

**MICUA Supplement
Fiscal 2022 Utilization of Funds Report**

DETAILED PROJECT DESCRIPTIONS

Institution: Johns Hopkins University

Project 1: Financial Aid for Maryland Students

Aligns with MHEC Priority 1: Study the affordability of postsecondary education in Maryland; Priority 4: Analyze systems that impact how specific student populations access affordable and quality postsecondary education

Project Budget: \$ 42,540,680

Detailed description of project/initiative:

The majority of Sellinger Aid funds which Johns Hopkins receives are used to fund financial aid to Maryland students attending our undergraduate or graduate programs throughout all of our academic disciplines. These funds are vital to our Institution's ability to provide access to as many students as possible who are academically qualified but lack the financial means to attend.

Describe how Maryland was served by this project/initiative:

Access to a quality higher education was provided to 5,050 Maryland students who received financial assistance in FY2022. Total institutional aid in FY2022 to Maryland students increased by 9% compared to prior year and amounted to \$ 129,768,314; 33% was supported by Sellinger funds.

Describe process of project evaluation/assessment:

Through a budget process involving our assistant vice provost for financial aid, deans and central leadership and ratified by the Board of Trustees, the divisions of the University set annual goals for the distribution of financial aid, a significant amount of which goes to benefit Maryland residents. Success in meeting these goals is evaluated at budget meetings throughout the year.

Project 2: Tuition Free Educational Opportunities for Maryland STEM Teachers

Aligns with MHEC Priority 4: Analyze systems that impact how specific student populations access affordable and quality postsecondary education; 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 48,625

Detailed description of project/initiative:

The Whiting School of Engineering is responding to an increased emphasis on quality Science, Technology, Engineering, and Mathematics (STEM) education that can only be met with available and affordable professional development for STEM teachers. To help Maryland become a leader in STEM education, Engineering for Professionals (EP) offers Maryland high school STEM teachers the opportunity to enroll in one course per semester—with a tuition waiver—in any of the EP's 22 graduate programs.

Describe how Maryland will be served by this project/initiative:

This program enables Maryland High School teachers under the STEM program to attend graduate level courses at no cost. Their attendance in the graduate courses improves the skill and knowledge of teachers throughout the State. The Whiting School of Engineering enrolled 17 students for the 2021-22 academic year.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Through an annual evaluation process developed by the leadership of the Whiting School of Engineering, we are continuing to adapt and modify the program to ensure that enrollment and continued progression is achieved.

Project 3: Graduate Degrees for Minorities in Engineering and Science

Aligns with MHEC Priority 4: Analyze systems that impact how specific student populations access affordable and quality postsecondary education

Proposed Budget: \$ 20,639

Detailed description of project/initiative:

These programs provides fellowships, community building initiatives, and professional development programming in support of engineering and science minority graduate students enrolled in the G.W.C. Whiting School of Engineering.

Describe how Maryland will be served by this project/initiative:

This initiative increases the access and affordability for minorities to engineering and science related degrees. In the last few years, more than 30% of Engineering/Science graduate students were female and 5% were minorities. These two groups have been historically underrepresented in the field of engineering and science, two fields which are vital to establishing Maryland as a leader in the life sciences and technology research industry. By increasing access to minorities in these fields, we are not only addressing the historical disparities, but also the needs of two of the

State's biggest economic sectors. In FY2022, 25 minority students graduated with their master's degree.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Through an annual evaluation process developed by the leadership of the Whiting School of Engineering, we are continuing to adapt and modify the program to ensure that minority enrollment and continued progression is achieved.

Project 4: Center for Teaching and Learning

Aligns with MHEC Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 6: Improve systems that prevent timely completion of an academic program; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 147,396

Detailed description of project/initiative:

The Center for Teaching and Learning supports the mission of the Bloomberg School of Public Health, "Protecting Health, Saving Lives, Millions at a Time" by developing, designing, and delivering online courses for various degree, certificate, and non-degree programs at the School. The Center employs professionals in instructional design, web development, technical writing, graphical illustration, and audio production. Center staff, media specialists, and the Information Systems group work together with the School's world-renowned faculty to produce and deliver public health content to students via the Internet. Students can access courses whenever it is convenient for them. We offered more than 347 full web courses that students can take for credit and enrolled 3,933 students in FY2022 through this public health education program. Students come from the part-time and full-time degree programs, certificate programs, professional training groups, alumni, self-learners, and interested health practitioners worldwide. In addition, we also offer what are called "massive open online courses" (MOOCs) on the Coursera platform (<http://www.coursera.org/jhu>) as well as FutureLearn and LeanPub. These courses are free to anyone in the world and students can earn statements of accomplishment after successful completion.

As of July 2022, 117 public health courses are listed on the Coursera website, 4 are listed on FutureLearn and 20 are listed on LeanPub. Our MOOC offerings have accumulated more than 11.6 million enrollments, and more than 2.1 million certificates of completion have been issued.

Describe how Maryland will be served by this project/initiative:

This program supports State goals for Maryland colleges and universities to provide high quality education and workforce training in areas such as health and the environment. The State further

encourages institutions to educate professionals in these high-demand, State workforce shortage areas and to work collaboratively to address these critical health issues. This program is an illustration of how the School of Public Health is addressing this vital workforce shortage, by providing a more user-friendly and accessible program to educate these much needed health professionals. The Center for Teaching and Learning supports faculty and staff across the Bloomberg School of Public Health.

Describe process of project evaluation/assessment:

Programs are regularly assessed by student and faculty evaluations, enrollments and feedback forms. In addition, each department is asked to evaluate and update the current courses available online and to provide additional courses as they become available. This program continues to be very successful and will remain a vital resource for Maryland students.

Project 5: SOURCE (Student Outreach Resource Center), the community engagement and service-learning center for the Johns Hopkins University Schools of Public Health, Nursing, and Medicine

Aligns with MHEC Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning; Priority 8: Promote a culture of risk-taking

Proposed Project Budget: \$ 41,403

Detailed description of project/initiative:

This program promotes a relationship and teaching tool between the local public school, its faculty, staff and students to community outreach centers, non-profit organizations, and Baltimore City Schools, administered through the Bloomberg School of Public Health.

Describe how Maryland will be served by this project/initiative:

This program improves communication skills of school administrative and teaching staff with their students and parents in the community. The program has also helped to build and sustain links with the East Baltimore community, while serving as a clearinghouse to engage students, faculty, and staff interested in community engagement to volunteer their time, efforts and expertise in the local public schools. SOURCE responds to community-identified needs of over 100 community-based organizations in Baltimore City.

Describe process of project evaluation/assessment:

This program has a governing board that reviews the progress and needs of the program. The number of participating organizations has grown each year as have the number of students and faculty participating in the program. This outreach program extends to three JHU divisions, Bloomberg School of Public Health, School of Medicine and School of Nursing. SOURCE offers a wide range of engagement opportunities, including for-credit academic courses, to

individuals from the JHU health professional schools. Each opportunity includes evaluation components from both the Hopkins and community partners participating in a particular project.

Project 6: Support Academic Programs in Public Health

Aligns with MHEC Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 351,232

Detailed description of project/initiative:

To provide faculty and student support, work study programs, and internship programs in the areas of: mental health, epidemiology, molecular microbiology and immunization, international health, and, population and family health sciences for the Bloomberg School of Public Health.

Describe how Maryland will be served by this project/initiative:

This operational support is vital to maintaining our world class research departments and in continuing our stature as the preeminent research institution in public health. This program supports the State goal for Maryland colleges and universities to provide high quality education and workforce training in areas, including health and the environment. The State further encourages institutions to educate professionals in these high-demand, state workforce shortage areas and to work collaboratively to address these critical health issues. Our School of Public Health continues to work to address the State's workforce needs in this ever growing discipline.

Describe process of project evaluation/assessment:

Through a process involving our dean and divisional leadership within the School of Public Health, they assess their past performance in and set annual goals for maintaining their leading academic programs. They then develop and prioritize these goals to best use the funds available.

Project 7: Support Remote/Online Instruction at the Johns Hopkins Bloomberg School of Public Health

Aligns with MHEC Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 6: Improve systems that prevent timely completion of an academic program

Proposed Project Budget: \$ 69,256

Detailed description of project/initiative:

The Bloomberg School of Public Health's overarching goal is to maintain a high-quality teaching and learning experience that optimizes student engagement for all students regardless of whether they choose to participate face to face or remotely. To fulfill this objective, this initiative provides an enhanced capability for hybrid teaching by allowing for additional training and support to faculty and their teaching assistants as well as enhance the technology used by instructors at home, in the field, and at the school.

Coaching and Support for Faculty: We support a Corps of Faculty Peer Teaching Mentors who serve as a resource to faculty to help transition courses to the virtual and hybrid environments. These faculty extend the efforts of the limited number of instructional designers in the Center for Teaching and Learning to produce a high-quality teaching and learning experience using practical solutions that are scalable. The initiative also includes recruiting and training a cohort of doctoral level "Senior TAs" who have both subject matter and technical expertise to assist faculty in transitioning to online or hybrid instruction. The cohort receives additional training from the Center of Teaching and Learning staff in both pedagogic best practices specifically focusing on active learning strategies and the tools available in CoursePlus and beyond (including more advanced uses of Zoom, VoiceThread and Teams). These "Senior TAs" work with faculty on a one-on-one basis in planning and preparing for their courses.

Technology: Classes that incorporate expert interviews, panel discussions, and live or recorded field experiences bring the student closer to the front lines of public health research and practice. Faculty need reliable and easy-to-use technologies to take full advantage of these modern approaches to teaching. To address the limited resources available for faculty to create high-quality academic course content, the School of Public Health proposes strengthening the remote instructor's voice through use of technologies that are robust, easy to deploy, enable superior audio-video recordings, and most importantly, vividly bring into the classroom public health experiences from around the globe. This technology includes high-quality, in-ear microphones, off campus recording kits, bonded cellular recording kits, and the expansion of MediaBridge (Tricaster) capacity to centrally record multiple faculty and subject matter experts both locally and around the world.

