Hispanic students over the last few years. However, our numbers of non-resident African American students have declined, which we attribute to eliminating the \$2,500 scholarship that was part of the Diversity Award for non-residents, though they still retain the non-resident tuition waiver. We saw a reduction of 59 African-American students for fall 2013 and another 21 students for fall 2014, and we anticipate a further decline for fall 2015. We plan to examine the lost tuition revenue vs. the budget impact of the \$2,500 to see if we should reinstate the award for fall 2016.

Transfer students have been another area of concern for us, with our own transfer numbers declining along with the enrollments in Missouri community colleges. During FY15 MU hired a transfer coordinator and created a transfer council to identify and implement initiatives to increase our transfer students. We are also at the beginning stages of developing a pathway program for students to begin at Moberly Community College. A pilot program is currently planned to begin in another year.

Additional information about recruiting efforts related to Mizzou Online is available in Lever 4.2.

Campus or Unit:	University of Missouri-Columbia
Lever Number:	Lever 1.4
Lever Description:	Expand opportunities for experiential learning
Lever Metric:	<div style="border: 1px solid black; padding: 5px;"><p>Global engagement (best in class metric), as demonstrated by undergraduate participation rate in study abroad. Baseline: 22.9%. FY14: 20.0%. FY15: 19.0%. Target: 30.0% by 2018.</p><p>Independent faculty-mentored research experience (best in class metric), as demonstrated by number of undergraduates at Spring Research Forum. Baseline: 276. FY14: 307. FY15: 324. Target: 450 by 2018.</p><p>Experiential learning (best in class metric), as demonstrated by participation in service learning. Baseline: 3,841. FY14: 4,265. FY15: 4,450. Target: 4,800 by 2018.</p></div>

Enhancing student opportunities for experiential learning continues to be an important part of graduate, undergraduate, and professional education at MU. Campus investments include the Midwest Innocence Project, the *Missourian*, and our nationally recognized Campus Writing Program.

Participation in service learning (one of our best-in-class metrics) improved slightly this past year, from 4,365 in 2013-2014 to 4,395 in 2014-2015. Data indicate that these students have a positive impact on the communities they serve. During the 2014-2015 academic year, community agencies and organizations rated our service-learning students as “excellent” or “very good” in 96% of our placements.

Global engagement, as demonstrated by undergraduate participation in study abroad, declined slightly in FY15, from 20% in FY14 to 19% in FY15. MU’s International Center recently presented a plan to increase study abroad participation, focusing specifically on scholarships and engagement of students earlier in their college years. Although study abroad declined slightly on the campus overall, several units made significant improvements. In the College of Engineering, for example, 78 students participated in college-organized study abroad trips in AY14-15, up 37% from AY13-14, and the Trulaske College of Business saw a 39.7% increase in student participation in study abroad. The College of Arts and Science, likewise, designated \$5,000 from new supplemental fees to provide scholarships for study abroad, allowing 40-50 more A&S students to participate. In FY16, the increase is expected to be close to 100 new students.

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Lever 1.4
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Some other notable successes for FY2015 related to experiential learning include the following:

- In spring 2015, the School of Health Professions, in collaboration with Mizzou Therapy Services, opened the MU Physical Therapy Clinic, a for-fee physical therapy clinic. This collaboration allows Physical Therapy clinicians an opportunity to have on-site practice, and students are provided opportunities to assist and observe.
- In the College of Arts and Science, new internship opportunities were established with the Art Institute of Chicago, the Metropolitan Museum of Art, and the Smithsonian Museums.
- In Fall 2014, the School of Social Work started the Integrative Behavioral Health Clinic. Students in the master's program in social work provide free mental health care for members of the community. All work is supervised by faculty. Clients have come from as far away as 100 miles to obtain this service.
- Building on the success of similar clinics (such as the Family Violence Clinic), in FY15, MU's School of Law launched two new clinics—the Entrepreneurship Legal Clinic and the Veteran's Clinic—that provide much needed services to our communities while also providing students highly valuable opportunities for “hands on” legal training.
- The College of Agriculture, Food, and Natural Resources (CAFNR) improved the number of students participating in internships, as reported on their survey of graduates (81% response rate). In Spring 2014 64% of graduates reported having completed an internship. In Spring 2015 that number increased to 71%.
- Through cooperation with MU Extension, Business Development, the Trulaske College of Business (TCoB) created an International Trade Center. Statewide Business Development Counselors identify small and mid-size Missouri businesses that need assistance expanding international trade. Undergraduate and graduate students are hired to conduct international trade research to support decision making by these businesses. In 2015, 7 projects were completed by 22 students interning for 4 companies. Students and projects are supervised by a team of MU Extension Business Development staff and TCoB faculty.

