HEALTHY EXCELLENCE:
PUTTING SUCCESS IN PERSPECTIVE

WSCUC THEMATIC PATHWAY TO REAFFIRMATION OF ACCREDITATION INSTITUTIONAL REPORT
AUGUST 2021

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Following WSCUC's 2018 Thematic Pathway for Review (TPR) Guide, our report is organized around the four required components (1, 2, 8 and 9, respectively). Component 1 describes Harvey Mudd College, highlights major changes since our last reaffirmation, responds to the 2011 Commission letter, and provides a general overview of our institutional-level response to the COVID-19 pandemic. Component 2 demonstrates HMC's compliance with WSCUC Standards and Federal Requirements. Component 8 begins by summarizing the process and approach used to determine the TPR theme of *Healthy Excellence* and its three projects: *Faculty, Student and Staff Workload, Redesign and Assessment of Core Curriculum,* and *Co-Curricular Support*, then details the evidence-based approach taken and findings associated with each project, with key findings highlighted at the start of each project. Overarching conclusions and future directions are provided in Component 9.

COMPONENT 1: INTRODUCTION

Overview of the Institution

Mission

Harvey Mudd College (HMC) is an undergraduate college with a mission to "…*educate engineers, scientists, and mathematicians well versed in all of these areas and in the humanities and the social sciences so that they may assume leadership in their fields with a clear understanding of the impact of their work on society."* Founded in 1955, the first class of 48 students and seven faculty arrived at HMC in 1957; the first bachelor's degree candidates graduated in 1959. In fall 2020, HMC offered 10 undergraduate majors in STEM fields, as well as options to design an individual program of studies or to declare an off-campus major to 827 undergraduate students from 44 states and 24 countries.

Our founders envisioned a distinctive educational experience for HMC students and embodied that experience in our academic plan. The curriculum is divided into three components: the common Core Curriculum (Core), the major, and the program in humanities, social sciences, and the arts (HSA). Unifying all of these is an emphasis on disciplinary practices, making connections across disciplinary

boundaries, strong oral and written communication, teamwork and collaboration, and a culminating experience with research (thesis) or a clinic project.

Curriculum

HMC's Core consists of foundational courses in each of our seven departments along with a cross-disciplinary, team-taught writing course (Writ 001) and is designed to provide essential knowledge for upper-division courses and to expose students to the various STEM disciplines as well as the Humanities, Social Sciences, and the Arts. The preparation students gain through the Core enables them to address practical and interdisciplinary problems from a strong theoretical and computational base of knowledge.

The HSA program further develops the liberal arts nature of an HMC education by strengthening humanistic and social scientific perspectives, often on key social and cultural issues. In addition to the HSA course in the Core, students take at least 10 additional HSA courses (~30% of their coursework). To achieve depth and intellectual development in some area of the humanities, social sciences or the arts, each student must complete a concentration of at least four courses in a single HSA discipline or interdisciplinary area chosen from the distinct areas of study offered at The Claremont Colleges. To obtain breadth in the humanities, social sciences, and the arts as well as an understanding of the varieties of approaches that inform these disciplines, each student must fulfill the distribution requirement by completing at least one full course in each of five different HSA disciplines. The emphasis on HSA distinguishes the HMC curriculum from most other undergraduate programs in science and engineering.

Experiential Learning

The Clinic Program, a nationally recognized hallmark of HMC, allows students to apply their academic experience in pursuit of solutions to real-world, technical challenges for industrial, governmental, NGO, non-profit, and corporate clients. Students work in teams to complete computer science, engineering, mathematics, physics, or multidisciplinary projects. For many students, these

projects serve as their senior capstone experience. The program includes a global clinic option, preparing students for the future challenges of practicing engineering, science, and mathematics in a global context. In 2018, we added a social justice clinic option, which focuses on projects that have a tangible impact on a community by providing it with technical resources that might not otherwise be accessible.

Our Clinic Program is only one example of HMC's commitment to active and project-based learning. In addition to employing active learning in more traditional course structures, faculty members take pedagogical innovation seriously and emphasize active learning through small-group seminars, student-directed team projects, and independent study. Research is also an important part of the academic program. Students who do not complete a Clinic project complete a research-driven thesis, following guidelines set out by their department as a capstone experience. Additionally, students are engaged with faculty in research projects at all levels, during the academic year and during summer research through nationally funded research grants and other opportunities. Students regularly co-present at national and international conferences and co-author papers with their professors that are published in peer-reviewed journals. Faculty and students routinely collaborate on distinctive, hands-on laboratory and field research at a level typically reserved for graduate students.

Substantial grants and contracts from the federal government as well as private corporations and foundations support considerable research activity for a campus of our size. Current support for faculty research projects includes grants from the National Science Foundation, the National Institutes of Health, the Howard Hughes Medical Institute, the American Chemical Society-Petroleum Research Fund, the Netherlands Science Foundation, the Research Corporation, the German Federal Environmental Agency (UAB), and the Teagle Foundation. There are currently more than 20 active NSF grants under management by members of the HMC faculty. Research in basic science and technology is a hallmark of the HMC experience, and many graduates go on to positions of distinction in their chosen pursuits. The college recently has received funding from both the Mellon and Carnegie Foundations. The Mellon funding was instrumental in efforts to improve faculty hiring practices, increase diversity among the

faculty, and to review and revise the Core. The Carnegie funds provided support for several initiatives, including department-specific efforts to enhance academic equity, diversity and inclusion, campus student space renovations, diversity strategic visioning workshops, Division of Student Affairs (DSA) Office of Health and Wellness (OHW) programming, ongoing support for the Summer Institute, and social justice summer research and clinic funding, among others.

Institutional Growth: Students and Support

To round out the picture of HMC, and especially its recent development, two additional pieces of context are important. First, in November 2013, as we opened the R. Michael Shanahan Center for Teaching and Learning, our main academic building, and the Board of Trustees approved a resolution to grow the size of the college from 800 to 900 students over a 10-year period. Accompanying that growth were several initiatives and projects designed to support the proposed growth plan so that the quality of the educational experience for faculty and students, as well as the work experience for staff, was enhanced. Those projects included increasing financial aid, faculty growth and start-up funds, and staff growth. Also relevant was the construction of two new buildings: The Wayne ’73 and Julie Drinkward Residence Hall opened in August of 2015, and the Scott A. McGregor Computer Science Center, including a multidisciplinary makerspace, was completed in March of 2021. We also updated Hoch-Shanahan Dining Commons, undertook vacated space planning and renovation, and revised the Campus Master Plan. Growth in the student body was scheduled to occur in two phases. During the first phase of the plan, the college anticipated growing its enrollment to 850 students by 2018-2019. At that point, we would assess the impact on the college’s core values and report to the trustees the findings for discussion. The trustees would review the results and determine if the college should continue with growth and/or adjust the timeline. If the trustees decided to continue, the college anticipated executing the second phase of the growth proposal, increasing the size of the student body to 900 students by 2023–2024. In 2018-2019, enrollment was 886, substantially passing the 850 mark. While the key indicators in the five-year assessment were positive and further growth was approved, the levels of stress that were apparent despite

favorable indicators required explanation. As a result, the Department Chairs Committee (DCC) shared additional evidence identified by faculty and academic departments. The DCC, along with the dean of the faculty, worked to develop a shared vision for addressing the issues related to growth in the student body including, but not limited to staffing, growth in off-campus enrollments, funding for summer research, and finding intellectual space for pedagogical innovation.

Second, while HMC is known for its challenging and invigorating academic environment, this period of time also saw the expansion and professionalization of our Division of Student Affairs (DSA). During the 2006-2007 academic year, the student FTE was 729 and DSA had an FTE of four. By the fall of 2020, the student FTE increased approximately 13% to 823, while DSA FTE grew 425%—increasing staff from four to 21 FTE. Although in part due to the growth in the student body, the growth in DSA staff is in direct response to—and acknowledgement of—the increasing needs of students. As the student body grew in size and in diversity, the needs of the students evolved as well. Since our last accreditation visit in 2011, we have created key DSA positions such as our associate dean of health and wellness, assistant director of housing and first-year experiences, coordinator for student accessibility services, and associate dean for academic resources and student success (ADARSS). The creation of the ADARSS position, along with the newly formed office where the position resides—Academic Resources and Student Support—expands our commitment to supporting students through the co-curricular program. In addition to providing academic resources and support programming, the ADARSS participates in key academic committees such as the Academic Affairs Committee of the board of trustees and the faculty Scholarly Standing Committee. Additionally, two faculty-held positions work closely with the ADARSS and participate in key DSA-led committees such as the CARE Team, a multidisciplinary team that works to assist students in need of personal and/or academic resources. Through this collaboration, we are able to leverage expertise in a variety of areas to provide a deeply integrated approach to student support. Having DSA represented this way allows us to have a 360-degree perspective of a student's experience, so that as a college, we are better able to identify students in need and work to address those needs before it is too late for the student to recover. How students do outside the classroom (i.e., emotionally, socially,

spiritually, physically) is interwoven with how they do inside the classroom, and this office serves as the lynchpin for the holistic way in which we work to support our students.

Additionally, of the current DSA staff, over half are new since 2015, including our director of career services, associate dean for institutional diversity, and associate dean of students and director of residential life. In addition to serving a more diverse student body, the growth in staff also represents a shift in focus to balance the quality of services delivered by our co-curricular program in order to match the quality of education delivered by academic affairs. The result of this shift is that we are able to align our student learning and development outcomes and academic support efforts to support all Mudders in achieving their academic and personal goals.

The DSA committed to supporting academic and personal development of HMC students by focusing on strategies for leadership and success students can utilize both while at HMC and after graduating. The DSA also has engaged in evaluating its existing programs and services as well as analysis and strategic planning. The DSA developed four foci that guide the work of the division: wellness and the development of the whole self, developing and strengthening inclusive communities, building experiential learning and life skills, and overall leadership development. The DSA also has instituted an assessment program that uses student engagement surveys and learning outcomes measurement as part of their program evaluations.

HMC in The Claremont Colleges Consortium

Finally, HMC is a member of The Claremont Colleges, a consortium of five undergraduate and two graduate institutions located in Claremont, California. The Claremont Colleges Services (TCCS) (TCCS) provides shared services (e.g., library, information technology, campus safety, health services, financial and administrative services). Each of the seven institutions has its own campus, its own students and faculty, and its own distinctive mission. Undergraduate students may choose from more than 2,000 courses offered each year across the colleges, and for the last several years, 100% of graduating HMC seniors took at least one course at one of the other Claremont colleges. HMC faculty members also

frequently partner with faculty colleagues within Claremont and take advantage of consortial resources like The Claremont College's Center for Teaching and Learning, which provides opportunities for faculty development.

Our Vision for HMC: Current Priorities, Plans, and Significant Changes to the Institution

The college celebrated its 60th anniversary in 2015, and, since being granted initial accreditation in 1959, has adhered closely to its original mission of ensuring our students are educated to become leaders in their chosen fields of study and that they have a clear understanding of the impact of their work on society. Accomplishing this mission commands both attention and innovation on our part. For most of its existence, HMC has attracted incredibly talented, STEM-focused students who accepted, and for the most part enjoyed, the liberal arts approach inherent in their HMC education. However, more recently the college has established an identity and a growing reputation as a place that makes STEM accessible and attractive, and as a result we have diversified our student body. Students come to HMC expecting to learn with and from people from a variety of backgrounds, knowing that diversity fosters innovation and success. In many ways, this report connects to and reflects those two important themes for us.

We believe it is one of the college's strengths that our community shares a common vision and interest in the intersection of scientific theory and practice, and over the last few years, the college has begun to enhance greatly both programming and conversations around a broad set of important issues as we foster a more inclusive campus community. In fall 2019, the board of trustees asked the President's Cabinet, the Faculty Executive Committee (FEC), and the DCC to collaborate in planning our annual Saddle Rock retreat focused on "Healthy Excellence". Groups of trustees, faculty, President's Cabinet members, students, and alumni worked together to facilitate discussions which addressed the themes of: building a culture of healthy excellence, supporting student excellence, making space to innovate, and connecting HMC to the world.

Our conversations on connecting HMC to the world have focused on addressing climate change by building additional capacity through research, teaching, and more sustainable institutional practices. As a residential college in Southern California, HMC has significant obligations and opportunities to mitigate climate change on its campus and to contribute to broader climate change solutions. A climate change working group was formed and its work resulted in a faculty endorsement of an expanded academic footprint for climate studies. At the same time, the Hixon Initiative Steering Committee (HISC) was formed to develop recommendations for the future of our Hixon Center for Sustainable Environmental Design, with the outcome that the Hixon Center be united with our climate initiatives and become the Hixon Center for Climate and the Environment. This will ultimately allow us to pursue options such as adding faculty with expertise in climate studies, hiring a director for the center, and supporting clinic projects that focus on issues of climate change, for example. The first faculty position dedicated entirely to the center will be staffed in January 2022.

Also discussed at Saddle Rock 2019 were HMC's efforts in the area of entrepreneurship and how we might consider expanding and enhancing support for the incubator, HMC INQ. Created by alumnus Josh Jones '98 and Emeritus Professor Gary Evans, HMC INQ is an eight-week intensive startup program based in Santa Monica that is open to HMC students and alumni, as well as other Claremont colleges students and alumni. Currently, admitted startups are paired with a mentor and then participate in online classes, one-on-one discussions, and speaker panels. Admitted startups have the option of presenting their company at Demo Day. In addition to any funding that may be secured from outside investors at Demo Day, HMC INQ invests $50,000 in up to five companies with a Mudd co-founder. We believe our graduates have a calling to tackle some of society's most urgent and pressing challenges. Entrepreneurs, particularly entrepreneurs in STEM, have the power to shape a more positive world by developing versatile skill sets and profitable businesses—all of which are crucial to society's progress.