The off campus recording kits include regular video cameras and also 360-degree video kits that can stitch together videos captured in all directions at the same time. When viewed on computers or mobile devices, users can view 360-degree videos, such as activities within a meat processing plant, in an immersive format similar to virtual reality. The bonded cellular recording kits are portable field equipment that can capture video in the field and reliably deliver or broadcast the video to another location hundreds of miles away. Together they allow faculty to capture and deliver videos of public health field experiences back to the School to be included in their instructions.

Describe how Maryland will be served by this project/initiative:

This program supports State goals for Maryland colleges and universities to provide high quality education and workforce training in areas such as health and the environment. The State further encourages institutions to educate professionals in these high-demand, State workforce shortage areas and to work collaboratively to address these critical health issues. This program is an

illustration of how the School of Public Health is addressing this vital workforce shortage, by providing a more user-friendly and accessible program to educate these much needed health professionals. The Center for Teaching and Learning supports faculty and staff across the Bloomberg School of Public Health by producing online training materials and delivering them on the School's own course management platform, CoursePlus.

Describe process of project evaluation/assessment:

Programs are regularly assessed by student and faculty evaluations, enrollments and feedback forms. Last fall we supplemented our usual course evaluations with mid-term course evaluations to collect more "real time" feedback and use the faculty mentors and senior TA's to help faculty "course correct" and ensure a robust online educational experience for students. We are also collecting data to ensure that each course being taught in an online format this fall has received assistance from the faculty mentors and senior TA's, or from Center for Teaching and Learning staff, and to solicit feedback regarding needs for additional training. A faculty survey was also carried out this fall to assess faculty's readiness for online instruction. Finally, we have a Fall Teaching Planning task force, composed of staff, faculty, and students, which meets weekly to assess the planning and implementation of the initiatives.

Project 8: Interdisciplinary Studies in Education

Aligns with MHEC Priority 3: Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning;

Proposed Project Budget: \$ 59,821

Detailed description of project/initiative:

The School of Education (SOE) draws upon interdisciplinary research and academic programs to address needs in PreK-12 education, with a particular emphasis on urban schools. Initiatives include both those that enhance the content knowledge of educators and those that apply current research and development activities to the improvement of student achievement and enhanced school performance. Interdisciplinary graduate programs, research projects, and professional development activities are being developed in partnership with other Johns Hopkins University academic units and with public schools.

The Neuro-Education Initiative (NEI)

The Neuro-Education Initiative seeks to bridge the gap between the science of learning and education by bringing together an interdisciplinary group of researchers, educators, and other key stakeholders to explore the intersection, knowledge, and current application of brain research in education, and to identify and conduct translational research. Through the learning sciences collaboration between the JHU's Schools of Education, Public Health, Medicine, and Nursing, and the Kennedy Krieger Institute, the NEI endeavors to improve teaching and learning by bringing to educators the latest research and best practices on the science of learning. Since

2008, the NEI has fostered an interdisciplinary dialogue in this emerging field that has the potential to revolutionize educational practice and policy on a regional and national level. With its rich array of world-renowned brain researchers and education experts, Johns Hopkins is uniquely positioned to become a leader in this work.

The NEI has established a strong collaborative network across JHU and other universities to work toward achieving its core goals, which include: (1) bringing to educators relevant research from the neuro- and cognitive sciences to enhance teaching and learning through academic programs such as the School of Education's Mind, Brain and Teaching post-baccalaureate certificate, as well as regional conferences, national summits, and a professional development series, (2) exploring translational research opportunities and conducting rigorous research studies in authentic educational as well as clinical settings, and (3) bringing educational best practices to schools nationally and internationally derived from research through publications, multiple media outlets, partnerships with state and local districts, and partnerships with national and international institutions.

NEI Academic Programs and Professional Development

The School of Education's Mind, Brain and Teaching (MBT) post-baccalaureate certificate is delivered in an online, face-to-face, and blended formats, allowing it to reach an international audience as well as domestic one. As well as offering a standalone certificate program, SOE offers a specialization in Mind, Brain, and Teaching as part of its online Doctor of Education (Ed.D.) program. This Ed.D. specialization is designed for educators interested in exploring research from cognitive theories and neurosciences, and its potential to inform the field of education. Students who pursue this specialization gain the knowledge and skills to interpret basic and applied research and apply relevant findings to educational practices and policies.

As of summer 2022, six cohorts of students who have pursued the MBT specialization within the Ed.D. have successfully defended their dissertations and have graduated from the program. These graduates have already been accepted to present their research in the form of research poster presentations at conferences such as National Association for Multicultural Education (NAME), Learning and the Brain conferences, and the International Mind, Brain, and Education Society.

In addition to academic programs, the NEI offers a professional development series based on the translational framework Brain-Targeted Teaching® (BTT) Model. The model provides educators with a pedagogical framework informed by a rich body of research from the neuro- and cognitive sciences. The Maryland State Department of Education (MSDE) has approved the BTT professional development series for MSDE-approved Continuing Professional Development (CPD) credits. Dr. Mariale Hardiman, JHU's Director of the Neuro-Education Initiative, has delivered professional development training on an annual basis to Baltimore City Public School teachers since 2012. Ongoing professional development cohorts are offered through a series of summer institutes and through online professional development modules through SOE's Center for Technology in Education.

Describe how Maryland will be served by this project/initiative:

School of Education faculty members are collaborating with researchers in other units at Johns Hopkins University to develop innovative academic and research programs to benefit PreK-12 schools, children, and communities in Maryland. The NEI's collaborative work with other JHU units and state and local agencies supports Priority #3 (Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education) and Priority 7 (Enhance the ways postsecondary education is a platform for ongoing lifelong learning) by bringing together educators, researchers, policy-makers, and other key stakeholders—for example, at conferences and summits—to discuss challenging educational and health-related problems facing society, analyze data, disseminate research, and inform decision-making. Furthermore, Maryland educators continue to benefit from the School of Education's specialized interdisciplinary post-baccalaureate certificate program Mind, Brain, and Teaching. The MBT certificate graduated 29 students in the 2021-22 academic year.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.

Project 9: Mathematics and STEM Instructional Leader (PreK-6) Certificate Programs

Aligns with MHEC Priority 3: Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education; Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 15,791

Detailed description of project/initiative:

The School of Education's two post-baccalaureate certificates in mathematics and STEM instructional leadership were developed in response to the Maryland State Department of Education endorsement for instructional leaders at the PreK-6 level. These certificates were designed to prepare an exceptional cadre of mathematics and science teacher leaders to serve teachers of PreK-6 grade students and in direct and indirect ways their students. Instructional leaders are specially trained to lead educational contexts to develop powerful learning contexts that support the development of beginning and veteran teachers of mathematics and STEM. Participants in this certificate program explore research-informed methods for effective mathematics teaching and effective leadership including policy, practice, emerging research, theory, culturally responsive education, and legislation/advocacy.

Using national and state mathematics, science, and STEM standards as frameworks, the programs are structured to provide deep conceptual understanding for PreK-6 instructional

leaders so that they are better able to help their students develop skills and knowledge in these critical areas. With content-application and research-practice approaches, teachers who complete these post-baccalaureate certificate programs are able to serve as mathematics or STEM instructional leaders. They are equipped with standards-based conceptual knowledge and practical skills; a foundation in equitable practices to support all students' learning through problem-based, project-based approaches; and knowledge of research to support effective teacher learning and instructional change. Teachers who participate in these certificates are prepared to organize, implement, and evaluate a school-wide approach to raising student achievement and providing professional learning opportunities to support teacher learning.

The certificate programs are aligned with the School of Education's mission to prepare leaders in the field of education and to improve the quality and availability of leaders in the STEM disciplines.

In 2016, SOE received approval from the Maryland Higher Education Commission (MHEC) to 1) redesign the curricula for these two certificate program to align with the new endorsements in STEM and mathematics instructional leadership introduced by the Maryland State Department of Education, and 2) change the delivery mode from a traditional face-to-face to fully online format. The program was launched in January 2019 with the goal of attracting a national, as well as a local audience. SOE recruited 4 students into both certificate programs during the 2021-22 academic year.

Describe how Maryland will be served by this project/initiative:

Graduates of the programs are qualified to fill positions as lead-teachers, content coaches, and instructional support teachers in mathematics and STEM education. These positions are in high demand as school systems seek to raise student achievement in these fields.

These certificate programs are among a handful of graduate level programs in the nation designed to address the needs of a large and growing field of mathematics and STEM education. While there are certainly other programs that prepare elementary teachers to teach mathematics and science, the School of Education's PreK-6 mathematics and STEM certificate programs are unique because they focus on strengthening PreK-6 teachers' knowledge in all the mathematics and STEM domains covered in the national and state standards. This experience also gave candidates the requisite content knowledge, pedagogic skills, and leadership strategies to develop and implement high quality mathematics and STEM teacher learning opportunities for their colleagues.

These certificate programs address MHEC Priority 3 (Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education), Priority 5 (Maintain the commitment to high-quality postsecondary education in Maryland), and Priority 7 (Enhance the ways postsecondary education is a platform for ongoing lifelong learning) since they help teachers spark better interest and prepare students for careers in the STEM disciplines. This, in turn, helps fuel the State's initiatives in key areas such as biotechnology and neuroscience.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.