Campus or Unit:	<u>University of Missouri-Columbia</u>			
Lever Number:	<u>Lever 2.1</u>			
Lever Description:	Recruit additional high-impact faculty and staff to enhance MU's academic stature and to improve MU's competitive advantage.			
Lever Metric:	<table border="1"><tr><td>Citations per faculty member. Baseline: 70. FY14: 63. FY15: 64. Target: 100 by 2018.</td></tr><tr><td>National Academy members. Baseline 8. FY14: 9. FY15: 9. Target: 12 by 2018.</td></tr><tr><td>Federal research dollars per TT faculty member: Baseline: \$92,139. FY14: \$89,710. FY15: \$85, 501. Target: \$110,000 by 2018.</td></tr></table>	Citations per faculty member. Baseline: 70. FY14: 63. FY15: 64. Target: 100 by 2018.	National Academy members. Baseline 8. FY14: 9. FY15: 9. Target: 12 by 2018.	Federal research dollars per TT faculty member: Baseline: \$92,139. FY14: \$89,710. FY15: \$85, 501. Target: \$110,000 by 2018.
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Federal research dollars per TT faculty member: Baseline: \$92,139. FY14: \$89,710. FY15: \$85, 501. Target: \$110,000 by 2018.				

Recruitment of high-impact faculty remains one of MU's highest priorities, and we have made significant progress on our efforts to hire 20+ "signature hires." MU campus leaders recently clarified the criteria for these signature hires as faculty in areas of key strength on our campus who will immediately improve our AAU indicators and who will enhance our recruitment and retention of other faculty in these disciplines. Other strategic hires will continue, of course—indeed *all* faculty hiring is determined by strategic priorities—but these signature hires will focus on this select group of faculty. Using this new, more focused criteria, we have, to date, made seven signature hires:

- Arthur Suits, Chemistry
- David Singh, Physics
- Wesley Benskoetter, Chemistry
- Thomas Spencer, Animal Science, Medicine
- Lloyd Sumner, Biochemistry
- Elizabeth Parks, Nutrition and Exercise Physiology, Medicine
- Kevin Stavely-O'Carroll, Surgery

Collectively and individually, these new faculty demonstrate our ability and commitment to hiring the highest caliber faculty, as suggested by these sample profiles:

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Dr. Kevin Staveley-O'Carroll, has been appointed chair of our Department of Surgery and director of Ellis Fischel Cancer Center. Staveley-O'Carroll's research and mentoring activities have been funded by the National Institutes of Health and American Cancer Society, as well as foundations, universities and industry. His active involvement with national and international organizations includes serving as president of the Association for Academic Surgery — the largest organization of academic surgeons in the world — and leading the Society of Clinical Surgery's membership committee. The author or coauthor of more than 90 peer-reviewed articles and book chapters, Staveley-O'Carroll has served as editor for the *World Journal of Gastroenterology*; *World Journal of Hepatology*; and *Cancer, Biology and Therapy*.

Joining MU's Department of Biochemistry in January 2016, Dr. Lloyd Sumner will establish and direct the University of Missouri Metabolomics Center. Dr. Sumner's area of expertise is plant chemistry and how it influences plant growth, health and disease resistance. Sumner will bring to MU an experienced team of metabolomics researchers. Former president and Lifetime Honorary Fellow of the Metabolomics Society, Fellow of the American Association for the Advancement of Science, and president-elect of the Phytochemistry Society of North America, Dr. Sumner has published more than 120 peer-reviewed articles and book chapters.

Internationally recognized for his research in reproductive and developmental biology, Dr. Thomas Spencer studies how to increase fertility in beef and dairy cattle, which can help cattle farmers be economically successful and feed a growing world population. In addition, he studies how to translate animal research to human medicine to solve fertility problems in women and improve their reproductive outcomes. With funding from NIH and USDA, he has published hundreds of journal articles and has more than 11,000 citations.

Regarded as one of the best experimental physical chemists in the world, Dr. Arthur Suits will be joining MU in January 2016, along with much of his research group (12-13 graduate students and postdoctoral fellows). Dr. Suits is an innovator in instrumentation, especially in the development of new experimental methods in atomic and molecular physics and spectroscopy, and he is especially known for his work in collisional dynamics. With over 180 publications, including six articles in *Science* (impact factor of 33.61), and an h-index of 40, Dr. Suits is an extraordinarily productive scholar, who has been cited over 5,000 times. He has four current active grants.

