MIT Open Learning

MIT Open Learning reports to Sanjay Sarma, the vice president for open learning and the Fred Fort Flowers (1941) and Daniel Fort Flowers (1941) Professor of Mechanical Engineering. It includes the following units:

- The Office of Digital Learning (ODL), which encompasses Residential Education, MITx, OpenCourseWare (OCW), MicroMasters, and the Digital Learning Lab (DLL), as well as MIT xPRO, Horizon, Bootcamps, and MIT Video Productions (MVP)
- The MIT Integrated Learning Initiative (MITili), a cross-disciplinary, Institutewide effort that fosters quantitative and rigorous research on teaching, learning, and education systems
- The Abdul Latif Jameel World Education Lab (J-WEL), which funds applied research on learning and convenes a global community of collaborators for sustainable, high-impact transformation in education
- Open Learning Research and Projects, which conducts applied research on learning via the Teaching Systems Lab and other projects
- MIT Open Learning supporting units, which provide functional support throughout Open Learning

The mission of MIT Open Learning is to transform teaching and learning at MIT and around the globe through innovative use of digital technologies. It fulfills this mission by:

- Supporting MIT faculty and students in bold experiments to enhance our residential education
- Promoting and enabling quantitative, rigorous, interdisciplinary research on teaching and learning
- Providing platforms for digital education
- Sharing research and best practices by convening and partnering with schools, universities, companies, nongovernmental organizations, and governments
- Extending MIT's knowledge and perspectives to the world

MIT Open Learning's goals are as follows:

- Enhance support for faculty, making it easier for them to experiment and succeed in online learning
- Continue to promote financial sustainability
- Continue innovation and agile operations while attracting, retaining, developing, and motivating staff and building community
- Support strategic initiatives, new research on teaching and learning, and innovation
- Enhance our ability to measure impact as a means of ensuring continual learning

Highlights of the Year

In AY2019, Open Learning innovated and expanded into new areas, built systems to enable scaling, and continued to advance ongoing operations. Specific highlights are listed below.

Strategic Projects and Programs

- The Center for Advanced Virtuality, led by Professor of Digital Media and Artificial Intelligence Fox Harrell, was launched in the summer of 2018. The center conducts research and supports creative projects leveraging technologies of virtuality.
- MIT Horizon, a business-to-business subscription online library of cuttingedge micro-assets, helps large organizations understand and apply the latest developments in technology and science. Horizon began development in summer 2018 with a soft launch in spring 2019. Early topics include additive manufacturing, artificial intelligence, and blockchain technology.
- Open Learning formed the Digital Credentials Collaboration with eight other universities. The goal is to create a trusted, distributed infrastructure standard for issuing, storing, displaying, and verifying academic credentials so that learners can maintain their credentials and interested parties can verify them.
- MITx piloted an xMinor, a sequence of two to four MITx MOOCs (massive open online courses) along with at least one proctored exam that, collectively, confer an xMinor certificate and are the equivalent to roughly one third to one half of an undergraduate minor. These courses can be taken by individuals or used by other colleges and universities to supplement their residential curriculum. The first xMinor, in materials for electronic, optical, and magnetic devices, is being piloted with Gordon College.
- The Refugee Action Hub (ReACT) moved into Open Learning. ReACT provides blended learning programming to refugees, helping to impact their lives and fuel regional growth. ReACT currently offers a certificate program in computer and data science and the Data, Economics, and Development Policy MicroMasters program.
- ODL designed and developed the MIT Open Learning Library, preparing for a soft launch in July 2019. The library is home to selected educational content from OCW and MITx courses and is freely available to anyone in the world at any time.
- MIT, edX, and Arizona State University (ASU) launched a stackable online master's degree in supply chain management. MITx MicroMasters credential holders in supply chain management who apply and gain admission to ASU will be eligible to earn an accelerated online master's from the university.
- J-WEL developed a three-year alliance with Plan Ceibal, the Uruguay Technological University, and ANII (Uruguay's National Research and Innovation Agency) to build data science capacity in Latin America. The program curriculum will include data analysis, entrepreneurship, the future of work, and machine learning.
- MITili and the Playful Journey Lab secured funding from the Schmidt Futures Foundation to help develop a plan for re-engineering preK-12 education.

Business Units

- Residential Education continued to operate the Residential MITx course platform, creating 79 course sites with 10,022 active MIT student enrollments. A total of 107 faculty taught these courses, and 99% of current MIT undergraduates have taken a class that used the platform.
- MITx launched 120 online courses (30 new courses and 90 reruns) on edX.
 Nearly 1 million learners from more than 200 countries enrolled in these courses.
 MITx also awarded grants for 22 funded projects. MITx Prizes for Teaching and Learning in MOOCs were awarded to Polina Anikeeva and Jessica Sandland for 3.024x Electronic, Optical, and Magnetic Properties of Materials, and to Martin Bazant for 10.50.1x Analysis of Transport Phenomena I: Mathematical Methods.
- OpenCourseWare published 49 courses (26 new courses and 23 updates) and two new supplemental resources. Twelve of the courses had OCW Educator Instructor Insights pages, and five had full video lectures. With more than 5,800 videos and over 2 million subscribers, OCW's YouTube channel is the most subscribed .edu channel in the world. OCW began planning for its nextgeneration platform, including a modernized mobile-responsive website, an enhanced user experience, and upgraded internal tools and workflows.
- MicroMasters launched the new Statistics and Data Science program and continued to run its existing three programs: Principles of Manufacturing; Data, Economics, and Development Policy; and Supply Chain Management. Enrollment in these programs exceeded 250,000, with more than 14,000 individual course certificates awarded. A total of 642 learners earned MicroMasters credentials, and 36 graduated from the Supply Chain Management blended master's program. New credit pathways were established with 13 universities in 13 countries.
- The Digital Learning Lab expanded to include five scientists, 14 fellows, and two research fellows. DLL members worked with faculty to develop and run 51 MOOCs, 15 of which were new, and added four new DLL fellow positions. Nine DLL members presented their work at national and international conferences.
- MIT xPRO launched two new online courses as part of its four-course program
 in quantum computing, reran 28 existing online courses, and piloted four new
 online courses internally for launch in fall 2019. In addition, it built a sales
 function to enter the business-to-business marketplace and signed a distribution
 deal with Skillsoft.
- Bootcamps delivered nine learning events: three corporate bootcamps and six open enrollment bootcamps, including events in Rio de Janeiro, Brisbane, and Tokyo
- MIT Video Productions continued to provide video services to MIT's departments, labs, and centers. The Great Clarinet Summit, created in collaboration with Music and Theater Arts, earned a New England Emmy nomination.
- MITili continued to progress the five-year Reach Every Reader program and funded four faculty research grants in learning effectiveness.

• J-WEL increased its membership to 25 institutions. The third and fourth J-WEL Weeks were held, and 235 participants from 26 countries participated in these events; in addition, J-WEL hosted the eighth Learning International Networks Consortium (LINC) Conference, which attracted 130 participants from 31 countries. J-WEL awarded 16 education innovation grants totaling nearly \$850,000 and announced a new initiative with Save the Children called Transforming Refugee Education towards Excellence.

Research and Projects

- The Playful Journey Lab was established as a separate entity from the Teaching Systems Lab. It aims to conduct research and design preK-12 curricula and assessments with a focus on learner centricity and playful exploration. The lab provided support to the Woodrow Wilson Academy of Teaching and Learning and conducted projects with funding from i2 Learning, J-WEL, and other groups.
- The Projects group concluded three major initiatives. The Connected Learning Initiative (CLIx) completed its four-year project, designing and developing curricula for 478 schools, 2,500 teachers, and 60,000 students; the Open Learning Scholars program worked with the American University in Cairo and the American University of Beirut to blend MITx course materials into local courses for more than 850 students; and Projects concluded its work with SRM University, where it supported over 1,300 learners in using MITx courses. Projects began work on CoLAB, supporting the Universidad Tecnológica del Uruguay (UTEC).

Supporting Units

- Engineering and Technical Operations launched MIT Open, a site designed to bring MIT learning and research resources to the world and create a community around them. The group also developed a platform to relaunch MIT xPRO as an in-house service, allowing for more innovation in the xPRO learning environment, and migrated support of OCW operations from Sapient to in-house.
- The Business Operations group continued to support Open Learning with strategic planning, marketing, finance, human resources, administration, and space. A new customer service group was established to provide support to MIT xPRO, MicroMasters, and Bootcamps, and a communications group was established separate from marketing. Marketing expanded operations to help deliver revenue targets for xPRO, MicroMasters, and Bootcamps and launched a customer relationship management system, HubSpot. Finance created an accounts receivable group and worked on preparing to take xPRO payments.
- Resource Development brought in \$21.2 million in gift revenue in FY2019, including \$10 million from J-WEL. The group secured additional gifts from Mathworks, the Schmidt Futures Foundation, and an anonymous donor. Over the past year, Resource Development provided funding for MITili, the pK-12 Action Group, and other areas and led Campaign for a Better World efforts for Open Learning.

Finances and Funding

In FY2019, MIT Open Learning's revenues increased to \$45.0 million, up from \$25.1 million in FY2018. The increase was attributable to a \$5.3 million (41%) rise in external fees and non-degree tuition, which increased from \$12.8 million in FY2018 to \$18.1 million in FY2019 largely as a result of higher revenue from J-WEL memberships. Also, gifts increased from \$6.8 million in FY2018 to \$21.2 million in FY2019 in part because \$5 million pledged from J-WEL in FY2018 arrived instead in FY2019 (in addition to the \$5 million pledged for FY2019). Provost funding decreased from \$12.7 million to \$12.5 million as time-limited funding expired.

Total expenses increased from \$35.4 million in FY2018 to \$46.7 million in FY2019. MIT Open Learning continued to invest, especially in MIT xPRO, Bootcamps, MicroMasters, marketing, and the expansion of J-WEL. Additionally, as products became revenue positive, revenue distribution to faculty members, departments, and the Office of the Provost increased from \$3.2 million to \$3.8 million and departmental support increased from \$6.8 million to \$10.2 million.