Never far from our minds are priorities that speak broadly to the intersection of science and social justice. Our conversations here have two parallel tracks. First, HMC-focused conversations about fundraising for student scholarships and the anticipated demographic shifts in population speak to our

desire to diversify the scientific workforce. Second, we also have prioritized helping our students and graduates see ways to use their scientific knowledge and skills to make the world a fairer and more just place for everyone. We believe the ways in which the culture of science has historically excluded certain identities (and continues to do so) are a problem that STEM-focused-institutions like ours are uniquely positioned to address, and that by teaching students to apply critical thinking and scientific methods to the field of science itself—particularly in service of issues of equity, inclusion, and justice—we can make considerable strides. By working together on these issues, we ensure that the college maintains the outstanding level of innovative academic excellence for which it is known while advocating for the cohesive, coherent, and collaborative integration of social justice into our pursuit of that excellence.

At HMC, we remain committed to preparing students for their futures as scholars and global citizens who are committed to actively participating in the communities in which they live, and who can act as stewards of the resources that sustain those communities. The challenges we face today are complex, urgent, and uncompromising. While broad challenges like climate change and diversity, equity, and inclusion certainly are top of mind, specific issues like the status of women in STEM; infectious diseases, and the racial biases built into technologies and the ways in which users interact with them are significant. These conversations recommit HMC to using its campus as a model classroom, sharing our curriculum, co-curriculum and campus operations with other institutions that are seeking to address the challenging problems at the interface of STEM and society.

A commitment to public good is also embedded in HMC's DNA. As a private liberal arts college, we aspire to provide a high quality education to a broad spectrum of qualified students. The President's Scholars Program is a renewable, four year, full-tuition scholarship that is offered to outstanding young men and women who have the potential to be future leaders in engineering, science, mathematics and technology and who are from backgrounds that are traditionally underrepresented at HMC and in the STEM fields, or are the first in their families to attend college. In fall 2020, we launched our Postdoctoral Program in Interdisciplinary Computation (PIC), which is designed to help address the need for more faculty equipped to teach computational skills. Our goal is to train recent PhD recipients in scientific

fields to help them develop as researchers, become excellent teachers of computational courses, and obtain faculty positions that bridge their home discipline and computer science.

Faculty continue to directly address community issues through their scholarship, including work on air pollution, the impact of structures of race, class, and gender on the production of scientific knowledge, the application of machine learning to literacy education, and ways to identify fake or tampered audio, such as synthetic recordings generated by deep fake technology. Our Office of Community Engagement (OCE) works both on campus and with the broader community through a variety of programs to educate and empower its constituents to make meaningful contributions to society, including Homework Hotline, Science Bus, and the Prison Education Project. A strategic partnership with the National Association of Student Personnel Administrators (NASPA) will provide opportunities for us to further this work.

In December 2018 we successfully concluded our first comprehensive fundraising campaign in 20 years and our largest to date. Campaign funding supported much of the work mentioned above.

The above efforts have been led by the President's Cabinet, which has undergone considerable change since our last accreditation visit. In 2017, Lisa Sullivan assumed the position of vice president of academic affairs and dean of the faculty, the first woman to do so at the college. In 2018, Anna Gonzalez became the vice president for student affairs and dean of students (VPSA). In 2019, Hieu Nguyen joined HMC as the vice president for advancement. Several faculty members also have assumed leadership positions. These include the appointment in 2018 of Liz Connolly to a newly created position of assistant dean for academic affairs; in 2019, Ben Wiedermann assumed the position of Core Curriculum director (CCD) and Chris Clark became the associate dean for research and experiential learning (ADREL); in 2020, Marianne de Laet became the associate dean for academic affairs and Katherine Van Heuvelen assumed the role of associate dean for faculty development and diversity. Beginning in July 2021, Kathy Van Heuvelen agreed to take on the portfolio of the associate dean of research and experiential learning for the two years remaining in her term as associate dean for faculty development and diversity. Functioning in the joint role as a full-time associate dean of faculty, Van Heuvelen is well-positioned to

support the faculty holistically. Finally, on the administrative side, Colleen Coxe joined the college as senior director of corporate relations in 2018, and in 2021 was named to lead our new Office of Sponsored Research and Programs as AVP.

As referenced earlier, there has been considerable transformation in the DSA since 2015. Besides the new positions, we have seen personnel changes in our assistant dean for institutional diversity, assistant dean for campus life and program manager for international students and scholars. In spring 2021, both our VPSA and our assistant vice president of student affairs announced that they would each be departing HMC. Our associate dean for housing and residence life was named as interim VPSA and dean of students beginning July 1, 2021. While we will conduct national searches for both recently vacated positions in the coming year, we believe it is important for the college community and campus culture to conduct the searches in person and with students on campus so that they can fully participate in the process. We will prioritize and hire for the VPSA position to ensure the newly appointed VP has an opportunity to contribute to the AVP search.

Finally, President Klawe has notified the board of trustees and the college community that she will step down when her current contract ends in June 2023. In fall 2021, the board of trustees will be reaching out to all college constituencies to get input on 1) the challenges ahead for Harvey Mudd College; 2) the special attributes about Harvey Mudd College that we hold timeless and immovable; 3) the opportunities facing Harvey Mudd College that we may seize in the next campaign.

Accreditation History and Response to Previous Commission Actions

In its July 2011 action letter reaffirming HMC's accreditation, the Commission commended the campus for approaching the accreditation process with a spirit of inquiry and an interest in improvement; for our carefully planned research investigations that led to meaningful program and curricular improvements; and for generating widespread faculty collaboration, enthusiasm and support for the assessment process. As the Educational Effectiveness Review team noted, "[T]here was no doubt about the seriousness and care that characterizes the institution's engagement with learning across its programs." The Commission also highlighted three areas that required attention and further development by HMC: 1) Continue progress in implementing the college's commitment to gender and ethnic diversity, 2) Improve educational effectiveness efforts including assessing the co-curricular aspects of the college, and 3) Strengthen capstone projects including broadening the definition of a capstone project. In its 2016 letter, the Interim Report Committee concluded we had made "significant progress" in each of these areas, and our interim report was received with no further action required. In the following paragraphs, we briefly summarize our continued progress in these areas and identify the section(s) of this report where the topics are addressed in more detail.

Continued Commitment to Gender and Ethnic Diversity (CFR 1.1, 1.4, 2.10, 2.13, 3.1)

The college has sustained its commitment to recruiting a diverse group of students as we have grown our student body. In fall 2020, there were a total of 827 degree-seeking undergraduate students enrolled at HMC. Included in this total are 207 entering first-year students. Half (49.8%) of the student body is women (46% of the first-year class), 12% of our students are first generation college students, and 13% are Pell Grant recipients. With respect to racial demographics, HMC continues to make progress diversifying its student body, with 28% of students identifying as white, 23% as Asian, 20% as Hispanic,

10% as two or more races, 7% as nonresident, 4% as Black or African-American, and less than 1% as American Indian or Alaska Native or Native Hawaiian or Pacific Islander, and 7% are of unknown ethnicity. The composition of faculty and instructional staff at HMC has also undergone real change since 2011, although we do acknowledge our work here is not complete. As of fall 2020 there were 113 faculty at HMC, of which 101 are full-time tenured and tenure-track faculty. Among the full-time tenure-track faculty, 37% are women and 26% are Asian, Black, Native American, Hispanic, or Pacific Islander (CFR 3.1). HMC takes very seriously the words in our Strategic Vision: "excellence and diversity at all levels." As a result, we have expanded our diversity work to include issues of equity and inclusion (CFR 1.1). In spring 2018, President Klawe established a diversity strategic planning committee composed of faculty, students, and staff that was tasked with developing HMC's strategic plan for diversity, equity, and inclusion (DEI) for the next five years. The committee held a series of strategic visioning workshops during spring 2019 attended by students, faculty, staff, and alumni. The participants' comments and responses during the sessions were summarized in a report of the findings that generated a shared understanding of our priorities and was submitted to Cabinet (CFR 2.10).

In fall 2019, an ad hoc committee was organized and staffed by the VPSA with the goal of articulating how the divisions of student and academic affairs might collaborate on projects related to DEI. The committee focused on several initiatives. To examine how we can continually improve instruction at HMC with equity and inclusivity in mind, committee members began work on grant applications that would fund the faculty to participate in critical action research that would lead to a more equitable student learning outcomes.

To train members of the student affairs staff to learn how to design and implement change strategies through an equity-minded lens, we engaged University of Southern California professor emerita Estela Bensimon to train the DSA and Office of Institutional Research and Effectiveness (OIRE) staff on the Racial Equity Scorecard (RES) process in order to learn how to use data to take concrete, actionable steps towards a campus culture with equity at its core (CFR 1.1). The DSA and OIRE staff completed their training in April 2021. Participating in the RES is personal, political work and everyone involved

put in considerable time and effort learning how to constructively interrogate data, policies, and processes that are in place with an eye towards supporting the needs of our students. Planning is underway in both the DSA and the OIRE to ensure that the work done to date can continue. The DSA is engaged in the process of using the RES in their reports as well as documents and programs for both internal and external audiences.

The HMC community has not been silent in response to the most recent racial reckoning brought about by the killing of Black individuals by police officers. In addition to the statements made by the administration, departments, and units condemning violence, expressing solidarity, and addressing systemic racism (many of which can be found in CFR 1.4 of the Compliance with WSCUC Standards and Federal Compliance Worksheet), we also are committed to action. HMC students organized a "Hack for Black Lives", and Jennifer Alanis, associate dean for institutional diversity, and Kathy Van Heuvelen, associate dean of faculty, collaborated on a series of DEI programming. As described in Component 8, this work has been informed and complemented by work in student affairs to develop the infrastructure to support a diverse community (CFR 2.13). While we remain focused on making progress on racial justice and curating anti-racist resources, we are also committed to working on other important inclusion issues and recognize that there is still considerable work to be done on our campus and in our community.

In spring 2021, we realized the extent to which our multi-faceted and disaggregated work in diversity, inclusion, and equity is spread across the campus and might at times appear uncoordinated, siloed, and even invisible to others outside of their own areas. Vice Presidents Sullivan and Gonzalez recognized the possibilities inherent in formalizing the relationship between their two parallel associate dean positions and with approval from the President's Cabinet, appointed the associate dean for institutional diversity and associate dean of faculty as co-chairs for a newly-formed Justice, Education, Diversity, and Inclusion (JEDI) Committee. This committee will be empowered to serve as the hub to facilitate the JEDI initiatives that occur across campus, to facilitate communication between departments

and constituents in regard to the JEDI initiatives, and serve as a way to connect and leverage JEDI initiatives at HMC (CFR 1.4).

In addition, there is significant activity within academic departments to promote a more inclusive culture. For example, the Physics department is participating in the American Institute of Physics TEAM-UP program, which is designed to help departments look at their practices, develop strategic plans to support the success of current and/or prospective African-American undergraduate students, investigate their culture, and commit to racial equity for African-American students in physics and astronomy. To be selected, departments must demonstrate a commitment to continue the work beyond the workshops, incorporating metrics and continuous assessment into their regular operations. Through a grant from the Andrew W. Mellon Foundation to The Claremont Colleges consortium, HMC faculty are also participating in a consortium-wide effort to expand educational access behind prison walls. That effort has encouraged our faculty to use transformative pedagogies that re-center classroom instruction so that students and faculty co-construct knowledge.

Additionally, the engineering department is using the framework of a prototyping mindset to change the culture within the department. A prototyping mindset is exemplified by the willingness to test solutions to a problem that may not be a final or best solution and further tie it to the willingness to repeatedly move through a cycle of try-fail-learn-evolve. When tackling an engineering problem, it is commonplace to reflect on our previous knowledge and experience, generate ideas, dive in and prototype possible solutions, learn from the failures of the prototypes, and evolve our design accordingly. This overarching goal serves as the basis for three projects: a student piece we are calling Prototyping Your Future Self (PYFS), a curricular piece focused on innovation, and a piece focused on creating an inclusive and equitable community. In Prototyping Your Future Self, students will employ the prototyping mindset and their own personal mission to design their experience in our program and future career. The PYFS program adapts the prototyping mindset and practices and extends across all four years of the curriculum. Students will be asked to focus on self-reflection around their personal mission and use their personal mission as a springboard for designing and testing their academic career and their future career (see slide

20 in the Prototyping Mindset appendix). We expect that the PYFS program will also lead to increased student self-efficacy, resilience, engineering identity, and academic and career satisfaction. The curricular piece leverages the prototyping mindset with faculty to develop a process for innovation in our curriculum that allows us to easily test, refine, and employ (or discard) highly innovative and therefore high-risk curricular changes (see slide 36) . We envision generating a process that can be employed at HMC and at other institutions to allow for nimble prototyping while preserving the core of the engineering major. Finally, the engineering department is using a prototyping mindset to help us move from a fear-driven approach to a test-and-learn approach to building an inclusive community. The department has instantiated an Engineering Student Advisory Board to provide ongoing feedback between faculty and students, and is considering partnering with BTS Spark to develop a "Walk a Mile in Students' Shoes" simulation aimed at increasing empathy for a wide array of student backgrounds and experiences. Additionally, they plan to hold annual student-faculty working sessions to address issues of inclusion in the department and program. The department believes these activities will increase empathy for students and improve the departmental climate for all constituencies.

Educational Effectiveness (CFR 1.2, 2.3, 2.4, 2.6, 2.7, 4.1-4.4)

On this topic, the Commission identified two areas for attention: 1) the need for the college to "give the same attention to quality assurance in student life and other areas that it has provided for the academic programs and 2) the need to sustain the college's work in educational effectiveness and continuous improvement in light of increasing demands and expansion of assessment efforts." Since 2011, we have made significant progress in both these areas.

