**Master's Subcommittee Final Report**
Graduate School Task Force
February 1, 2021--Revised February 3, 2021

**OVERVIEW**

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**Charge:**  Review our current practices and programs related to the graduate school guiding principles and 2020-2025 university graduate and professional education strategic priorities and form recommendations to move our institution towards becoming a globally-recognized leader in graduate and professional education. The specific charge of our sub-committee was to review and make recommendations related to master's programs.

**Summary of Subcommittee Activities:** The subcommittee met six times between October 2020 and January 2021.  We hosted four open forums for faculty and staff (November 17 and 18, with about 70 in attendance) and students (November 20 and January 27, with about 10 in attendance).  Each forum began with a presentation on the background of the Graduate and Professional School and common terminology then moved to an open discussion, focused on the guiding principles shown below.  We also engaged with members of the Executive Committees of the Faculty Senate (January 4) and the Council of Principal Investigators (CPI) (January 6) as well as the full membership of Council of Principal Investigators (January 13). Additionally, we made available an online feedback form to faculty, staff, and students. We reviewed this feedback in addition to existing numerical data as well reports from culture and climate surveys, graduation exit surveys and reports from the Council of Graduate Schools, EAB Insights, and Hanover Reports.

The following guiding principles were used to frame our work:

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| SERVICE AND EXCELLENCE – the school exists to serve students, faculty, and graduate programs and advance excellence in graduate and professional education |
| A STUDENT-CENTERED APPROACH – The school should be leading the implementation of student centered, optimal approaches for student success and well-being across programs. |
| FACULTY GOVERNANCE – Faculty should retain a critical role in collective decision-making for graduate education. |
| PROGRAM DIVERSITY – TAMU administers a wide variety of graduate programs, from professional  and research programs to STEM and Humanities programs. Respect for differences of disciplines in  best practices will guide implementation of the school's strategies. |
| BUDGETING – The core of the school's budget should consist of funds currently allocated to the Office of Graduate and Professional Studies. Additional funding should come from new investments. For this work, assume no additional funds. |

**EXECUTIVE SUMMARY**

Our work resulted in a summary of the context of master's programs, including data related to the diversity of our student population as well as the identification of themes and related recommendations. These themes included: value of master's programs and students, value of diversity, value of student centered approach, value to funding, access to resources, academic support, mentoring and advising, improved communication, engagement and networking, effective teaching, career focus, and benefits of virtual.

We also curated general best practices for master's programs and program level recommendations to consider. Recommendations for best practices and future activities centered around the following themes: value and diversity, access to resources, career development, streamline dual programs, student feedback, monitor data, mentoring, teaching effectiveness, Ombuds services, access to advising tools, mental health resources, adloc funding, focused orientation, and enhanced communication.

Immediate actionable recommendations included:
- Ensure that students are served through our university services by adlocing them to colleges and not agencies;
- Review awards offered through the Graduate and Professional School to ensure that master's students are appropriately valued for their unique contributions to our institution and where practicable are eligible
- Where appropriate, offer separate orientation activities for master's students; and
- Provide the Howdy Advisor Tab to faculty and staff members who need access to these resources.

**FINDINGS and RECOMMENDATIONS**

**Context:** Our institution has great breadth and depth of Master's programming that varies by college and department. In Fall 2020, we had 7,307 students enrolled in 162 master's degree programs across 17 colleges and schools (taken from (http://accountability.tamu.edu/All-Metrics/Mixed-Metrics/Student-Demographics). Our institution strives to meet the unique needs of students, boasting 10 interdisciplinary programs and 34 distance approved programs offered at the master's level. Master's programs are offered on four campuses: Texas A&M University (6,646 students, comprising, 90.9% of the total master's student population), Health Science Center (505 students, 6.9%), Galveston (121 students, 1.6%), and Qatar (35 students, 0.005%). Of those, 2,283 students (31.2%) were enrolled in a distance education program. We also had 4,921 (63.7%) in-state students, 979 (13.3%) out-of-state students, and 1,425 (19.5%) international students enrolled at the master's level. (It should be noted that due to COVID complications, our master's international student population declined by 31.4% (651 students) in 2020 compared to 2019.) In terms of ethnicity of our master's students, 3,617 (49.5%) are White, 981 (13.4%) are Hispanic, 360 (4.9%) are Black, and 453 (6.2%) are Asian with 1425 (19.5%) International. In terms of gender, 3,965 (54.2%) are male and 3,342 (45.7%) are female. In terms of attendance, 4,707 (64.4%) of our master's students are full-time and 2,600 (35.5%) part-time. In terms of thesis versus non-thesis

programs, 1,315 (17.9%) of students were enrolled in an on-campus non-thesis program, 1,778 (24.3%) were enrolled in a distance education non-thesis program, and 573 (7.8%) enrolled in a thesis program with only three of these students enrolled in a distance education thesis program.