Project 10: MAT Program Enhancement Initiative

Aligns with MHEC Priority 3: Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 13,566

Detailed description of project/initiative:

The Master of Arts in Teaching (MAT) program at the Johns Hopkins School of Education (SOE) embodies the spirit of the University in its unwavering pursuit of excellence through its commitment to a rigorous program that uniquely prepares aspiring teachers to embrace the challenges of diverse classrooms. The hallmark of this innovative program is its focus on an intellectually challenging, reform-minded program of studies in which candidates acquire teaching competencies within a supportive learning community in urban schools. Both in and outside the classroom, through multiple coherently designed experiences, candidates come to recognize that teaching is more complex than simply conveying subject matter. Candidates learn to transform their subject matter expertise into relevant experiences for PreK-12 learners by applying the best of what we know from the Learning Sciences about how children and youth think and learn. A cadre of professional educators support candidate development through a continuous model of improvement with timely and targeted feedback in both face-to-face and real-time digital formats.

Revisions to the MAT program continued throughout the 2021-22 academic year, with a focus on addressing the teaching and learning challenges of preparing candidates for a rapidly changing educational environment where the demands for effective teaching require great flexibility and innovation. Revisions focus on social-emotional learning, design thinking, and technology innovations. Recent revisions to the MAT program, aligned with Priority 3 and 7, have addressed Maryland State Department of Education recommendations to increase teacher candidate preparedness in meeting the challenges of increasingly more diverse classrooms. The MAT has implemented multiple intensive school-based experiences focused on special populations at nationally recognized institutions including Kennedy Krieger Institute, Center for Talented Youth, and Henderson-Hopkins K-8 School. The MAT continues to revise its curriculum to emphasize the learning sciences through a focus on the latest research in the cognitive processes of attention, memory, emotions, creativity, and the neurobiology of learning differences. In addition to learning sciences, MAT developed new curriculum focused on the connections between education and health, working closely with the School of Education's Center for Safe and Healthy Schools.

To further develop its advising model, the MAT program collaborated with the School of Education Office of Student Affairs' Ambassador of Learning Design who work directly with MAT faculty, students, and alumni to develop a professional identity through a highly personalized advising model focused on academic, career, and personal well-being. The MAT is a fast-paced, one-year program leading to Maryland certification. MAT leadership worked closely with MSDE's initiatives to prepare teachers to teach in Maryland schools. Specifically, the MAT developed a support structure for students to meet the new assessment requirements for the State of Maryland.

Describe how Maryland will be served by this project/initiative:

Maryland is served by this project by having the opportunity to hire highly prepared, fully certified candidates to teach in Maryland schools. Because candidates complete all of their internship experiences in Baltimore City Public Schools, they experience some of the most complex challenges in today's classrooms and schools. They are mentored by some of the most accomplished and committed educators in the state and are inspired to continue to work in challenging school settings. In past years, at least 50% of the graduates of the MAT program were employed by Maryland school systems. In the 2021-22 school year, the MAT program was redesigned with the goal of increasing its impact on the State of Maryland, and budgeted funds were used to revise curriculum and to hire and train new faculty.

Describe process of project evaluation/assessment:

Ongoing assessment data was collected from all stakeholders. MAT program leadership collected feedback from MAT candidates, faculty, K-12 mentors, and university supervisors on the quality of the program. In addition, the SOE Assessment Office collects data on SOE student performance, including their impact on K-12 students. In 2021-22, MAT leadership continued to collect data through focus groups with MAT program partners.

Project 11: Digital Age in Learning, Education, and Technology

Aligns with MHEC Priority 3: Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning.

Proposed Project Budget: \$ 94,608

Detailed description of project/initiative:

The Digital Age Learning and Educational Technology (DALET) master's degree program in the Johns Hopkins School of Education is designed for K-12 teachers, administrators, student support personnel, organizational leaders, education nonprofit professionals, and policymakers who want to use the best research from educational technology and the learning sciences to inform and improve professional practice and student learning outcomes in education.

The program's curriculum and learning objectives align with the International Society for Technology in Education's (ISTE) Standards for Educators, as well as the standards of the Association for Educational Communications & Technology. Through their courses, DALET students focus on the evolving field of learning science and the ways that technology can be effectively integrated in learning environments to improve student learning outcomes. Students explore emerging technology trends and research best practices in a wide range of learning environments, including formal, informal, online, blended, and personalized. Courses involve project-based learning and collaborative planning, and candidates gain competencies in learning science, design thinking, instructional design, systems change, Universal Design for Learning, and evaluation and research of emerging technologies. Students complete a capstone project. There were 99 students in the 2021-22 degree and professional certificate programs.

DALET courses also serve as elective courses for students in the SOE teacher preparation programs. Additionally, DALET faculty regularly collaborate with faculty in the teacher preparation programs to explore opportunities for research and new program initiatives.

Describe how Maryland will be served by this project/initiative:

Approximately 15% of active DALET students reside in Maryland, the majority of whom are K–12 educators. DALET serves the state by preparing those educators to apply best practices in the integration of educational technologies into their learning environments. DALET faculty also collaborate with other faculty members across the university to introduce projects to improve educators' practices. As one example, a team of faculty from the School of Education and the JHU Whiting School of Engineering recently received a planning grant from the MD Center for Computing in Education to begin introducing computational thinking/computer science education courses into the SOE curriculum. This project directly benefits Baltimore City and Baltimore County schools, as the work of the grant entails building partnerships with schools in these districts to understand their needs with respect to computational thinking and computer science education in K–12 schools. Further, the grant serves as the foundation for a long-term initiative between the Whiting School of Engineering and the School of Education to create a new computer science education program for Maryland K–12 educators.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education were assessed through the use of student and faculty evaluations and feedback surveys.

Project 12: MS, Education with a concentration in Educational Studies (Urban Teachers Baltimore option)

Aligns with MHEC Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 756,247

Detailed description of project/initiative:

Through a partnership with Urban Teachers, the School of Education provides coursework leading to the Master of Science (MS), Education degree with a concentration in Educational Studies. Students complete coursework that covers not only their content area, but classroom management strategies, culturally relevant pedagogy, and special education. Students spend the first year of the program as a resident in an expert teacher's classroom in Baltimore City, where they gradually take on more responsibility under the tutelage of their host teacher. They also receive rigorous coaching. In their second year, they begin as a teacher of record in their own classroom while they complete their MS degree and continue to receive coaching support. Students who graduate from the program continue to receive an additional year of coaching prior to being recommended by our partner, Urban Teachers (an MSDE-approved alternative certification provider) for dual certification in their content area and special education.

Describe how Maryland will be served by this project/initiative:

Maryland is currently a net importer of teachers, with Maryland Institutions of Higher Education only producing about 50% of the new teachers needed by the State each year. This program produces close to 100 teachers each year, with about two third of that number serving in elementary classrooms and the rest split between secondary mathematics and secondary English Language Arts classrooms. These teachers enter the classrooms with a year of experience as a resident under their belts, with dual certification, and with a strong network of support. The program also focuses specifically on recruiting Black teachers, as Baltimore is a majority Black city and research has shown the benefits of having a Black teacher for Black students.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education were assessed through the use of student and faculty evaluations and feedback surveys. The School of Education and our partner track multiple data points related to the program, including teacher retention, coaching evaluation data, and partner satisfaction. The School anticipates that 84 teachers participating in the 2022-23 academic year will enter the Maryland teaching workforce as new teachers in August-2022.

Project 13: TimelyMD

Aligns with MHEC Priority 6: Improve systems that prevent timely completion of an academic program

Proposed Project Budget: \$ 383,000

Actual Spend: \$ 393,662

Detailed description of project/initiative:

TimelyMD is a platform that supports the mental health and well-being of students in need through two primary services.

- Talk Now
 - Online resource staffed by mental health professionals that students can contact to talk about any issue, at any time.
- Scheduled Counseling Appointments
 - Students can set up ongoing mental telehealth counseling appointments with a licensed provider.

Describe how Maryland was served by this project/initiative:

TimelyMD provides students with access to a wide range of mental telehealth counseling services free and available to traditional and non-traditional students and learners to augment Student Health and Well Being services in a remote modality. The remote platform is expected to reach a wider range of students that seek mental health services that is convenient and confidential. The mission of the TimelyMD initiative was to implement licensed student health practices that promote student success by removing financial and operational barriers in relation to mental health support services.

Describe process of project evaluation/assessment:

University Student Services undergoes an annual budget process involving our vice provost for student health and well-being, deans and central leadership where program initiatives and funding sources and uses are evaluated in relation to program objectives. The effectiveness and utilization of the services are evaluated as part of the budget process annually.

Project 14: Hopkins Office of Undergraduate Research (HOUR)

Aligns with MHEC Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 8: Promote a culture of risk-taking

Proposed Project Budget: \$ 388,000

Actual Spend: \$ 444,982

Detailed description of project/initiative:

The purpose and vision of HOUR is to create equitable access to impactful research opportunities for Johns Hopkins University undergraduate students. Over 80% of Hopkins undergraduates participate in at least one research experience during their time at Hopkins. Students average 8-10 hours per week during the academic year participating in research opportunities and often give up breaks to work full time on these projects which provide enriching hands-on experience.

Describe how Maryland was served by this project/initiative:

HOOR is an initiative that builds upon Johns Hopkins University's strengths and goals as America's first research university by taking advantage of the thousands of faculty, staff, and graduate students involved in research and creative projects promoting a culture of research and scholarship that enriches the undergraduate experience. These experiences prepare undergraduate students for the working environment and graduate education programs.

Describe process of project evaluation/assessment:

University Student Services participates in an annual budget process involving our vice provost for integrative learning and life design, deans and central leadership where program initiatives and funding sources and uses details are evaluated in relation to program objectives. The effectiveness of services are evaluated as part of the budget process annually.