As described in Component 8, we have applied the practices and program review to the DSA in a way that is both sustainable and explicitly connected to assessment activities already underway in academic departments. Annual assessment and program review processes have been strengthened and deepened (CFR 2.7), leading to useful insights about student learning and actions to improve and

advance the goals we have for our campus (CFR 1.2). Learning outcomes are publicly accessible on departmental webpages, and we routinely share the results of our assessment of learning outcomes and student achievement (CFR 2.3).

In Component 8, we describe the impact of the comprehensive review of our Core Curriculum, which has led to a redesigned Core, approved by faculty in spring of 2020. We describe the revised Core—which is designed to reduce student stress due to context-switching and increase joy of learning, reflection, mastery, and retention by allowing students to take a four-course load in the first four semesters while still being on track to graduate in four years—and how changes will be assessed (CFR 2.8). This work has been informed by an external review, a self-study and external program review and accompanied by sustained involvement by faculty, students, alumni, and trustees, led by our Core Review Committee (CRC). HMC's mission statement provided the central focus for the committee's work. Evidence-based data, provided by the Office of Institutional Research and Effectiveness (OIRE) and the Office of the Registrar helped committee members assume collective responsibility for establishing "appropriate standards of performance" (CFR 2.4). Also in Component 8, we describe the steps taken to engage the entire community in the redesign of the Core, including the development of a goal statement and learning outcomes for the Core, refinement and articulation of details for Core proposals, feedback from the community around specifics of the proposals with respect to resources and constraints. As the Core takes shape, this work has been turned over to a Core Implementation Committee (CIC), who are working closely with academic departments, appropriate standing and ad hoc committees, relevant staff, and the dean of faculty to guide the development, delivery, and assessment of the new Core (CFR 2.6).

As a direct result of our continued attention to the two issues identified in our previous review, we have seen an increase in demand and expansion of assessment efforts. To ensure our ability to sustain our commitment to improvement based on data and evidence, we have added two positions in OIRE. In 2015, we added a research analyst, and in 2018 that position was recategorized as assistant director. In 2019 we added an associate director (CFR 4.1-4.3).

Capstone Courses (CFR 1.1, 2.3-2.6, 4.3-4.5).

Previous assessment work revealed some limitations with respect to students developing an appreciation of the social impact of their senior capstone projects (either clinic or thesis). The Commission recommended we "broaden the definition of capstone projects and the learning outcomes that students are expected to demonstrate in order to place more emphasis on the social responsibility aspect of the mission." Inquiry into improving this aspect of our curriculum and underlying pedagogy led us to expand the places where impact on society is addressed from our previous focus on capstone projects, by incorporating impact explicitly in specific courses, including Chemistry 23: Chemistry in the Modern World, Biology 52: Introduction to Biology, and CS5: Introduction to Computer Science, and by introducing a required impact course in the Core (CFR 4.4). Although the exact topics have not been finalized, we expect the impact course will focus on issues such as social justice and environmental impacts. We also mapped the learning outcomes students are expected to demonstrate in Core, which helped us place more emphasis on the social responsibility aspect of the mission earlier in their career, allowing them a solid foundation on which to build their capstone work (CFR 1.1, 2.3-2.6). Finally, Component 8 describes the additional service learning, internship, and volunteer programs that offer students the opportunity to connect their scientific training to societal impact and the wider world.

In our response to the Commission's recommendations, we have regularly involved appropriate stakeholders in the assessment of institutional effectiveness. Students routinely serve on essential institutional committees, such as the CRC and the Faculty Executive Committee. The board of trustees' Student Affairs Committee and Academic Affairs Committee, on which students and alumni also serve, is routinely consulted on matters related to our educational programs (CFR 4.5). The involvement of multiple constituencies help us articulate our priorities and examine the extent to which our purposes, core functions, resources are aligned and help us clearly define the future direction of HMC (CFR 4.6).

Institutional Response to COVID-19

Like so many institutions across the country, HMC has spent the last year enveloped by the pandemic crisis. Interrupting a number of key initiatives—not least, the focused in-person endeavors building around our TPR of *Healthy Excellence*—COVID-19 emptied the campus residences in March 2020 and propelled us abruptly to remote learning. Our pivot, which began with the cessation of normal academic and residential operations, ultimately resulted in operating budget cuts, a hiring freeze, and the furloughing of staff. In the academic program, key endeavors including the review of our Reappointment, Promotion and Tenure (RPT) processes halted, and our substantial revision of our Core slowed.

Harvey Mudd was not unique in turning to these measures, but the pandemic has thrown into relief the significance of our ongoing efforts to address and improve work-life balance for all constituencies at the college. Specifically, the additional burdens of remote teaching, learning, and campus operations made clear how close our normal practices were to maximum capacities. While it disappoints us to have delayed our progress on workload and not to have our new Core fully implemented, we were pleased we were able to move forward in important ways with our new Core and with co-curricular assessment. We have solidified campus commitments to returning to our initiatives around student, faculty, and staff workload at the moment it becomes practical to do so. The FEC, for example, has already prepared to restart a review of RPT practices when we return to campus, picking up an initiative described below. We anticipate fully instantiating our new Core, with its smaller footprint, within a year of resuming full in-person operations.

While strengthening our commitments to ongoing efforts, the pandemic has also revealed to us ways in which our pre-pandemic engagement with work-life and workload prepared us to recognize difficulties and to act nimbly as we could. Within weeks of the March 2020 closure of the campus, a multi-constituent planning group, led by the dean of faculty, instituted COVID-19 policies around workload that included greater flexibility in the tenure clock for faculty and grade flexibility for students. The President's Cabinet, working with the board of trustees, approved the use of college funds for

telecommuting support for faculty and staff and technology and support for students compelled to work remotely. An Emergency Employee Relief Fund, funded with voluntary contributions from across the constituencies of the college, supported health insurance and other necessary expenditures for our furloughed colleagues.

Our VPSA, along with the student affairs staff, developed programs to support students in their new work environments. In response to the need to communicate broadly and clearly with students and families, the DSA initiated communication, policies, documents, and related programs under the Stay Safe @ Mudd initiative. Additionally, critical information was delivered through Inside Mudd, a webinar series for families, students, faculty, and staff focused on updates about the campus and COVID-19. The VPSA also gathered a group of 27 individuals, 22 of whom were students, to meet weekly in an advisory capacity as decisions were being made that pertained to the student experience. As the DSA prepared to modify policies and procedures to support students during the pandemic, they engaged in seven consortial and HMC-specific committees that addressed academic planning, contact tracing, testing, social norming, mental health, safety, and general COVID-19 responses. The DSA also modified the student engagement model, shifting resources, programs, and services to be completely virtual. The Office of Health and Wellness contracted with MiResource to help students identify resources and providers in their remote locations. Additionally, The Claremont Colleges contracted with Timely.MD, a provider of online medical and counseling services, to offer a telehealth option to all HMC students to expand and supplement services currently available at Student Health Services (SHS) and Monsour Counseling and Psychological Services (MCAPS). Students who were struggling academically or with their wellness received individualized outreach by text messages, phone calls, emails, and one-on-one meetings with staff in partnership with the academic deans. Programs such as career fairs, emotional intelligence seminars, physical wellness, painting with the dean, academic advising and skill building, community engagement opportunities, an anti-racist webinar series and book club, leadership webinars, social connection events, and one-on-one meetings with the DSA staff members were all conducted virtually. These offerings served to provide essential resources, co-curricular learning opportunities, social

gathering and engagement occasions, opportunities to collaborate, and to provide stress management and wellness support for students.

Ongoing communication with students, faculty, staff, and families through town halls provided an important two-way flow of information between campus leadership and the college community, frequently surfacing concerns about workload or work-life that enabled us to pivot toward new support or policies. Town halls with faculty and staff, for example, created support for an initiative to provide ongoing health insurance coverage for furloughed staff, and town halls with families and students emphasized the need for attention to time zone differentials as well. In summer 2020, we worked with the CTL to provide support for a cohort of 40 faculty to learn best—and efficient—practices for delivering distance learning in ways that would address their own workload concerns and the diverse learning situations of our students.

Preparation for the Reaffirmation Process

In preparing for this reaffirmation review, our general strategy was to have the work of the review run through a representative steering committee, small enough to work efficiently, but broad enough to reach all campus constituencies at key points in the process.

To accomplish this, in August 2018 the FEC established the WSCUC Steering Committee. The committee is composed of a mix of faculty and administrative representatives. This includes the chair of the FEC, chair of the Assessment and Accreditation Committee, and the chair of the Department of Engineering. Administrative members included the VPAA, the VPSA, the associate dean of the faculty, the director of summer programs and special projects, and the accreditation liaison officer (ALO)/assistant vice president for institutional research and effectiveness.

At every stage of the multi-year process, the Steering Committee led the initial deliberation and drafting of documents. It then broadly engaged the campus community gathering feedback that informed refinements and revision.

To draft the institutional report, the Steering Committee selected leads for each project in the theme, as well as leads for each component. Those leads invited other members of the Steering Committee, as well as non-committee members, to help draft their section. During the 2019-2020 academic year, leads drafted outlines for their sections as their projects progressed.

Essay drafting took place during the 2020-2021 academic year. In March 2021, essay drafts were compiled into a draft institutional report. The steering committee reviewed this first draft, editing and revising as appropriate. During April and May this initial draft was reviewed by administrative and faculty leadership, including President Klawe. Feedback from these groups informed the development of a second draft, which was shared with the campus community in summer 2021 and then finalized.

The board of trustees has reviewed this report, and has received regular updates on the college's progress in the board's Academic Affairs Committee and in meetings of the full board of trustees.

COMPONENT 2: COMPLIANCE WITH STANDARDS

In this essay, we describe the process by which we completed our review under the WSCUC Standards, including what we learned and how we are responding with respect to the Core Commitments and Standards of Accreditation. We also briefly describe how we are meeting federal requirements as revealed by the Federal Checklists. In sum, evidence indicates that we have in place a system for assessing, tracking, and improving the learning of our students and we have not discovered any issues or areas of concern.

Review Under the WSCUC Standards

HMC completed its review under the WSCUC Standards in two steps. The first step was designed to initiate awareness of—and, as necessary, action in response to—accreditation expectations as described by the Standards and Criteria for Review. The second step finalized our self-analysis.

In fall 2019, the Assessment and Accreditation Committee (AAC) began to engage in a formative self-analysis of the compliance standards to identify our strengths, areas for improvement, and any areas in need of immediate attention. The AAC developed a draft of the evidence to support our compliance with the standards. When campus closed in March 2020, the AVP for institutional research and effectiveness completed the initial analysis and used it to generate a document that identified areas of strength and areas where we needed more information. When the AAC reconvened, they used that document to reach out to the offices of the president, dean of faculty, business and finance, and advancement to complete a draft of the Compliance with WSCUC Standards and Federal Requirements worksheet. Through this collaborative effort, we were able to identify shared values across many offices, including a deep dedication to working efficiently and effectively, to fulfilling our commitments, and to helping the members of our community thrive. The worksheet also reveals the extent to which our assessment efforts have grown. It was satisfying for the AAC to see the frequency with which we were able to provide the results of our assessment work as evidence of our compliance with a particular Criterion for Review, whether the CFR was about learning outcomes, assessment, pedagogy, planning, or institutional effectiveness.

In looking closely at the structures that support our assessment work, we were able to note the following patterns: 1) all academic departments participate in program review, including the Core; 2) the evidence we use to determine the extent to which our graduates achieve the outcomes we set out for them is apparent in all departments; 3) major or program requirements are clearly outlined on each academic department's website; 4) All departments have learning outcomes on the websites; and 5) all academic departments have mechanisms to determine if students have achieved stated outcomes which create

multiple opportunities between students and faculty to discuss performance, and in some cases, those conversations continue past graduation to include alumni.

The AAC's examination of assessment processes also shows that all departments have responded to program review findings with plans to revise program curriculum and/or program assessment strategies. Departments also are using the results to stimulate faculty discussions, reconsider pedagogy, re-examine the program's intended learning outcomes, and support resource requests for the purposes of improving student learning and achievement.

The AAC identified several opportunities to engage in deeper forms of assessment. In partnership with the Core Implementation Committee, the AAC revised the learning outcomes for the new Core and began the process of putting together a comprehensive plan of assessment for the new Core. The committee also worked with the VPSA on integrating students affairs assessment into the AAC's reporting cycle so that the results can be disseminated to the entire faculty in a meaningful way. Moving forward, the AAC will continue to take the lead on these endeavors and ensure they become part of the fabric of the work of the AAC.

Federal Checklists

HMC initiated completion of the four Federal Checklists in June 2020, with the intention of identifying, and as necessary rectifying, any discrepancies between federal requirements and campus practices. As required by the review, the four checklists—credit hour, marketing and recruitment, student complaints, and transfer credit—have been submitted with this report for verification by the WSCUC review team of HMC's compliance with these expectations.

COMPONENT 8: INSTITUTION SPECIFIC THEME

Origin of the Theme and Projects

HMC advanced the theme of "*Healthy Excellence: Putting Success in Perspective*" because it provided us with an opportunity to build on our previous work and integrate many academic and co-curricular support structures, initiatives, offices, and programs that help our students, faculty and staff thrive while also demonstrating our commitment to WSCUC's four Standards of Accreditation.