**Themes:**  The following themes emerged from our subcommittee discussions, open forums, and other activities. Subcommittee recommendations follow the summary of findings for each theme.

- VALUE of MASTER'S PROGRAMS and STUDENTS:  With large undergraduate numbers, it is no wonder that the primary focus of our institution is on undergraduate students.  As an AAU Tier I Research university, we also have a strong focus on doctoral education.  This sometimes results in master's students and programs falling through the cracks in terms of value.  The committee felt strongly that master's programs and students are an integral and important part of graduate education and should be valued as such.  About half of our graduate numbers are from master's students.  Although master's students frequently feed into robust doctoral programs, many master's students at TAMU are here for a terminal master's degree.  The numbers do not support the misperception held by some that master's degrees are only for those who opt out of doctoral programs. Indeed there are far, far more students who come to TAMU specifically to earn a terminal master's degree.
    - Recommendation: Raise awareness among faculty, staff, and students about the value of terminal master's degree programs including their utility and value in and of themselves not as gateways to doctoral programs. Dispel misconceptions that master's students are failed or future doctoral students.
- VALUE of DIVERSITY:  We should continue to work to value all types of diversity among our students - including race and ethnicity, age, and gender identity - and our programs-including campus and online, thesis and non-thesis, and research and professional programs.  The diversity of programs should also be valued and highlighted for impact.
    - Recommendation: Highlight programs across the university to celebrate the diversity of programs and the contributions of diverse students.
- VALUE of a STUDENT CENTERED APPROACH:  It is the goal of the institution to help students reach their goals.  Our programming should focus on best meeting the needs of our students.  This may mean changing our practices in order to prioritize the needs of our students.  One example is the recommendation that all funded students should be ad-loc'ed to the colleges and not to extension or research funding (this issue is specific to particular colleges, but has presented unnecessary hurdles for students).  Another recommendation is to make sure that targeted resources (e.g. mental health and support resources) are not only available to students but are housed in a way that will be user friendly to graduate students.
    - Recommendation: Continue to explore possible changes to practices and organization that streamline student resources.
- VALUE to FUNDING:  The committee investigated the funding model at our institution in order to determine the role of master's student funding in the scope of educational funding.  The funding model used by our institution is quite complex and relies heavily upon historical data.  There are no differences between master's students within a

program (e.g. thesis, non-thesis, etc.) in terms of funding received. The value assigned by faculty is a result of individual perceptions by field, not any actual numerical data. Again, the value of diversity and meeting student needs were determined to be the important functions of value in the truest sense.

- ○ Recommendation: Emphasize that funding of master's students is discipline-specific and should be left to colleges and departments to determine. Additionally, the relative value of thesis versus non-thesis options should be based on the utility and service to students..

- ● ACCESS to RESOURCES:  Given the size of our institution, it is difficult for everyone to know and have what they need when they need it.  Targeting resources (both monetary and informational) to those who need them at the right time was suggested.  Creating lists of specific resources for distance students was also suggested.
  - ○ Recommendations: Raise awareness that student services are available for master's students, not only undergraduate students, and improve organization and communication of access to these resources. This may include investment in better indexing of services so that they are more easily located and used by master's students. This could also involve the creation of a graduate student success center within the Graduate and Professional School, akin to the Aggie Success Center but focused on resources for graduate students.
  - ○ Recommendation: Promote a broad understanding among student services offices that student access of services are constrained by location - not all students are local, the pandemic, and the diversity of their needs (i.e., distance education students). Therefore, student services offices should strive to offer services in a way that meets these needs and is sensitive to the needs of master's students.
  - ○ Recommendation: Facilitate travel resources for master's students presenting their research at conferences. Departments need to be aware of the impact that their choices about what and who to fund have on the ability of students to complete the research and disseminate their findings. Additionally, the Graduate and Professional School should review policies and practices related to it's award requirements.  If there are ways to include master's students in these in more robust ways, the Graduate and Professional School should consider revising those requirements in order to avoid the perception that doctoral students are more highly valued than master's students.