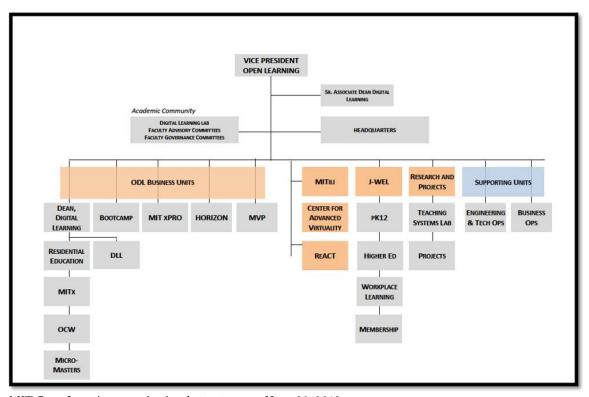
MIT Open Learning ended FY2019 with a net surplus of \$10.8 million, as compared with \$2.4 million in FY2018. Of this surplus, \$7.2 million was due to the J-WEL gift that will fund future J-WEL operations, and another \$2.7 million was due to the timing of the Mathworks gift, which also arrived in FY2019 and is intended to fund three years of operations. The table below summarizes financial results for the year.

Summary of FY2019 Open Learning Income and Expenses

Income or expense	Total (in millions)
Sponsored revenues	\$4.1
External fees	\$7.0
Non-degree tuition revenues	\$11.1
Internal fees	\$1.4
Gifts and investment income	\$21.2
Transfers	\$0.2
Total revenues	\$45.0
Total provost funding	\$12.5
Total income	\$57.5
Salaries and benefits	\$17.8
Department support	\$10.2
Revenue distribution	\$3.8
Other expenses	\$11.6
Total direct expenses	\$43.4
Total indirect expenses	\$3.3
Total expenses	\$46.7
Net surplus (deficit)	\$10.8

Staffing

The chart below shows the overall organizational structure of MIT Open Learning as of June 30, 2019.



MIT Open Learning organizational structure as of June 30, 2019.

MIT Open Learning Management Team as of June 30, 2019

- Sanjay Sarma, Vice President for Open Learning
- Krishna Rajagopal, Dean for Digital Learning
- Isaac Chuang, Senior Associate Dean
- Eric Klopfer, Director of the MIT Scheller Teacher Education Program
- Shigeru Miyagawa, Senior Associate Dean
- Ferdi Alimadhi, Director of Engineering
- Erdin Beshimov, Lecturer and Director of Bootcamps
- Lawrence Gallagher, Director, MIT Video Productions (MVP)
- TC Haldi, Senior Director, MIT xPRO
- Vijay M.S. Kumar, Associate Dean of Digital Learning and Executive Director of J-WEL
- Lisa Schwallie, Executive Director, Business and Operations
- Tom Smith, Senior Director, Development and Strategic Initiatives

Office of Digital Learning

Residential Education

The mission of the Residential Education team is to empower MIT faculty to use digital technologies to augment and transform how they teach. We do this by collaborating with faculty to instigate, explore, test, and institutionalize pedagogical models that enhance on-campus education through the use of digital technology. Our key strategies are to:

- Support digital learning experiments at MIT with technical expertise, consultation, facilities, funding collaboration, and training
- Encourage wider institutional adoption of pedagogical approaches enabled by digital learning tools by capturing and sharing our faculty innovations
- Collaborate with faculty, departments, the Office of the Vice Chancellor, and
 others to encourage and enable faculty to use digital teaching and learning tools,
 to help departments grow their course production capacity, and to support
 mechanisms that leverage existing Institute resources and synergies with other
 initiatives across MIT

In pursuit of these strategies, Residential Education provides the following services:

- Science of learning, learning analytics, and blended course design consulting
- Support of experimental/innovative learning spaces
- Technical and pedagogical support for Residential MITx
- Outreach and events (e.g., xTalks, Festival of Learning, Teaching with Digital Technology Awards, newsletter) to promote innovative teaching and learning

Summary and Highlights

The Residential Education group sustained success in supporting faculty use of the Residential MITx course platform, creating sites for 79 courses with 10,022 active MIT student enrollments. More than 100 faculty members taught these courses, and 99% of current MIT undergraduates have taken a class that used the platform. Residential Education successfully expanded participation in its Institute-wide Festival of Learning, drawing more than 300 community members, including more than 50 faculty members. It also continues to update the Residential Digital Innovations section on the Open Learning website, which now highlights almost 70 cases of innovative teaching practices at MIT.

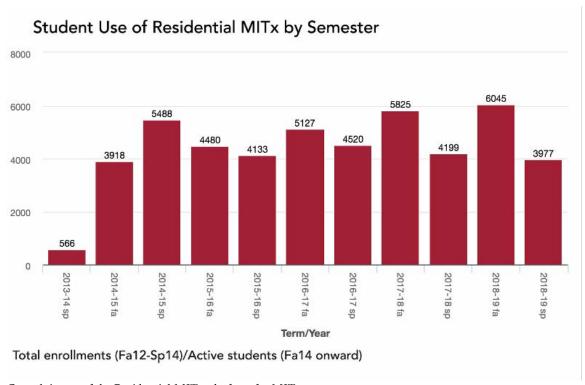
Goals and Objectives

The Residential Education unit strives to help make MIT on-campus education more effective and efficient for both students and faculty.

Accomplishments

During AY2019, key accomplishments in support of residential education included the following:

- Hosted 17 xTalks with more than 380 attendees, including 72 faculty members
- Supported 32 residential courses with the learning environments team using video lecture capture and lightboard studio recordings
- Managed a lecture capture installation in Room 35-225 for the Department of Aeronautics and Astronautics with alumni funds



Growth in use of the Residential MITx platform for MIT courses.

- Managed Open Learning's Teaching with Digital Technology Awards, which are co-sponsored by the Office of the Vice Chancellor
- Contributed learning sciences, instructional design, and learning analytics expertise to foster teaching innovation throughout the MITx grant process
- Continued to facilitate the Science of Learning journal club in collaboration with MITili
- Developed learning sciences and learning analytics projects with DLL and other groups
- Successfully collaborated with faculty and staff at the Sloan School of Management on implementing the School's flipped classroom model
- Offered presentations and workshops highlighting Open Learning and Residential Education work/accomplishments for MIT colleagues, external audiences, and visiting delegations
- Supported three innovative technology-enabled learning spaces and their infrastructure along with two lightboard studios, providing primary teaching space for seven classes and supplemental teaching space for an additional 12 classes

MITx

MITx on edX is the Institute's interactive learning initiative that offers online versions of MIT courses on the edX platform, a collaboration in online education between MIT and Harvard University. MIT instructors teach MITx courses to learners around the world.

Many people refer to MITx courses as massive open online courses (MOOCs). The learning experience features multimedia and video content, sophisticated auto-graded online problems similar to those encountered by MIT students, embedded quizzes with immediate feedback, online laboratories, and peer-to-peer communications. Courses can be instructor paced, with deadlines and new content made available weekly, or can be set up for self-paced learners to work through at their own pace. Learners who wish to demonstrate their mastery of subjects can verify their identity and then earn certificates of completion after paying a fee and, in many cases, successfully finalizing summative assessments. The opportunity to learn from MITx courses is available for free to all learners.

The MITx platform is also used in a growing number of on-campus MIT courses to bring advanced digital learning technologies to residential education. MITx residential modules support online assessments with rapid feedback, active learning classrooms, flexibility in course delivery, and other emerging digital teaching and learning innovations. MIT faculty and instructors have developed many kinds of sophisticated auto-graded assessments—and more than 35,000 unique problems—for their on-campus students' homework, quizzes, and tests. A digital learning ecosystem has developed whereby a faculty member can build a suite of digital learning content and assessments on the Residential MITx platform to support teaching and learning in the classroom. Building on the experience, and benefiting from student feedback, the faculty member can then decide to transform the course for use on edX by global learners.

The vast array of data gathered through MITx global and residential use is helping researchers better understand how learners learn and how technology can facilitate effective teaching both on campus and online. Research findings are then introduced into new generations of learning tools, creating a continuous loop of educational innovation.

Summary and Highlights

During the 2019 academic year, the MITx team accomplished the following:

- Offered 29 new MOOCs and 85 MOOCS that had been offered in prior semesters.
 We enrolled 969,842 learners from more than 200 countries across these 114
 MOOCs, among whom 76,533 explored more than 50% of their courses.
- Provided additional support for several CCX (Custom Courses on edX) and Digital Learning Solutions courses.
- Generated \$3.8 million in revenue through ID-verified certificates and licensing arrangements (\$3.2 million from ID-verified certificate fees, \$81,000 from MicroMasters comprehensive final exams, and \$463,000 from CCX licenses); \$293,000 was transferred to edX.
- Piloted a new faculty support model in conjunction with the Residential Education team.

Highlights below show the cumulative impact of MITx on edX since its inception in 2012:

- Enrollment (clicked enroll): 8.3 million unique learners enrolled
- Participation (viewed courseware): 4.6 million
- Exploration (viewed more than half of a course): 802,000
- Certificates earned: 284,000

Goals and Objectives

The mission of MITx is to support the development of free, openly licensed, scalable, MIT-quality courses for academically talented learners worldwide; support the use of digital learning tools and techniques in the delivery of MIT residential programs; and further the understanding of best practices in emerging digital and scalable learning environments via data collected from MITx learners. MITx goals are as follows:

- Reach: expand access to MIT-quality education worldwide
- Residential: improve teaching and learning across campus
- Research: advance teaching and learning through educational research
- Revenue: generate revenue to help sustain MITx and other Open Learning units

MITx major operational priorities during FY2019 were:

- Design and pilot a new method for supporting faculty centered around a customized support and course strategy
- Help to pilot the MIT Open Learning Library in conjunction with OCW
- Develop synergies, improved efficiencies, and communications with other Open Learning units, the MIT community, and external resources

Accomplishments

During the 2019 academic year, MITx:

- Held two successful calls for proposals for the MITx Grant Program, resulting in 22 funded projects from 41 proposals submitted by 22 academic departments and programs.
- Developed the MIT Open Learning Library in conjunction with OCW, preparing for its soft launch (with more than a dozen MITx courses and modules and two OCW courses) in July 2019.
- Awarded three MITx Prizes for Teaching and Learning in MOOCs at the MITx Significant Interest Group event on May 17. Polina Anikeeva (Department of Materials Science and Engineering) and Jessica Sandland (Digital Learning Lab) received the prize for teaching 3.024x Electronic, Optical and Magnetic Properties of Materials, and Martin Bazant (Departments of Chemical Engineering and Mathematics) was recognized for his course 10.50.1x Analysis of Transport Phenomena Mathematical Methods.