Project 15: Behavioral Health Crisis Support Team (BHCST)

Aligns with MHEC Priority 6: Improve systems that prevent timely completion of an academic program

Proposed Project Budget: \$ 850,000

Actual Spend: \$ 782,356

Detailed description of project/initiative:

Johns Hopkins University has established a Behavioral Health Crisis Support Team (BHCST) to augment the university's response to calls for help in acute mental health situations. The BHCST serves students, faculty, staff, and community members who experience a behavioral health crisis on or near its Baltimore campuses and offers a range of services, including a 24/7 mobile crisis team for people in need of intervention. In addition to 24/7 immediate crisis response, BHCST clinicians also offer near-term mental health support and resources to ensure the individual has continuation of care in partnership with Baltimore Crisis Response, Inc. (BCRI), an established community organization with significant experience helping individuals in crisis throughout the city of Baltimore.

Describe how Maryland was served by this project/initiative:

Leveraging best practices and innovative approaches identified in the field, the BHCST provides JHU affiliates with quality mental health crisis assistance for those in and around the city of Baltimore. The goal is to help address the growing need for a more nuanced approach to public health response practices in relation to behavioral and mental health crisis moments and to link individuals in crisis to ongoing university support services to ensure continuation of care as needed. This approach is designed to be an efficient and effective model to respond to emergency calls as more than one-third (35.6%) of calls to Johns Hopkins Safety & Security were determined to be related to a mental health crisis between January 2019 and December 2020.

Describe process of project evaluation/assessment:

As part of the annual budget process involving our vice provost for student health and well-being, deans and central leadership this program is assessed along with other priorities to determine appropriate resource allocations. This program is evaluated by stakeholders on a continuous basis as part of these budget meetings.

**MICUA Supplement
Fiscal 2023 Intended Use of Funds Report**

Institution: Johns Hopkins University

Summary of Projects/Initiatives:

1	Financial Aid for Maryland Students	\$58,198,336
2	Tuition Free Educational Opportunities for Maryland STEM Teachers	217,728
3	Graduate Degrees for Minorities in Engineering and Science	951,841
4	Center for Teaching and Learning	130,151
5	SOURCE (Student Outreach Resource Center)	38,903
6	Support Academic Programs in Public Health	446,543
7	Interdisciplinary Studies in Education	19,157
8	Mathematics and STEM Instructional Leader (PreK-6) Certificate Programs	10,991
9	Digital Age in Learning and Educational Technology	40,761
10	MS Education w/ a Concentration in Education Studies (UT)	341,597
11	TimelyCare	400,000
12	Hopkins Office of Undergraduate Research (HOUR)	400,000
13	Behavioral Health Crisis Support	1,000,000
14	Making Neuroscience Fun	100,000
15	Math Future Scholars Program	100,000
16	Physics Fair and Outreach	20,000
17	Opportunities for Maryland Community College Students	250,000
18	COMPASS	197,000
19	TeachWell	657,751
20	Center for Educational Outreach	1,000,000
21	Musicians in Residence	25,000
22	LaunchPad	75,000
Total		\$64,620,760

**MICUA Supplement
Fiscal 2023 Intended Use of Funds Report**

DETAILED PROJECT DESCRIPTIONS

Institution: Johns Hopkins University

Project 1: Financial Aid for Maryland Students

Aligns with MHEC Priority 1: Study the affordability of postsecondary education in Maryland; Priority 4: Analyze systems that impact how specific student populations access affordable and quality postsecondary education

Proposed Project Budget: \$ 58,198,336

Detailed description of project/initiative:

The majority of Sellinger Aid funds which Johns Hopkins receives are used to fund financial aid to Maryland students attending our undergraduate or graduate programs throughout all of our academic disciplines. These funds are vital to our Institution's ability to provide access to as many students as possible who are academically qualified but lack the financial means to attend.

Describe how Maryland was served by this project/initiative:

Current appropriations for FY2023 Sellinger aid is \$64,620,760, 90% of which will be used to fund aid for Maryland students. In FY2022, 5,050 Maryland students received financial assistance to access a quality higher education; a comparable number of students are expected to be served by this initiative in the 2022-23 academic year.

Describe process of project evaluation/assessment:

Through a budget process involving our assistant vice provost for financial aid, deans and central leadership and ratified by the Board of Trustees, the divisions of the University set annual goals for the distribution of financial aid, a significant amount of which goes to benefit Maryland residents. Success in meeting these goals is evaluated at budget meetings throughout the year.

Project 2: Tuition Free Educational Opportunities for Maryland STEM Teachers

Aligns with MHEC Priority 4: Analyze systems that impact how specific student populations access affordable and quality postsecondary education; 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 217,728

Detailed description of project/initiative:

The Whiting School of Engineering is responding to an increased emphasis on quality Science, Technology, Engineering, and Mathematics (STEM) education that can only be met with available and affordable professional development for STEM teachers. To help Maryland become a leader in STEM education, Engineering for Professionals (EP) offers Maryland high school STEM teachers the opportunity to enroll in one course per semester with a tuition waiver in any of the EP's 23 graduate programs.

Describe how Maryland will be served by this project/initiative:

This program enables Maryland High School teachers under the STEM program to attend graduate level courses at no cost. Their attendance in the graduate courses improves the skill and knowledge of teachers throughout the State. The Whiting School of Engineering projects enrollments of 18 students for the 2022-23 academic year.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Through an annual evaluation process developed by the leadership of the Whiting School of Engineering, we are continuing to adapt and modify the program to ensure that enrollment and continued progression is achieved.

Project 3: Graduate Degrees for Minorities in Engineering and Science

Aligns with MHEC Priority 4: Analyze systems that impact how specific student populations access affordable and quality postsecondary education

Proposed Project Budget: \$ 951,841

Detailed description of project/initiative:

This program provides fellowships, community building initiatives, and professional development programming in support of engineering and science minority graduate students enrolled in the G.W.C. Whiting School of Engineering.

Describe how Maryland will be served by this project/initiative:

This initiative increases the access and affordability for minorities to engineering and science related degrees. In the last few years, more than 31% of Engineering/Science graduate students were female and 5% were minorities. These two groups have been historically underrepresented in the field of engineering and science, two fields which are vital to establishing Maryland as a leader in the life sciences and technology research industry. By increasing access to minorities in these fields, we are not only addressing the historical disparities, but also the needs of two of the State's biggest economic sectors. In FY2023, it is expected that 5 minority students will graduate with their PhD alongside 35 minority students with their master's degree.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Through an annual evaluation process developed by the leadership of the Whiting School of Engineering, we are continuing to adapt and modify the program to ensure that minority enrollment and continued progression is achieved.

Project 4: Center for Teaching and Learning

Aligns with MHEC Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 6: Improve systems that prevent timely completion of an academic program; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 130,151

Detailed description of project/initiative:

The Center for Teaching and Learning supports the mission of the Bloomberg School of Public Health, "Protecting Health, Saving Lives, Millions at a Time" by developing, designing, and delivering online courses for various degree, certificate, and non-degree programs at the School. The Center employs professionals in instructional design, web development, technical writing, graphical illustration, and audio production. Center staff, media specialists, and the Information Systems group work together with the School's world-renowned faculty to produce and deliver public health content to students via the Internet. Students can access courses whenever it is convenient for them. We offer more than 347 full web courses that students can take for credit and enroll more than 3,933 students each year through this public health education program. Students come from the part-time and full-time degree programs, certificate programs, professional training groups, alumni, self-learners, and interested health practitioners worldwide. In addition, we also offer what are called "massive open online courses" (MOOCs) on the Coursera platform (<http://www.coursera.org/jhu>) as well as FutureLearn and LeanPub. These courses are free to anyone in the world and students can earn statements of accomplishment after successful completion.

As of July 2022, 117 public health courses are listed on the Coursera website, 4 are listed on FutureLearn and 20 are listed on LeanPub. Our MOOC offerings have accumulated more than 11.6 million enrollments, and more than 2.1 million certificates of completion have been issued.

Describe how Maryland will be served by this project/initiative:

This program supports State goals for Maryland colleges and universities to provide high quality education and workforce training in areas such as health and the environment. The State further encourages institutions to educate professionals in these high-demand, State workforce shortage areas and to work collaboratively to address these critical health issues. This program is an

illustration of how the School of Public Health is addressing this vital workforce shortage, by providing a more user-friendly and accessible program to educate these much needed health professionals. The Center for Teaching and Learning supports faculty and staff across the Bloomberg School of Public Health.

Describe process of project evaluation/assessment:

Programs are regularly assessed by student and faculty evaluations, enrollments and feedback forms. In addition, each department is asked to evaluate and update the current courses available online and to provide additional courses as they become available. This program continues to be very successful and will remain a vital resource for Maryland students.

Project 5: SOURCE (Student Outreach Resource Center), the community engagement and service-learning center for the Johns Hopkins University Schools of Public Health, Nursing, and Medicine

Aligns with MHEC Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning; Priority 8: Promote a culture of risk-taking

Proposed Project Budget: \$ 38,903

Detailed description of project/initiative:

This program promotes a relationship and teaching tool between the local public school, its faculty, staff and students to community outreach centers, non-profit organizations, and Baltimore City Schools, administered through the Bloomberg School of Public Health.

Describe how Maryland will be served by this project/initiative:

This program improves communication skills of school administrative and teaching staff with their students and parents in the community. The program has also helped to build and sustain links with the East Baltimore community, while serving as a clearinghouse to engage students, faculty, and staff interested in community engagement to volunteer their time, efforts and expertise in the local public schools. SOURCE responds to community-identified needs of over 100 community-based organizations in Baltimore City.

Describe process of project evaluation/assessment:

This program has a governing board that reviews the progress and needs of the program. The number of participating organizations has grown each year as have the number of students and faculty participating in the program. This outreach program extends to three divisions, Bloomberg School of Public Health, School of Medicine and School of Nursing. SOURCE offers a wide range of engagement opportunities, including for-credit academic courses, to individuals from the JHU health professional schools. Each opportunity includes evaluation components from both the Hopkins and community partners participating in a particular project.