- ● ACADEMIC SUPPORT:  There was some expressed need for assistance in specific course content since tutoring is not traditionally made available to graduate students, particularly in the area of statistics and some of the natural sciences.
  - ○ Recommendation: Emphasize to colleges and departments the need to provide academic support to master's students for some courses and curriculum.
  - ○ Recommendation: Disseminate information on and examples of successful refresher courses for master's students especially those not entering directly from undergraduate programs.

- ● MENTORING and ADVISING:  We must support students through active mentoring and appropriate advising.  We should continue to explore best practices with Individualized Development Plans (IDP) and structured advising at the departmental/college level to ensure students have the support they need throughout the program. It should be clear

to students that the primary responsibility for advising and mentoring (with regard to completion of program milestones and research) rests with their department or program.

- ○ Recommendation: Encourage colleges and departments to review, consider, develop, and pursue best practices in mentoring and advising, such as: publishing future schedules or rotation of classes so students can make informed choices about class scheduling; connecting students with those who can answer advising questions; and ensuring those tasked with advising can help students with course and degree plan decisions.
- IMPROVED COMMUNICATION:  We heard various issues that are failures of clear communication.  This is everything from improved ability to find resources, to knowing what resources are available, to programs communicating with students about requirements and opportunities.
  - ○ Recommendation: Invest in ways to better organize and communicate resources centrally with the Graduate and Professional School. This may involve better indexing so students can more easily find and use services or the creation of a center of success within the School to centrally house and/or connect graduate students to resources.
  - ○ Recommendation: Emphasize to colleges and departments the need to: review their communication practices with graduate students; centralize and consolidate communication where possible so graduate students are not overwhelmed with information; and consistently, clearly, and frequently communicate program requirements and opportunities.
- ENGAGE and NETWORK:  Some students expressed a desire to be more engaged and connected to people (faculty and other students) and resources.  It was suggested that we create a platform and schedule time for students to network in a virtual environment for a coffee hour, etc. Cohort building, community building, introductions to program, etc. This will continue to be an issue as we expand online offerings and our new normal of remote learning.
  - ○ Recommendation: Explore possible venues to connect master's students. The creation of a graduate student success center may offer a hub for such connections.
  - ○ Recommendations: Explore and disseminate best practices on networking and cohort building among on-line students.
- EFFECTIVE TEACHING:  Students value faculty who work to engage them in course work, provide resources for enrichment and remediation, and connect the coursework to real world applications and careers.  Graduate teaching assistants also make a tremendous impact on undergraduate students and programs through their teaching.
  - ○ Recommendation: Efforts to help our graduate teaching assistants improve and document their contributions should be highlighted.
- CAREER FOCUS:  Students are very interested in career opportunities beyond higher education and have an expectation that faculty will be knowledgeable in helping students make those connections.
  - ○ Recommendation: Emphasize to students, staff, and faculty the career resources available. This may entail consolidating information on these resources and communicate this to program coordinators.

- ○ Recommendation: Assess the utility of the career center offerings for graduate students to determine if they are meeting needs and adjust as appropriate.
- ● BENEFITS of VIRTUAL: Many of the changes made for remote instruction during covid are generally good for graduate programs and should be continued. This includes offering support services outside of regular work hours in order to accommodate students who are not full time graduate students and virtual graduation ceremonies. Continuing virtual instruction, service access, and celebrations allows distance students and those unable to be physically present an opportunity to be fully engaged.
  - ○ Recommendation: Graduate programs and student service offices should review changes made to their practices and services to accommodate virtual students and continue to offer these where feasible.
  - ○ Recommendation: Several master's programs have been recognized by US News as top-10 on-line programs. Successful strategies used by those programs should be shared with other programs.

**General Best Practices:** Though not an exhaustive list, there were several best practices for master's education that emerged from our work. It is important to note that this is an iterative process and that a collection of best practices will need to continue to be curated across programs and from lessons learned from peer institutions. These practices should be reviewed and pursued where relevant at all levels of graduate education, from the Graduate and Professional School to individual programs.

