Quality Growth
Draft Strategic Priority Task Force Report

Introduction to Quality Growth Priority
The Quality Growth priority addresses how much the institute should grow, what resources will be needed, and how to ensure that growth does not come at the expense of quality.

Importance of Quality Growth Priority
Since 2010, enrollment has grown from 1,652 degree-seeking students to 1,886 degree-seeking students, while budgets have remained mostly flat. In some areas the quality of academic and student services has decreased to the point of being only reasonably acceptable. The goals and objectives in this section seek to grow the institution in an intentional, planned, and controlled way, with appropriate resource allocation and consideration of the needs of the entire campus community.

Strategic Priority:
Grow and improve New Mexico Tech in an intentional way that maintains quality.

Goal 1:
Grow undergraduate enrollment in an intentional way that maintains quality.

Objective 1.A: Evaluate growth potential.
   1.A.1. Perform a capacity study to determine actual maximum capacity in all aspects of instruction, advising, research, and student life. Champion: VPAA, VPSUR
   1.A.2. Receive target number from President and Regents by January 2015. Champion: VPSUR
   1.A.3. Obtain from each academic department and administrative office its vision and goals for undergraduate growth, including how they see themselves fitting in with the university’s target enrollment number, and what infrastructure and resources will be needed to support effective instruction, advising, student services, and research experience at that level. Champion: Vice Presidents
   1.A.4. Align department goals with Admission Office recruiting measures, to include more focused recruiting for academic departments that have the capacity and desire to grow. Champion: Deans
   1.A.5. Increase recruitment of minority, low income, and first generation students. Champion: VPSUR
   1.A.6. Institutionalize the Deans’ annual report of faculty and TA needs as a mechanism to organize the distribution of resources. Champion: Deans
   1.A.7. Maximize use of technology to relieve shortages of academic and administrative resources. Such technology may include DE capability, Maple TA, DegreeWorks, Starfish, Canvas. Champion: Chair of the Campus Technology Committee (CTC)
   1.A.8. Employ the Space Allocation & Utilization Committee to manage classroom, office, lab space allocation. Champion: VPAA
   1.A.9. Perform a needs analysis of the campus infrastructure, with emphasis on campus safety infrastructure and technology infrastructure. Champion: VPAF
   1.A.10. Create an Infrastructure Steering Committee to centralize the planning, development, and management of campus infrastructure. Champion: VPAF
Objective 1.B: Improve Undergraduate Retention and Success

1.B.1. Admit applicants who are ready to succeed.
   1. Require placement into Math 103 as an admission requirement for all undergraduate students.
      Champion: ASAC Chair
   2. Analyze high school GPA as an indicator of student success at NMT, for the possibility of raising the admission requirement. Champion: Registrar
   3. Assist minority, low income, first generation and other applicants who do not meet the admission standards by placing them in a community college for preparation to transfer into an NMT program in a later semester. Champion: Transfer & Articulation Specialist
      - build partnerships/articulation agreements
      - maintain tracking database
      - develop community college course plan for student, including semester schedules and e.t.a. for transfer to Tech
      - cross-enrollment programs to keep students engaged at Tech
      - deliver intro and specialty courses to community colleges in DE format
      - enhance financial aid packages for transfer into Tech
      - invite students to Tech events (SRS)
      - lobby state legislature to better reward community colleges and four-year schools for successful transfers

1.B.2. Involve more students in undergraduate research. Champion: VPSUR, VPRED, VPAA
   1. Determine the correlation between undergraduate research and student success at NMT.
   2. Develop the Research Opportunity Grant to re-purpose scholarship money for undergraduate research positions.
   3. Seek new research opportunities with emphasis on minority, low income, and first generation students.

1.B.3. Improve six-year graduation rate to 50%
   1. Use new approaches to data (DegreeWorks, Argos, in-depth study of successful graduates) to gain a better understanding of the roadblocks to completion. Champion: Registrar
   2. Take measures to address the roadblocks identified in 1.B.3.1. Champion: VPAA

1.B.4. Strengthen and grow career placement as the ultimate measure of student success Champion: VPSUR
   1. Increase efforts to identify and fill industry needs
   2. Improve tracking and measurement of both short term and long term career placement (at graduation, six months after graduation, ten years after graduation).
   3. Increase coordination with Alumni Office
Goal 2:
Grow graduate enrollment in an intentional way so that NMT will become a PhD-granting institution (Carnegie definition) in 7 to 8 years.

