

A Focus on Academic and Career Advising: Spring 2016

The Phase III Unit Planning performed by the campus during Fall 2014 launched the next phase in the strategic planning process. As part of Unit Planning, Schools/Colleges/Departments were asked to “take a look in the mirror” and report on suggested prompts within the areas of research, graduate education and undergraduate education. The undergraduate education section began the process of evaluating academic advising and students’ preparation for careers, but given the volume of work to be done could not complete the kind of “deeper dive” we need in order to identify opportunities for enhancement.¹

The Strategic Plan draws upon a college-based model in which overall responsibility for advising resides at the Dean’s level, with departments contributing according to a college-wide plan. This college-based model has predominantly focused on academic advising, with career advising primarily supported by partners in Student Affairs (except in Isenberg and Engineering who have their own college-based career services staff/center).

Advising occurs in many settings. The advising strategy should recognize multiple roles – faculty, professional staff, and student peers – and provide for appropriate expectations, guidance training and evaluation (p. 19). In addition, information and interaction with employers to find the appropriate intersection between education and workforce needs, and better alignment with career preparation and curricula should be occurring (p. 14). One way of supporting students is to take advantage of technological advances that now permit effective institution-wide curricular tracking and advising systems (p. 19).

Part One. Analysis of the Current Landscape, “A [Deeper] Look in the Mirror”

Consider the evidence you currently have about your undergraduates’ academic and career advising experience, the way in which they are advised on academic requirements, the way in which they are advised on majors/academic areas of interest that make sense for them, the way in which they are supported in “flow” across campus (selection of an appropriate major, change of major process, and “handoff” between School/College/Department), the way in which they are advised on potential careers, job placement, and internship opportunities.

- What are the strengths and weaknesses of the ways in which **Academic Advising** is currently performed at the School/College level, at the Departmental level (with the student experience as the unit of analysis). As you think about the various touch points where/when academic advising is done (from the declaration of majors to changes from one major or College to

¹ The University’s Strategic Plan, “Innovation and Impact: Renewing the Promise of the Public Research University”, draws attention to academic and career advising stating, “One of our responsibilities as educators is to promote an effective match between the institution and the student. Increasingly, students are looking for assurance that their choice of a college will work for them from admissions to graduation and beyond. We must offer the prospect of timely progress, in a program of choice, with access to courses then and as needed. We must support their progress through advising and other services, and to position them well for employment or additional study (p. 16).”

another), where do you feel we are doing well and what needs to be improved? What different approaches/processes do you have in place to respond to the needs of freshmen students vs. transfer students?

- The division of labor by separating the university and college requirements to the College advising while the Department focuses on the majors' degree requirements makes sense. We should leave the advising to the "expert advisors" in their respective areas. In Astronomy, the entire incoming freshman class is assigned to a single faculty advisor who guides them through their entire four year career. This enables uniform advising of the entire class through the established familiarity and continuity. Transfer students often require an individualized academic program with creative solutions, and they are assigned to the two most experienced faculty advisors, CUA (M. Yun) and UGPD (R. Snell). One area that could use some improvement is the new student orientation run by the College, where the entering freshmen receive recommendations for their first year courses – the students are frequently advised to math and physics courses lower than they should be in.
- How is **Career Advising** currently performed at the School/College level, at the Departmental level (with the student experience as the unit of analysis) and what do you see as the strengths and weaknesses of your current approach? It will be important to identify for the student and their respective academic "major", the various touch points where/when career advising is provided. What specific approaches/processes are in place specific to assisting students with internship possibilities and employment? Where do you feel your department/college "gets it right" and where is there need for additional or alternative approaches?
 - Astronomy Department offers astronomy-specific career advising primarily through the Freshman Seminar and is often one of the focal points of regular advising sessions in each semester. Reminders for internship programs, including our own FCAD summer internship program (funded through FCAD and Space Grant), are regularly sent out to the majors through email. Our strongest students are encouraged to complete for national REU programs, and many (typically 5-6) students interested in doing an FCAD summer internship are given the opportunity. We feel the general career advising the College provides, such as various workshops, are extremely valuable and are beyond what we can provide. However, we lack any data on the usage and the effectiveness for our majors. Having this information in our advisers' hands might serve well during the regular advising sessions. Providing career advising for many of our majors who are not continuing into an academic or research career is a real challenge. We rely mostly on handful of known examples of previous graduates finding career in other fields where they take advantage of their training (we started a career-oriented event called Astronomy Alumni Seminar whereby we invite astronomy alums to visit campus and share their experiences and offer a chance to network with current students), but obtaining and maintaining information on Astronomy alumni has been a challenge. For example, our attempt to contact the UMass Alumni Association for a collaboration have gone unanswered in previous years. Using the social network such as Facebook or LinkedIn is a possibility. We are also considering a 1-credit seminar class for upper classmen, focused mainly on career planning.
- **Division of Labor/Usage of Personnel:** Professional staff, faculty, and peers are all involved in supporting students' academic and career advising.
 - How involved and in what way is the School/College central advising office used for a) academic advising, and b) career advising. In what areas (i.e., academic advising, internship placement, career advising, student programming in these areas, employer

interactions) should the central office be more engaged or is decentralization more appropriate? What is the optimal balance?