Widely acknowledged as a rising star in inorganic chemistry, Dr. Wesley Bernskoetter specializes in organometallic chemistry, with an emphasis on metal-centered reactions of refractory molecules such as methane and nitrogen. This research is aimed at finding new pathways that address challenges relevant to sustainable chemical synthesis. With approximately \$3 million in current external funding, including a prestigious NSF CAREER award, Dr. Bernskoetter is a highly productive researcher, especially for someone relatively early in his career. (He received his PhD in 2006 and completed his postdoctoral fellowship in 2009.) He has already been cited nearly 1,000 times and has an h-index of 19. In 2014 he was awarded the prestigious Alfred P. Sloan Foundation Fellowship, an annual award given to early-career scientists whose achievements and potential identify them as the next generation of scientific leaders. Joining him at MU will be several graduate students and postdoctoral fellows.

Internationally known for his work in condensed matter theory, Dr. David Singh will join the Physics Department beginning Fall 2015. With over 500 research publications in peer-reviewed journals, Dr. Singh works on a research areas including including semiconductors, superconductors, thermoelectric materials, correlated electron systems, and bio materials. His work has been cited over 42,000 times, with a current citation rate of 3,500 annually and an H-index of 75.

STRATEGIC PLANNING: ANNUAL REPORT (FY15)

Campus or Unit: University of Missouri-Columbia

Lever Number: Lever 2.2

Lever Description: Encourage and reward effective disciplinary work by faculty and staff

Lever Metric: This lever has been rolled into 2.3.



Campus or Unit:	University of Missouri-Columbia
Lever Number:	Level 2.3
Lever Description:	Ensure that MU is able to recruit and retain the best faculty, staff, postdoctoral fellows and graduate students.
Lever Metric:	Ranking among AAU public universities of average faculty salaries. Baseline: 30/32. FY15: 31/33. Target: 28/32 by 2018.

One of MU's top priorities in our Strategic Operating Plan is recruiting and retaining the best faculty. It is a goal on which virtually all other objectives in the Strategic Operating Plan depend.

As noted in our February 2015 semi-annual report, MU has made two very significant investments related to this priority.

1) In September 2014 Chancellor Loftin announced a Voluntary Separation Program (VSP) for tenured faculty who were retirement eligible and at least age 62 by August 31, 2015. Participants in the program were offered a one-time payout of 1.5 times their base salary (not to exceed \$200,000) for retiring from the university no later than August 31, 2015. Offered in two stages (one for tenured faculty members and the other for academic administrators with tenure), a total of 123 individuals elected to participate. The total cost of both rounds of the VSP program was \$20.3M, with costs included in both FY15 and FY16. Cost of the program was divided between the UM System (approximately 25%), the individual schools and colleges (about 50%), and the MU campus (about 25%).

Because it will make funds available for strategic hiring of faculty, the VSP is critical to the overall success of our strategic plan. These hires will add new areas of research, teaching, and creative activity to our scholarly community, strengthen areas where we have or are building on a tradition of excellence, and spark innovation across Mizzou's multiple missions of teaching, research, service, and economic development.

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Lever 2.3
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One way to realize the enormous potential impact of VSP is to consider that, as a campus, we typically have 10-12 tenured faculty retire each year. With VSP, we will have 123 retirements, approximately a decade's worth. This is an extraordinary opportunity for the campus to invest strategically in our faculty.

2) Our continued work to improve faculty compensation focused on merit raises, with essential two distinct strategies. The first was for the schools and colleges to give merit raises, using internal reallocation. These raises totaled \$5.5M. In addition to these merit raises, the Chancellor provided funds for additional raises, effective 9/1/14, to our most productive faculty. These raises to our top-performing faculty included nearly \$1.5M, which was awarded to 258 faculty, from across campus. The distribution of these top-performing faculty include 117 full professors, 67 associate professors, 40 assistant professors, and 34 ranked NTT faculty.

With merit raises and exceptional raises combined, MU was able to award an average merit increase among tenured and tenure-track faculty of 4.78%.

Despite these investments in faculty compensation, we are not keeping up with our peer institutions. MU continues to be among the last of AAU Publics in terms of average faculty salary. When adjusted for cost-of-living, we are 21/33. We would need to average more than two percent *more* than the AAU Public average to catch up in ten years and between four and five percent more than the AAU publics average to catch up in five years.

Additional information about our signature hires is provided in Lever 2.1.

Campus or Unit:	<u>University of Missouri-Columbia</u>
Lever Number:	<u>Lever 2.4</u>
Lever Description:	Continually strengthen a diverse, safe and inclusive culture that encourages and rewards interaction across demographics, social, and interpersonal differences
Lever Metric:	Student diversity (fall). Baseline: 12.2%. FY14: 12.8%. FY15: 13.2%. Target 13.2% by 2018.

MU has many programs designed to ensure that we have a diverse, safe, and inclusive university for faculty, staff, and students. These programs include, for example, the Missouri College Advising Corps, the Faculty Inclusive Excellence Fund (used to support faculty from underrepresented groups), the Chancellor’s Diversity Initiative, and many others.