Objective 2.A: Develop new graduate programs. Champion: Graduate Dean

2.A.1. Establish PhD program in Mechanical Engineering
   1. Proposal to Graduate Council and Faculty Senate in Fall 2014
   2. HED approval by Spring 2016
   3. First enrollment by Fall 2016
2.A.2. Establish PhD programs in Biology & Engineering (general)
   1. Chairs and Deans to develop timelines for internal and external approval
2.A.3. Develop advisory group to assist department chairs who are looking to establish PhD programs
2.A.4. Perform a needs analysis to determine what new PhD programs would best suit NM industry.

Objective 2.B: Increase graduate enrollment. Champion: Graduate Dean

2.B.1. Develop a university-wide strategy for funding graduate students
   1. Endowments for PhD students while research projects are being developed
   2. More alignment with research divisions
   3. Include RAs as part of new faculty start-up packages
2.B.2. Expand recruiting
   1. Explore DE “virtual” recruiting to showcase research, SRS, presentations, specialty courses
   2. Increase faculty visibility and research visibility
2.B.3. Establish additional certificate programs, focusing on those that can be easily attained through distance education
   1. Find funding for establishment/kick-off
   2. Reach the target market by advertising in trade magazines, online education venues, and social media sites.
2.B.4. Increase DE enrollment
   1. Increase the number of courses that have a DE component
   2. Improve marketing of DE courses to STEM professionals in New Mexico
   3. Analyze the efficiency and affordability of the DE fee structure and the instructor pay structure
   4. Investigate “low-residency” DE programs that branch out into distance education without sacrificing the hands-on component
2.B.5. Increase MST enrollment
   1. Stabilize and increase NMT’s internal scholarship funding
   2. Obtain state scholarship funding and other external sources of scholarships
   3. Evaluate and improve the structure of the program as a transdisciplinary/interdepartmental program so faculty will be supported in an instructional and advising capacity.

Objective 2.C: Decrease Time to Completion not to exceed 150% of required credits.

2.C.1. Identify roadblocks to program completion. Champion: Graduate Dean
   1. Analysis of completion data and program requirements
   2. Capitalize on DegreeWorks, Argos, Starfish as tools to identify roadblocks
   3. Develop an exit survey for graduate students

1. Consider the use of DE to address course offering deficiencies
2. Develop a funding pool for students who need an “emergency” last semester in order to complete
3. Re-evaluate MS programs as they contribute to student readiness to complete a PhD.

Goal 3:
Strengthen and grow NMT’s research component.

Objective 3.A: Rebuild research activity to pre-sequestration level of $100M.

3.A.1. Increase transdisciplinary research
   1. Increase the number of transdisciplinary research proposals. Champion: VPRED
   2. Develop Transdisciplinary Research Certificate. Champion: Deans
   3. Develop Biomedical BS. Champion: Dean of Arts & Sciences
3.A.2. Evaluate opportunities to acquire new research divisions that contribute to Tech’s vision and mission
   Champion: VPRED
   1. National Center for Genome Resources (NCGR)
3.A.4. Increase faculty research.
   2. Identify and address the barriers to faculty research. Champion: VPAA
      a. Start up packages, equipment, lab space
      b. Increased teaching and advising loads
   3. Use research revenue and patent revenue to enhance merit pay for producing faculty.
      Champion: VPAA

Objective 3.B: Increase the number of students employed by research

3.B.1. Include RAs as part of new faculty start up packages. Champion: VPAA
3.B.2. Establish Research Opportunity Grant program for undergraduates. Champion: 
3.B.3. Improve communication between advisors and research divisions to increase awareness of student employment opportunities. Champion:
3.B.4. Expand support for REU program. Champion:

Objective 3.C: Increase patents and commercialization of intellectual property

3.C.1. Educate NMT faculty and researchers about how the patent system works in general and at NMT specifically. Champion: CLTC Director
   1. Support and grow initiatives such as Entrepreneurial Boot Camp, MGT 101 seminars, and the Center for Leadership & Technology Commercialization (CLTC).
   2. Include students in the patent process as part of their STEM education
3.C.2. Restructure tenure process to value patents as equivalent to publishing. Champion: VPAA
3.C.3. Improve the patent process at NMT. Champion:
   1. Award patents as quickly as possible (process disclosures more frequently than once/year)
   2. Improve connectivity between the Tech foundation and faculty/researchers
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<td>Evaluate the need for a dedicated patent office.</td>
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<td>3.C.4.</td>
<td>Improve and increase industry partnerships. Champion:</td>
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