The theme of *Healthy Excellence* has two interrelated subthemes. The "healthy" in Healthy Excellence alludes to workload, which has been mentioned in previous accreditation cycles. In 2009, the WASC Visiting Team for the Capacity and Preparatory Review recommended "Harvey Mudd College should continue to examine issues about faculty and student workload to promote balance in personal and professional life." We wanted to look at workload because it would capture our commitment to improving the educational experience and touch on the "core functions of teaching and learning, scholarship and creative activity, and support for student learning and success" (Standard 2). We have considerable data from students and faculty that indicates that in their pursuit of excellence, students and faculty are often overextended and find it difficult to fully appreciate their successes, and this is an opportunity to examine the complex connections between the challenges that exist at HMC and the ways in which wellness is tied to performance for students and workplace satisfaction and professional development for faculty and staff. Since our last reaffirmation, several centers, initiatives, and offices have been established to support members of our community while others have been expanded or re-visioned. Looking purposefully at our culture provides us with the opportunity to demonstrate our commitment to "achieving educational objectives through investments in…resources and organizational structures that promote the achievement of institutional purposes and educational objectives, and create a high quality environment for learning" (Standard 3).

The "excellence" in Healthy Excellence refers to the degree to which we are meeting the Harvey Mudd College mission. We appreciate the chance to reevaluate the ways in which we are meeting the

ambitious goals we have set out and to use the data collection, research, and institutional inquiry to "establish priorities, to plan and to improve quality and effectiveness" (Standard 4). For example, what does it mean for students to be well-versed in scientific, engineering, and mathematical disciplines? How and where do students demonstrate their understanding of the impact of their work on society? Are students prepared to assume leadership roles in their fields?

As we thought about the intersection of our mission with our culture, we envisioned three intersecting projects, each of which has implications for faculty, students, and staff. When we originally conceived of this work, we centered these within the Core, but as our work unfolded, we realized that workload was truly at the heart of our work, allowing us to connect the projects explicitly to the support structures in place to help students, faculty, and staff thrive. This approach provided us with the opportunity to have a purposeful discussion of how our work in Core and on our co-curriculum intersects and strengthens our mission as a college and epitomizes our "essential values and character" (Standard 1).

Project 1: Faculty, Student and Staff Workload (CFR 2.1, 2.8, 2.13, 3.1, 3.3)

HMC's ability to respond to the workload concerns which have been heightened by the pandemic was improved by a longstanding effort to understand these pressures on our campus and to respond to them. That there have been such concerns is unsurprising. Our high quality faculty and staff deliver an intensive and expansive curriculum to a highly selective student body through a pedagogy and co-curriculum that emphasizes high contact learning and support. Maintaining an active and professionally significant research program is important to many of our faculty, many of whom retain standards of contribution influenced by their R1 training and collaborators; substantial numbers of staff are likewise deeply committed to professional development and activity at a high level that includes leadership in professional organizations, publication, and conference dissemination. In short, like many other STEM institutions, HMC has just the right ingredients for a culture oriented toward "more" that, we feared,

might ultimately serve as an obstacle to our aspirations for student learning and holistic development and impede the broad flourishing we wished for faculty and staff.

Our efforts to develop a rigorous and data-driven approach to understanding the impact of a "more" culture on our campus have been ongoing at least since the early 2000s when a qualitative study of work-life among faculty produced several conclusions that continue to resonate as we pursue healthy excellence in the area of work:

- Faculty, staff, and student work culture at HMC is strongly interlinked and mutually reinforcing.
- The academic program (curriculum) is the key locus of interconnectivity and thus a key lever in any global changes.
- Change at HMC needs to rest on quantitative analysis.
- Opportunities to improve work satisfaction and workload exist in smaller measures that could be undertaken while progressing toward larger changes like shifts in the curriculum or processes for faculty advancement.

Strategic planning undertaken on the arrival in 2006 of Maria Klawe as HMC's fifth president gave focus, energy, and resources to the goal of improved work on campus by elevating the objective of "nurturing and developing the whole person" as a strategic objective of the college. Emerging from the strategic planning effort, a reform of the Core completed in 2009 had the effect of creating more time for reflection and whole person development as a central goal and provided enhanced space for electivity and an option for reduced course load during the first year. While the long-term success of these reforms in encouraging students to build more space into their programs was mixed, the process undertaking curricular reform with an eye toward student support pointed the way to the next revision of the Core discussed below (CFR 2.13).

Key Findings on Workload

Our efforts to encourage healthy work practices have continued since 2011, building on early studies and the assessment of first-wave initiatives. While we continue to see important areas of intersection among the experiences of students, faculty, and staff, this section of the report will describe several high-level findings for each group based on locally developed surveys as well as national instruments. In examining workload, we have learned:

- **Finding**: Collaborative on Academic Careers in Higher Education (COACHE) faculty surveys in 2017 and 2020 revealed that faculty report uncertainty regarding requirements for promotion and tenure. Faculty, specifically in some departments, see expectations regarding scholarship as lacking clarity. **Response:** Our FEC has initiated a review of the Faculty Notebook criteria for promotion and tenure; a new associate deanship has been established to support faculty development with a particular focus on pre-tenure faculty.
- **Finding:** COACHE surveys show that faculty feel the need for more and better support around research activities. Institutional support for grants seeking, time for research, and recognition for research were all areas where satisfaction was below both our peers and our threshold of acceptability. **Response:** We have created a new Office of Sponsored Research and hired a grants specialist to support faculty grant-seeking; we have highlighted faculty research achievement in public forums, which resulted in improvement between the 2017 and 2020 administrations of the COACHE survey; we are piloting additional summer salary support for faculty.
- **Finding**: Various assessments, including a time use study, have confirmed that the academic workload in the Core is a significant source of stress for students. Specifically, the fact that our students routinely take five or six required courses when students at other campuses take four courses contributes to overwhelm our students. **Response:** The ongoing Core revision will reduce course workload to four courses within each of the first three semesters; curricular revisions in departments have put workload front and center.

- **Finding**: Results from our first staff survey found most exempt and non-exempt staff "agreed" or "strongly agreed" that they were proud to work at HMC; found their work environment inclusive and welcoming; experienced open communication with their colleagues, and felt supported by their departments. **Response**: The pandemic has encouraged us to look for ways to maintain this strength through frequent, transparent communication in town halls, department events, and well-being activities.
- **Finding:** Survey results suggest that many staff perceive an increase in their workloads in the 12 months preceding the survey, which was completed pre-pandemic; others experience difficulty disconnecting from work at home; still others lack time for reflection and large-picture thinking. **Response** (interrupted): Moving forward on issues of staff workload requires further attention, and we have planned town halls with staff by division to gather further information to help monitor workload and guide improvements.

Faculty Workload

Since 2011, our efforts to understand and improve faculty work have been anchored by our partnership with the Harvard-based Collaborative on Academic Careers in Higher Education (COACHE). Following a pilot survey effort by our FEC in 2010, the dean of the faculty launched our research-practice partnership with COACHE with the administration of the Collaborative's Faculty Job Satisfaction Survey in spring 2017. The comprehensive survey, designed to probe faculty satisfaction around teaching, research, service, governance, and institutional support, was taken by 88% of our regular and contingent faculty. The instrument also included a set of institution-specific questions designed by a steering committee of faculty across ranks. Important findings from our 2017 COACHE survey included:

- More than 80% of faculty reported that they were satisfied or highly satisfied with their work-life in the institution as a whole and in their departments.

- Important areas of strength were located in faculty governance, departmental functioning and support, and institutional policies. Most strikingly, faculty named the "quality" of colleagues and students among the "two best aspects of working at your institution" at rates, respectively, of 53% and 79%.
- But alongside these overarching satisfactions, 26% identified "unrelenting pressure to perform"—35% of faculty at the associate rank—when asked to indicate the "two worst aspects" of working at Harvey Mudd.
- Specific weaknesses were seen both absolutely and relative to our peers in institutional support for grants-seeking, time for research, and recognition of research.
- Teaching satisfaction closely matched our liberal arts peers, but opportunities for growth were identified in numbers of courses taught and distribution of teaching load. Faculty belief that *students* were overloaded was confirmed in responses to a self-designed question, with 70% of faculty agreeing or strongly agreeing that "students at HMC should take fewer courses."
- Finally, we noted relative and absolute weakness in measures related to the clarity of our tenure process, suggesting an important area of stress given our extremely high levels of tenure achievement (for the period from 2010-2020, HMC's tenure rate is 94%)

Building on the COACHE Data

Receipt of the COACHE data in summer 2017 set in motion a series of initiatives directed toward work-life balance that culminated in our decision to pursue Healthy Excellence as the focus for our TPR. Key responses have emerged in three areas:

- **Office of Academic Affairs.** In response to faculty desires for more attention to research and to the interconnections among teaching, research, service, and off-campus life, a trio of associate deanships in the Office of the Dean of the Faculty was reorganized into an integrated pair charged with supporting faculty professional development (associate dean for research and experiential

learning/ADREL) and campus work-life (associate dean for faculty development and diversity/ADFDD). Since 2018, the ADREL has created a unified site for sharing information about internal funding and student support; created a regular feature in faculty meetings spotlighting faculty research; and partnered with the director of corporate relations in the design of an Office of Sponsored Research and Projects (OSRP), which includes the new position of grants support specialist. The impact of these efforts is perceivable in our 2020 COACHE results where satisfaction with support for engaging undergraduates in research increased from 42% in 2017 to 52% in 2020.

- **Academic Departments.** In fall 2017, the DCC in partnership with the dean of the faculty and the OIRE, initiated an investigation of an apparent disjunction between faculty reports of work-related stress and a long-term, low student-to-faculty ratio. Ultimately, the DCC collected its work in an evolving "Pressure Points" document, which that group has used to communicate with the college and the board of trustees about resource needs. A January 2019 presentation by the DCC to the board of trustees resulted in a pilot program to provide summer salary support to faculty researchers, addressing a need also identified in the 2017 COACHE data. DCC arguments for additional support for academic staffing helped lead to the creation of a new position, the assistant dean for resources and student success (January 2019), and the expansion of an existing position in accessibility support services (August 2020) to provide more efficient and effective support for students and faculty. DCC conversations with the FEC have informed the resource planning to-date around the developing new Core, encouraging all parties to make sure that there is a good understanding of instructional and support staff needs before instantiating any element of the new curriculum (CFR 3.1).
- **Faculty Governance.** Committee staffing and structure are within the portfolio of the FEC and that group responded to workload concerns articulated both in the COACHE results and directly from faculty by undertaking a thorough-going review and restructuring of committee obligations in 2019. That effort was accelerated in 2020-2021 to help ensure that faculty and academic staff

undertook only the most essential committee tasks in order to create additional time for the demands of remote instruction, pandemic planning, and additional extra-campus burdens. The FEC also has been instrumental in the effort to bring forward a new Core with the specified goal of addressing workload concerns raised in the COACHE data and affirmed in studies of recent students and alumni/ae. Finally, the FEC had initiated a critical re-examination of the policies and standards related to reappointment, promotion, and tenure in fall 2019. Our 2017 COACHE results suggested that there are important differences in clarity of tenure expectations. In 2017, just over one-third (39%) of pre-tenure faculty indicated that tenure expectations with respect to scholarship were very or somewhat clear. This stands in contrast to teaching expectations, where 83% indicate those were very or somewhat clear. Our 2020 COACHE results confirm these issues persist. In addition, only one-third (32%) of pre-tenure faculty in 2020 agreed that the messages they received about tenure were consistent. While these new data redoubled our determination to tackle tenure clarity, that effort, just gaining steam as the pandemic side-lined us, will resume as we return to campus. Our expectation continues to be that an ability to provide greater clarity regarding expectations for faculty career advancement will be stress-relieving and help to realign workload expectations for all faculty, but particularly for pre-tenure faculty.

While the pandemic disrupted our ability to have a thorough-going, community-wide discussion of the 2020 COACHE data, the results were reviewed by the DCC and presented in brief to the faculty during this academic year before complete results were made available to faculty. Overall, the results confirmed both concerns and strengths apparent in our 2017 survey. In particular, the data let us know that our developing reforms of the Core Curriculum and RPT processes were the right areas for our investments of time and resources. We had already begun to address the third key concern from the 2017 data—a sense that insufficient resources were directed toward faculty research—in 2019-2020 with the expanded functions of our associate dean for faculty research. The expanded website, regular celebrations of accomplishment, and the development of resources, including a writing working group for junior

faculty, may help to explain our stronger results in some COACHE areas. More substantial concerns about the lack of college support for grant-seeking resulted in a Cabinet-level decision to develop an Office of Sponsored Research, and we have hired our first technical grants specialist. We expect to see the effects of improved faculty grants support reflected both in the numbers of grant proposals submitted and funding secured, but also in faculty satisfaction around research support when we conduct our next COACHE survey.

Student Workload

On May 8, 2020, the faculty voted overwhelmingly to instantiate a new Core Curriculum. This curricular initiative, affecting one-third of the academic program required of all students, will provide a substantial departure from the existing Core when it is fully implemented, likely in fall 2023 given pandemic delays. The new Core charts a path that innovates, most evidently, in a design that allows students to complete all required work in a footprint of four courses per term for the first three semesters, rather than our current model of five. But the new Core will be equally groundbreaking in its attachment to goals that describe the nurturing of students' "intellectual curiosity and joy of learning" alongside foundational STEM knowledge and core competencies including critical thinking, oral and written communication, quantitative reasoning, and information literacy (CFR 2.1). While we recognize that the entirety of the HMC curriculum may ultimately benefit from this level of re-envisioning, the Core affords us a particularly powerful target for workload concerns. Because every student participates in the Core, the habits of healthy academic work can be cultivated there (CFR 2.13). And because every department contributes to the Core, best pedagogical practices developed there will propagate through the curriculum as a whole.