During FY15, MU’s strategic investments regards to Lever 2.4 have focused on three areas: Title IX, campus safety, and diversity and inclusion.

During FY15, MU’s Title IX Office has accomplished the following:

- Hired a Title IX Administrator, a Lead Title IX Investigator, and a Title IX Investigator. (Additional hiring of two more investigators, a case manager, and an administrative assistant is underway.)
- Launched a highly successful Title IX website.
- Delivered over 60 presentations to over 3,000 faculty, staff, students, and community members.
- Successfully implemented online training regarding gender discrimination for faculty and staff with a high completion rate.
- Provided more than fifty employees with intensive training in Title IX issues (with training ranging from two to eight days).

In addition to these accomplishments, the Title IX Office is working with various campus stakeholders to implement the “Not Anymore” online program, which will be required for all new students (both graduate and undergraduate). Students will be required to complete the program before enrolling in classes for Spring 2016.

A second area of investment in FY15 has been the hiring of additional patrol officers with MUPD to ensure the safety of our campus community.

A third area of focus has been diversity and inclusion, specifically in regards to faculty hiring. In FY15 the campus provided Diversity Recruitment funding to hire ten new faculty members.

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Lever 2.4
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Strategic investments inevitably include more than financial commitments, and this has been especially true with regard to our ongoing efforts to ensure that we have a diverse, safe, and inclusive campus culture. One important example of these efforts is the series of open forums on the topic of race relations. Initially launched in response to incidents taking place in Ferguson, MO, these open forums provided students an opportunity to voice their concerns about race relations on campus. As a result of these forums, Faculty Council appointed a committee to review minority students' experiences in the classrooms. A committee has also been formed to review and develop a proposal for a diversity requirement in the curriculum. The Chancellor has committed to a review of the Chancellor's Diversity Initiative Office, with plans to consider how best to position diversity and inclusion within campus administration. In addition, MU created a website—www.transparency.missouri.edu—at the request of the campus community for MU administration to share information about progress on initiatives to improve our campus climate.

Campus or Unit:	<u>University of Missouri-Columbia</u>
Lever Number:	<u>Lever 2.5</u>
Lever Description:	Optimize faculty impact in teaching, research, outreach, and economic development.
Lever Metric:	Overall satisfaction of MU faculty, according to COACHE survey. Baseline: 68% satisfied or very satisfied. Target: 75% by 2018.

Our most significant progress regarding Lever 2.5 focuses on our participation with survey of faculty satisfaction conducted by the Collaborative on Academic Careers in Higher Education (COACHE). Founded in 2002 and based at the Harvard Graduate School of Education, COACHE is a research initiative and membership organization focused on providing accurate data to senior academic officers for purposes of making decisions about recruitment and management of faculty. MU joined COACHE for the 2012-13 survey cycle, with a response rate of 51%, and we recently renewed our participation so that we will distribute a new faculty survey early in 2016.

Much of the work in FY15 focused on specific responses to the results of our 2012-2013 survey. In that survey 68% of those surveyed were satisfied or very satisfied with MU as a place to work. 72% of the faculty were satisfied or very satisfied with their departments as places to work. 69% agreed or strongly agreed that they would choose MU again. The survey identified specific strengths: time spent on research, support for engaging undergraduates in research, time spent on teaching, quality of students taught, ability to balance teaching/research/service, interdisciplinary work, and tenure reasonableness. Areas for improvement included quality of graduate students to support teaching and research, support for improving teaching, work space (laboratory, research, studio), childcare, mentoring of associate and pre-tenured faculty, clarity of tenure/promotion in general, and collegiality and engagement in departments. A summary of the results, along with comparisons with all 81 institutions that participated in the 2012-2013 survey and five peer institutions we selected, is provided on the following page.

In the COACHE benchmark graph, each column represents the range of institutional means along that dimension. The red portion of the column indicates the bottom 30% of responding institutions, the gray portion indicates the middle 40%, while the green section shows the top 30% of institutions participating in the 2012-13 survey cycle. Within each column the (♦) symbol represents MU's mean benchmark score. The (O) represent the means scores of each of the peer institutions we selected from the 81 colleges and universities in our survey cohort. The black horizontal line indicates the cohort mean score.