Project 6: Support Academic Programs in Public Health

Aligns with MHEC Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 446,543

Detailed description of project/initiative:

To provide faculty and student support, work study programs, and internship programs in the areas of: mental health, epidemiology, molecular microbiology and immunization, international health, and, population and family health sciences for the Bloomberg School of Public Health.

Describe how Maryland will be served by this project/initiative:

This operational support is vital to maintaining our world class research departments and in continuing our stature as the preeminent research institution in public health. This program supports the State goal for Maryland colleges and universities to provide high quality education and workforce training in areas, including health and the environment. The State further encourages institutions to educate professionals in these high-demand, state workforce shortage areas and to work collaboratively to address these critical health issues. Our School of Public Health continues to work to address the State's workforce needs in this ever growing discipline.

Describe process of project evaluation/assessment:

Through a process involving our dean and divisional leadership within the School of Public Health, they assess their past performance in and set annual goals for maintaining their leading academic programs. They then develop and prioritize these goals to best use the funds available.

Project 7: Interdisciplinary Studies in Education

Aligns with MHEC Priority 3: Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 19,157

Detailed description of project/initiative:

The School of Education (SOE) draws upon interdisciplinary research and academic programs to address needs in PreK-12 education, with a particular emphasis on urban schools. Initiatives include both those that enhance the content knowledge of educators and those that apply current

research and development activities to the improvement of student achievement and enhanced school performance. Interdisciplinary graduate programs, research projects, and professional development activities are being developed in partnership with other Johns Hopkins University academic units and with public schools.

The Neuro-Education Initiative (NEI)

The Neuro-Education Initiative seeks to bridge the gap between the science of learning and education by bringing together an interdisciplinary group of researchers, educators, and other key stakeholders to explore the intersection, knowledge, and current application of brain research in education, and to identify and conduct translational research. Through the learning sciences collaboration between the JHU's Schools of Education, Public Health, Medicine, and Nursing, and the Kennedy Krieger Institute, the NEI endeavors to improve teaching and learning by bringing to educators the latest research and best practices on the science of learning. Since 2008, the NEI has fostered an interdisciplinary dialogue in this emerging field that has the potential to revolutionize educational practice and policy on a regional and national level. With its rich array of world-renowned brain researchers and education experts, Johns Hopkins is uniquely positioned to become a leader in this work.

The NEI has established a strong collaborative network across JHU and other universities to work toward achieving its core goals, which include: (1) bringing to educators relevant research from the neuro- and cognitive sciences to enhance teaching and learning through academic programs such as the School of Education's Mind, Brain and Teaching post-baccalaureate certificate, as well as regional conferences, national summits, and a professional development series, (2) exploring translational research opportunities and conducting rigorous research studies in authentic educational as well as clinical settings, and (3) bringing educational best practices to schools nationally and internationally derived from research through publications, multiple media outlets, partnerships with state and local districts, and partnerships with national and international institutions.

NEI Academic Programs and Professional Development

The School of Education's Mind, Brain and Teaching (MBT) post-baccalaureate certificate is delivered in an online, face-to-face, and blended formats, allowing it to reach an international audience as well as domestic one. As well as offering a standalone certificate program, SOE offers a specialization in Mind, Brain, and Teaching as part of its online Doctor of Education (Ed.D.) program. This Ed.D. specialization is designed for educators interested in exploring research from cognitive theories and neurosciences, and its potential to inform the field of education. Students who pursue this specialization will gain the knowledge and skills to interpret basic and applied research and apply relevant findings to educational practices and policies.

As of June 2022, six cohorts of students who have pursued the MBT specialization within the Ed.D. have successfully defended their dissertations and have graduated from the program. These graduates have already been accepted to present their research in the form of research poster presentations at conferences such as National Association for Multicultural Education (NAME), Learning and the Brain conferences, and the International Mind, Brain, and Education Society.

In addition to academic programs, the NEI offers a professional development series based on the translational framework Brain-Targeted Teaching® (BTT) Model. The model provides educators with a pedagogical framework informed by a rich body of research from the neuro- and cognitive sciences. The Maryland State Department of Education (MSDE) has approved the BTT professional development series for MSDE-approved Continuing Professional Development (CPD) credits. Dr. Mariale Hardiman, JHU's Director of the Neuro-Education Initiative, has delivered professional development training on an annual basis to Baltimore City Public School teachers since 2012. Ongoing professional development cohorts are offered through a series of summer institutes and through online professional development modules through SOE's Center for Technology in Education.

Describe how Maryland will be served by this project/initiative:

School of Education faculty members are collaborating with researchers in other units at Johns Hopkins University to develop innovative academic and research programs to benefit PreK-12 schools, children, and communities in Maryland. The NEI's collaborative work with other JHU units and state and local agencies supports Priority 3 (Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education) and Priority 7 (Enhance the ways postsecondary education is a platform for ongoing lifelong learning) by bringing together educators, researchers, policy-makers, and other key stakeholders—for example, at conferences and summits—to discuss challenging educational and health-related problems facing society, analyze data, disseminate research, and inform decision-making. Furthermore, Maryland educators will continue to benefit from the School of Education's specialized interdisciplinary post-baccalaureate certificate program Mind, Brain, and Teaching. The MBT certificate anticipates graduating approximately 30-40 students in the 2022-23 academic year.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.

Project 8: Mathematics and STEM Instructional Leader (PreK-6) Certificate Programs

Aligns with MHEC Priority 3: Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education; Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 10,991

Detailed description of project/initiative:

The School of Education's two post-baccalaureate certificates in mathematics and STEM instructional leadership were developed in response to the Maryland State Department of Education endorsement for instructional leaders at the PreK-6 level. These certificates were designed to prepare an exceptional cadre of mathematics and science teacher leaders to serve teachers of PreK-6 grade students and in direct and indirect ways their students. Instructional leaders are specially trained to lead educational contexts to develop powerful learning contexts that support the development of beginning and veteran teachers of mathematics and STEM. Participants in this certificate program will explore research-informed methods for effective mathematics teaching and effective leadership including policy, practice, emerging research, theory, culturally responsive education, and legislation/advocacy.

Using national and state mathematics, science, and STEM standards as frameworks, the programs are structured to provide deep conceptual understanding for PreK-6 instructional leaders so that they are better able to help their students develop skills and knowledge in these critical areas. With content-application and research-practice approaches, teachers who complete these post-baccalaureate certificate programs are able to serve as mathematics or STEM instructional leaders. They are equipped with standards-based conceptual knowledge and practical skills; a foundation in equitable practices to support all students' learning through problem-based, project-based approaches; and knowledge of research to support effective teacher learning and instructional change. Teachers who participate in these certificates will be prepared to organize, implement, and evaluate a school-wide approach to raising student achievement and providing professional learning opportunities to support teacher learning.

The certificate programs are aligned with the School of Education's mission to prepare leaders in the field of education and to improve the quality and availability of leaders in the STEM disciplines.

In 2016, SOE received approval from the Maryland Higher Education Commission (MHEC) to 1) redesign the curricula for these two certificate program to align with the new endorsements in STEM and mathematics instructional leadership introduced by the Maryland State Department of Education, and 2) change the delivery mode from a traditional face-to-face to fully online format. The program was launched in January 2019 with the goal of attracting a national, as well as a local audience. Currently, admission to this program is suspended. There are 5 students enrolled in this program and 40% are Maryland state residents.

Describe how Maryland will be served by this project/initiative:

Graduates of the programs are qualified to fill positions as lead-teachers, content coaches, and instructional support teachers in mathematics and STEM education. These positions are in high demand as school systems seek to raise student achievement in these fields.

These certificate programs are among a handful of graduate level programs in the nation designed to address the needs of a large and growing field of mathematics and STEM education. While there are certainly other programs that prepare elementary teachers to teach mathematics and science, the School of Education's PreK-6 mathematics and STEM certificate programs are unique because they focus on strengthening PreK-6 teachers' knowledge in all the mathematics

and STEM domains covered in the national and state standards. This experience will also give candidates the requisite content knowledge, pedagogic skills, and leadership strategies to develop and implement high quality mathematics and STEM teacher learning opportunities for their colleagues.

These certificate programs address MHEC Priority 3 (Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education), Priority 5 (Maintain the commitment to high-quality postsecondary education in Maryland), and Priority 7 (Enhance the ways postsecondary education is a platform for ongoing lifelong learning) since they help teachers spark better interest and prepare students for careers in the STEM disciplines. This, in turn, helps fuel the state's initiatives in key areas such as biotechnology and neuroscience.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.

Project 9: Digital Age in Learning and Educational Technology

Aligns with MHEC Priority 3: Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning.

Proposed Project Budget: \$ 40,761

Detailed description of project/initiative:

The Digital Age Learning and Educational Technology (DALET) master's degree program in the Johns Hopkins School of Education is designed for K–12 teachers, administrators, student support personnel, organizational leaders, education nonprofit professionals, and policymakers who want to use the best research from educational technology and the learning sciences to inform and improve professional practice and student learning outcomes in education.

The program's curriculum and learning objectives align with the International Society for Technology in Education's (ISTE) Standards for Educators, as well as the standards of the Association for Educational Communications & Technology. Through their courses, DALET students focus on the evolving field of learning science and the ways that technology can be effectively integrated in learning environments to improve student learning outcomes. Students explore emerging technology trends and research best practices in a wide range of learning environments, including formal, informal, online, blended, and personalized. Courses involve project-based learning and collaborative planning, and candidates gain competencies in learning science, design thinking, instructional design, systems change, Universal Design for Learning, and evaluation and research of emerging technologies. Students complete a capstone project. We

anticipate that there will be 79 active students in the 2022-23 degree and professional certificate programs.