Just as recent faculty workload initiatives rest upon the data-driven work of the DCC, FEC, and others, the new Core is itself the capstone of work that has gone on since 2011 to better understand students' academic experiences. Informed by early in-house studies of student time-use and a report on the student academic experience developed in partnership between the HMC Teaching and Learning

Committee and the Wabash College Center of Inquiry, HMC launched two substantial investigations of student workload in 2017. The first was a substantial self-study of the Core Curriculum, undertaken with the leadership of a multi-constituency steering committee—the Core Review Planning Team (CRPT)—chaired by the Core Curriculum director. The extensive self-study undertaken by the CRPT built upon a preliminary, limited external evaluation of the Core undertaken in spring 2017 and culminated in a formal external review in fall 2017. Substantial overlap was evident among the findings of all three evaluations in key areas including: 1) strong continuing attachment by all constituencies to a common Core experience rooted in the mission; 2) the existence of multiple competing objectives in the Core that resulted in what the external reviewers termed "a characteristic tendency toward additive pursuit of workload and challenge"; and 3) the need for a "from the ground up" reform if the college wanted to take on workload and student well-being.

Launched in fall 2017, the *Workload and Health at Mudd (WHAM)* study also focused on the student academic experience, following the time use and academic experiences of 305 Harvey Mudd students on a weekly basis in order to document the time demands of the curriculum and "describe the impact [of] workload … on other aspects of student well-being and performance." Key findings of the WHAM study, released to the community in May 2018, included significant qualitative evidence of negative mental well-being even while documenting average weekly workloads consistent with Carnegie unit recommendations. Both an external review of the data and the insights of the team of faculty and staff responsible for the study pointed toward the likely effects of intellectual and cognitive overload from switching between multiple tasks.

Our current Core revision rests on the work of the CRPT and the WHAM study and also benefits from insights gleaned from department-level curricular revisions undertaken since 2011. While revisions of Core courses in chemistry, computer science, physics, math and engineering have had multiple objectives, they also have dealt centrally with student concerns about workload. A thorough-going revision of Engineering Systems (E79), for example, included attention to workload among a set of

design objectives aimed at providing a more engaging, useful, and inclusive learning experience for students. Strategic deployment of flipped classroom techniques and a single, focal hands-on project enabled all of these objectives to be met while simultaneously improving learning outcomes from the original course. Ongoing curricular reform of Core offerings in the Department of Mathematics, already undergoing preliminary assessment, also emphasizes considerations of student workload and motivation.

During the 2020-2021 year, the Core Implementation Committee (CIC) was determined to move forward on the Core during the pandemic, when almost all other college projects were set aside. In 2020-2021, the CIC ran two faculty workshops and administered a survey to seek faculty input on aspects of the impact course. CIC also mapped Core learning goals onto the impact course, with an eye to matching the course with the goals that are not already represented elsewhere in the Core. Finally, the CIC rebalanced the number of units per semester that students take (CFR 2.8) to both recognize and promote a healthy interdependence between students' burgeoning scholarship, creative activity, and their learning.

CIC felt that the next step with the impact course would require dedicated work by those faculty members who were likely to teach in the course. The CIC met with interested faculty and organized an Impact Course Development Team. This group has been tasked with developing a course pilot for spring 2022 following the guidelines just described, with the goal of implementing in spring 2023.

The CIC will continue its work in 2021-2022, turning its attention to directing the development of the impact course; recommending sustainable models and mechanisms for staffing, funding, and scheduling; proposing an ongoing mechanism for monitoring the time students and faculty spend in the Core; mapping student pathways through the Core; and proposing grading policies and contingencies.

Staff Workload

Student, faculty, and staff workload are integrally interconnected, and it is clear to us that to achieve a flourishing and "healthy" institutional life means addressing the experiences of all campus constituencies. While our current efforts to optimize student and faculty workload build on years of study

and iterative reforms, we turned for the first time to a comprehensive survey of staff work experiences in February 2020. The survey, closely aligned with COACHE data collection for faculty, achieved an 82% overall response rate among our 254 exempt and non-exempt staff. As was the case for faculty, staff reported a high level of overall satisfaction with employment. Responses to the prompts "I am proud to work at HMC" and "The work I do is valuable to HMC" were strongly affirmative for both exempt and non-exempt staff. Most exempt and non-exempt respondents "agreed" or "strongly agreed" that their work environment was inclusive and welcoming, that they experienced open communication with their colleagues, and that they felt supported by their departments (CFR 3.1).

Like students and faculty, staff experience high levels of satisfaction at the same time that they recognize areas of challenge. Most notably, more than 50% reported an increase in workload in the 12 months preceding the study. While some of this increase appears rooted in elective overtime, perception of a trend of increasing staff workload will require post-pandemic assessment as will data that suggest challenges for some staff members in disconnecting from work and/or finding space to focus on long-term projects or broad institutional goals. Our plan to share staff survey data in focused town halls as a step toward prioritizing areas for improvement or further study was subverted by the pandemic, but departments within the college have already begun to use data to update and inform practices. The Division of Academic Affairs, for example, has instituted a practice of biweekly online meetings for administrative support staff as a means to respond quickly to increase two-way flow of information regarding work-at-home experiences and institutional COVID-19 planning.

Like many academic institutions, the faculty at HMC tend to define the culture of the institution. Our faculty are excellent teachers and scholars who are routinely recognized with awards and accolades. As a result, HMC is a faculty-centered institution in what we value. The downside of this is that staff have the potential to feel undervalued. We mentioned earlier that many of our staff are distinguished in their own right, and faculty are often mindful of demands placed on staff and make certain to recognize their good work. As we continue to focus on staff workload, we intend to find additional ways to routinely

acknowledge and give voice to the contributions our staff make so that the culture of HMC also reflects their contributions (CFR 3.3).

Project 2: The Redesign and Assessment of the Core Curriculum (CFR 2.2, 2.2a, 2.3, 2.4, 2.5, 2.6, 4.1)

HMC's mission statement reflects a recognition that the scientists, engineers, and mathematicians who face global challenges are well-served by a strong, interdisciplinary background that spans both STEM and the humanities, social sciences, and the arts (HSA). HMC's founders developed an innovative Core Curriculum that has been a defining feature of the college since its founding. The Core includes coursework in chemistry, biology, physics, mathematics, computer science, engineering, writing, and HSA that is designed to meet an ambitious set of learning outcomes. This curriculum spans the first two years of the student experience at HMC and provides students with the foundation in STEM and HSA necessary for their advanced coursework and for success in STEM professions. Students move through the curriculum as a single cohort, which facilitates a sense of belonging and builds a sense of community. In the first semester, Core courses are graded as "High Pass", "Pass", or "No Credit" to help students adjust to college. The Core deliberately fosters a collaborative learning environment and encourages students to work together formally in classes and informally when studying outside of class. Such a rigorous curriculum, HMC's founders argued, would prepare students well for an increasingly interdisciplinary and technologically complex world.

In many respects, this curricular experiment has been successful. In a Spring 2017 examination, alumni report that the Core provided them with a breadth of knowledge and comfort working across disciplinary lines, as well as skills such as time-management and the willingness to learn complex new material. This kind of broad curriculum, however, also comes with significant challenges for all constituencies. Herein we discuss 1) how the Core has evolved since 2011, 2) the holistic Core review process that led to a new curriculum, and 3) the current state of assessment plans for the new Core.

Key Findings on Core Redesign and Assessment

The appendices for this section present the range of data collected and assessed; however this section of the institutional report will delineate several high-level findings. We have learned:

- **Finding:** Faculty strongly endorse the Core Curriculum, and faculty and students alike underscore the importance of sharing an experience with their classmates and sharing a common experience with all Mudders. **Response:** The revised Core preserves this common experience.
- **Finding:** The Core does a good job of exposing students to a wide variety of STEM disciplines and does an excellent job of teaching students the core competencies of quantitative reasoning, critical thinking, and oral and written communication. Given the content of our Core, this is gratifying. However, data suggests the Core could be focusing on and investing in helping students understand the impact of scientific work on society and the moral and ethical implications underlying their work, as well as providing time to reflect on and integrate the material covered in each of the courses. **Response:** The faculty approved a new Core Curriculum in spring 2020 that includes an "impact" course, named for the portion of the HMC mission statement that calls us to consider "the impact of [our] work on society." The Core Implementation Committee (CIC) developed preliminary learning goals for this course in spring 2021, and a small group of faculty are developing a pilot during the summer of 2021.
- **Finding:** Issues of workload discussed in Project 1 are evident in the Core, and in fact, the workload associated with the Core may be a factor in perpetuating the culture of overwork at HMC as first-year students learn to triage their work in response to a heavy course load. **Response:** The college revised the Core at the course level and undertook a holistic review of the curriculum, and workload was an important consideration in the review. In spring 2020, the faculty voted to adopt a new Core in which students take four courses plus a lab, in contrast to the current model of taking five or six courses plus a lab each semester. The pivot to emergency remote learning in spring 2020 slowed the rollout of the new curriculum, and the new Core is being implemented over multiple years to allow time for developing new courses in chemistry

and biology as well as designing a new course that will address the impact of scientific work on society.

- **Finding:** While holistic reviews of the Core happen each decade, an arc of development is visible across the life of the Core in response to changing understandings of student needs and the current state of knowledge. **Response:** Acknowledging that the Core is a living curriculum could help HMC better support this important piece of the HMC experience, for example by increasing support for developing innovative pedagogical strategies for existing Core courses and for piloting new Core programs. The Core Incubator (which was piloted in 2019-2020) was an important test of this framework.

The Evolution of the Core Curriculum

One of our primary insights as we undertook the revision of our Core has been the extent to which our Core is a living curriculum that evolves in response to our assessment data, external reviews, and departmental considerations. At the start of this project, we would have asserted that our Core was last revised in 2009, but closer inspection as we prepared to redesign our Core revealed considerable change over time. Our work began with the Core Review Planning Team (CRPT), whose primary charge was to lead the endeavor to develop a new goals statement for the Core. They turned the work over to a Core Redesign Committee (CRC), that worked to develop viable models for a new Core. Currently, the work rests with a Core Implementation Committee (CIC) whose work is to guide the development and delivery of this new curriculum. The changes to Core over time are detailed in the appendices and Core flowcharts, but below is a high-level overview that describes both the magnitude and depth of change (CFR 2.4).

Course-Level Revisions

The 2011 Core included multiple half-courses that spanned seven weeks. These included three half-courses in chemistry, six half-courses in mathematics, a half-course in academic writing (Writ 001), and a half-course in physics (Physics 23: Special Relativity). Taken together this meant that at one point, the fall semester included nine discrete academic courses for first-year students. Sound pedagogical reasoning drove this design. A student who failed a half-course could continue with the curriculum without falling significantly behind. Half-courses were also intended to help faculty manage workload by offering multiple sections of the same prep in a single semester or by concentrating teaching responsibilities in one half of the semester. In practice, half-courses posed challenges: testing occurs during a de facto finals period midway through the semester without the benefit of reading days; building a classroom community and rapport between students and faculty was difficult in the truncated courses; and students found it challenging to switch gears so often during a semester. Half-courses have largely been replaced with full-semester courses. Mathematics has consolidated their six half-courses into three full-semester courses in calculus, linear algebra, and differential equations (nicknamed the "CALINDER" model). In this process, probability and statistics was removed from the Core and became a stand-alone offering that some departments have added to their major requirements. As the first cohort of students just completed the sequence, assessment suggests students exhibit gains in understanding the importance of writing in math and on the clarity and effectiveness of their mathematical writing, see the topics in Core math are strongly connected to each other, and are strongly connected to other disciplines at HMC.

The 2011 instantiation of the Core also included semester-long laboratory courses in chemistry and physics, as well as Choice Lab 57. This sophomore-level laboratory was offered by all departments and allowed students to apply their laboratory skills to an interdisciplinary topic. While the labs were popular, there were structural issues: some departments offered more choice labs than others, which posed a challenge for staffing and for managing faculty workload; it was challenging to offer sufficient courses to serve all of the students in a growing college; the biology department also noted the significant

omission of a biology laboratory in the Core. In 2016, the faculty voted to restructure the Core laboratories such that first-year students would take one semester of chemistry lab and one semester of biology lab, while the physics Core lab moved to the sophomore year.

In addition to structural changes, the dedication to pedagogical innovation and revision that is found throughout our curriculum is also evident in the Core. Three half-semester courses that were taught through interactive lectures were replaced with a one-and-a-half semester sequence (Chem 23A&B) structured around 11 modules that teach chemistry through the lens of case studies. Each module centers on a societal problem and taught the chemistry required to understand that problem. For example, the module "Tesla vs. Toyota Smackdown" teaches fundamental electrochemistry through the lens of lithium ion batteries and hydrogen fuel cells. Formative assessment data tracking student experience in the course around group work, out-of-class time required for the course, and student learning suggests that the workload is challenging but appropriate and that students learn to work cooperatively with others (seeking their involvement and feedback) and are able to reflect on their own learning and put it into broader context.

The engineering Core course has been transformed from a traditional lecture-based course to a course centered around integrated theory and hands-on practice with a theme of underwater robotics. Final grades in the original lecture-based course revealed an equity gap, with male students receiving higher grades than female students. This course now employs a flipped classroom model and hands-on practicums. Assessment data for the modified course reveal a significant increase in content learning as well as affective gains for all students. Furthermore, the gender disparity in final course grades disappeared: there is no difference between the performance of male and female students on the pre-post content test. The hands-on practicums continue to be used to study the most effective strategies for enhancing student learning.

The biology Core course, Bio 52, was redesigned to incorporate computational modeling and to demonstrate how the tools of computational biology can assist in understanding and treating diseases.

This course builds directly on the first-semester computer science course and allows students to apply their computational skills to problems in biology, reinforcing connections between the two fields.