AY2019 New MITx on edX Courses (MOOCs)

Course	Title	Instructor(s)
12.DTEx	Deform the Earth!	Matej Pec
2.830.2x	Manufacturing Process Control II	Duane S. Boning, David E. Hardt
6.431x	Probability—The Science of Uncertainty and Data	Patrick Jaillet, John N. Tsitsiklis
10.50.1x	Analysis of Transport Phenomena I: Mathematical Methods	Martin Z. Bazant
14.310Fx	Data Analysis in Social Science—Assessing Your Knowledge	Esther Duflo
16.885x	Engineering the Space Shuttle	Jeffrey A. Hoffman
18.03Fx	Differential Equations: Fourier Series and Partial Differential Equations	Laurent Demanet, Joern Dunkel, David Jerison, Arthur P. Mattuck, Haynes R. Miller, Bjorn Poonen, Gigliola Staffilani
0.502x	Competency-Based Education: The Why, What, and How	Justin Reich
8.371.2x	Quantum Information Science II Part 2	Isaac Chuang, Peter W. Shor, Aram W. Harrow
8.371.3x	Quantum Information Science II Part 3	Isaac Chuang, Peter W. Shor, Aram W. Harrow
2.086x	Computational Thinking for Modeling and Simulation	Daniel Frey
2.854.2x	Manufacturing Systems II	Stanley Gershwin
2.961.2x	Management in Engineering II	Jung-Hoon Chun, Abbott Weiss
3.012S.1x	Structure of Materials, Part 1: Fundamentals of Materials Structure	Silvija Gradecak
3.012S.2x	Structure of Materials, Part 2: The Crystalline State	Silvija Gradecak
3.012S.3x	Structure of Materials, Part 3: Liquid Crystals, Defects, and Diffusion	Silvija Gradecak
3.46.2x	Photonic Integrated Circuits 1	Lionel C. Kimerling
7.05x	Biochemistry: Biomolecules, Methods, and Mechanisms	Michael B. Yaffe
8.01.4x	Mechanics: Simple Harmonic Motion	Deepto Chakrabarty
8.06x	Applications of Quantum Mechanics	Barton Zwiebach
15.482x	Healthcare Finance	Andrew W. Lo
15.763x	Supply Chains for Manufacturing II	Stephen C. Graves
17.TAEx	Tools for Academic Engagement in Public Policy	Chappell Lawson
18.6501x	Fundamentals of Statistics	Philippe Rigollet
21H.009x	World History and Its Fault Lines Since 1800	Jeffrey S. Ravel, Sana Aiyar, Hiromu Nagahara
21A.819.1x	Qualitative Research Methods: Conversational Interviewing	Susan S. Silbey
22.011x	Nuclear Energy: Science, Systems and Society	Jacopo Buongiorno, Paola Cappellaro, Michael P. Short, Anne E. White
VPx	Visualizing Imperialism & the Philippines, 1898-1913	Christopher Capozzola, John W. Dower, Shigeru Miyagawa
6.86x	Machine Learning with Python: From Linear Models to Deep Learning	Regina Barzilay, Tommi S. Jaakkola

Additionally, MITx offered 85 previously run courses from the Departments of Mechanical Engineering, Materials Science and Engineering, Architecture, Electrical Engineering and Computer Science, Biology, Physics, Economics, Mathematics, and Aeronautics and Astronautics as well as Comparative Media Studies, the Sloan School of Management, the Center for Transportation and Logistics, the Jameel World Education Lab, the Sam Tak Lee Center for Real Estate, and D-Lab. Twenty-nine of these rerun courses were associated with MicroMasters programs, and 10 were first-year science, technology, engineering, and mathematics (STEM) courses.

Administrative Accomplishments

In AY2019, we focused on stabilizing our structure with good management practices. Accomplishments are detailed below.

- Organization: added a project manager to the MITx team, Sarah Davis; changed the reporting structure for project managers, who now report to the assistant director instead of the director; and transitioned two contract video workers to full-time media team members.
- Services and support: continued to add documentation and guides to the internal
 wiki, finalized the CCX sub-licensing pricing model, completed the transfer of
 IP (Internet Protocol) tracking to the QuickBase portal, and created a permanent
 process working group to constantly evaluate our support model, resulting in a
 new onboarding process for faculty.
- Professional development: Lana Scott gave presentations on video best practices in MOOCs at the 2018 Media and Learning Conference in Brussels, Belgium; David Chotin and Brad Kay-Goodman presented at OLC Innovate in Denver; Lindsey Weeramuni presented at OLC Accelerate; Geoff Wilson presented at QuickBase Empower; and Shelly Upton presented at EdConnect.
- Community building: held two faculty Special Interest Group events to bring the digital community together to share best practices and innovations.

MITx Faculty Advisory Committee

The purpose of the MITx Faculty Advisory Committee (FAC) is to provide oversight and guidance for MITx courses. The committee:

- Offers clear guidelines on topics related to MITx and is responsive to the MIT faculty with regard to MITx governance
- Provides oversight on subjects or modules produced for MITx, including consideration of benefits to MIT residential education, department strategies, and sharing of a broad and diverse cross section of the best of MIT with learners around the world
- Promotes innovative approaches to an MIT education, including evaluating new approaches proposed for MITx courses and experiments in digital learning and helping MITx bring innovative digital learning to the education of MIT students

The committee's chair is Hazel L. Sive, professor of biology. Members are as follows:

- Bill Aulet, professor of the practice, Sloan School of Management
- W. Craig Carter, professor, Department of Materials Science and Engineering
- Isaac Chuang, professor, Department of Electrical Engineering and Computer Science, and senior associate dean of digital learning
- Michael Cuthbert, associate professor, Music and Theater Arts
- Woodie Flowers, professor emeritus, Department of Mechanical Engineering
- Lorna Gibson, Matoula S. Salapatas Professor of Materials Science and Engineering and MacVicar Faculty Fellow
- Caspar Hare, professor, Department of Linguistics and Philosophy
- Shigeru Miyagawa, professor, Department of Linguistics and Philosophy; Kochi-Manjiro Professor of Japanese Language and Culture; and senior associate dean for open learning (ex officio)
- Krishna Rajagopal, professor, Department of Physics, and dean for digital learning (ex officio)
- Brent Ryan, associate professor, Department of Urban Studies and Planning (DUSP), and head of the City Design and Development Group
- Sanjay E. Sarma, professor, Department of Mechanical Engineering, and vice president for open learning (ex officio)
- Susan Silbey, Leon and Anne Goldberg Professor of Humanities, Sociology and Anthropology; professor of behavioral and policy sciences, Sloan School of Management; and chair of the faculty
- Pawan Sinha, professor, Department of Brain and Cognitive Sciences
- Iain Stewart, professor, Department of Physics
- Ian Waitz, professor, Department of Aeronautics and Astronautics, and vice chancellor (ex officio)
- Mary Ellen Wiltrout, digital learning scientist and lecturer, Department of Biology (ex officio)

OpenCourseWare

MIT OpenCourseWare provides free open-licensed educational materials from across the MIT curriculum, reflecting undergraduate- and graduate-level teaching in all five MIT schools and 33 academic units. OCW now has material from over 2,450 courses. Its depth and breadth of coverage in all disciplines make OCW unique among open education offerings around the world.

Through OCW, MIT faculty members share their teaching materials with a global audience of teachers and learners. Educators use these resources for teaching and curriculum development, while students and self-learners draw upon the materials for self-study or supplementary use.

Summary and Highlights

OCW continued reducing staff and expenses in FY2019, finally achieving a long-desired goal of financial sustainability. OCW is funded in part through the Office of the Provost and in part through grants and gifts, including a diminishing reserve. FY2019 operating expenses were at a level that can be sustained without drawing on any remaining reserve.

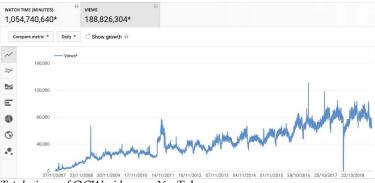
In FY2019, OCW published 49 courses (26 new, 23 updated) and two new supplemental resources. This output reflects reduced OCW team staffing and the end of the Sapient contract for authoring and technical support. Five of the courses had full video lectures, and 12 had OCW Educator Instructor Insights pages.

Highlights of OCW publication metrics as of June 30, 2019 are as follows:

- Courses live on OCW website: 2,453
- Supplemental resources live on OCW website: 65
- Full video lecture series: 134
- Exemplary (partial) video lecture series: 65
- Total sites with audio or video resources: 215
- Open textbooks: 68
- Courses with OCW Educator content: 212 (29 with video interviews)
- Courses retired and archived on DSpace: 1,105

According to Google Analytics, 121 million users in 245 countries across every continent and subcontinent have visited the OCW website over the past 10 years (with an overall total of approximately 232 million visits). The average time spent per site visit is five minutes.

Now with over 5,800 videos and more than 2 million subscribers, OCW's YouTube channel has become the most subscribed .edu channel globally. OCW's YouTube videos have been viewed more than 188 million times since November 2007, with overall viewing time exceeding 1 billion minutes.



Total views of OCW videos on YouTube.

Planning for a next-generation OCW began during FY2019 in close collaboration with Daniel Seaton, Open Learning's new senior learning systems designer. The next-generation version is expected to include a modernized mobile-responsive website, an enhanced user experience, upgraded internal tools, and streamlined workflows. A key goal is initiating its development during FY2020 in collaboration with the Open Learning Engineering team.