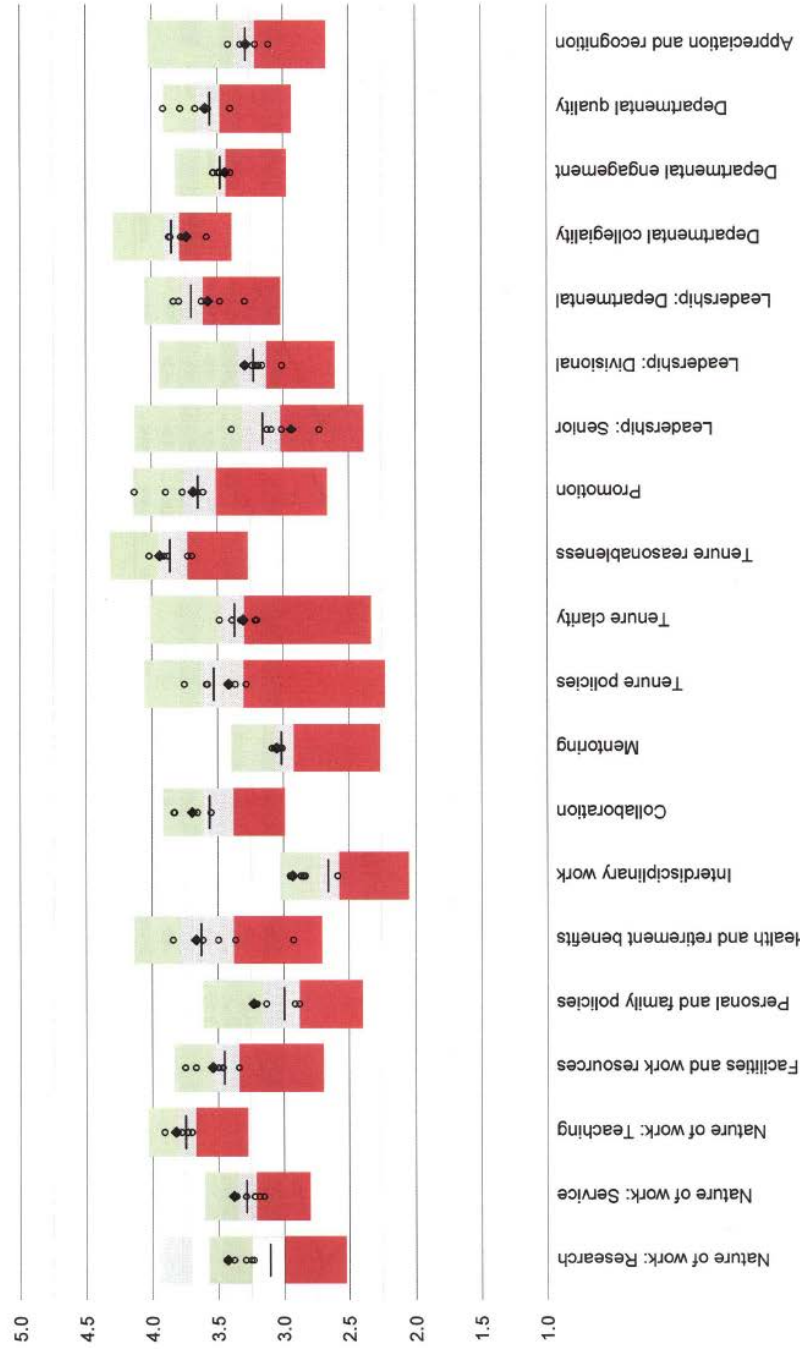
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COACHE RESULTS AT A GLANCE

The Collaborative on Academic Careers in Higher Education
Faculty Job Satisfaction Survey 2012-13

University of Missouri - Columbia



Based on the recommendations of the faculty committee, our responses in FY15 were tailored to individual schools and colleges. Each dean was charged with working with faculty to respond to specific areas of improvement needed. Some examples of the actions taken are noted below:

- Responding to concerns about facilities and work resources, several colleges made strategic investments in teaching and research facilities. The College of Engineering, for example, hired two employees in Engineering Technical Services to improve IT issues within the college. The College of Engineering also invested \$350,000 for equipment in teaching laboratories. Obviously, the ongoing renovation of Lafferre Hall will be critical in addressing this area of concern. Likewise, the College of Arts and Science invested funds from supplemental fees to address much needed renovations in teaching and research facilities (particularly in biological sciences, physics and astronomy, and psychological sciences).
- Several schools and colleges (e.g. the College of Education, the Law School, and the Truman School of Public Affairs) revised policies and procedures related to promotion and tenure and/or instituted new faculty workshops to ensure that faculty have adequate resources and knowledge during the promotion and tenure process.
- To improve support for faculty research and to increase faculty collaboration, the School of Health Professions created a school-wide faculty leave program and a “Lunch and Learn” series to increase faculty collaboration.

Campus or Unit:	University of Missouri-Columbia
Lever Number:	Lever 3.1
Lever Description:	Provide the facilities capable of supporting today's and tomorrow's teaching and research.
Lever Metric:	Number of buildings on campus with FCNI of 0.40 or higher. FY14: 34. FY15: 41. Target: 31 by 2018.