The physics Core includes a half-course on special relativity (Phys 23), a lab course (Phys 50), a full-semester course in mechanics (Phys 24), and a full-semester course in electricity and magnetism (Phys 51). Departmental assessment indicated that some students struggled to transfer their mathematical knowledge to calculus-based physics courses. To better support these students, the physics department piloted a new version of Phys 51 (named 51M) in 2019. In this course, key topics in vector calculus are taught and reviewed alongside the physics content; in addition, numerical examples and interactive demonstrations in Python are used to demystify abstract mathematical concepts (as well as build connections to CS 5 and Bio 52). In 2019, student performance in Phys 23 and 24 was used to identify students who could benefit from this new course and who were then invited to enroll. As a result of the pilot, far fewer students failed or withdrew from any of the versions of Phys 51 than was previously the norm; similar results were seen when the course was repeated in 2020. Going forward, Phys 51 will no longer be part of the Core, so many of the lessons from Phys 51M will be incorporated into its successor course (which we anticipate will likely be taken by 50% of the student body).

Taken together, these course-level changes to the Core challenge HMC's pervasive view that the Core is a static curriculum that undergoes a major revision approximately every 10 years. Instead, we now recognize the Core as a living curriculum in which faculty work in partnership with staff professionals to respond to innovations within disciplines and within the scholarship of teaching and learning, assessment results, and student needs (CFR 2.4).

Holistic Review and Revision of the Core Curriculum

While these course-level innovations led to valuable changes, the aggregate data from external reviews and surveys highlighted the need for a holistic review of the Core. The committees that led this process included faculty, staff, student representatives, and a representative from the Alumni Association

Board of Governors (AABOG) to reflect the fact that the entire HMC community is invested in and committed to the Core.

In fall 2017, the Core Review Planning Team (CRPT) analyzed data from students and alumni and led the faculty in conversations about the goals of the Core. These conversations led the faculty to adopt a new Core goals statement that explicitly includes curiosity, joy of learning, and critical thinking skills in addition to disciplinary work in STEM and HSA:

> *The Core Curriculum at Harvey Mudd College seeks to nurture students' intellectual curiosity and joy of learning, provide them with foundational knowledge and skills needed for further study in STEM disciplines, and begin a critical engagement with the humanities, social sciences, and the arts. In keeping with HMC's liberal-arts approach to STEM education, the Core engages students in thinking critically about consequential problems and complex issues, making connections across disciplinary boundaries, communicating and collaborating effectively, and understanding how their personal and professional actions impact the world around them.*

In spring 2018, the Core Review Committee (CRC) worked with the faculty to develop a call for curricular proposals that included key design elements including how the proposal addressed the impact of our work on society, student and faculty experience, impact on departments and majors, and impact on resources. The CRC built on this work in 2018-2019 by investigating the resources needed to mount the Core. This committee expanded to include a faculty representative from every department, and their work included evaluating proposed curricula from the faculty, developing additional proposals, and considering the resources needed to mount the Core.

The process continued in 2019-2020. During the fall of 2019, the CRC led the faculty in a discussion of the Core in which every department chair, the Core Curriculum director (CCD), and the senior director of learning programs each gave a 30-minute presentation about their existing Core offerings, the content from their discipline that their department believed to be crucial in the Core, and their hopes for the new Core. These presentations occurred in a series of well-attended special faculty meetings. Many faculty and staff reported that, for the first time, they came away from this series of meetings with a much deeper understanding of the Core and how their department's offerings fit into the larger whole. Throughout this multi-year process, the CRC engaged deeply with faculty through

dedicated faculty meetings and workshops, asynchronous surveys, conversations in department meetings, and lunch conversations, all designed to move us toward the development of a revised Core that would meet the goals we set out for ourselves. Similarly, the student representatives on the committee held open information sessions for students and spoke with students at events such as dorm barbecues (CFR 2.5).

With this information in hand, the CRC developed a series of proposed Core curricula. Each model included an impact course and a common kernel of courses. The proposals differed in the number of courses that students take each semester, the degree of electivity, and the sequencing of courses. After multiple conversations in faculty meetings, the faculty moved through a three-step voting process in spring 2020 to adopt a new Core. The faculty voted by a significant margin to adopt the curriculum "Four courses with optional electivity".

This curriculum seeks to manage student workload by allowing students to take four courses plus a lab each semester of the Core, instead of their current workload of five or six courses plus a lab. In addition, for the first time, students will take chemistry lab concurrently with the chemistry course and biology lab concurrently with the biology course. Students who seek to do more can take an optional fifth course in later semesters. These changes were made possible by requiring two physics courses instead of three, and two math courses instead of three. It is likely that departments will require a third math course for their majors, which allows students to take a third math course that contributes to their chosen course of study. For example, a physicist or engineer may take differential equations while a computer scientist or biologist might take statistics and probability. Moving these courses from Core into major requirements gives students more space in the Core, but does require the restructuring of some major sequences.

This new Core includes a sophomore-level impact course, named for the mission statement's call to understand "the impact of [our] work on society." The faculty see this course as a way to address the need for students and alumni to be able to engage deeply with questions about the social, political, and ethical considerations of their work (CFR 2.2a). This course is also an opportunity for students to use the academic toolkit they have developed in their Core courses to tackle a complex, interdisciplinary problem

such as climate change or biases in algorithms. As we head into summer 2021, the faculty is in conversation to articulate the learning outcomes and structure of the impact course. HMC has a history of developing innovative interdisciplinary courses that provide rich learning experiences but prove difficult to sustain. For example, the Core lab described earlier in this section and other interdisciplinary programs that sit outside of departments often suffered from a "tragedy of the commons" effect; departments, quite reasonably, prioritize staffing departmental Core and major offerings, and interdisciplinary programs can fall by the wayside due to staffing challenges. The notable exception to this is the Core class Writ 001: Introduction to Academic Writing, which is run by the senior director of learning programs. In an effort to avoid the pitfalls that we have encountered in the past, the faculty approved a "sunrise clause" for the impact course; the course will not launch until sufficient resources are in place to support it. Similarly, the faculty will actively decide to continue the course three years after its launch.

Learning Outcomes

Revisiting the learning outcomes for Core and making sure they reflected the values we articulated in the goals statement and aligned with the new Core represented significant work. The goals statement encourages a culture of intellectual curiosity, collaboration, critical thinking about complex issues, and interdisciplinary thinking while providing foundational experience in all fields of science. Significant study in HSA remains a critical component of our Core, providing Mudders with the ability to traverse the social, political, ethical, and economic factors that impact, and are impacted by, their scientific work.

Given its departmental representation, the Assessment and Accreditation Committee (AAC) took the lead in updating the learning outcomes and delivering them to the CIC. They used the goals statement to generate a set of specific and assessable learning outcomes. Revising learning outcomes was admittedly complex on a number of fronts, the most relevant being HMC's culture of granting our faculty considerable autonomy in what they teach in their courses and how they assess student learning. Asking faculty across disciplines to reach a consensus on priorities and assessment meant they had to commit to

overarching goals that might not perfectly represent their individual view. The learning outcomes for the new Core are:

THE HARVEY MUDD COLLEGE CORE CURRICULUM IS DESIGNED TO:

- Nurture intellectual curiosity and joy of learning.
  Students will be able to:
  1. Explore the beauty, power, and promise found in our core disciplines.
  2. Develop habits and skills that help manage academic challenges with resilience and confidence.
  3. Collaborate effectively as part of a team.
  4. Communicate clearly and appropriately to a variety of audiences through multiple formats (e.g., oral, written, visual).
  5. Engage in informed creation and analysis in the Humanities, Social Sciences, and the Arts.

- Provide foundational knowledge and skills needed for further study in STEM disciplines.
  Students will be able to:
  1. Demonstrate an understanding of foundational scientific skills.
  2. Use modes of thinking, analytical and/or experimental skills, and methods within a particular discipline.
  3. Apply knowledge, modes of thinking, analytical and/or experimental skills, and methods across disciplines to solve problems.

- Engage students in thinking critically about consequential problems and complex issues.
  Students will be able to:
  1. Explore the historical and contemporary relationships between science and society.
  2. Appreciate how personal and professional actions impact the world.
  3. Analyze or construct arguments, considering underlying assumptions and potential counterarguments where appropriate.
  4. Reflect on the moral, ethical, and social implications of their work.

Curriculum Maps and Assessment

With learning outcomes in place, the AAC turned its attention to developing a curriculum map for the new Core that maps learning outcomes against the corresponding courses. We took a somewhat unconventional intermediate step in developing a curriculum map. Rather than asking faculty whether a particular outcome was introduced, reinforced, or mastered in a course, the AAC asked faculty to what extent the course addressed the learning outcomes, asking faculty to respond with minimal, moderate, or significant. Asking faculty to what extent a course addressed an outcome rather than at what level they expected students to perform liberated them and allowed them to indicate that a course did not address an

outcome, or did so in a minimal way. The resulting curriculum map visually represents the extent to which students encounter content or methods that ask them to develop their skills and abilities. Consensus is evident in the map, with faculty indicating most courses in the Core contribute significantly to students ability to: demonstrate an understanding of foundational scientific skills; use modes of thinking, analytical and/or experimental skills, and methods within a particular discipline; explore the beauty, power, and promise found in our core disciplines; and develop habits and skills that help manage academic challenges with resilience and confidence (CFR 2.6). The curriculum map also revealed that while most courses focused on foundational concepts, when we looked at our third goal of engaging students in thinking critically about consequential problems and complex issues, we saw that most courses were not addressing the goal or addressing it in a minimal way. This response is consistent with student and alumni survey results. It is a function of individual teaching styles rather than different expectations, and is something that now that it is visible, we can work to resolve.

This curriculum map serves to educate the community about the learning outcomes and to bring faculty teaching in the Core together so they can see how learning outcomes connect their courses to one another as they work towards common goals and developing student skills. It allowed us to see where the Core is addressing the objectives we set out for students. An emphasis on collaboration and communication appears in scientific disciplines as well as in HSA classes, which was gratifying, as was seeing the emphasis on problem solving within and across disciplines (CFR 2.2). As our new Core continues to take shape, and our comfort with discussing our contribution to shared goals across the Core deepens, the AAC anticipates moving past this intermediate step, and developing a more traditional curriculum map that asks faculty at what developmental level (beginner, intermediate, mastery) they expect students to perform on outcomes in Core courses.

With respect to assessment, the AAC was also charged with developing an assessment plan to evaluate the effectiveness of the new curriculum. The current draft leverages existing assessment tools and information such as the NSSE and CIRP surveys to assess the holistic learning goals of the revised Core. In addition, individual instructors will continue course-level assessment efforts to directly measure

student learning and experience. The AAC also drafted a set of supplemental questions for end-of-semester course evaluations designed to address learning outcomes for which we do not have readily available data. This is an unconventional approach for us. While different sections of the same course often submit common supplemental questions to understand how a course is performing, we have not done this across courses and disciplines, as we would in Core. At this time, we have plans to talk with RPT about having the aggregate results generated from these items go to the AAC, CCD, department chairs and individual faculty teaching in the Core, but RPT would not receive the individual faculty results for these items unless the individual faculty member chose to include them in their materials.

Oversight of the New Core

Oversight of the Core remains a critical issue. Currently, a faculty member serves as the Core Curriculum director (CCD). The CCD is responsible for: representing the Core as a member of the DCC; encouraging horizontal integration throughout the Core; overseeing the first-year writing course, including training sessions for faculty members; in collaboration with the AAC, overseeing the regular assessment of the Core; in collaboration with the Academic Affairs Committee, coordinating homework and examination schedules for Core courses; working with the registrar and the DCC to address scheduling conflicts, including those arising through elective cross registration; working with the registrar, academic departments, and the other Claremont colleges to improve access to electives for first-year students; and overseeing lines for Core support within the dean of the faculty budget. In 2020-2021, the CCD served on the Academic Affairs Committee, the DCC, and the CIC, and was ex-officio on the Curriculum Committee and Assessment and Accreditation Committee.

In 2019-2020, HMC formed a “Core Incubator”. The incubator brought together instructors from across the college, along with select DSA staff, to connect ideas across Core courses and to brainstorm future support mechanisms, and showed promise in helping to develop a sustained practice of reviewing assessment data and provide a mechanism to disseminate results to all Core instructors and foster

discussion and collaboration that makes the Core stronger and more connected. The incubator was sidelined in 2020-21 by the pandemic, but it laid the groundwork for future conversations about a group we have been calling the "Core Corps", which would advise and assist the CCD by continually attending to the curriculum, workload, and assessment of Core (CFR 4.1).

Our work redesigning the Core underscores its significance to the HMC community. The conversations we had about the Core, whether they were about establishing the broad goals for Core, revising the Core with an eye toward workload, or how to implement and assess our new Core, underscore the extent to which the HMC community views Core as the embodiment of our essential values and character. Our curriculum map has shown us that there is considerable consensus on the extent to which the revised learning outcomes are addressed in the Core, but we do believe there are instances where we can deepen the connections across the Core. For example, while we have preliminary ideas, we have yet to firmly decide on the nature of our Impact course. The past 10 years have underscored for us the extent to which our Core is a living curriculum. While the holistic review of the Core was a major institutional endeavor, faculty and staff look forward to continually revising and iterating on our Core in order to better support student learning and student thriving.

Project 3: Co-Curricular Program (CFR 1.4, 2.8, 2.11-2.13, 4.1, 4.4)

HMC is known for its challenging and invigorating academic environment where students often talk about Mudd's unique mission as a liberal arts college that focuses on STEM while also supporting and encouraging students to pursue interests and endeavors outside of their majors. We frequently hear from students who chose HMC specifically because it would provide the rigorous scientific and technical education they desired, without sacrificing the additional aspects of their lives that are important to them—whether that is a love of running, drawing cartoons, or playing a musical instrument. Additionally, the HMC Office of Admission and Financial Aid's website notes that students "have the opportunity to

continue pursuing their nontechnical academic interests" and many students arrive expecting to be able to continue to pursue interests in history, music, economics, etc. At HMC, students are not asked to sacrifice their interest in philosophy or film to be a good scientist, resulting in an environment where students lean in to the challenge of doing more. Students see HMC and the resources available with The Claremont Colleges as a place to pursue "both-and", rather than prioritize their interests.