DALET courses also serve as elective courses for students in the SOE teacher preparation programs. Additionally, DALET faculty regularly collaborate with faculty in the teacher preparation programs to explore opportunities for research and new program initiatives.

Describe how Maryland will be served by this project/initiative:

Approximately 15% of active DALET students reside in Maryland, the majority of whom are K–12 educators. DALET serves the state by preparing those educators to apply best practices in the integration of educational technologies into their learning environments. As noted, DALET faculty also collaborate with other faculty members across the university to introduce projects to improve educators’ practices. As one example, a team of faculty from the School of Education and the JHU Whiting School of Engineering recently received a planning grant from the MD Center for Computing in Education to begin introducing computational thinking/computer science education courses into the SOE curriculum. This project will directly benefit Baltimore City and Baltimore County schools, as the work of the grant entails building partnerships with schools in these districts to understand their needs with respect to computational thinking and computer science education in K–12 schools. Further, the grant will serve as the foundation for a long-term initiative between the Whiting School of Engineering and the School of Education to create a new computer science education program for Maryland K–12 educators.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.

Project10: MS, Education with a concentration in Educational Studies (Urban Teachers Baltimore option)

Aligns with MHEC Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 341,597

Detailed description of project/initiative:

Through a partnership with Urban Teachers, the School of Education provides coursework leading to the Master of Science (MS), Education degree with a concentration in Educational Studies. Students complete coursework that covers not only their content area, but classroom management strategies, culturally relevant pedagogy, and special education. Students spend the first year of the program as a resident in an expert teacher’s classroom in Baltimore City, where

they gradually take on more responsibility under the tutelage of their host teacher. They also receive rigorous coaching. In their second year, they begin as a teacher of record in their own classroom while they complete their MS degree and continue to receive coaching support. Students who graduate from the program continue to receive an additional year of coaching prior to being recommended by our partner, Urban Teachers (an MSDE-approved alternative certification provider) for dual certification in their content area and special education.

Describe how Maryland will be served by this project/initiative:

Maryland is currently a new importer of teachers, with Maryland Institutions of Higher Education only producing about 50% of the new teachers needed by the State each year. This program produces close to 100 teachers each year, with about two third of that number serving in elementary classrooms and the rest split between secondary mathematics and secondary English Language Arts classrooms. These teachers enter the classrooms with a year of experience as a resident under their belts, with dual certification, and with a strong network of support. The program also focuses specifically on recruiting Black teachers, as Baltimore is a majority Black city and research has shown the benefits of having a Black teacher for Black students.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys. The School of Education and our partner track multiple data points related to the program, including teacher retention, coaching evaluation data, and partner satisfaction. The School anticipates that 68 teachers will participate in the 2022-23 academic year, and enter the Maryland teaching workforce as new teachers.

Project 11: TimelyCare

Aligns with MHEC Priority 6: Improve systems that prevent timely completion of an academic program

Proposed Project Budget: \$ 400,000

Detailed description of project/initiative:

TimelyCare is a platform that supports the mental health and well-being of students in need through two primary services.

- Talk Now
 - Online resource staffed by mental health professionals that students can contact to talk about any issue, at any time.
- Scheduled Counseling Appointments

- Students can set up ongoing mental telehealth counseling appointments with a licensed provider.

Describe how Maryland will be served by this project/initiative:

TimelyCare provides students with access to a wide range of mental telehealth counseling services free and available to traditional and non-traditional students and learners to augment Student Health and Well Being services in a remote modality. The remote platform is expected to reach a wider range of students that seek mental health services that is convenient and confidential. The mission of the TimelyCare initiative is to implement licensed student health practices that promote student success by removing financial and operational barriers in relation to mental health support services.

TimelyCare was available to 19,346 JHU learners (16,546 full-time students and 2,800 trainees) during the 2021-22 academic year. Approximately 19,800 enrollments are anticipated during the 2022-23 academic year, providing telehealth services to an estimated 17,000 full-time students and 2,800 trainees.

Describe process of project evaluation/assessment:

University Student Services undergoes an annual budget process involving our vice provost for student health and well-being, deans and central leadership where program initiatives and funding sources and uses are evaluated in relation to program objectives. The effectiveness and utilization of the services are evaluated as part of the budget process annually.

Project 12: Hopkins Office of Undergraduate Research (HOUR)

Aligns with MHEC Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 8: Promote a culture of risk-taking

Proposed Project Budget: \$ 400,000

Detailed description of project/initiative:

The purpose and vision of HOUR is to create equitable access to impactful research opportunities for Johns Hopkins University undergraduate students. Over 80% of Hopkins undergraduates participate in at least one research experience during their time at Hopkins. Students average 8-10 hours per week during the academic year participating in research opportunities and often give up breaks to work full time on these projects which provide enriching hands-on experience.

Describe how Maryland will be served by this project/initiative:

HOUR is an initiative that builds upon Johns Hopkins University's strengths and goals as America's first research university by taking advantage of the thousands of faculty, staff, and

graduate students involved in research and creative projects promoting a culture of research and scholarship that enriches the undergraduate experience. These experiences prepare undergraduate students for the working environment and graduate education programs.

Describe process of project evaluation/assessment:

University Student Services participates in an annual budget process involving our vice provost for integrative learning and life design, deans and central leadership where program initiatives and funding sources and uses details are evaluated in relation to program objectives. The effectiveness of services are evaluated as part of the budget process annually.

Project 13: Behavioral Health Crisis Support Team (BHCST)

Aligns with MHEC Priority 6: Improve systems that prevent timely completion of an academic program

Proposed Project Budget: \$ 1,000,000

Detailed description of project/initiative:

Johns Hopkins University has established a Behavioral Health Crisis Support Team (BHCST) to augment the university's response to calls for help in acute mental health situations. The BHCST serves students, faculty, staff, and community members who experience a behavioral health crisis on or near its Baltimore campuses and will offer a range of services, including a 24/7 mobile crisis team for people in need of intervention. In addition to 24/7 immediate crisis response, BHCST clinicians also offer near-term mental health support and resources to ensure the individual has continuation of care in partnership with Baltimore Crisis Response, Inc. (BCRI), an established community organization with significant experience helping individuals in crisis throughout the city of Baltimore.

Describe how Maryland will be served by this project/initiative:

Leveraging best practices and innovative approaches identified in the field, the BHCST provides JHU affiliates with quality mental health crisis assistance for those in and around the city of Baltimore. The goal is to help address the growing need for a more nuanced approach to public health response practices in relation to behavioral and mental health crisis moments and to link individuals in crisis to ongoing university support services to ensure continuation of care as needed. This approach is designed to be an efficient and effective model to respond to emergency calls as more than one-third (35.6%) of calls to Johns Hopkins Safety & Security were determined to be related to a mental health crisis between January 2019 and December 2020.

Describe process of project evaluation/assessment:

As part of the annual budget process involving our vice provost for student health and well-being, deans and central leadership this program is assessed along with other priorities to determine appropriate resource allocations. This program will be evaluated by stakeholders on a continuous basis as part of these budget meetings.

Project 14: Making Neuroscience Fun

Aligns with MHEC Priority 3: Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education

Proposed Project Budget: \$ 100,000

Detailed description of project/initiative:

Making Neuroscience Fun is a community outreach program designed to teach children pre-K through 5th grade about the brain and the nervous system through age-appropriate interactive and fun presentations. Making Neuroscience Fun (MNF) is a series of age-appropriate modules aimed at fostering appreciation for science, developmental education, and the importance of the brain and the nervous system in everyday life. The MNF modules are designed around "stories" detailing specific aspects of the brain and nervous system and consists of presentations, demonstrations and activities that are educational, entertaining and exciting. The stories are told in easy to understand language and explain how mental health is dependent on the interactions between the brain and Social, Physical, Emotional and Cognitive (SPEC) health.

Description of how Maryland will be served by this project/initiative

The main goal of Making Neuroscience Fun is to show elementary students that learning about science–neuroscience in particular–can be fun. Making Neuroscience Fun is a free program underwritten by Johns Hopkins University. The program aligns with Priority 3 (Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education) by educating children on how to achieve good mental health by focusing on the role the brain plays in our social, physical, emotional and cognitive health using scientific research in an age-appropriate manner, which is free and accessible to all.

Description of the process of project evaluation/assessment:

Assessment of program impact will be measured by the number and satisfaction of participating students and year over year participation growth.

Project 15: Math Future Scholars Program

Aligns with MHEC Priority 3: Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education; Priority 4: Analyze systems that impact how specific student populations access affordable and quality postsecondary education

Proposed Project Budget: \$ 100,000

Detailed description of project/initiative:

The Future Scholars Program provides high school seniors with an opportunity to take college math classes for credit. The mission of the program is to provide advice and mentorship to high school students and a mechanism for them to transfer credits eventually whenever these students attend college. The program targets Baltimore-area in an effort to develop partnerships and cultivate student readiness for post-secondary education.

Description of how Maryland will be served by this project/initiative

The program provides an opportunity for Baltimore County/City students to earn Johns Hopkins University credits during their senior year of high school, to bypass the AP system with actual university courses (tuition free), to obtain advice/mentorship from JHU's mathematics department, and earn transferrable credits to an accepting college/university. Since the program's inception, we've had students from 18 different Baltimore-area schools participate. The Department of Mathematics works with the schools' counselors and math faculty to target potential participants. Students are able to register for one course per semester without tuition costs.

Description of the process of project evaluation/assessment:

Assessment of program impact will be measured by the number of participating students and year over year participation growth.

