

Project Management Education Soars at the National Aeronautics and Space Administration (NASA)

Why is project management education important to NASA? Just ask Dr. Edward Hoffman, founding Director of NASA's Academy of Program/Project & Engineering Leadership (APPEL). "NASA lives in a project world. We have an US\$18 billion budget, and every penny of it is spent on missions, which are accomplished through programs and projects."

NASA knows that project management education is essential to its success. But this was not always the case, as formal project management education didn't begin until 1988, when NASA established the Program and Project Management Initiative (PPMI). This initiative was launched as part of NASA's response to addressing cultural and training deficits identified following the Space Shuttle Challenger disaster.

In order to form its training approach, NASA began by harvesting the experience of its most successful engineers and practitioners. Then, it turned outward, looking for an international community and an independent standard of best practice... and found PMI.

NASA AND PMI

"It has been great working with PMI. It's been a partnership from the start in a lot of areas," says Dr. Hoffman. "Senior executives wanted to know: 'what is happening outside the agency?' They wanted an independent authority that would help them look outside the

agency, see what other organizations are doing, and help NASA understand 'what we are doing right.' To NASA, PMI is that independent agency."

As the years passed, project management proficiency and leadership became more and more important across the organization, as NASA faced increasing pressure to "work faster, better, cheaper" and experienced substantial reductions in workforce and budgets. To help them meet this challenge, the APPEL was founded in 1997 and today its project management courses, events, publications and research activities impact thousands of people both inside and outside of NASA.

THE R.E.P. PROGRAM TAKES FLIGHT

One of the Academy's key decisions was to seek Registered Education Provider (R.E.P.) status. "Our R.E.P. status was an indication to our leadership and practitioners that we were taking seriously the profession of project management," says Dr. Hoffman. "It demonstrates our commitment to the field of project management and shows people that we're doing things right."

BOOSTING EFFECTIVENESS

"Doing things right" is vitally important to NASA, as it operates in a world where its success relies on its ability to effectively manage increasingly complex projects and teams composed of specialists from multiple organizations

around the world. Currently, 100% of its space missions and 80% of all science missions involve collaborating with international partners. NASA's R.E.P. status enables it to build and maintain proficiency with the international standard of project management. "We look at PMI and the *PMBOK® Guide* as the map of the 'planet of project management,'" says Dr. Hoffman. "NASA

WHAT IS AN R.E.P.?

A PMI Registered Education Provider (R.E.P.) is an organization approved by PMI to issue professional development units (PDUs) for its training courses. R.E.P.s have met PMI's rigorous process requirements for on-going, high quality, project management training and education.

Courses offered by R.E.P.s are pre-approved for contact hours in fulfillment of certification eligibility requirements, as well as PDUs to fulfill the continuing certification requirements for PMI credentials.

The R.E.P. program has been designed to enhance the ongoing professional development of PMI members, those credentialed through PMI and others in or seeking to be in the project management profession.

For more information visit:
[PMI.org/REP](https://www.pmi.org/REP)

has a 'map' that works off of that, which is adapted to our needs, to focus on systems like engineering, material safety, etc. But the broader concepts of project management still apply."

LAUNCHING CAREERS

NASA's R.E.P. status also benefits those inside of NASA, as it helps them gain and maintain a credential that is highly valued in their workplace. "Being a project manager is the second most valued employment status, after astronaut," says Dr. Hoffman. "Many people want to become project managers, so they are looking for any advantage. They see the advantage of being able to demonstrate their knowledge and capability through a PMI credential." Currently, more than half of NASA's 131 courses are approved by PMI to offer Professional Development Units (PDU) credit and contact hours for those seeking a PMI credential or certification.

As a result, NASA employees can obtain their project management training directly from APPEL rather than going to an outside training organization. This provides employees with the convenience of in-house training and helps the agency cut costs.

INCREASING SUCCESS

According to Dr. Hoffman, close association with PMI also enables NASA to continually improve its project management practice by sharing knowledge with PMI's global community of practitioners and academics. He praises the value of being able to "talk amongst ourselves to discuss the challenges of managing projects, and what we can do to increase project success. It helps us get real-time feedback as to what works and what doesn't."

THE KEY TO THE FUTURE... ON AND OFF THE PLANET.

NASA's decision to become an R.E.P. is reflective of a deep belief that the value of project management extends far beyond its own operations. "As a public agency, we believe we have an educational responsibility," Dr. Hoffman explains. "We see project management as a core competency. NASA believes that the big challenges that society is taking on are in the forms of projects and programs. In fact, the greater the challenge, the more likely it is to be taken on in the form of a project. If we are going to be successful in our society, we need to be able to do projects."

Now in its 53rd year, NASA will continue to reach for the stars... secure in the knowledge that the APPEL and its R.E.P. status will help keep its feet firmly on the ground.