Goals and Objectives

OCW's formal goals for FY2019 included the following:

- Facilitate publication of courses and supplemental resources from across the MIT curriculum, minimizing faculty time and effort, to represent education on the MIT campus to a global audience
- Produce OCW Educator Instructor Insights for at least 25% of published courses
- Implement new post-Sapient roles, responsibilities, and workflows in which all content authoring and routine maintenance are done by in-house OCW staff
- Collaborate with Open Learning Engineering to maintain OCW's existing publication infrastructure and support incremental site enhancements until a new infrastructure can be developed
- Start working with Engineering on a next-generation OCW with an improved user experience, streamlined course production and renewal, and cross-platform sharing
- Maintain responsive outreach programs in user feedback, awareness building, and support for under-resourced populations
- Continue to move OCW toward financial sustainability
- Build on annual giving, corporate underwriting, and Capital Campaign programs

Accomplishments

Course Publication

Course publication is the heart of the OCW mission. In FY2019, the team:

- Published 49 courses with the following distribution across MIT schools:
 Architecture and Planning, 4; Engineering, 8; Science, 12; Humanities, Arts, and Social Sciences, 22; and Sloan School of Management, 3
- Published two new supplemental resources associated with Course 3 and Course 11
- Published five courses with complete video lectures and three with partial video lectures
- Processed or cleared 1,290 intellectual property objects

OCW Educator

Through a special portal and publications (Instructor Insights), OCW Educator shares MIT teaching approaches and helps education professionals navigate the vast library of open educational resources available through OpenCourseWare.

Specific FY2019 accomplishments include the following:

- We published 12 Instructor Insights sections, four of which had video insights. Two sections also included student insights, and one included insights from teaching assistants. In addition, we enhanced the video interview style to better engage our audience of educators.
- Educator content was viewed over 230,000 times. The Educator portal had an average of 500 visits per day, with the most active users in India and the United States.
- We began production on an OCW Educator podcast (hosted by our Educator project manager) featuring MIT faculty who have published on OCW. The podcast will help educators and learners connect with MIT faculty and OCW content.
- In terms of OCW Educator's campus impact, the MIT Teaching + Learning Lab
 uses select OCW Instructor Insights and course content to illustrate its guidelines
 for teaching, and the Residential Open Learning team includes Instructor
 Insights in its Residential Digital Innovations & Tools online resource. Also,
 the OCW Educator model has been adopted by MITx; OCW's Educator project
 manager now creates MITx Educator content with members of the MITx team.

Special Content Collections

OCW maintained two popular special content collections: OCW Scholar and Highlights for High School. OCW Scholar is a collection of 16 foundational college-level subjects in math, science, engineering, and other fields. OCW Scholar courses supply all of the resources needed for independent study in a logical step-by-step sequence. In total, these courses were visited more than 1.9 million times during FY2019. Highlights for High School is a collection of courses and resources tailored to high school educators, students, and parents. It combines selected OCW assets and specially produced original content and had more than 230,000 visits during FY2019.

Open Learning Library

OCW contributed to the design and development of the MIT Open Learning Library in conjunction with MITx, preparing for its soft launch (with more than a dozen courses and modules from MITx and two courses from OCW) in July 2019.

Technology

The OCW website and publishing infrastructure rely on a highly technical backend and engineering team. This technology and team not only support learners and educators across the globe but also support internal OCW needs in areas including publication, outreach, site curation, and user feedback.

This year, the OCW publication infrastructure transitioned to Amazon Web Services in order to mitigate the risk of aging hardware, allowing us much greater reliability and

flexibility and the ability to easily update many critical core components as needed. During this effort, OCW collaborated with the Open Learning Engineering team to look to the future and the technologies that can help further and expand OCW's mission.

Accessibility

Accessibility features broaden the reach of OCW to learners with disabilities and also assist others, such as users lacking fluency in English. OCW maintains a multifaceted accessibility program, including standards for webpage and PDF compliance with screen readers, and ensures that all new site features and functionality have been tested for accessibility.

Communications

OCW pursues a substantial external communications program with contributions from many staff. In FY2019, we:

- Sent 118 emails to about 195,000 subscribers. Our communications were opened more than 1.1 million times (a 19.1% open rate), and our content was clicked on more than 61,000 times (an overall click-through rate of 1.1%).
- Processed more than 7,600 user feedback emails.
- Celebrated our two millionth YouTube subscriber with a lighthearted short video of OCW team members highlighting some favorite courses.
- Continued to grow our reach and impact on social media. For example, we added 8,600 Twitter followers, bringing the total to more than 193,000. The average number of impressions per month was 294,000. Also, we sustained our number of Facebook followers at nearly a half million. Average monthly reach (number of people viewing OCW content) was 432,000.

Fundraising

OCW received 3,742 donations for a total of \$367,386 in FY2019, a 15% increase from the previous fiscal year.

To recognize and share inspirational feedback from OCW learners, we created a book in both paper and digital formats that includes learners' thoughts and experiences about how OCW has helped improve and change their lives and communities.

Administrative Initiatives

Sustainability, Staffing, Roles, and Support

At the start of FY2019, publication director Joseph Pickett retired, and publication manager and site curator Curt Newton was promoted to the director role. Newton's previous role was not filled, cutting the team from three publication managers to two. In addition, a web production specialist left near the end of the year and was not replaced.

Along with cost-savings benefits, the termination of OCW's 17-year contract with Sapient at the end of FY2018 increased the work that OCW staff do for each course, as the tasks performed by Sapient were pulled in-house. As a result of staff reductions and

the associated increased workload, the rate at which new courses are published has been correspondingly lower than in prior years.

Technology support also transitioned at the end of FY2018 from Sapient to the Open Learning Engineering team. During FY2019, that team assumed responsibility for the OCW Content Management System (CMS). Open Learning engineers migrated the system and its related infrastructure from local hardware servers to virtual servers in the cloud to increase reliability and enable more modern and efficient tools for maintenance. In addition, they began working through deferred CMS maintenance and upgrades.

In-House Video Editing

The pilot program to use in-house video editing rather than outsourcing to MIT Video Productions or outside contractors was successful in terms of cost efficiency, workflow, and product quality. An OCW video team was established that will consist of the video publication manager, a video technology specialist, and at least one editor.

Faculty Advisory Committee

The OCW Faculty Advisory Committee provides advice on policy, sustainability, and relations with the MIT faculty and with academic departments. The committee underwent some significant changes this year as Professors Stuart Madnick, Karen Willcox, and Dick Yue concluded their service and Professors Valerie Karplus, Caitlin Mueller, Jeffrey S. Ravel, and Michael Short joined. Professor Eric Grimson assumed the responsibility of chairing the committee.

Committee members in FY2019 were as follows:

- Hal Abelson, Class of 1922 Professor, Electrical Engineering and Computer Science
- Noam Buckman, graduate student, Mechanical Engineering
- Eric Grimson (chair), professor of computer science and engineering and chancellor for academic advancement
- Valerie Karplus, assistant professor, Sloan School of Management
- Eric Klopfer, professor and section head, Comparative Media Studies/Writing, and director of the Scheller Teacher Education Program
- Vijay Kumar, associate dean for open learning, and J-WEL executive director (ex officio)
- Antonella Masini, undergraduate student, Mechanical Engineering
- Haynes Miller, professor, Mathematics
- Shigeru Miyagawa, senior associate dean for open learning and professor, Foreign Languages and Literatures (ex officio)
- Caitlin Mueller, assistant professor, Architecture and Civil and Environmental Engineering

- Krishna Rajagopal, dean for digital learning and William A. M. Burden Professor of Physics (ex officio)
- Jeffrey S. Ravel, professor, History
- Michael Short, associate professor, Nuclear Science and Engineering
- Hazel Sive, professor, Biology, and J-WEL faculty director of higher education

MicroMasters

Summary of Accomplishments

- Continued to run our existing three programs (Supply Chain Management; Data, Economics, and Development Policy; and Principles of Manufacturing) and successfully launched the new Statistics and Data Science program. Enrollments in these programs exceeded 250,000 learners. More than 14,000 individual course certificates were awarded, along with 642 MicroMasters credentials.
- Announced a new program in finance.
- Built new credit pathways with 13 schools from 13 countries.

Goals, Objectives, and Priorities

- Support academic departments in developing and gaining approval for new MicroMasters programs
- Create interdepartmental synergy on sharing best practices in running MicroMasters programs
- Serve as a center of information across all schools offering MicroMasters programs
- Enhance program value and completion rates by building external pathways
- Leverage MicroMasters global pathway schools for new opportunities
- Collaborate with colleagues to leverage resources for pathway building and B2B opportunities
- Continue to facilitate key conversations within ODL units (e.g., MITx, Engineering and Technical Operations, Resource Development) with respect to program launches and post-launch coordination
- Strengthen and be a steward of the MITx MicroMasters brand globally
- Create a healthy ecosystem for MicroMasters global pathways
- Make good use of intelligence collected through the MicroMasters portal, surveys, Zendesk, and other channels (e.g., course teams, edX, in-person meetings with learners)

Digital Learning Lab

Summary

The MITx Digital Learning Lab is a joint program between MIT Open Learning and MIT's academic departments. The lab is composed of scientists and fellows who play a critical role in advancing digital learning initiatives across MIT by working closely with faculty. Lab members are experienced subject matter experts in their various fields who are also well versed in the latest teaching and learning theories and technologies.

DLL scientists generally hold lecturer appointments and serve as leaders within their departments in developing a digital learning strategy alongside faculty. They manage a team, often including one or more DLL fellows (who are typically postdoctoral scholars), that seeks to develop and deliver innovative digital content as MOOCs for a global audience and in residential courses. Digital Learning Lab members also facilitate general advances in online learning through tool development, educational research, and other projects. The Lab currently has two PhD candidates under Professor Isaac Chuang; they hold the title of digital learning research fellow.