HMC's inaugural makerspace, opening within the new Scott A. McGregor Computer Science Center in August 2021, is another project devoted to "both-and" learning at the college. Supporting independent and passion projects alongside work emerging from the curriculum, the makerspace will be an exciting new place for students to develop as whole persons as well as a site to nurture a campus maker culture. Indeed, we construe making as broadly as possible and include artists and musicians as well as scientists and engineers. Our vision is for the makerspace is to be an all-college space where community can come together, engaging creatively and collaboratively. We also wanted to help students gain confidence in their abilities to be creative and to build things.

Our co-curricular offerings are instrumental in supporting students in their pursuit of healthy excellence. Students acknowledge the education available at HMC is first-rate, and we work hard to have support structures in place so that our students can thrive. But complaints about workload are not uncommon. The college search tool Niche, which ranks schools based on key statistics and student and alumni reviews, indicates that 0% of our students/alumni agree "the workload at HMC is easy to manage," and one of the three key words or phrases used to best describe the typical student is "depressed."

Mental health is an increasingly important issue on college campuses, and the relationship between our Office of Health and Wellness (OHW) and The Claremont College's Monsour Counseling and Psychological Services (MCAPS) deserves explication. Our OHW oversees health promotion programming on campus and provides support, advocacy, and case management for students in need. Part of this work includes connecting students to various resources available to them through the college such as MCAPS. MCAPS is a shared resource that provides mental health and psychological wellness services

to the students at The Claremont Colleges. In order to better meet student needs, MCAPS implemented a rapid intake model during the fall 2020 semester to better ensure all students are seen within five business days of calling for an appointment. Students meet with a therapist who can assess their needs and make an appropriate referral for the type of care the individual student may find beneficial.

Deans from OHW also work closely with Timely.MD, a third-party company with which HMC has contracted with to provide virtual medical and talk now behavioral health services to students. This service has been immensely helpful in providing services to students currently dispersed around the country due to the COVID-19 pandemic. 7C Health provides on demand services to students 24/7 with an average wait time of 3:18 minutes for medical and 7:56 minutes for behavioral health services. At the close of spring 2021, 93 HMC students were registered for services with 7C Health.

Mudders are certainly well-prepared and motivated to take on a curriculum that challenges and stimulates them. However, an increasing number of students confront difficulties related to mental health, time management, and feelings of belonging. These issues are not uncommon across institutions in higher education, and certainly have been heightened for us during the pandemic. Here, we discuss how we have articulated and promoted the link between the DSA and our academic values as a means to better support the student experience. At the center of this work was an initiative to develop and implement a strategy to clearly identify the impact of the work being done in the co-curriculum to support our mission. We were aware that each of the offices in the DSA were actively engaged in initiatives, programs and practices that support our mission (e.g., Impact Leadership Program, community service, social justice advocacy, identity and self-efficacy programming, internship and career placement) but these efforts were not clearly and consistently aligned under a holistic umbrella that would help students make connections between their scientific and technical education and their experiences in the co-curriculum. We also sought to increase faculty awareness of these endeavors in such a way that they could both support and underscore their importance to students so that co-curricular activities were seen not as an add-on, but as an integral part of an HMC education.

The Division of Student Affairs includes seven separate offices: Academic Resources & Student Success (ARSS), Campus Life (OCL), Career Services (OCS), Community Engagement (OCE), Institutional Diversity (OID), Health & Wellness (OHW), and Housing and Residential Life (OHRL). Originally, it was our intent to focus this project on four offices within the DSA—community engagement, career services, institutional diversity, and the Office of Housing and Residential Life—and to expand to other offices in the following years. Given the way this project unfolded, we are delighted that we were able to include all offices and major programs in the DSA from the outset.

Key Findings on Co-Curricular Programs

The appendices for this section present the range of data collected, examined, and assessed. This section of the report will delineate some high-level findings. In undertaking this project, we learned the following:

- **Finding:** The offices within the DSA are actively engaged in activities that support our mission outside the classroom, but these endeavors are not yet clearly and consistently aligned under a holistic umbrella that allows students to make the connections between their scientific and technical education and their experiences in the co-curriculum in a deep and meaningful way. **Response:** Alongside a strategic reorganization, the DSA created a mission statement and four foci and mapped them to the mission of the college. This exercise gave us the opportunity to examine programming, activities, and policies in relation to one another.
- **Finding:** Student Affairs has long struggled to articulate the impact their work has on students and how we support the college's mission. **Response 1:** Assessment processes in the DSA have been developed to better articulate how the DSA supports the college's mission. How each office contributes to the four foci is assessed in a variety of ways, including, but not limited to, institutional surveys (National Survey of Student Engagement (NSSE) and Cooperative Institutional Research P), exit surveys of graduating seniors, and alumni surveys (HEDS Alumni

Survey). HMC's small size provides us with the flexibility to conduct smaller, more frequent, informative assessments as necessary. **Response 2:** Academic and co-curricular support at HMC are deeply interconnected, and the boundaries are not always clear. Making faculty more aware of the work being done in the DSA and fostering partnerships with faculty has been prioritized. Sharing the DSA assessment plans with the Assessment and Accreditation Committee (AAC) has allowed us to begin to integrate assessment work across academic and co-curricular divisions of the college, but we need to attend to this process to ensure it is fully integrated into our practices (CFR 2.8).

History and Organization of Student Affairs

The dramatic increase in the DSA staff notwithstanding, it is worth mentioning that the DSA has undergone four senior leadership changes since our last reaffirmation. Maggie Browning was dean of students from 2009 to 2015. She was succeeded by Kenneth and Diana Jonsson Professor of Mathematics Jon Jacobsen in 2015. Under Dean Jakes, as he was known, the role was recategorized as vice president for student affairs and dean of students (VPSA) and the position of assistant vice president of student affairs was added. Dean Jakes strengthened and grew the Division of Student Affairs (DSA) and focused on improving services for students in the areas of diversity and inclusion, community engagement, health and wellness, and leadership. In 2018, Anna Gonzalez joined HMC as VPSA. "Dr. G" as she was known on campus, brought with her considerable professional experience in student affairs, having held senior-level student affairs positions at Lewis & Clark College and the University of Illinois at Urbana-Champaign. With the departures of Anna Gonzalez and Leslie Hughes, AVP for student affairs, in spring 2021, Marco Valenzuela was named as the interim VPSA. Transition within student affairs is not uncommon; however, we are cognizant that this amount of organizational change among key leadership in the division requires the campus to remain attentive to the needs of the DSA in order to retain the momentum and impact of the work that has occurred to date.

Student Affairs Assessment

Prior turnover in key DSA leadership positions created a situation where efforts to articulate and align their purpose were not a priority for the division. When Anna Gonzalez arrived in 2018, efforts between offices within the DSA were disjointed. Further, the DSA also faced challenges related to identity and reputation, epitomized by the following conversation the VPSA had with a student when she first arrived:

> *Student: "I don't like DSA"*
> *VPSA: But you work for DSA?"*
> *Student: "Oh no, I work for career services."*

The student was unaware that career services was included within the DSA, and the student, similar to other students, wanted to distance themselves from the division. Our work to develop professional standards designed to guide quality higher education practices began with a strategic reorganization of the DSA. The goal was to help the DSA become better-serving in our work as co-educators in support of the college's mission and to address issues of maintaining health and wellness in an intense academic environment. Key offices like the Office of Accessible Education were realigned under the DSA to enable the division to align support structures. Additionally, as mentioned in Component 1, we created the ADARSS position, where Amy Bibbens serves as a connection point for students seeing academic resources and support, and to coordinate outreach efforts for students who struggle academically (CFR 2.12).

We developed the first mission statement for the DSA that centers the division's work to support and encourage a culture of healthy excellence and provide the foundation for co-curricular life at HMC:

> *The Division of Student Affairs serves as co-educators in support of the mission of Harvey Mudd College while cultivating student's life skills. Through collaboration and partnership, we foster an inclusive community while creating innovative programs that provide leadership and developmental opportunities. We prepare students for their futures beyond HMC as scholars and global citizens who impact their communities in significant ways.*

This mission statement is supported by four foci, each which operationalize the ways we use the mission statement in order to achieve our vision of providing transformative student learning experiences.

The foci also serve as a framework for departmental strategic planning as well as a guide to identify opportunities for collaborative programming and improvement:

1. *Experiential Learning*: We provide resources and opportunities for students to foster resilience, exercise accountability, and engage in community.
2. *Inclusive Communities*: We foster a welcoming environment by educating across identities and celebrating communities through awareness, allyship, and action.
3. *Leadership Development*: We provide opportunities that support and increase awareness of diverse leadership styles through involvement, collaboration, and cultivation of strengths for transformational change.
4. *Wellbeing and Holistic Development*: We engage students to learn, understand, and practice the nine dimensions of wellness to strive for a balanced sense of self.

With the mission and foci determined and shared publicly on the DSA website, the DSA partnered with OIRE to continue its assessment work. In spring 2020, OIRE facilitated three workshops guiding and supporting the DSA staff through the assessment process. The first workshop focused on developing learning outcomes and mapping them to the four foci, the second on identifying, collecting, and examining assessment data for one of their learning outcomes, and the third focused on writing up an assessment report. In these workshops, the DSA dedicated time to look for connections between their work, discussed what they were learning, and asked questions, all with special emphasis on examples, issues, and concerns relevant to student affairs assessment. Each workshop ended with "homework" designed to keep the offices moving through the assessment process while allowing staff to simultaneously attend to their day-to-day responsibilities. OIRE set aside office hours specifically for the DSA in the DSA offices, to make it easier for staff to have informal discussions about assessment and ask questions about their work in a comfortable atmosphere. OIRE also worked with each office to identify a bank of items on institutional surveys (NSSE, CIRP, HEDS alumni survey) that mapped onto their learning outcomes that they could use to incorporate into departmental assessment efforts (CFR 4.1).

With learning outcomes designated and data identified, the OIRE and the DSA created a reporting template that closely mirrors the template used in academic assessment reports. This was done

to facilitate conversation and alignment between academic and co-curricular units and to allow programs to articulate not only how their program or activity meets the agreed upon outcomes, but also to focus each office on what they have learned and what actions they will take, rather than on plans. Each department writes a brief (two-page) narrative that addresses the following questions:

- What student learning outcome is your office working on?
- What evidence are you using?
- What have you learned?
- What changes have you made or are you contemplating?
- What challenges are you facing as you consider these changes?
- How will you gauge (or are you gauging) the impact of these changes?

In doing this assessment work, we not only wanted to demonstrate the DSA's commitment to experiential learning, inclusivity, leadership, and student wellbeing, but also to develop a model for a formal, regular assessment process. These assessment reports would not only assist us in understanding the work being done by the offices in the DSA, but also give us the ability to clearly articulate how their commitment contributes to student's development at HMC. The DSA's dedication to data collection and reporting is considerable, and something we want to continue (CFR 2.11, 4.4). Below is a brief, high-level description of assessment conducted in the four original offices targeted for this work. Assessment reports for the other offices and programs can be found in the appendices.

One of the important pieces of learning that emerged from that first round of assessment reports was the difficulty of thinking about assessment work during the academic year, when attention is rightly focused on student support, activities, and opportunities. We adjusted the assessment schedule for the DSA to provide them with time and space to analyze assessment data they collected, write assessment reports and plan for the coming year during breaks and over the summer months, so that during the academic year, they are focusing on collecting the data. OIRE has indicated it is willing to continue to offer dedicated office hours for the DSA staff to work on their assessment, and will continue to be a resource for any unit in the DSA as they think about their assessment work.

The Office of Community Engagement (OCE)

OCE chose to focus on a single outcome: "engage with community members to co-create empowering solutions to address societal issues." This maps onto the experiential learning, inclusive community, and leadership development foci. To understand the depth of engagement of students with our community partners, we looked at NSSE items from the main survey in advance of the NSSE Civic Engagement module (anticipated July 2020). The results suggest that HMC students are relatively consistent in their involvement in community service from their first year to their senior year, with 20% of first years and 25% of seniors indicating they participate in community service between one and five hours a week. This is consistent with data OCE tracked for students who participated in community facing programs such as Science Bus, Engineers without Borders, and the Prison Education Project. During the 2019-2020 academic year 295 students (~35%) volunteered in these programs.

That no students indicated doing community service more than six hours a week is consistent with what we hear from students. This confirms for us that in developing partnerships with community members, sticking to a commitment that is less than five hours a week is important as we look to increase the number of students who take advantage of community engagement opportunities. Further investigation will help us clarify the extent to which we are meeting our goal. Our NSSE Civic Engagement model results exclude students who volunteered for one-time events. With this understanding, we plan to better differentiate one-time and recurring engagement by our students. This should give us a better understanding of how to best support students who want to put their scientific training to use in community setting and help co-create responses to societal issues.

The Office of Career Services (OCS)

This first year of our assessment work saw OCS collect baseline data. We focused on our implementation outcomes, which focus on how our students market themselves effectively to employers and graduate programs, identify and use relevant tools in their searchers, activate and maintain professional

relationships, and understand and plan for future educational pursuits and career trajectories. In summer 2020, we launched our first Summer Experiences Survey asking students to report their plans during the summer (e.g., research, internship, projects, or classes) and what barriers they foresaw in their post-graduate plans. Based on the survey results, we are able to proactively respond and develop career education programming and communication that addresses their concerns and interests during the fall semester, which is peak recruiting time.