The most significant investments in MU's facilities in FY15 were related to re-opening of MU's Jesse Hall after completion of life safety and ADA improvement, the continuation of the renovation of Swallow Hall, and the planning and start of construction of Lafferre Hall and the Patient-Centered Care Learning Center.

Swallow Hall's completion in May 2016 will demonstrate the emphasis on enhancing teaching and research opportunities whenever an academic building undergoes renovation. This \$16.9 million project will allow the departments of anthropology and art & archaeology to be housed in one facility. A 100-seat lecture hall and additional 30-seat classroom will improve teaching opportunities, as both will be equipped with state-of-the-art technology.

The Lafferre Hall complete top-to-bottom renovation in the 1935 and 1944 sections improves the academic performance while eliminating more than \$24.4 million in critical facilities needs throughout the building by bringing it up to current accessibility regulations and life safety codes.

STEM class lab/research renovations at Lafferre Hall 1935/1944 sections will help support a nearly 60 percent growth in enrollment over the past seven years and enhance the educational experience for engineering students by creating flexible instructional teaching labs and improving experiential learning, research, academic support and collaborative student success spaces. The renovation will include five large, flexible, multi-disciplinary class labs in comparison to the existing structure of 13 small, single discipline teaching rooms, as well as new, flexible labs on upper floors for changing research opportunities. Donor funding allows construction of a third floor shell space for future research labs. Total project cost is \$44.7 million.

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Lever 3.1
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The Patient-Centered Care Learning Center, a \$42.5 million project, allows the MU School of Medicine to increase enrollment by 33 percent to meet the request of Association of American Medical Colleges (AAMC) that medical schools increase enrollment by 30 percent. This new facility also meets the requests from the health systems in Springfield, Mo., for a clinical campus to be located there. This project provides MU SOM an opportunity to illustrate the distinctive characteristics of Patient Based Learning in simulated patient environments, patient-based learning collaboration rooms, an appropriately sized and ventilated anatomy lab, and a large multipurpose active learning classroom to house one full cadre of medical students. The design took place in FY15, construction began in summer 2015, and it will be ready for occupancy in summer 2017.

Finally, Stewart Hall Renovation planning has begun and includes developing class lab spaces that maximize flexibility and allow for adaptability to respond to pedagogical changes over time.

The renovations of Lafferre and Stewart halls and new construction of P-CCLC address MU's identified need for additional class-lab space and the focus by the State of Missouri and university leaders on preparing graduates who meet the demand for STEM skills.

Campus or Unit:	University of Missouri-Columbia
Lever Number:	Lever 3.2
Lever Description:	Invest in new technologies that promote collaborative and interdisciplinary research and teaching.
Lever Metric:	Federal research dollars per TT faculty member: Baseline: \$92,139. FY14: \$89,710. FY15: \$85, 501. Target: \$110,000 by 2018.

Focusing specifically on boosting research productivity and impact, MU's investments in new technologies have continued to grow, as described in Lever 3.3. In addition, in FY15 MU's strategic research investments have shifted from technology to faculty. In particular, the Office of Research has invested in FY15 in the following three areas:

- 1) Funds for 41 faculty members across campus to spend the spring semester devoted to research and scholarship, with an emphasis on preparing proposals.
- 2) MU's Broader Impacts Network (BIN). This investment is the result of the increased emphasis from NSF and other agencies for all funded researchers to communicate effectively to U.S. citizens the relevance of public investments in scientific discovery and technological innovation to the nation's security, prosperity, and welfare. MU researchers have identified this as an area in which they need increased support and assistance.
- 3) The Entrepreneurship Legal Clinic (ELC) within the Law School. This clinic began in May 2015 and already has 16 clients. ELC provides a variety of types of legal advice to start-up and small business. In ad, the ELC represents a strategic investment in MU's goal of becoming more of an innovation and entrepreneurship culture.



Campus or Unit:	University of Missouri-Columbia
Lever Number:	Lever 3.3
Lever Description:	Provide the scholarly infrastructure for libraries, research collections, and scholarly communication to ensure faculty and student success.
Lever Metric:	<div style="border: 1px solid black; padding: 5px;"><p>Federal research dollars per TT faculty member: Baseline: \$92,139. FY14: \$89,710. FY15: \$85,501. Target: \$110,000 by 2018.</p><p>Citations per faculty member. Baseline: 70. FY14: 63. FY15: 64. Target: 100 by 2018.</p><p>Ranking of library among AAU institutions. Baseline: Bottom quartile. FY14 and FY15: bottom quartile. Target: Move into third quartile by 2018.</p></div>

Scholarly infrastructure continues to be a crucial element of MU's emphasis on our AAU research indicators. Highlights in FY15 include the following:

Web of Science: Web of Science (which is a key data source not just for the sciences but also for social sciences, arts and humanities) is the primary source of metrics used by the AAU. For many years MU had a subscription to Web of Science, which allowed faculty and campus administrators access to the largest data source on scholarly research, including information about citation rates, emerging trends, impact factors, journal rankings, all as measured by the AAU. Unfortunately, because of budget cuts, our subscription to Web of Science was cut in 2008. This has proved to be a serious liability.