Members of the Digital Learning Lab work together as a community to support and share innovations across MIT as well as externally. The DLL community meets bimonthly to share updates, best practices, and trends and to hear from guest speakers from MIT and beyond. They also support each other in developing tools and techniques for course development. The Digital Learning Lab is at the center of a larger community that includes others at MIT whose work intersects with digital learning and who participate in the bimonthly meetings.

Current Membership Roster

- Scientists: Ana Bell (Electrical Engineering and Computer Science), Jennifer French (Mathematics), Jessica Sandland (Materials Science and Engineering), Simona Socrate (Mechanical Engineering), and Mary Ellen Wiltrout (Biology)
- Fellows: Jolyon Bloomfield (Physics), Michelle Tomasik (Physics), Aidan MacDonough (Physics; junior fellow), Monika Avello (Biology), Darcy Gordon (Biology), Meghan Perdue (School of Humanities, Arts, and Social Sciences), Kristin Kurianski (Mathematics), Alejandra Quintanilla Terminel (Earth, Atmospheric and Planetary Sciences), John Harrold (Materials Science and Engineering), Inma Borello (Center for Transportation and Logistics), Karene Chu (Institute for Data, Systems, and Society), Sudarsan Ranganthan (Institute for Data, Systems, and Society), Elizabeth Huttner-Loan (Teaching Systems Lab/Comparative Media Studies), and John Liu (Mechanical Engineering)
- Research fellows: Curtis Northcutt (Electrical Engineering and Computer Science) and Martin Segado (Mechanical Engineering)

Goals and Objectives

The mission of the Digital Learning Lab is to partner with MIT academic departments to learn, collaborate, and innovate with digital learning on campus and beyond.

Overall DLL goals are as follows:

- Support academic departments in developing and deploying digital learning strategies that include both residential and global initiatives
- Lead the development of innovative course content and tools that faculty can use on campus and in MOOCs
- Enhance MIT's mission of advancing education through technology by conducting and publishing educational research
- Create a robust MIT digital learning community by conducting bimonthly
 meetings, hosting and participating in talks and presentations around campus,
 and sharing best practices and innovations

DLL's major objectives and priorities during FY2019 were:

- Add new Digital Learning Lab positions in key departments around MIT
- Build DLL's reputation as an organization and grow a robust community of practice
- Support professional development and career advancement for fellows and scientists
- Continue to create and deliver innovative digital course content both on campus and for global learners

Accomplishments

- We worked with faculty to develop and run 51 MOOCs, 15 of which were new.
- We added five new fellow positions (four of which will technically begin in the upcoming fiscal year) in the Statistics and Data Science MicroMasters program (which will be filled by Sudarsan Ranganathan), the Sloan School of Management Finance MicroMasters program, Chemical Engineering, Linguistics and Philosophy, and Chemistry.
- We supported 10 DLL members in attending seven national and international conferences, with nine of them presenting their work while attending. In addition, we supported three members in attending special training programs to enhance their career development and job skills.
- We collaborated in-house and with LINC Conference organizers to offer Engaging Digital Learning Experiences, a full-day pre-conference workshop.
- We began the development of a symposium to be submitted to the 2020
 American Educational Research Association annual meeting, working together in small groups to create cross-disciplinary research projects on topics related to work in digital learning.

- We participated in and helped to shape a full-day DLL retreat that focused on leadership skills and career development.
- We continued our ex-officio membership on the MITx Faculty Advisory
 Committee (held this year by Mary Ellen Wiltrout), which allows DLL to have
 more voice into the direction and strategy of MITx.
- Jessica Sandland was recognized alongside Professor Polina Anikeeva with the MITx Prize for Teaching and Learning in MOOCs, awarded in May 2019.

MIT xPRO

MIT xPRO develops and delivers online, fee-based programs targeted to adult learners who wish to expand their knowledge and build their skills, primarily in the context of professional education. MIT xPRO was formed in spring 2015 in response to market demand for MIT professional education, especially in rapidly changing technology and business disciplines, where MIT is recognized as a leader.

In its fourth year of operations, MIT xPRO:

- Launched two new online courses
- Internally piloted four new online courses
- Reran 28 existing online courses
- Built a sales function and entered the business to business (B2B) marketplace
- Generated \$9.0 million in total gross revenue (a 13% year-over-year growth rate)

Goals for FY2019

- Grow the product portfolio, developing and launching seven new online courses
- Increase the number of rerun courses
- Grow the sales function (B2B)
- Explore channel and distribution partnerships
- Generate \$9.0 million in gross revenues from B2B and business-to-consumer (B2C) sales
- Collaborate across the Institute with groups such as Sloan and DUSP to develop integrated, interdisciplinary offerings
- Co-develop a blended program between MIT xPRO and the Bootcamps team
- Support the Online Professional Education Governance Committee
- Pursue customer-driven product development processes

Accomplishments

- Launched two new online courses: Practical Realities of Quantum Computation and Quantum Communication and Requirements for Large-Scale Universal Quantum Computation (both developed in partnership with IBM). These courses generated 67 enrollees and approximately \$170,000 in gross revenue.
- Piloted four new online courses: Understanding Organizational Strategy and Capabilities, Negotiating and Applying Influence and Power, Leading Change in Organizations, and Discovering and Implementing Your Leadership Strengths. The purpose of the pilot was to collect customer insights on course content and the learning experience. The pilot was run with select learners from Boeing, NASA (National Aeronautics and Space Administration), the Air Force Institute of Technology, Boston Scientific, and Fidelity.
- Reran 14 existing online courses: Architecture and Complex Systems (developed in partnership with Boeing); Models in Engineering (developed in partnership with Boeing); Model-Based Systems Engineering: Documentation and Analysis (developed in partnership with Boeing); Quantitative Methods in Systems Engineering (developed in partnership with Boeing); Additive Manufacturing for Innovative Design and Production (developed in partnership with Boeing); Additive Manufacturing: Technology Principles and Applications; Data Science and Big Data Analytics: Making Data-Driven Decisions; Introduction to Quantum Computing (developed in partnership with IBM); Quantum Computing Algorithms for Cybersecurity, Chemistry, and Optimization (developed in partnership with IBM); Entrepreneurial Negotiations; Entrepreneurial Online Bootcamp; Principles of Biomanufacturing: Using Biotechnology to Manufacture Medicines; The Role of Impact Assessments in Real Estate Development; and Creating Shared Benefits in Real Estate Development. These courses generated 11,541 enrollees and approximately \$8.8 million in gross revenue.
- Hired our first sales representative, who closed \$1.5 million in B2B deals.
- Signed a distribution deal with Skillsoft.
- Generated \$9.0 million in overall gross revenue (a 13% year-over-year growth rate). Of this total, \$6.4 million went to MIT (\$5.8 million from B2B and B2C sales and \$0.6 million from underwriting). An additional \$2.3 million went to edX. We had 11,600 enrollments and a 95% certificate completion rate.
- Worked with Sloan and DUSP to develop and pilot the Leadership Academy for Scientists, Engineers, and Researchers (LASER) program.
- Pursued customer-driven product development processes based on learner assessment instruments and customer feedback loops.
- Continued to support the Online Professional Education Governance Committee in overseeing and monitoring all online professional education activities across the Institute.

Horizon

MIT Horizon is a B2B subscription content library designed to help large public and private sector organizations better educate their workforces on emerging technologies such as artificial intelligence, additive manufacturing, and blockchain. We offer our customers up-to-date, accurate educational content together with an enterprise-friendly platform, usage analytics, ongoing user engagement support, and various professional services to ensure their success.

Our content is developed for both technical and non-technical learners and focuses on micro-assets (e.g., articles, videos, podcasts) that our customers can stack into custom educational paths or courses. Although much of MIT Horizon's content is developed inhouse, we also license and include content from a number of MIT publishers (e.g., The MIT Press and the *Sloan Management Review*).

This is the first product of its kind from a university and fills an important unmet need in the corporate learning market. We believe that the market and our product can support a run rate of \$50 million or more per year and generate substantial profits for MIT while expanding the Institute's educational reach to millions of working professionals.

Goals for FY2019

- Validate the product and market opportunity
- Build and launch an "early access" version of the product
- Demonstrate substantial commercial interest, ideally by signing our first customer(s)

Accomplishments

- Completed market exploration, identified needs, and validated business model.
- Designed and built a new platform and developed initial original content.
- Established content licensing partnerships with The MIT Press, the Sloan Management Review, MIT News, and MIT xPRO.
- Signed our first three paying customers: HP, the United Nations, and Amsted.
 United Technologies has since signed, and we have verbal commitments from the Central Intelligence Agency and Cisco.
- Developed a strong sales pipeline for FY2020.

Administrative Initiatives and Accomplishments

- Helped educate our content partners (The MIT Press, the Sloan Management Review, MIT News, and MIT xPRO) on the corporate learning market
- Collaborated with the MIT Industrial Liaison Program on how we can support
 its members and engaged in ongoing discussions with MIT Executive Education,
 the Computer Science and Artificial Intelligence Laboratory, Bootcamps,
 MicroMasters, and many other MIT groups and faculty on potential collaborations

Bootcamps

MIT Bootcamps programs educate future entrepreneurs worldwide on new technology, innovation, and entrepreneurship techniques. A combination of online and in-person programs are used to connect students globally, and these students have created more than a hundred ventures that have raised over \$70 million.

Summary and Highlights

In 2018–2019, MIT Bootcamps ran a record-breaking 11 in-person programs, including four new programs with cutting-edge curricula in the fields of technology, health care, the Internet of Things (IoT), and the arts.

Notable among the new programs this year was the MIT-HMS Healthcare Innovation Bootcamp, which was developed in partnership with the Harvard Medical School (HMS) Center for Primary Care. This joint program serves a wide market of health-care professionals looking to expand their careers through the principles of MIT's innovation curriculum. Because of high demand from professionals in this area, the Healthcare Innovation Bootcamp ran twice in AY2019.

In addition to traditional bootcamp programs, the MIT Bootcamps team launched the inaugural MIT-Grafenegg Forum, an unprecedented event bringing together the most accomplished in the fields of music, the arts, technology, research, and business. This forum launched a significant new debate format, the Vienna-style debate, bringing seemingly disparate sides of an issue to consensus through friendly collisions.