1. Interdisciplinary education and research benefits students, but presents challenges for programs and departments that are organized by discipline. Having an outlined and well-communicated plan related to committee membership, courses, and projects/internships facilitates interdisciplinary student learning and research and enhances their experience in ways that best prepares them for the world of work outside of academia.
2. Providing proactive mentoring that includes mentor and mentee compacts as well as Individualized Development Plans (IDP) help master's students understand the connections and relationships between mentoring, professional development, and academic coursework.
3. Providing distance education program master's students the opportunity to connect with others in their program as a cohort, with structured schedules of classes to ensure there is a sense of belonging and community fosters community. Programs that have an orientation for all new distance master's students as well as regular cohort building opportunities provide value added to students and help students succeed and be more satisfied.
4. Providing career development opportunities and career counseling throughout the program, particularly for those who are in terminal or professional master's programs.
5. Encouraging students to complete certificate programs through the Center for Teaching Excellence or GRAD Aggies to strategically enhance their academic experience.
6. Organizing writing groups for students at different stages of the proposal development and thesis writing process to provide support for writing, not discipline specific feedback or advice.

7. Facilitating a feedback loop in teaching assistant evaluations that includes self-reflection, peer, and student feedback to improve teaching and learning.

**Program Level Recommendations:** Given the diversity of the master's programs at TAMU, much of what can be done to improve graduate education is up to program decision-makers, faculty, and staff. Though not all inclusive and some overlap with the general best practices outlined above, the following are some suggestions for programs to consider implementing specific to master's students.

- Creating explicit expectations and transparent policies that are consistent with TAMU policies.
- Enabling graduate students to make timely progress in their degree programs by ensuring that required courses and examinations are scheduled in a timely manner.
- Creating opportunities for networking and expanding career and professional development (e.g., organizing speaker series, colloquia, and other formal and informal events).
- Creating opportunities for graduate students to become familiar with the various forms of scholarship in the field.
- Sharing responsibility with guidance committees and faculty advisors for fostering the professional and career development of graduate students (e.g., providing venues for honing professional writing and presentation skills, grants writing, publishing).
- Ensuring that regular progress checks are provided for students.
- Providing education in research ethics and integrity.
- Recognizing and rewarding excellence in mentoring, and identifying opportunities for professional development so that faculty can improve their mentoring skills and abilities.
- Connecting faculty to a broader community of support by sharing information about resources that can support them in mentoring graduate students.
- Consider implementing near peer mentoring or student ambassador programs to ensure students have access to information at the appropriate time.
- Consider implementing "graduation coaches" who can help students navigate issues with program requirements, course challenges, and other issues.

**Recommendations for Practice and Future Activities:** As previously mentioned, the work to effectively move from the Office of Graduate and Professional Studies to the Graduate and Professional School is an iterative process. As such, the work necessary to continue to move our institution towards becoming a globally-recognized leader in graduate and professional education will be ongoing. Below are suggestions for future activities to continue to inform our processes and programs for the future:

- VALUE and DIVERSITY: Perhaps one of the most notable recommendations from our work is that there is a great deal of value inherent in master's programs and the diversity of our master's program offerings. Whether they be research or professionally focused, online or face-to-face, master's students make up about half of our graduate numbers, overall, and many serve in very important roles as teaching assistants in undergraduate courses. Their impact beyond our institution is vast and important. While undergraduate and doctoral education tend to be the focus of many initiatives, we believe that

articulating the unique contributions of master's programs and students is important in our work as a Graduate and Professional School.