In FY15, MU resumed its subscription to Web of Science, a decision that was well received by faculty, librarians, and deans. By having access to unbiased metrics of research world-wide (and the same data source used by AAU), MU faculty and campus administrators are able to track emerging trends world-wide (essential for submitting competitive grant applications), identify potential research collaborators with high citation records, and track research productivity of specific faculty members (current, potential, and external collaborators).

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Lever 3.3
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Another key investment continues to be meeting the requirements of an increasingly data-intensive research environment. As an example, genomics (applied to plants, animal, and humans), is an area of significant existing and growing strength at MU. Genomics has recently been recognized as an area which is expected to equal if not surpass the data output of the particle physics community, the archetypal “big data” discipline. Our research initiatives involving genomics, metabolomics, personalized health care, advanced imaging systems are all instances of fields that are increasingly dependent on access to next-generation information technology tools and services. This is in addition to the ongoing, growing use of these types of approaches by physicists, theoretical chemists, statisticians, economists, and others – all of whom are seeking to derive more meaning from ever-larger data sets. Contemporary research across the campus increasingly requires high-performance computing, massive (e.g., petabyte-scale) data storage, very-high-bandwidth networking for moving enormous data sets among (often remote) co-investigators and facilities, and latest-generation visualization tools. Through partnerships and joint investments with individual faculty and even entire research groups, we have been systematically adding to our local services in all of these research-enabling information technology services, and, importantly, are adding staff expertise required for facile use of these tools by research disciplinarians. Ensuring that we have the capacity for such big-data research is crucial within our highly competitive funding environment and is needed by both the faculty and the graduate students and post-docs they mentor.

Campus or Unit: University of Missouri-Columbia

Lever Number: Lever 4.1

Lever Description: Develop and implement strategies for producing new net revenues

Lever Metric:

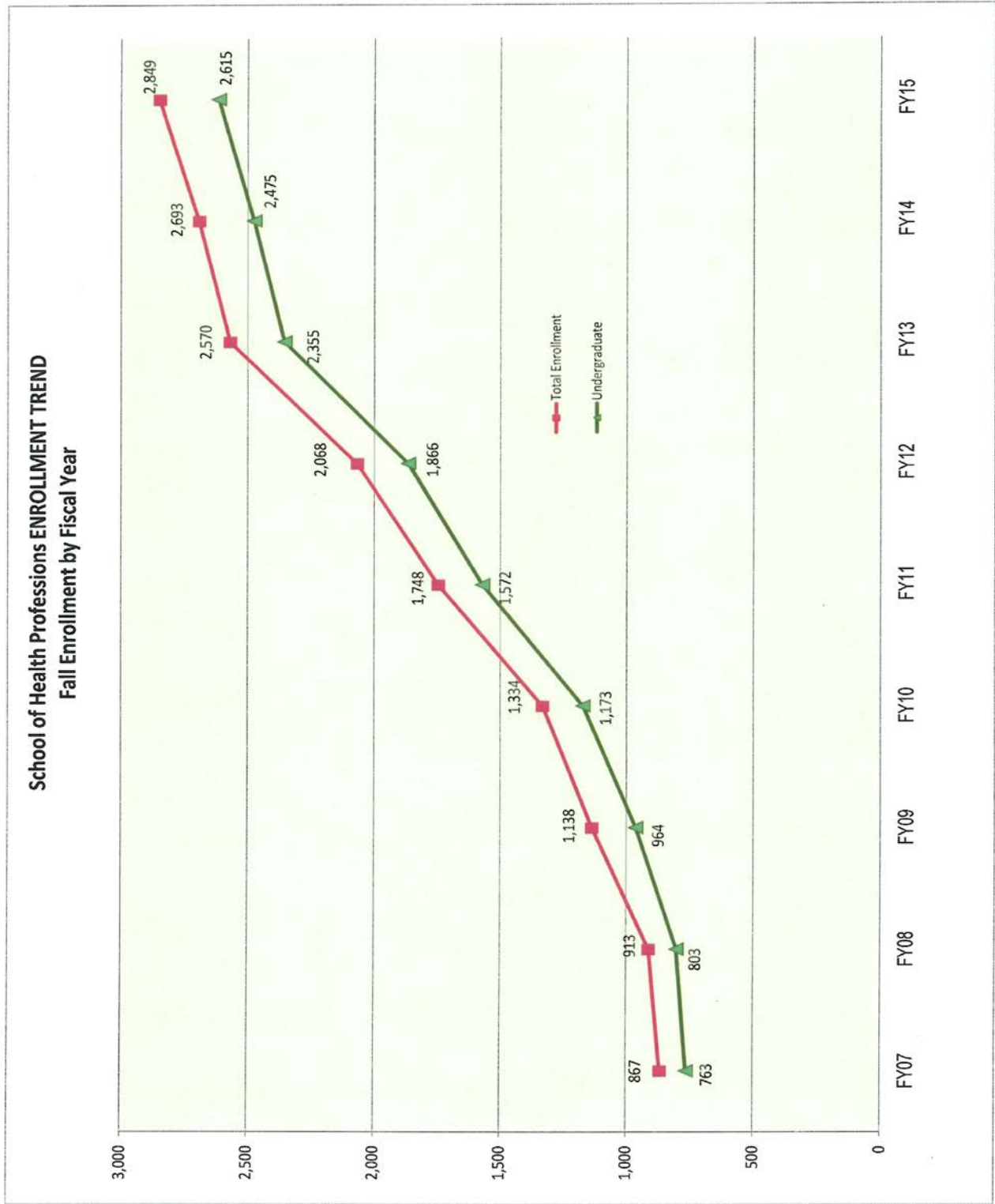
Net Operating Revenues Ratio. Baseline: FY13 +5.3%. FY15 +3.2%. Target: Positive.