Goals and Objectives

The goals of the Bootcamps team during FY2019 included the following:

- Develop a new health-care, technology, and creativity Bootcamps curriculum to educate underserved groups of potential innovators
- Run a record number of in-person Bootcamps and trek programs
- Build strategic relationships with Harvard Medical School and other key partners
- Increase the frequency and variety of in-person programs to help make innovation more accessible
- Create the inaugural MIT-Grafenegg Forum to connect industry professionals to the Institute and further MIT's influence in the arts and sciences
- Develop a new debate format that focuses on inclusion and consensus

Accomplishments

MIT Bootcamps accomplishments during FY2019 are detailed below.

- In-person programs: we conducted 11 programs (10 public, one invitational).
- Open admissions programs: we ran the Rio Innovation Experience trek in Rio de Janeiro, Brazil; two MIT Innovation and Entrepreneurship Bootcamps (one in Rio de Janeiro and the other in Brisbane, Australia); two MIT-HMS Healthcare

Innovation Bootcamps in Cambridge; the Innovation is Everywhere trek in Queensland, Australia; the Disaster and Resilience trek in Tokyo, Japan; the MIT Technology and Innovation Bootcamp in Tokyo; the MIT Deep Technology Bootcamp in Cambridge; and the Healthcare Innovation trek in Cambridge.

• Invitational program: the May 2019 MIT-Grafenegg Forum in Grafenegg, Austria, attracted 50 participants and resulted in multiple cross-industry collaborations.

MIT Video Productions

MIT Video Productions provides video support for academic programs, departments, and Institute initiatives. MVP offers a variety of services on a cost-recovery basis, including video production, webcasting, and post-production, in support of the MIT community.

Summary and Highlights

In FY2019, MVP continued to provide video services to MIT's departments, labs, and centers.

- We provided more than 19,000 billable work hours in support of 547 projects to 156 unique MIT community clients.
- We surveyed our client base and achieved a Net Promoter Score of 62.
- We continued to focus on our creative business line, including story-telling and marketing content. Highlights include a high-profile collaboration with Community Jameel and a kick-off video for the J-Clinic.

Goals and Objectives

MVP provides media production and publication services to the MIT community in support of education, research, and outreach. Goals include the following:

- Provide creative media services in support of MIT and Open Learning mission objectives
- Groom an agile and efficient team of videographers, producers, and editors to produce client content on a timely and cost-effective basis
- Strengthen and build new relationships and collaborations with communication staff
 throughout MIT toward a common objective of having our collective work reach
 desired audiences, including alumni, potential applicants, funders, faculty members,
 the Institute community, peer institutions, and the greater global community

Accomplishments

MVP continued to provide reliable, valued, and high-quality video production services to clients throughout the Institute. In many cases, we are also called upon to produce content serving as a programmatic contribution to Institute events. We continue to work with departments in crafting custom video programs in support of their communication objectives. For example, we provided video production services for the Commencement exercise through the Commencement website (20,817 views), MIT Facebook Live (22,741 views), and LinkedIn Live (130,304 views). Also, the Great Clarinet Summit, a collaboration with Music and Theater Arts, earned a New England Emmy nomination.

Administrative Accomplishments

Clayton Hainsworth replaced Larry Gallagher as MVP director in January 2019. MVP continued to offer top-quality customer service and video services during this transition with no operational difficulties.

MIT Integrated Learning Initiative

The MIT Integrated Learning Initiative funds, connects, and shares research on learning effectiveness. This research ranges from scanning the brains of individual learners to improve assessment and instruction (Department of Brain and Cognitive Sciences) to applying large-scale data analytics aimed at guiding education policy decisions (Department of Economics). Studies address questions at the learner, instruction, and policy levels across one or more of three broad demographics: birth through preK–12, higher education, and workforce learning.

Summary and Highlights

Four highlights of MITili's year are as follows:

- Addressed deficits in reading skills among preK–3 learners as part of Reach Every Reader
- Secured funding from the Schmidt Futures Foundation to help develop a preK-12 re-engineering plan for Project Blueprint
- Received 16 proposals in response to its second annual learning effectiveness research grant program
- Expanded its outreach footprint through conference presentations and cosponsorships, membership in industry affiliations, and website/social media communications

Goals and Objectives

- Fund projects and initiatives
- Drive and support corporate, foundation, and government fundraising for MITili
- Connect with other groups and share information
- Lead and participate in the projects outlined below
- Publish frequently to the MITili website, social media, and email lists
- Attend and present at relevant conferences

Accomplishments

 As part of the Chan-Zuckerberg Initiative (CZI)—supported Reach Every Reader project, now in its second year, MITili worked to address deficits in reading skills among preK–3 learners. MITili's specific role is with the integration and infrastructure strand of the project.

- Working with Resource Development, MITili secured funding from the Schmidt Futures Foundation to help develop a preK-12 re-engineering plan (A Systems Approach to Engineering Tomorrow's Schools) Project Blueprint. The project is being led by Open Learning's Playful Journey Lab with support from MITili. The objective is to understand effective practices and generate detailed plans to revolutionize these practices.
- MITili announced its six FY2019 learning effectiveness research grants in July 2018. In the second quarter of 2019, MITili released its request for proposals for the FY2020 version of the program.
- As a means of expanding outreach, MITili participated in the Consortium for Advancing Adult Learning and Development, the Digital Learning Consortium, and IMS Global and published to its website, social media, and email newsletter lists.
- MITili participated in conferences including the MIT School Access and Quality Summit and the Science of Reading Symposium.

Center for Advanced Virtuality

The MIT Center for Advanced Virtuality (MIT Virtuality) pioneers innovative experiences using technologies of virtuality—computing systems that construct imaginative experiences atop our physical world. Our approach to engineering and creative practices pushes the expressive potential of technologies of virtuality and simulates social and cognitive phenomena while intrinsically considering their educational, social, and cultural impacts. MIT Virtuality supports both creative projects and research endeavors through its four components: the studio, laboratory, salon, and hub.

- The studio brings together faculty and professionals to innovate new genres, aesthetics, and conventions for using technologies of virtuality.
- The laboratory studies the design and impacts of these technologies.
- The salon creates events to further MIT's intellectual and creative capacity in terms of work regarding these technologies.
- The hub connects students, experts, and resources focused on technologies of virtuality from across MIT.

Together, these functions advance the state of the art for virtuality research and development with a cutting-edge humanistic ethos that considers the social and ethical impacts of technologies as we invent them. The Center for Advanced Virtuality is led by Professor D. Fox Harrell, with several affiliate faculty and graduate students. Highlights over the past year included:

- Hosted our first advisory board meeting with representatives from Sundance, Warner Brothers, Boomgen Studios, The Guardian, the University of California at Riverside, and the Population Media Center.
- Participated in the Met x Microsoft x MIT Hackathon at the Microsoft New England Research and Development Center, with Professor Harrell speaking at the event.

- Hosted an MIT Virtuality launch party at the Human-Computer Interaction Salon. The event was co-sponsored by Open Learning and the MIT School of Humanities, Arts, and Social Sciences.
- Participated in the half-day Open Learning symposium VR, Sound, and Cinema: Implications for Storytelling and Learning, which was open to students from MIT, the Berklee College of Music, and the area community.
- Coordinated a public immersive augmented reality exhibit by Santander and the Boston-area nonprofit organization Heading Home. The exhibit was designed to promote empathy and respect for Boston's working homeless population and spark conversations among participants immersed in an augmented reality experience.
- Hosted the Resource Development Campaign Academy, which featured remarks
 by Vice President for Open Learning Sanjay Sarma and Professor Harrell
 along with an interactive showcase of virtual reality projects. The goal was to
 raise the visibility of the center and its fundraising priorities among Resource
 Development and the Alumni Association.
- Developed and cultivated a list of prospective philanthropic funders and organizational partners.
- Cultivated several key relationships with individual philanthropists, foundations, companies, and other organizations for financial and in-kind support and collaborations.
- Formed an advisory council of philanthropic supporters.

Refugee Action Hub

Since 2017, the MIT Refugee Action Hub has offered innovative blended learning programs for refugees and other members of forcibly displaced communities around the world. ReACT works closely with MITx and MIT faculty and students to combine online courses with in-person workshops focused on entrepreneurship, innovation, maker labs, and professional development. ReACT also collaborates with businesses and international organizations to provide students with paid, mentored internships. These opportunities create new professional pathways to complement the educational bridges that ReACT's programs build. ReACT currently offers a certificate program in computer and data science as well as tracks in a growing number of MITx MicroMasters programs.

Summary and Highlights

- Received over 1,000 applications to the computer and data science program from 47 countries around the world. Forty percent of the applicants identified as women.
- Graduated our pilot group of 17 students and admitted 32 new students to the computer and data science program in January 2019. Refugees make up nearly 70% of the new class, and women account for 55%.
- Launched a new educational pathway on the MITx Data, Economics, and Development Policy MicroMasters program in partnership with the Abdul Latif Jameel Poverty Action Lab (J-PAL).

Accomplishments

- Sponsored seven select refugee students to enroll in the MITx Data, Economics, and Development Policy MicroMasters program. These students are on track to complete the certification by summer 2019.
- Continued to cultivate and curate an effective network of partnerships with United Nations agencies, nongovernmental organizations, the extended MIT community, and civil society to make program announcements and aid in the recruitment of a quality student pool.
- Participated in conferences such as the No Lost Generation Tech Summit (Amman, Jordan), the Techfugees Summit (Paris, France), and the MIT LINC Conference.

Abdul Latif Jameel World Education Lab

Established in May 2017, the Abdul Latif Jameel World Education Lab promotes excellence and transformation in education worldwide by leveraging MIT's educational innovation, practice, and research. Through online and in-person collaborations, workshops, information-sharing events, and strategic projects, the lab engages educators, policymakers, societal leaders, employers, and employees in developing individual and institutional capabilities and capacity among our member organizations. Member organizations work with MIT faculty and staff to address global opportunities for scalable change in education through collaboratives for preK–12 education, higher education, and workforce learning.