- ACCESS to RESOURCES:  Access to resources was a recurring theme throughout our work.  Often the issue is lack of knowledge about resources available rather than the absence of a particular resource. This is a function of the size and complexity of navigating our institutional resources.  It is recommended that we work to improve the search feature of our grad.tamu.edu websites to ensure items are tagged in layman's terms and consider other ways to centrally promote resources through the Graduate and Professional School.
- CAREER DEVELOPMENT:  Though our institution has robust offerings in career planning and development, there was a suggestion that interdisciplinary career fairs and events that allow many different types of students and programs to capitalize on their skills across colleges be highlighted.  These interdisciplinary career fairs should be welcoming and useful to master's students, not only undergraduate students.   It is also important to consider the best ways to communicate those opportunities that already do exist.
- STREAMLINE DUAL PROGRAMS:  We also propose an initiative to streamline 3+2, 4+1, and dual degree program students into the graduate program so that they are considered full-time students, are considered part of both degrees, and receive appropriate advisement and communication at the right time.  Connecting these efforts to interdisciplinary programs may be most appropriate to ensure that students are best supported.  We should also explore software programs that allow program administrators the flexibility to see all aspects of students and determine how best to administer these types of programs.  Perhaps a template for future program proposals would ensure consistency across the institution in how these programs are structured.  Related to this issue is that some programs exist in different systems (EnLaw and EnMed for example) and advisors only have access to one system. This creates a barrier in providing timely advice to students. Consideration of when 3+2 and 4+1 students move to G7 status would be important in making sure that they receive communications targeted at master's students that are relevant to them.
- STUDENT FEEDBACK:  Though the committee considered creating and distributing a survey to current students, the decision was made to rely upon the GradSeru survey for this purpose as a standardized tool to inform the work in the future.  This ensures consistency over the years, allows us to benchmark data points, and reduces survey fatigue of students.
- MONITOR DATA:  Continue to monitor data.  The evolution of our data tools is ongoing. From recruitment, admissions, current student, and exit data, we should be making data informed decisions that are student centered and move us towards becoming a globally-recognized leader in graduate and professional education.
- MENTORING:  Work to improve mentoring impacts across colleges and departments through specific engagement with faculty and graduate students and the creation of an articulated plan for graduate student mentoring.  We should ensure that mentoring is specific for master's students who may have different needs (in person versus online, research versus professional, etc.)
- TEACHING EFFECTIVENESS:  Work to improve the effectiveness of graduate student teaching through more purposeful interactions in teaching assistant feedback and

evaluation in partnership with ongoing Center for Teaching Excellence activities and programs.

- OMBUDS SERVICES:  Because of the unique issues related to master's students, we may want to consider offering specific Ombuds services for master's students
- ACCESS to ADVISING TOOLS:  Through our work, we discovered that some faculty and staff who should have access to the Howdy Advisor Tab do not have access and must rely on others to look up and send information.  We recommend that those who need access to the advisor tab in Howdy should be allowed access.  There is no institutional benefit to keeping faculty and staff who need access from having access.
- MENTAL HEALTH RESOURCES:  Leverage centralized activities in the area of student mental health and disability services to ensure students and faculty are aware of opportunities and activities when they need services. This may be as simple as highlighting available resources for students who are on campus, at a distance, or at one of our other campus locations (Dallas, Fort Worth, Galveston, Kingsville, Qatar).
- ADLOC FUNDING: Reduce barriers to interdisciplinary degrees and programs particularly as it relates to funding of students.  Faculty and students spend an inordinate amount of time and resources navigating changes in funding for interdisciplinary programs and in navigating issues related to agency adlocs.  One specific recommendation is that students should be adloced to the college and not other agencies.
- FOCUSED ORIENTATION:  It was suggested that our orientation activities should be more tailored and student-centered.  It was recommended that, when possible, master's students should receive an orientation separate from doctoral students.  Additionally, examples of resources should include not just research resources, but also include resources for students in professional programs, such as internship and career information.
- ENHANCED COMMUNICATION:  Seek to communicate more effectively.  One specific suggestion was a monthly blast from the graduate and professional school with deadlines upcoming in the next several months.  We should also explore tools such as SLATE that allow users to indicate the type and timing of communications.

Of these, our subcommittee recommends the following as immediate action items:
- Ensure that students are served through our university services by adlocing them to colleges and not agencies;
- Review awards offered through the Graduate and Professional School to ensure that master's students are appropriately valued for their unique contributions to our institution and where practicable are eligible
- Where appropriate,offer separate orientation activities for master's students; and
- Provide the Howdy Advisor Tab to faculty and staff members who need access to these resources.