Project 16: Physics Fair and Outreach

Aligns with MHEC Priority 8: Promote a culture of risk-taking

Proposed Project Budget: \$ 20,000

Detailed description of project/initiative:

The Johns Hopkins University Physics Fair is an outreach program that engages the public from school age children to seniors through hands-on physics demonstrations and activities including use of the Maryland Space Grant Observatory telescope. The main goal of the Physics Fair is to engage in public outreach to further science education. At the fair the public also learn about

radio astronomy through guided operation of our teaching radio telescope. Included in the science fun are spaghetti-marshmallow towers and how to make ice cream with liquid nitrogen.

Description of how Maryland will be served by this project/initiative

The Physics Fair aligns with MHEC Priority 8 (Promote a culture of risk-taking) by conducting games, demonstrations, competitions and other activities to expose K-12 students to the wonder of Physics by hosting students on campus as well as participating in-school visits. The purpose of the fair is to spark interest and curiosity in an effort to foster the next generation of ground-breaking scientists through engagement with the general public in Baltimore and surrounding areas. Visitors have the opportunity to explore important questions in science which is intended to stimulate interest in STEM through presentations and interaction with Physics and Astronomy team members.

Description of the process of project evaluation/assessment:

Assessment of program impact will be measured by the number of participating students in fair activities/competitions, and the number of schools in attendance.

Project 17: Opportunities for Maryland Community College Students

Aligns with MHEC Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland; Priority 6: Improve systems that prevent timely completion of an academic program

Proposed Project Budget: \$ 250,000

Detailed description of project/initiative:

Aligned with the Johns Hopkins University mission to educate its students and cultivate their capacity for lifelong learning, to foster independent and original research, and to bring the benefits of discovery to the world; the summer humanities program for community college students provides an opportunity for local area students to bolster their academic confidence while conducting humanities research. The cornerstone of the program is experiential learning through research opportunities.

Description of how Maryland will be served by this project/initiative

The program is designed to offer high-performing students at any Maryland community college an opportunity to engage in humanities research projects of their choosing. Students are paid a stipend and offered room and board, to pursue subjects they are passionate about—often subjects they have not been able to explore in their regular coursework. Students are encouraged to work collaboratively and attend professional and cultural workshops. The program is in close alignment with MHEC Priority 5 (Maintain the commitment to high-quality postsecondary education in Maryland) and priority 6 (Improve systems that prevent timely completion of an

academic program) because it builds subject matter expertise in a supportive environment empowering students in the Maryland State area. The program not only enhances confidence but fosters a sense of belonging at a four-year university improving student outcomes.

Description of the process of project evaluation/assessment:

Assessment of program impact will be measured by the number of participating students that enroll in four-year colleges in conjunction with year over year participation growth with positive outcomes.

Project 18: COMPASS

Aligns with MHEC Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning; Priority 8: Promote a culture of risk-taking

Proposed Project Budget: \$ 197,000

Detailed description of project/initiative:

The Johns Hopkins School of Nursing Center for Community Programs, Innovation, and Scholarship (COMPASS Center) serves as an operational umbrella for evolving Hopkins Nursing community education, practice, research, and policy initiatives. The vision of the COMPASS Center is to create a sustainable model for promoting the health and well-being of disadvantaged populations in Maryland. The Center leads and supports nurse-led community programs and initiatives that nurture its reach and impact to promote community health, health equity and advance nursing.

Description of how Maryland will be served by this project/initiative

The Johns Hopkins University School of Nursing Community Outreach Program (COP) falls under the umbrella of COMPASS and provides community health nursing and other valuable services to individuals, families, communities, and populations in underserved local areas, with an emphasis on East Baltimore. The goal of the program is to improve the health status of urban Baltimore City communities and to provide services to disadvantaged populations. The Community Outreach Program is a student service-learning component of COMPASS Center, in partnership with SOURCE, the community engagement and service-learning center for the Johns Hopkins University Schools of Public Health, Nursing, and Medicine. Students have hands-on opportunities to serve in underserved and vulnerable communities in and around Baltimore City while they complete their nursing education.

Description of the process of project evaluation/assessment:

Periodic reviews of COMPASS activities, student involvement, community members served, and outreach initiatives will be performed as part of our overall strategy for enhancing student learning and service within community research, policy, advocacy, and leadership programs.

Project 19: TeachWell

Aligns with MHEC Priority 3: Analyze and improve systems that inform and evaluate a student's academic readiness for postsecondary education; Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning

Proposed Project Budget: \$ 657,751

Detailed description of project/initiative:

TeachWell is a revolutionary educator preparation program to address today's crisis in the K-12 teaching profession by providing unmatched support both inside and outside of the program in a 1+4 year model. The program will include just over one year of coursework, plus four years of continued mentoring to guide early-career educators to national board certification and long-term teaching success. The program recruitment starts in October 2022 and will launch Fall 2023, with an initial cohort specializing in either secondary STEM or elementary education (with a STEM emphasis). The curriculum will incorporate environmental science and social justice as a gateway to STEM teaching expertise, and will also include a strong focus on educator and student well-being. The Johns Hopkins School of Education plans to partner with middle and high schools in the surrounding Baltimore school communities for job placement, with starting salary of approximately \$65,000. Multiple sources of loan repayment assistance to reduce or eliminate their student loan debt over a specified period of years will be available to program completers.

Describe how Maryland will be served by this project/initiative:

The proposed M.Ed. for Teaching Professionals stands out in Maryland in terms of its "certification plus" approach. Given the ever-evolving and complex nature of the education field across the United States, there is a need for educator preparation programs to take a holistic approach to developing teachers who are committed to understanding what it means to be a professional educator. Consequently, in addition to rigorous certification and subject content coursework, there is a significant emphasis in the M.Ed. degree on whole-person educator preparation, focusing on teacher wellness, SEL, and social/environmental justice. Additionally, recognizing that quality educators are key to student success, *House Bill 1300: Blueprint for Maryland's Future – Implementation* (passed by the Maryland General Assembly in 2020; <https://mgaleg.maryland.gov/2020RS/bills/hb/hb1300E.pdf>) seeks to re-establish the teaching profession. The Blueprint for Maryland's Future specifically calls for the implementation of a career ladder with increases in salaries for teachers on various steps in the ladder, while also increasing the rigor and depth of teacher preparation programs in an effort to attract and retain the highest performing teachers. We believe that the proposed program aligns well with the initiatives outlined in the Blueprint for Maryland's Future, especially related to re-establishing the teaching profession.

In terms of content area specializations, SOE's proposed program will initially focus on areas of high need where there are significant teacher shortages, especially in Baltimore City Public

Schools—secondary STEM and elementary education (with a focus on STEM)—with other content areas being introduced once the program becomes established. According to the MSDE’s 2020-2021 Traditional Program Annual Report (TPAR), the number of certificate-eligible students graduating from Maryland’s traditional educator preparation programs between 2017 and 2021 fell from 1,782 to 1,362. Additionally, while the TPAR reported higher numbers of program completers for elementary education and secondary mathematics (484 and 54 respectively), the number of program completers in the sciences was alarmingly low: earth/space science (4); computer science (1); environmental science (0); and physical science (0). Even in areas where the completer numbers are relatively strong, Maryland has historically imported 50 percent of its teachers from other states to fill position vacancies, and the State expects that teacher shortages will continue to persist for the foreseeable future (<https://teach.in.maryland.gov/Pages/Certified-Out-of-State-Teacher.aspx>).

The School anticipates 22 candidates will successfully complete the program in 2023-2024 academic year, all of whom will be eligible for Maryland certification and commit to teaching for four years in the local school system. In subsequent years, the number of graduates will double, increasing to 44.

Describe process of project evaluation/assessment:

Evaluation of the program’s educational effectiveness will be guided by SOE’s Comprehensive Assessment System (CAS).

The effectiveness of the program will primarily be determined by benchmarking how well student learning outcomes are achieved, drawing from a variety of assessments and data sources, both direct and indirect.

Through semester and/or annual review of both direct and indirect assessment data (e.g., course-based assessment results, course evaluation results, alumni and exit survey responses, feedback from faculty and instructors, etc.), the program director will collaborate with the Office of Innovative Learning, Design, and Assessment (OILDA) to identify areas of improvement, develop an action plan to address those areas of improvement, and implement the action plan.

Project 20: Center for Education Outreach

Aligns with MHEC Priority 4: Analyze systems that impact how specific student populations access affordable and quality postsecondary education; Priority 8: Promote a culture of risk-taking

Proposed Project Budget: \$ 1,000,000

Detailed description of project/initiative:

In 2003, the Center for Educational Outreach (CEO) at the Whiting School of Engineering established educational outreach programs directed towards underrepresented groups in science, technology, engineering, and mathematics (STEM). To date, the CEO has served over 5,000 K-

12 students and teachers through summer programs, afterschool programs, lab internships, statewide competitions, career days, campus visits, professional development and curriculum development. The Whiting School of Engineering made a significant investment in STEM educational outreach in 2010 by hiring a full-time assistant dean to manage and grow the CEO. The CEO's top priority is reaching Baltimore City Public School students while continuing to grow our national program, Engineering Innovation. Involving JHU faculty and students is key to providing unique, inspirational STEM content, mentors and role models for the following programs:

BOAST

The Baltimore Online Algebra for Students in Technology (BOAST) Program is a free, afterschool program for high school students who are interested in STEM fields and careers and want to apply their math skills to solving real-world challenges. Email BOASTProgram@jhu.edu for more information.

SABES

STEM Achievement in Baltimore Elementary Schools (SABES) began as a five-year project that sought to improve STEM curriculum and delivery in grades 3 – 5 within Baltimore City Schools. Currently, SABES continues to operate in partnership with afterschool organizations at select Baltimore City elementary and elementary/middle schools.