Organizational and Programmatic Capabilities

In FY2019 we refined our approach to member engagement, developing new programs and benefits supplemented by strategic use of wider Open Learning resources. We also refined J-WEL's financial model, balancing the autonomy and innovation requirements of each collaborative by using common central services to increase efficiency.

We continued to develop the infrastructure needed to support our members, including our website. We added new features and functions to the site (e.g., an integrated chat feature) and increased our site library content.

Events and Member Recruitment

J-WEL's membership has continued to grow, increasing from 11 at the end of FY2018 to 25 at the end of FY2019. New members include the Mathisi Initiative (Greece) in preK–12 education, Plan Ceibal (Uruguay) in higher education, and the Universitat Oberta de Catalunya (Spain) in workforce learning.

In FY2019, J-WEL hosted the following events and programs to engage with members:

 Our third and fourth J-WEL Weeks in October 2018 and April 2019. Respectively, these events brought together 123 participants from 24 countries and 112 participants from 26 countries.

- The eighth LINC Conference, which attracted 130 participants from 31 countries and 153 scholarly paper submissions from 54 countries.
- Three exchange/workshop programs: a one-week in-depth exploration of STEM education for preK-12 instructors, a course and curriculum design workshop for higher education members (offered twice during the fiscal year), and a highimpact research workshop, also for higher education members.

J-WEL also held seven webinars with speakers from organizations such as MIT OpenCourseWare and J-PAL. The webinars were recorded and archived on our website.

MIT Community Involvement

J-WEL involves the MIT community in two primary ways: as presenters at J-WEL events and through our education innovation grant programs. More than 100 members of the MIT community participated in the J-WEL Weeks held in FY2019. Also, during the J-WEL Week events, external participants visited programs across the campus such as BioBuilder and AppInventor.

Education Innovation Grant Program

In FY2019, our three collaboratives awarded a total of \$846,941 in grants (\$297,138 through the preK–12 Collaborative, \$348,023 through the Higher Education Collaborative, and \$201,780 through the Workforce Learning Collaborative). The preK–12 Collaborative funded three projects, including Mitchel Resnick's Computational Fluency in Context: Empowering Educators to Support Personally and Culturally Meaningful Creative Coding Experiences. The Higher Education Collaborative funded 10 projects, including TactionTablet: Makerspace Training with a Social Impact, led by Professor Pawan Sinha. Finally, the Workforce Learning Collaborative funded three projects, including Teachbot: Improving Advanced Manufacturing Learning for Adult Workers, headed by Professor Harry Asada.

Initiatives Supported through Membership in J-WEL

Transforming Refugee Education towards Excellence

In September 2018 we announced a major new initiative with J-WEL member Save the Children, Transforming Refugee Education towards Excellence (TREE), which aims to tackle education systems across the Middle East that are strained as a result of the conflict in Syria. TREE seeks to improve teachers' well-being through the use of practical approaches that incorporate compassion and empathy into education-based systems thinking.

Program in Data Science

In May 2018 CoLAB, an alliance of Uruguayan educational organizations, launched a new program to build data science capacity in Latin America. The Program in Data Science includes online courses from MITx and several Uruguayan universities, synchronous online activities facilitated by J-WEL staff, and on-site workshops run by J-WEL and the MIT International Science and Technology Initiatives.

Research and Projects

Playful Journey Lab

The MIT Playful Journey Lab, established in 2019 by researcher YJ Kim, aims to explore frontiers in lifelong learning with the goal of understanding the ways we can strengthen future-ready skills. The lab, with a focus on learner-centered assessment and playful exploration, designs and investigates new ways to prepare students, teachers, schools, and members of society to thrive in a rapidly changing world. Through the design of digital and non-digital tools, design-based research with learners and practitioners, and a growing community of passionate educators, this work will map out new pathways for the future of learning.

Goals and Objectives

Specific aims over the past year included:

- Launch the new research and development unit and establish a shared vision and mission for the lab among multiple stakeholders
- Develop new sources to support the lab's playful assessment work
- Provide continued support to the development of the Woodrow Wilson Academy of Teaching and Learning
- Develop, validate, and disseminate embedded assessment tools for middle school maker curricula
- Develop and validate the game-based Shadowspect assessment system with support from the Emerson Collective
- Present our work widely at conferences and other scholarly venues
- Develop new partnerships to disseminate our work more broadly

Accomplishments

- We continued to expand the work of embedded assessment in making in collaboration with i2 Learning and J-WEL. For example, we collaborated with J-WEL to fund work helping Hong Kong STEM teachers implement innovative assessment in STEM education. Additionally, we are conducting a pilot study in collaboration with i2 during its STEM Week. This pilot will investigate how our embedded assessment tools can be implemented in the hands-on STEM Week curriculum developed by i2. The project will impact around 800 students and 32 teachers in the greater Boston area.
- In collaboration with Maker Ed, we published all of our embedded assessment tools, available to educators at no charge. There were more than 700 downloads during the first two months after the launch.
- Our game-based assessment system, Shadowspect, was fully developed and pilot tested at selected schools in the greater Boston area. In addition to the research paper describing our development approach receiving the best poster award at the 2019 Learning Analytics & Knowledge (LAK19) Conference, Shadowspect received a bronze medal in the educational game category at the Serious Play Conference.

- We continued our research and development support for the Woodrow Wilson
 Academy of Teaching and Learning. This included research support to articulate
 the theory of learning in the academy and its effectiveness in terms of teacher
 candidate learning.
- We presented our research at various domestic and international conferences including the American Educational Research Association annual meeting, the Computer Supported Collaborative Learning Conference, the International Learning Analytics and Knowledge Conference, FabLearn, and the Connected Learning Summit.

Projects

The Projects team supports initiatives between MIT and other universities, foundations and trusts, nongovernmental organizations, and national governments in their efforts to advance and transform educational opportunity through digital learning. Through these initiatives, MIT is furthering its mission to advance learning worldwide.

Summary and Highlights

In FY2019, the Projects group focused on four international initiatives that shared MIT's expertise and approach to teaching and learning with K–12 students and teachers, university students and faculty, and lifelong learners. Projects promoted MIT's unique approaches to learning with the following international audiences:

- For CLIx in India, Projects supported the design and development of curriculum modules in English, math, and science; developed an assessment platform, interactive tools, and a standalone curriculum delivery platform; and co-designed and participated in learning outcomes and adoption studies and other research.
 Over the project's four-year period, CLIx reached 478 schools, 60,000 students, and 2,500 teachers in four states (Rajasthan, Telangana, Chhattisgarh, and Mizoram).
- Projects supported the efforts of the Al-Ghurair Foundation for Education's Open Learning Scholars program to increase the use of online and digital learning in the Arab world. Projects has supported MITx digital learning scientists and staff, along with faculty from the American University in Cairo and the American University of Beirut, in blending MITx course materials (from 7.00x, 18.03x, and 6.00x) into local courses for more than 850 learners to date.
- With CoLAB, a collaboration primarily involving Centro Ceibal and the
 Universidad Tecnológica del Uruguay in Uruguay, Projects identified and
 supported a new project to support UTEC students concurrently enrolled in
 a UTEC master's degree program and the MITx Statistics and Data Science
 MicroMasters program. The initial cohort of 60 learners participated in a
 workshop and received extra course support in the form of project-run recitation
 sessions accompanying MITx Statistics and Data Science courses.
- For SRM University in India, Projects supported faculty in using materials from eight sub-licensed MITx courses (6.00x, 6.002x, 6.004x, 8.01x, 8.02x, 18.01x, 18.03x, and 2.01x) with their first two groups of students. Over the two-year project period, MIT Open Learning supported approximately 1,300 individual learners.

Goals and Objectives

During FY2019, the broad goals of the Projects team were to:

- Execute on existing projects (Connected Learning Initiative, Open Learning Scholars, SRM University)
- Identify (and execute) new digital learning projects, including CoLAB, in support of the Abdul Latif Jameel World Education Lab, MIT Open Learning, and the Institute
- Integrate science of learning findings into project activities

Accomplishments

Connected Learning Initiative

- Co-designed and participated in major CLIx research and evaluation studies conducted in 2018–2019, including a learning outcomes study (focused on the English-Beginner/English-Elementary, Astronomy, and Geometric Reasoning modules) and an adoption study
- Participated in the meeting held at the end of the initial phase of CLIx in April 2019

Open Learning Scholars

- Supported the American University in Cairo in using course materials from 18.03x (with 290 students) and 7.00x (with 36 students) and supported the American University of Beirut in using course materials from 7.00x (with 46 students) and 6.00x (with 254 students)
- Supported the Al Ghurair Foundation's efforts to provide Arab world learners with scholarships for the MITx Supply Chain Management and Data, Economics, and Development Policy MicroMasters programs

CoLAB

- Launched the project with a symposium and workshop in May 2019
- Supported the initial cohort of 60 learners in the first Statistics and Data Science program MITx course

SRM University

- Provided an in-person training session to help 13 SRM University faculty members become familiar with and use 2.01x, 6.002x, 6.004x, and 18.03x course materials
- Supported SRM University faculty using MITx course materials from 6.00x, 6.002x, 6.004x, and 8.01x

Supporting Units

Engineering and Technical Operations

The Engineering and Technical Operations group develops and maintains the technology infrastructure that supports the development and delivery of digital learning content and tools. The group also consults internally with other Open Learning units on technical matters.