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## Appendices

The subcommittee reviewed a number of reports from a variety of entities in order to gain insight on issues and best practices from our peers.  These included the Council of Graduate Schools, EAB Insights, and Hanover Reports.  Highlights of the reports included:

- A survey of more than 100 campus leaders of all job titles and across all function areas prioritized identifying their unique brand and strategies to stand out in a competitive and saturated graduate education market.  The author found that it is important to set clear goals—and then quantifying results and return on investment— to advocate for the resources needed to recruit adult learners (Murchison, 2020).
- A series of surveys of adult learners indicated that about 1-in-4 prefer an online program and another 1-in-4 do not want to pursue an online program. Preference for online programs is associated with age - older adult learners prefer online programs - and deem them essential to their ability to obtain a graduate degree - while younger learners prefer in-person instruction (Lamb, 2020).
- To identify which academic programs have the greatest potential for growth, it is important to evaluate internal and external factors, including: *enrollment and conferral -* total enrollment, student credit hours taught, degrees conferred; *pipeline -* average number of inquiries, conversion rate from inquiry to application, average number of applications and growth in applications, and yield rate from acceptance to enrollment; *labor market opportunities -* historic employer demand, both in relevant job postings' volume and growth as well as as projected employment for typical job outcomes; *competitive opportunities -* historic student completions, both in volume and growth and the number of other programs as well as the change in competitors over time. It is also important to consider how students' program preferences are evolving as high school students' attitudes towards majors can help anticipate future trends (Edmonds, 2020).
- Once graduate programs with the most growth potential are identified, it is critical to equip them for growth by: 1) align programs to market needs - emphasize in-demand coursework and preparation for valuable careers; 2) optimize curricular maps and faculty resources for growth - evaluate if the faculty resources and course sequencing enable

student completion as well as offer the flexibility adult students need; and 3) develop and implement a robust adult learner recruitment strategy - ensure prospective students know about your program and its value (Edmonds, 2020).

- Milder (2020) offered the following strategies to help students and recent graduates succeed in today's restricted economy and competitive job market:
  - Improve technical competencies
    - Offer a post-graduate intensive that complements a liberal arts major with a deep dive into the essentials of business and entrepreneurship; example: Certificate in Entrepreneurship | College of the Holy Cross
    - Consider developing soft skills for technical degree holders (i.e., engineers) that focuses on leadership, communication, and critical thinking
  - Build seamless pathways to graduate education
    - Offer master's degrees in 4+1 or 3+2 formats
    - Offer tuition discounts to alumni
    - Ensure students' access high-quality work experiences by requiring an internship for students entering the master's program on a 4+1 or 3+2 path - and provide staff support to find internships; this ensures students can reflect and engage with program peers who bring years of professional experience to the program (Milder, 2020).
- Bailey (2020) summarized the three major takeaways from nearly 700 adult learner administrators at a Council of Graduate School's Annual meeting:
  - Improve student support to accommodate graduate students - make advising, counseling, tutoring, writing, and math centers available at non-traditional hours and offer programs applicable to adult learners with work and family commitments
  - Marketing to be responsive to needs - respond quickly to communication and inquiries, post FAQ page that consolidates key program information in one place, and minimize application barriers
  - Design programs to help students juggle work and family commitments - online programs, multiple points of registration throughout the year, and easy to calculate tuition and fees (Bailey, 2020).
- While the proportion of racial and ethnic minority students going to college has substantially increased (about 1.5 times) in the past two decades, minority students have lower completion rates, higher student debt, and less propensity to pursue STEM degrees (EAB, 2019).
- EAB (n.d.) also offers the following as best practices to improve diversity of graduate programs:
  - Provide equity-focused professional development focused on racial literacy and racial equity problem-solving skills to ensure the ability to address and confront practices, cultural norms, and policies that undermine racial equity.
  - Conduct campus climate assessments to understand student, faculty, and staff perceptions and experiences, identify strengths and areas for improvement.
  - Make student care a coordinated effort by creating a Coordinated Care Network across offices (i.e., financial aid, career advising, academic support, and student

health and counseling centers) to facilitate coordination and collaboration for student support.
- ○ Foster student belongingness by evaluating best practices and developing support and response plans to ensure that all students, especially those from underserved backgrounds, feel supported and valued by their community.
- ○ Leverage technology for proactive advising by using student success technology platforms (EAB, n.d.).