Barclay Hopkins STEM Partnership

Barclay Elementary/Middle School, a Baltimore City Public School, works in partnership with Johns Hopkins University's Whiting School of Engineering to offer both in-school and out-of-school STEM programming, with a key focus on engineering and computer science. This ten-year partnership aims to engage Barclay youth, teachers, and staff, with JHU faculty and students, to help promote STEM education and strengthen Barclay Elementary/Middle School as a university-assisted, PK-8 STEAM community school.

The Barclay Hopkins STEM Partnership began in school year 2015-2016, with the unveiling of a newly renovated, state-of-the-art STEM Lab at Barclay School. Outfitted with smart boards, document cameras, laser printers, and laptops, the Barclay School STEM Lab has a total seating capacity of 60–100. The lab is currently divided into two instructional spaces, with each space focused on science and engineering instruction for students in grades 6-8.

Whiting Internships in Science & Engineering (WISE) Program

WISE is a paid research learning opportunity for Baltimore City public high school students who are mentored by Johns Hopkins University (JHU) researchers. The primary objective of WISE is to increase the diversity of students who are pursuing science and engineering in college by developing their knowledge of a specific STEM field, strengthening their analytical skills, and fostering connections with STEM professionals.

WISE is offered after school in the fall and spring or daily over four consecutive weeks in the summer.

Each student will explore a subject in laboratory, computer, or field settings which could include Materials Science, Mechanical, Electrical and Computer, and Biomedical Engineering. At the close of each program, WISE students present their research and experiences to fellow WISE students, their research labs, their families, and Hopkins community members.

Describe how Maryland will be served by this project/initiative:

As national and local attention to STEM education has grown, the CEO has brought together other STEM practitioners across JHU to coordinate and collaborate in an effort to better serve our community.

Vision – Our vision is to increase the number of underrepresented youth pursuing STEM careers

Mission – Our mission is to engage JHU faculty and students to inspire and prepare K-12 students in STEM education and careers

Strategy – Our strategy is to focus on Baltimore City Public School students while growing our Engineering Innovation summer program for high school students nationally. We achieve this by:

- Partnering with local schools and youth-serving nonprofits to recruit students and teachers
- Partnering with faculty to identify ways to meet their needs for broader impact or community outreach on their research grants while meeting our goal
- Partnering with JHU undergraduate and graduate students to deliver content and mentor
- Partnering with School of Education to incorporate pedagogy for appropriate pupils while improving teachers' STEM knowledge
- Partnering with local businesses to provide funding, STEM models, and internship opportunities
- Leveraging research-based strategies for teaching STEM
- Measuring effectiveness of programs to improve chance of success with fundraising and grant writing

Describe process of project evaluation/assessment:

Annual summer impact reports reflect the number of students served and the demographics within each summer cohort. Assessments of program impact will be measured by continued participation growth for both partners and student participation in each program supported by CEO.

Project 21: Musicians in Residence

Aligns with MHEC Priority 4: Analyze systems that impact how specific student populations access affordable and quality postsecondary education; Priority 6: Improve systems that prevent timely completion of an academic program

Proposed Initiative Budget: \$ 25,000

Detailed description of project/initiative:

The Peabody Institute Musician-in-Residence program embeds Peabody musicians in a community, giving them frequent and regular access to an audience with whom they can develop their performance and presentation skills and for whom they learn to program music. Residencies provide a deep and ongoing “laboratory” for audience development and engagement strategies, critical for success as a 21st century musician and foundational to Peabody’s new Breakthrough Curriculum in music leadership training. Providing Peabody students with a place to live and a means of funding their performance studies, the program also invites young professional musicians to develop their identity as citizen artists within a broad social context and to demonstrate the relevance of music in an intimate community setting. The program expands in FY23 to include four continuing care retirement communities in Baltimore. Funding to support the Peabody MIR program offsets costs for travel to/from campus and each other’s residences to perform; gather as a cohort to share experiences and learn best practices; and help ensure the development of the program by recruiting additional local partners

Describe how Maryland will be served by this project/initiative:

This program provides support for degree completion by solving for one of the financial barriers that students may face – affordable housing. In collaboration with our partners, the program provides an innovative type of financial aid through housing and transportation support in exchange for musical services for one academic year.

The program also supports workforce development and improves workforce readiness by providing students with specialized resources, training, mentorship, and hands-on experiences surrounding arts and health, aging, and creative aging. Students are equipped with the training, experience, and resources to set up similar programs in other locations after they graduate. Students work with professional CCRC staff including music therapists, activities coordinators, and other personnel to provide arts access to residents who may no longer be able to visit our state’s cultural institutions. The Musician-in-Residence program addresses the increased need for the arts as well as decreased arts access among those disproportionately impacted by the pandemic. During COVID, communities of older adults have turned to the arts to build social connection, foster emotional self-expression, and support staff suffering from burnout. Musicians-in-Residence are also supported by the Peabody community engagement and LAUNCHPad staff and faculty to design programming that reflects the Breakthrough Curriculum goals and connect Peabody students to their local community.

Describe process of project evaluation/assessment:

Programs are assessed using student and partner evaluations and feedback forms. Internal evaluation of training and resources are conducted at the end of each school year to update and refine materials for alignment with best practices in arts in health, aging, and creative aging.

Project 22: LaunchPad

Aligns with MHEC Priority 8: Promote a culture of risk-taking

Proposed Initiative Budget: \$ 75,000

Detailed description of project/initiative:

Peabody LAUNCHPad helps students and recent alumni forge satisfying, successful careers through providing comprehensive services to support designing a life inspired by personal ambitions and interests. This is furthered by the Breakthrough Curriculum which was designed, supported, and taught by LAUNCHPad staff.

Peabody launched the Breakthrough Curriculum in order to adapt Peabody students' educational experience to the evolving demands of the arts industry. According to data from [SNAAP \(Strategic National Arts Alumni Project\)](#), numerous sources have revealed substantial gaps between the skills student attain through arts higher education and the skills they need to launch and sustain their careers. A 2020 SNAAP Data Brief highlighted that, while there was a 90% match in the area of Artistic Technique, 65% of arts graduates reported skills development gaps in Financial and Business Management, and 54% reported skills development gaps in Entrepreneurship. The Breakthrough Curriculum courses were designed to fill these gaps and better prepare Peabody graduates with essential skills that will enable them to create satisfying and sustainable careers in the arts.

Peabody's LAUNCHPad and Breakthrough Curriculum are designed to provide students with an education that not only provides high artistic standards, but also addresses the unique and changing needs of today's cultural environment. The curriculum focuses on three primary topics:

- **Performance**: Through wide-ranging coursework and performance experiences, the Breakthrough Curriculum ensures training across a range of styles critical for developing artistic flexibility. Conservatory dancers study ballet and modern dance, jazz and West African dance, and have opportunities to collaborate with musicians across genres. For instrumentalists, a re-imagined Large Ensemble Program is designed to acquaint Peabody students with the rich and varied literature of many musical genres. Students rotate through different ensembles, which each serve a distinct purpose and explore different types of repertoire in varying sizes, configurations, and historical periods. A course in improvisation for classical musicians will build skills in tonal improvisation, listening and awareness, the understanding of the links between harmony and melody, the connections between music theory and improvisational practice, and attitudes of personal investment in the music-making process.
- **Career Development**: Through two foundational courses in business and career development. In *Building a Brand and Portfolio* students examine traditional and new markets, diverse career paths, and professional communication skills. Students construct a digital portfolio which is then refined over the course of their degree, and study topics including fundamental career skills, professional materials, personal finance, networking, promotional activities, and more.

- Citizen Artistry: The Breakthrough Curriculum scaffolds skills in entrepreneurial thinking, leadership, project development, and citizen artistry in a sequence of traditional coursework and curated project-based learning. The courses Exploring Arts Careers and Pitching Your Creative Idea prepare students to compete for extended and supported fellowships and residencies in real-world community contexts.

The LAUNCHPad team and faculty that support the Breakthrough Curriculum are made up of active artists, educators, arts administrators and professionals with a wide range of skills and experiences whose goal is to provide and promote opportunities that will help students find inspiration, explore career ambitions, and make bold steps toward the future.

Describe how Maryland will be served by this project/initiative:

In addition to supporting student academic outcomes, this initiative also supports Maryland small business by working to match recent graduates with potential employers who are in need of experienced early career: music and dance pedagogues, arts administrators, composers/arrangers, and performers. This initiative also serves the Baltimore/Washington D.C. community by offering performance services to local concert series, residents holding special occasions including weddings, parties, and church events. Lastly, as part the LaunchPad's Community-Based Learning approach, Peabody students serve as ambassadors for the city of Baltimore through its community concerts partnership with Baltimore City's Enoch Pratt Free Library Branches, and the Penn Station Rush Hour Series that both welcomes and sees off travelers as they perform in the hall of Baltimore's historic Penn Station during the height of rush hour on select Friday afternoons.

All of Peabody students participate in our LaunchPad initiative in some fashion. Academic year 2021-2022, total Peabody student count was 766 with 196 Maryland residents.

Describe process of project evaluation/assessment:

Our approach to evaluation and assessment of LAUNCHPad and the Breakthrough Curriculum is multifaceted in its approach that regularly employs the following tactics:

1. Review of course materials, syllabi, course sessions
2. Review feedback: faculty, TA, student, staff, focus group
3. Benchmarking: what are other schools doing? Where is the field?
4. Identify gaps/redundancies/areas that need reinforcement

Along with these steps, LAUNCHPad employs a first destination survey for every graduate of the Peabody Conservatory, and has partnered with SNAAP (Strategic National Arts Alumni Project) to conduct longitudinal outcomes tracking of recent graduates to help identify future curricular development needs to prepare emerging artists for the field.

Lastly, LAUNCHPad staff/faculty use student evaluations to better identify areas of the curriculum that need improvement, understand where student needs are being met, and better identify the key areas of impact in the development of these professional artists in training.