Goals and Objectives

During AY2019, the goals of Engineering and Technical Operations were to:

- Support experiments with online assessments for Residential MITx and provide systems support for automated lecture capture via the ODL Video Service
- Launch an in-house version of MIT xPRO, develop social features for the MicroMasters portal, and support the Bootcamps e-commerce web application
- Continue to develop the bi.odl.mit.edu service in collaboration with data scientists and work with OCW to move toward a next-generation platform
- Support the launch of new MicroMasters programs and develop social features for the MicroMasters portal that can be scaled up
- Develop MIT Open as a way to connect learners with learning resources across the Institute

Accomplishments

During AY2019, the Engineering and Technical Operations team:

- Launched MIT Open, a site designed to bring MIT learning and research
 resources to the world and create a community around them. The MIT Open site
 currently averages about two new posts and four comments per day across a mix
 of public and private channels.
- Relaunched MIT xPRO as an in-house service, allowing for more innovation and control of the xPRO learning environment. We have started accepting payments for courses that start in September 2019.
- Continued to support four programs in the MITx MicroMasters portal.
- Migrated OCW support and operations from Sapient to our in-house team. We also moved the OCW Content Management System off legacy hardware to the Amazon cloud, where it will be easier to support and maintain.
- Contributed code to Open edX to improve functionality and fix bugs.
- Updated the Bootcamps e-commerce website to integrate the site with SMApply, the course team's application service.
- Maintained and upgraded bi.odl.mit.edu, greatly expanding the number of dashboards, reports, and internal users.
- Continued to support lecture capture via the ODL Video Service.
- Presented our work at the September 2018 DevOps Days conference and the March 2019 Open edX conference.

Administrative Accomplishments

To consolidate and strengthen the Engineering team this year, we hired a senior user experience designer and an additional development and operations engineer.

New Code Libraries

Engineering developed several open source tools to help accelerate the process of building new web applications, including:

- Enhancements to our edX API (application programming interface) client library and other tools for integrating edX with MIT xPRO
- The ocw-data-parser tool, a library for processing raw data exported from the CMS
- Open source edX themes for Residential MITx and MIT xPRO
- Enhancements to our tools for managing infrastructure and the code release process

Business Operations

Business Operations includes finance and accounting, human resources, marketing, communications, customer service, space, media strategy, and general administration. It provides support for the other sections of MIT Open Learning with respect to defining and implementing strategic, operational, and organizational improvements and facilitating ongoing operations. It also collaborates across the Institute to ensure that MIT Open Learning's work is in accord with MIT best practices and policies and that it aligns with the Institute's broader purpose.

Summary and Highlights

- Expanded and scaled the marketing team to help deliver \$18.2 million in external fees and non-degree tuition. Also, we implemented HubSpot, a customer relationship management tool that enables better marketing analytics and targeting.
- Established a customer service team to support xPRO, MicroMasters, Bootcamps, and Open Learning generally. In addition, we expanded the Zendesk ticketing system, enabling auto-generated responses to frequently asked questions.
- Established an accounts receivable team in preparation for taking payments in volume for the new xPRO platform, reworked systems and processes so that they scale, and worked with the Office of the Vice President for Finance to prepare to manage our accounts receivable and establish an Open Learning bank account for quicker notice of cash received.
- Launched a new website that better accommodates expanded activities and ties to sites of all organizations within Open Learning.
- Created a separate communications group to augment our earned media reputation. We placed articles demonstrating the impact of MIT's efforts in teaching and learning in the New York Times, the Washington Post, and other outlets and surfaced stories to share through MIT's successful, far-reaching media channels such as MIT News and the MIT Daily.

- Worked with MIT Human Resources on the Institute-wide project to establish new job titles and grades for all staff.
- Supported the execution of more than 60 legal agreements, including membership agreements, sales contracts, and nondisclosure agreements.
- Built out space in Building NE49, to create 11 new seats.
- Continued strong delivery of services, including budgeting and finance, human resources, marketing, and administration.
- Supported emerging initiatives such as MIT Open, xMinor (a series of undergraduate courses taken for a certificate), ReACT, and the Center for Advanced Virtuality.

Goals and Objectives

During AY2019, consistent with MIT Open Learning goals, the priorities of Business Operations were to enhance support for faculty, making it easier for them to experiment and succeed in online learning; continue to promote financial sustainability; continue innovation and agile operations while attracting, retaining, developing, and motivating staff and building community; support strategic initiatives, new research on teaching and learning, and innovation; and enhance our ability to measure impact as a means of ensuring continual learning.

Accomplishments

Business Operations had key achievements in these five goal areas during AY2019, as follows.

Enhancing support for faculty:

- Maintained financial reporting, including by course and by department, to track
 real-time spending on courses; enhanced reporting through development of new
 self-service reports to track spending on sponsored and other specially funded
 projects; and continued use of Tableau to automate a substantial amount of
 quarterly reporting
- Managed the revenue distribution process and reports for MITx and MIT xPRO courses
- Marketed MIT xPRO and MicroMasters courses, working with faculty to define and deliver target audiences, and supported the launch of the new Statistics and Data Science MicroMasters program, which enrolled over 30,000 learners
- Supported MITili faculty in developing strategies and budgets and managing the grant process

Promoting financial sustainability:

- Led an Open Learning–wide annual strategic planning process that resulted in an increased focus on marketing, Digital Learning Solutions, Business Development, and Resource Development
- Continued cross-organization processes to establish clear goals, including
 Open Learning-wide goals and supporting business unit goals, and conducted semiannual goal reviews and individual project reviews to monitor progress

- Developed the MIT Open Learning budget for FY2020 and continued quarterly financial reporting on budgets, actual expenditures, and projections for 17 business units as well as individual courses and projects
- Generated financial reporting for large, ongoing projects (e.g., Woodrow Wilson Academy, Connected Learning Initiative) and supported faculty in amending strategies and budgets to reflect evolving priorities and technologies
- Developed budgets for numerous potential new projects
- Supported the execution of over 60 legal agreements, including agreements for Bootcamps, CCX, and other products, by reviewing business terms and liaising with the Office of the General Counsel for review and Institute approval
- Enhanced self-serve financial reporting, creating more—and more useful reports that managers can download in real time
- Developed and enacted external marketing plans for MIT xPRO and MicroMasters courses and supported communications for selected MITx courses
- Continued support of the Capital Campaign through work on 17 gift budgets/receipts
- Supported coordination across MIT for all groups serving executive and professional audiences with digital learning

Continuing innovation and agile operations:

- Developed and delivered financial, administrative, marketing, media, and other training across MIT Open Learning and better publicized MIT training, leading to more staff use of this resource
- Supported 152 active staff in work with contractors and students as well as supplemental compensation
- Continued performance reviews, discussing performance versus individual FY2019 goals and developing FY2020 goals for each member of MIT Open Learning
- Executed an MIT Open Learning internal communications program comprising two town halls, an innovation market, and routine sharing of work among business units through brown bag lunches and launched the Lunch and Learn program
- Supported Open Learning's participation in MIT-wide communications and human resources initiatives, including the MIT open house and the job fair
- Maintained and continued to develop human resources policies to improve clarity of expectations and enhance equity across MIT Open Learning

Supporting strategic initiatives:

- Supported the creation and launch of the Finance MicroMasters program by developing a financial model and marketing plans
- Supported the development of new initiatives across MIT Open Learning, including ReACT, the Center for Advanced Virtuality, and projects with CZI and SRM University

- Supported Institute-wide collaboration on education for corporations, professionals, and executives, including regular meetings of key stakeholders, and began work on a website that will include all of MIT's professional offerings
- Finalized the business requirements and design of the MIT-wide portal for professional development offerings

Enhancing measurement of impact:

- Obtained a richer understanding of our xPRO learners and potential customers through HubSpot
- Analyzed professional education Institute-wide to look for areas of opportunity
- Launched our first business-to-business digital marketing campaign, leading to a 20-seat sale with Uber

Resource Development and Strategic Initiatives

Resource Development provides leadership in and complete operations of gift and revenue generation as well as donor relations. We work closely with the vice president for open learning, colleagues across Open Learning, central MIT Resource Development, the Alumni Association, and key faculty to develop and execute plans to secure support from individuals, foundations, corporations, and other organizations. The unit serves as a central coordinator and information source on all development activities. It also oversees the Strategic Initiatives unit within Open Learning, incubating new initiatives under the supervision of the vice president for open learning.

Summary and Highlights

- Secured \$21.2 million in gift revenue and \$1.7 million in gift transfers in FY2019
- Led Campaign for a Better World efforts for Open Learning

Accomplishments

- Continued to drive the OCW and MITx annual giving programs. The programs brought in \$583,977, with more than 4,900 donations. Both programs participated in the Institute's third annual 24-Hour Giving Day, garnering a total of 879 individual gifts.
- Hosted scores of campus visits in addition to hosting and coordinating a range
 of donor- and alumni-facing events, including the Festival of Learning dean's
 breakfast, the Playful Journey Lab launch, and the Science of Reading Symposium.
- Featured Vice President for Open Learning Sanjay Sarma and J-WEL preK-12 faculty director Eric Klopfer in Campaign for a Better World events in San Francisco and Palo Alto, CA, that reached audiences of over 700 alumni and guests.
- Integrated the MIT Refugee Action Hub into Open Learning.

- Launched the Center for Advanced Virtuality.
- Advised the Playful Journey Lab and hosted a launch celebration at SXSW EDU.
- Along with the Knowledge Futures Group, co-sponsored the Met x Microsoft x MIT Hackathon at the Microsoft New England Research and Development Center in December and a subsequent event at the Metropolitan Museum of Art in February.
- Created the Open 2020 Working Group, which includes members from the Hewlett Foundation, Wikipedia, and MIT along with other leaders in the open education field.
- Hosted over 30 MIT faculty and staff leaders working in preK–12 education to explore collaborations with i2 Learning.
- Hosted several VIP guests during the October 2018 and March 2019 J-WEL Weeks as well as campus visits throughout the year, serving as a crucial pipeline for J-WEL memberships.

Administrative Accomplishments

- Continued to improve reporting of gifts and revenue projections with the Business Operations finance team
- Met with the MIT research and development leadership team to explore further collaborations and communicate Open Learning fundraising priorities
- Participated in the resource development committee of the MIT Stephen A.
 Schwarzman College of Computing, with our senior director of development serving as a member
- Improved stewardship efforts with donors through timely gift acknowledgments and continued digital annual and midyear impact reports and custom donor impact reports
- Grew awareness of Open Learning by distributing monthly newsletters to donors and staff in Resource Development, the Alumni Association, and school development offices

Sanjay Sarma Vice President for Open Learning