Highlights from the reports from the Council of Graduate Schools include:

**CGE Advice to Faculty and Administration**
- Common Standards and Practices
  - ○ "The master's degree is awarded to students who demonstrate a level of academic accomplishment and subject mastery substantially beyond that required for the baccalaureate degree." pg. 21
  - ○ "Master's programs usually require a capstone or culminating experience that indicates the ability to synthesize material from course work and to apply information and knowledge to a specific issue or problem, although some programs may require only completion of course work." pg. 21
- Institutional Environment
  - ○ "When institutions place a strong emphasis upon the baccalaureate or the doctoral degree, master's education is sometimes shortchanged in decisions about allocating institutional resources and faculty time, attention, and effort." pg. 22
  - ○ "Some institutions adhere to an earlier CGS recommendation to retain the Master of Science (MS) and Master of Arts (MA) titles for degrees that require a thesis based upon research or scholarship and to indicate disciplinary or interdisciplinary major on transcripts, while adopting the common practice of using titles and more specific designations for applied and career-focused master's programs. This practice preserves the historical reputation of the MS and MA degrees and reflects, with proper transcript notation, the nature of contemporary master's programs and the work that students in those programs accomplish." Pg. 23
- General Nature of Programs
  - ○ "Each program and the graduate office should monitor progress of all graduate students to ensure that satisfactory progress is being made and to be alert to instances where students may need encouragement or support along the way." pg. 46
  - ○ "In some cases, a statement to the graduate school by the student's adviser that satisfactory progress is (or is not) being made suffices, although a regularly scheduled review by the advisory committee is strongly recommended." pg. 46-47
- Program Degree Requirements
  - ○ Capstone Experience
    - ■ "The inclusion of a culminating or capstone experience in all master's programs is strongly recommended. The master's program is often the

first academic experience in which a student is expected to integrate prior learning." pg. 51

- Completion and Attrition
- FACTORS CONTRIBUTING TO COMPLETION AND ATTRITION
  - Program Structure and Faculty, pg. 94
    - Among Masters **graduates**, the following were ranked as the most important factors contributing to their completion of the program:
      - Quality of Teaching and Supportive Faculty
      - Program structure, requirements, sequencing, delivery, and availability of courses.
      - Advising
    - Among Masters students **Stopout/Dropouts**, the following were ranked as the most important factors contributing to their failure to complete the program:
      - Program structure
      - Lack of support from faculty
      - Lack of institutional supports
  - Financial Supports
    - Graduates
      - Financial support
      - Access to loans
    - Stopout/Dropout
      - Lack of financial support
  - Community
    - Graduates
      - Peer support
    - Stopout/Dropout
      - Lack of peer support
- Identify promising practices to help improve outcomes, pg. 101
  - Establish and maintain Student Tracking Systems and Data
    - Centralizing data warehouses where student-level data (e.g., enrollment, course and grade, leave of absence, and graduation data) are collected, integrated, and maintained.
  - Program Review
    - Implementing periodic program reviews and supporting ongoing program assessments (often including enrollment, graduation, post-graduation employment, satisfaction, among other measures), which may include surveys of current and former students.
  - Advising and Mentoring
    - Hosting faculty mentoring workshops that are required of faculty members before they are appointed to the graduate faculty.
  - Academic and Non-Academic Supports
    - Providing a range of non-academic supports, such as health services, social events for students, social networks, graduate student lounge, housing referrals, and fully or partially subsidized health insurance.

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  - ○ Supporting Students Underrepresented
    - ■ Supporting underrepresented student associations on campus (including black, Hispanic, Native American, and Asian student associations) that offered social events and support for their members.
  - ○ Professional Development
    - ■ Offering career-oriented workshops on resume writing, marketing job skills, and mock interviews specific to graduate students, and holding career fairs where potential employers are invited to meet with students.
- Conclusion
  - ○ "For graduate schools, the implication of this conclusion is that a strong sense of community within programs is more likely to promote completion." pg. 105

Highlights from the reports from Hanover include:
- Market place is changing - innovation to attract students is necessary
- International students: resources/decreasing tuition
- Micro Credentialing programs - workplace skills
- Competency based curriculum (nursing education at national level is moving toward this model)
- Experiential learning (College-Employer partnerships)
- Academic coaches/Peer mentors/diversity in faculty
- Diversify use of campus - rent space; multipurpose space
- Engage alumni
- Clearly establish a "brand" and market as such
- GRADUATE
- Social media expansion
- Run admission office in fashion of business model: recruitment models; being strategic
- Use of technology
- Communication, early with applicants, those not completing applications, reaching out to support those having difficulties with maintaining grades
- Collaborate with departments : academic affairs, financial departments, students, alumni, marketing,
- Provide programs that serve a gap and the market needs