We launch our annual Senior Survey in late spring semester (with the exception of spring 2020 because of COVID-19) and ask our graduating seniors what their plans are for the following fall. Over the past few years, we have made edits to our survey to better understand recruiting trends. We looked at the 2019 Senior Survey to learn when our students were accepting internship and employment offers. This helped us tailor workshop content that would be most helpful, determine when to provide programming, and see if we needed to put new or different resources towards on-campus recruiting. We learned that offers varied by discipline, and were more likely to align by industry standard. For example companies recruiting for software engineering and development positions tend to do so in the fall. However, that is not the case for all disciplines. The rumor that all seniors have job offers in the fall semester is not accurate, and that helps us both work to actively counteract that narrative and plan to continue to promote job-search and on-campus recruiting throughout the spring and summer. Since 2019, we have included more self-reported data about demographics, including gender identity, whether they identify as transgender, whether they identify as a member of historically marginalized racial group, and whether they identify as a first-generation college student. Not only will this data help OCS with tailored programming needs, but it allows us to see whether salaries, bonuses, and negotiation efforts are equitable across the graduating class. Our hope is to track the demographic data longitudinally and develop initiatives that work to address any identified discrepancies.

The Office of Institutional Diversity (OID)

OID chose to focus on the extent to which HMC students can engage in identity development and examine the impacts of power and privilege on self and society, which maps onto the DSA foci of inclusive communities and experiential learning. Looking at the CIRP data for our first-year students, OID learned that we lag behind our peers on three of four items (Ability to work cooperatively with diverse people; ability to discuss and negotiate controversial issues; improving my understanding of other countries and cultures). Only on "tolerance of others with different beliefs" were HMC first-years ahead of our peers. Some of these differences were slight, but one, "improving my understanding of other countries and cultures," had a large gap (53.2% of HMC first years reported this was a major strength/they were somewhat strong, compared to 74.6% of first years in our comparison group). OID used this data to delineate some of the educational needs of our students and to develop programming models centered around expanding our community members' cultural competencies. HMC students come to campus with the motivation to learn about and across difference and with an expectation for diversity in our community that we are not fully meeting. In analyzing this data, we were also able to articulate other questions we had, and areas in which we need additional data to be able to not only further our aims, but to actively understand our students' experience. In 2020, we participated in NSSE's Inclusiveness and Engagement with Diversity module, and the results in Summer 2020, allow for a deeper dive into diversity.

In the wake of Black Lives Matter (BLM), the murder of George Floyd, Asian-American and Pacific Islander (AAPI) hate, validating and hearing the voices of our students from historically excluded communities, specifically our Black and Asian identified students, was essential to OID. It was also vital to HMC to create a more inclusive campus climate through increased programming. OID acted swiftly to provide space for not only students, but also for faculty and staff to process the events that were taking place while providing both on and off-campus resources of support. We created and implemented a foundational anti-racism module for all incoming students as well as an anti-racism program series to

include topics such as how to address systemic racism on campuses of higher education, building solidarity across communities, and the impact of xenophobia in our communities. These new programmatic efforts showed a significant commitment on behalf of the institution to create a positive campus climate to become more anti-racist as a community (CFR 1.4). These efforts had a positive impact as the engagement was high across our campus constituents.

As part of the election and census programming provided by HMC, there was a series of debate debriefs, election pop-ins, and discussion circles offered to faculty, staff, and students. OID also supported a student-created and organized, consortium-wide, hackathon inspired by the BLM movement - Hack For Black Lives. We also worked to provide a new common read program to address anti-racism, however, the pandemic impacted the success of this initiative. We plan to re-launch this effort when students return to campus in-person.

Finally, OID had 19 faculty and staff from various departments across campus and one staff member from CMS Athletics participate in over 16 hours of intergroup dialogue and social justice training. This cohort of trained facilitators will serve as inaugural facilitators for the HMC Dialogue Across Difference program, which will commence this summer as it will be incorporated into our First-Year Experience and Sophomore Year Experience programs. The Dialogue Across Difference program is a six-session series that provides HMC students with the skills to engage in complex and thoughtful dialogue on social identity in society. Our hope is that participants will gain skills in intergroup communication, critical thinking, perspective-taking, and cultural understanding. Dialogue Across Difference participants will commit to attending and actively engaging in all six sessions.

Many of the programs that were instituted were well received in a virtual environment, and we are committed to hosting similar programming once students are back on campus. OID is committed to creating a positive campus climate for our students of historically excluded communities. We will assess our programmatic and support services to understand if these efforts are making a positive impact on our community.

The Office of Housing and Residential Life (OHRL)

OHRL focused on "students will learn to explore their personal identities and form an understanding of self in relation to others" for our SLO for 2020. This outcome plays an important role in all four of the DSA's foci. To better understand students' experiences regarding diversity in their residential communities, students' ability to recognize and successfully interact with others who are different from themselves, and students' ability to learn to advocate for members of their community, OHRL used data from the HEDS Alumni Survey, CIRP College Senior Survey, and our own annual HMC Residential Life survey. Both the HEDS and CIRP surveys reveal that while Mudders feel that their experience on campus contributed to their intercultural knowledge and competence, we still lag behind our peer comparison groups. Both the HEDS and CIRP results also suggest that students may be reporting confidence around their cultural knowledge and practices despite reporting modest levels of engagement around these matters. These findings suggest that there is an opportunity for OHRL to increase student engagement through programs where students can practice their intergroup relations with people who are different from themselves and increase their cultural knowledge and competence. The 2019 HMC Residential Life survey indicates that students report high levels of satisfaction with the students they are living with in the residence halls. Specifically, students reported that they were "satisfied" or "very satisfied" with their fellow residents' respect for racial/ethnic differences (82%); cultural differences (84%); differences in sexual orientation (85%); and gender differences (82%). Students feel that respect for differences is a behavior mostly present in their residential experience. However, the CIRP senior survey indicated 12% of students sometimes felt ignored or invisible because of their race/ethnicity, while 6% reported they felt this way "often" or "very often". OHRL would like to see those numbers decrease to zero. In response, we will stress interpersonal effectiveness aimed at helping students gain awareness of the diverse communities in which they live and demonstrate an openness to differences. Furthermore, we will highlight conflict resolution practices and community development in our First-Year Experience (FYE) and Sophomore-Year Experience (SYE) programs. In addition to modifying our

FYE and SYE programs, we also plan to update our OHRL programming model and collaborate with the Office of Health and Wellness to broaden our efforts to encompass areas of wellness into programming.

Summary of the Division of Student Affairs Assessment Process

As mentioned previously, we hoped to develop an assessment process with four of our units and use their experience to develop a general strategy for examining the effectiveness of all our co-curricular programs. Given the engagement of all units in developing the DSA's mission and foci, we were fortunate to be able to capitalize on that enthusiasm and move forward with having all offices and major programs participate in the assessment process. This made developing a more focused and organized practice of assessment of paramount importance. We had all major offices and programs looking at specific sets of learning outcomes which linked not only to the DSA's mission but also helped us to articulate the ways in which our offices contribute to the college's mission. We partnered with a faculty committee, the Assessment and Accreditation Committee (AAC), to establish a route for our assessment reports to be integrated to the overall assessment reporting, and for faculty to hear from the VPSA about the DSA findings so they might better understand and support the changes and improvements happening in the DSA. Together, the AAC and the DSA developed a plan where the DSA assessment plans were to be shared with the AAC. The AAC would include them in their annual report on assessment and then share with faculty as a whole. However, these efforts were interrupted by the pandemic. We will resume this in academic year 2021-2022.

Next Steps

The assessment reports clearly highlight the commitment to both academic success and personal wellbeing of students, yet we see opportunities to improve. We have a process in place, but the pandemic interrupted it, and senior leadership changes threaten to continue the disruption. The DSA knows it must use this leadership change to re-engage with assessment. As we return to campus in the fall and (re)launch

our programming in person, we have a process in place that allows us to ask questions of ourselves, to use data to answer those questions, and to share results across the division with the entire campus. Committing to our assessment reporting will help us put student affairs work in larger conversations—about workload, leadership, impact on society—at HMC and beyond. When we put all the reports together, the DSA will have the ability to have evidence-based discussions about how the programming and services in the DSA impact what students know, what they can do, and how they feel about themselves and their broader world. Those larger conversations serve to keep the DSA vital. We are in a position to continue to deepen and strengthen our work; however, we must commit to attending to it. Based on the surveys and assessments we have already conducted, we believe that most of our offices are functioning well, and the ones that have challenges are on their way to operating more efficiently and effectively. Many offices have new leadership, and as the DSA looks for new leadership in the near future, we will use this as an opportunity to underscore our commitment to doing our best to help students at HMC thrive.

COMPONENT 9: REFLECTION AND PLANS FOR IMPROVEMENT

HMC approached this TPR with a sense of inquiry. What has become clear to us as we worked on each of our projects, punctuated by the COVID-19 pandemic, is the extent to which we are a community. What has emerged from this process, whether the topic was workload, the Core, or the co-curriculum, was the strength that comes from working together across disciplines and functions towards a common goal, using relevant data to guide and improve our work. As a result, we are better prepared to carry forward this momentum now with a revised set of learning outcomes for Core and a mission statement and four foci related to the co-curriculum against which we can assess our effectiveness. Redesigning our Core Curriculum and updating the associated learning outcomes provided us with the opportunity to refine not only the expectations we have for students, but also for ourselves as well. We have developed a Core that helps our students achieve the goals they set out for themselves, and to do so in a way that fosters

resilience and confidence. Our investigation into workload for students, faculty, and staff underscores the extent to which our policies and practices intentionally and unintentionally undergird many of the issues regarding workload and wellbeing. Our co-curriculum is aligned with our mission and presents opportunities to help students grow and thrive in a diverse environment like HMC and beyond. We are proud of this progress, but understand our work is not complete.

Among the challenges that we will face in the coming year are recovery from staffing deficits linked to our hiring freeze in 2020-2021 as well as to an acceleration of retirements and relocations. Our furloughed staff, largely in building and grounds and dining services, will be returning to campus in July and August 2021. In many areas, including advancement and business affairs, searches are ongoing to replace vacancies in areas where workflow will return to full strength when the campus reopens in the fall. In the faculty, where both frozen searches and retirements left us with a shortfall of more than 10% last year, we have put visitors in place for 2021-2022 and initiated seven tenure-track searches to bring in a cohort of new faculty in fall 2023. A second, similarly sized set of searches will be launched in 2023 for new hires to begin fall 2024. Last year, the pressures on the academic program were mitigated somewhat by smaller than usual enrollments at HMC and across the consortium, but we expect full strength enrollments to resume this year and have leaned much more heavily than usual into visitors' appointments and the enhancement of support staff to help us bridge the gap.

As a result of the pandemic, much of our TPR work was disseminated and discussed in smaller, digestible chunks with relevant faculty, students, and staff in order to minimize issues of burnout and bandwidth, and to remain mindful of the need to address pressing academic and co-curricular issues through our regular broad, multi-constituency channels. While this document was greatly enhanced by the involvement of those constituencies in our work along the way, the WSCUC Steering Committee has sorely missed the opportunities for informal discussions that would have occurred more naturally in person.

As we move forward and prepare for our next presidential transition, our work includes: 1) broadening the dissemination of the work we have done to date, including the learning outcomes,

assessment, and curriculum map for Core. These activities have provided us with a shared understanding of the foundational work in the HMC curriculum, and provide the basis for additional efforts which include mapping student pathways through the Core and into their chosen major with an eye toward revising advising guidelines, planning the pilot impact courses and integrating them into the larger curricular context, and evaluating the extent to which the funding and staffing are in place to deliver the new Core; 2) continuing the collaborative efforts that have engaged faculty, students and staff in productive conversations about the intersection of workload, wellness, and excellence, including re-examining and clarifying our RPT policies and associated departmental and institutional-level changes, holding town halls to revive our discussions of staff workload and wellness, and monitoring the workload in the revised Core; and 3) continuing to support and assess the support structures in our co-curriculum that are critical to the academic and personal well-being of our students. Going forward, we expect assessment processes and findings to deepen as we gain experience with the process in the DSA. The Office of Institutional Research and Effectiveness and the DSA will continue to partner on assessment, which will allow us to look more holistically at how these units function as support structures for our students. Racial equity is one particular area that will remain salient in this work. Our work with the Racial Equity Scorecard (RES) has shown us where disparities exist, and going forward we expect our assessment work will document how we address issues and work towards equity for all our students. The results of this work will be made accessible so that our community will have regular and predictable access to evaluate our progress.

As these reflections make clear, HMC is a different place today than it was even 10 years ago. As we reflect on President Klawe's tremendous legacy and prepare for a presidential search, we are grateful for a reaffirmation process that has allowed us to undertake a careful examination of issues that are so close to the heart of what matters for us. In writing this report, we have been forced to consider how we will continue the momentum that the TPR process has engendered for us. The AAC in concert with the CCD and new leadership in the DSA will ensure that assessing our effectiveness in the academic and co-curricular domains takes place on an ongoing basis, to determine whether the learning outcomes and

assessment for Core need to be revised, to monitor workload such that it remains manageable for students, faculty, and staff, to connect the work of the co-curriculum to the curriculum such that students have the support they need to thrive, and to make sure that findings are disseminated broadly. The TPR has given us the opportunity to reflect on the educational experience we offer, and we believe that through redesigning and assessing our Core, evaluating workload for students, faculty, and staff, and aligning and strengthening our co-curricular support, we not only have a better idea of what a HMC education stands for, we also know what it means for every member of our community to consider themselves a Mudder.