MU continues to have a broad strategy for producing new net revenues, including increased student recruitment and retention, development of new innovative degree programs, expansion of online programs, investments in economic development, etc. Many of these initiatives are featured in other sections of this report (e.g., 1.2, 1.3, and 4.2).

In FY15 one of the most significant areas of investment related to production of new net revenues has been the expansion of high demand degree programs, most notably the bachelor of health sciences, physical therapy, occupational therapy, speech-language pathology, and a new 3+2 program in China with engineering.

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Campus or Unit:	<u>University of Missouri-Columbia</u>
Lever Number:	<u>Lever 4.2</u>
Lever Description:	Increase on line course offerings to meet market demand and generate net revenues
Lever Metric:	Number of students enrolled in Mizzou Online. Baseline in AY13-14: 14,115. AY14-15: 15,438. Target: 17,780 by 2018.

MU remains focused on expanding its high-quality online degree programs both in terms of number of programs and program enrollments. We are on track to meet the 2018 growth target listed above. We projected an 8 percent growth in enrollment for AY15 and realized a 9 percent growth with 15,438 students enrolled in classes supported by Mizzou Online.

In FY14, Mizzou Online transferred \$8.1M in funds to the campus G.O. budget. (This does not include revenue distributed directly to departments.) We projected the ability to increase this amount by an additional \$1M for FY15 and were able to exceed that and transfer \$3.1M in additional revenue; the FY15 transfer was \$11.2M

MU's schools and colleges made 11 online degree and certificate programs available in AY15:

- Doctoral:
 - Nursing Leadership and Innovations in Health Care (DNP)
 - Agricultural and Educational Leadership (PhD)
- Master's:
 - Mathematics Education (M Ed)
 - Public Health (MPH)
 - English Education (M Ed)
- Graduate Certificates:
 - Positive Psychology
 - Global Public Health
 - Organizational Change
 - Energy Efficiency
- Bachelor's:
 - Human Environmental Sciences: Early Childhood Education in a Mobile Society
 - Educational Studies

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Lever 4.2
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By the end of AY15, MU was offering 97 distance degrees and certificates, seven of which are being phased out and no longer accepting new students. Many of these that are being phased out have already been replaced by more effective and attractive alternatives.

In addition to expanding online degree programs, MU continues to expand online courses available to graduate and undergraduate students. There were 1,047 classes offered in AY15, which represents an increase of 53 online classes added to the portfolio for the purposes of supporting multiple academic programs.

AY16 initiatives for generating additional enrollments include an emphasis on recruiting students affiliated with the U.S. Armed Forces and community college graduates. Mizzou Online now funds two tuition awards for these groups; funds for the awards come from Mizzou Online's portion of the revenue share.

- Mizzou Online Military Tuition Award – 10 percent tuition award for distance-coded students in a distance degree or certificate program (all academic levels). Eligible groups include active duty, veterans, National Guardsmen, Reservists and the spouses and dependent children of these groups.
- Mizzou Online Community College Tuition Award – 10 percent tuition award for undergraduate distance programs for distance-coded students who are Missouri residents and graduates of a regionally accredited Missouri community college.

To support recruitment efforts among these groups, we added a staff member to focus on military, corporate and community college relationship building on behalf of MU's distance education programs.