- We rely on the College advising for GenEd and general career advising. Our faculty advisers are best suited for providing field-specific academic and career advising. This division is clear and works well.
- Does the School/College/Department have academic advising *professional* staff and if so, how are they used (what are their primary roles and responsibilities)? Is this the optimal way to draw on their talents and time?
 - Astronomy dept advisers are all full time tenure track faculty members. The College advising uses professional staff for academic advising, and that seems appropriate.
- Does the School/College/Department have career advising *professional* staff and if so, how are they used (what are their primary roles and responsibilities)? Similarly, is this the optimal arrangement or would you recommend alternatives for consideration?
 - Astronomy dept advisers are all full time tenured faculty members. The College advising uses part time professional staff for career advising, and that seems appropriate, given the large number of students they serve.
- How are faculty advisers used in terms of academic advising, career advising? Where could they be used most effectively? Where are they being used in ways that are not as optimal?
 - The entire departmental advising team consists of full time tenure track faculty members in Astronomy. This is an expensive way to provide advising, but this ensures high quality advising for the small group (~100 total) of majors we have. Some faculty advisers feel that they are NOT the best people to advise students for career outside the academia, but our advising team as a group probably have the best institutional knowledge on career choices and successes for our majors.
- Does the School/College/Department use peer advisers to support academic and/or career advising? If so, please describe how peer advisers are used and what you see as the potential strengths that could be better developed?
 - We do not use peer advisers. Given the small number of majors, the faculty advising team can provide the required advising for the same effort necessary to train peer advisers. Our graduate students have successfully served as mentors, on informal basis, with some success.
- **Data Analytics/Tracking:** What type/level of tracking of students is happening at the School/College/Department levels (i.e., flow of students in/out of the School/College/Department, academic progress including GPA and timely progress toward degree completion, etc.)? Describe how students are identified for various outreach campaigns/activities/programming that support students in need of assistance (i.e., identifying an appropriate major, experiencing academic difficulty, not progressing in a timely fashion toward degree completion, unsure as to a potential career, etc.). What specific intervention tools/programs/communications do you have in place and when are they performed? Do you know what percentage of your students see an academic advisor, a career advisor on a yearly basis? Are there data sources you wish you had that are not presently available?
 - 100% of our majors meet and discuss their academic progress and internship/career options during their regularly scheduled advising meeting each semester (through the use of the RAC hold). The main weakness of our scheme is that anyone experiencing any major personal or academic problems after the mid-semester advising appointment

could go unnoticed until the next semester. We also find that some the incoming freshmen are enrolled at a wrong level of math or physics classes, and this can lead to potential scheduling complications to even a delay in their graduation. A better communication and coordination with the NSO team should help solving this problem.

- **Experiential Opportunities:** How does the School/College/Department currently support matching students with appropriate opportunities such as double majors, minors, certificates, honors, individualized programs, internships, international opportunities, research experiences, community service, etc. Does the School/College/Department include internship and/or employment-related practicum/experiential opportunities as part of the credit-bearing curriculum requirements? If not, are there ways to pursue this in the School/College/Department field of study that makes sense and helps facilitate career opportunities?
 - All astrophysics BS track students are double majors in the physics BS program by design, and many others also take advantage of the rigorous math requirements to double-major or minor in math. Our students in the Space Sciences BS track must satisfy 3-course set “concentration requirements”, which can be easily expanded to satisfy a minor in their selected fields. Many students desire an opportunity to do senior thesis, and they are regularly identified and directed to the CHC admissions. Our Freshman Seminar (Astron 191A) is a required course for all majors and is designed to convey all academic and career/internship information and expectations from the Year One. The CUA handles all queries regarding international programs and domestic exchange programs. We are now considering a junior level seminar with a focus on career preparation.
- **Informational Data/Resources:** [Due to a secure website, access to data and student survey responses in the tables below can be accessed by copying and pasting the following, umass.edu/oir-dept-review, into your web browser and then sign in to the secure site using your netid and password]. Moving beyond general questions of effectiveness and the “division of labor” in academic advising and career support, we are interested in specific metrics that various stakeholders are interested in seeing improve. Based on key data metrics and student responses found in the following sources, what would you describe as your School/College/Department strengths with academic and career advising? What would you describe as areas needing attention and/or in need of improvement?
 - Destination of Choice, Overall Effectiveness, Student Progress - One Year Retention
 - Astronomy tracks the CNS average retention rate very closely.
 - Destination of Choice, Overall Effectiveness, Student Progress - Four and Six Year Graduation
 - Astronomy is slightly worse than CNS average but is comparable or slightly better than physics, which is similarly rigorous.
 - Destination of Choice, Overall Effectiveness, Student Progress - Time to Degree
 - Astronomy is consistently better than the CNS average and is slightly better than physics. The above three metrics are expected to take a major setback in the coming years, at least for Astronomy, as a direct consequence of the removal of the “undecided” major. The advisor for the freshman class (M. Weinberg) reports that nearly 1/3 of the current freshman majors are astronomy majors only in title, as they are all seeking advice on how to enter other majors such as computer science or engineering. This will affect all above 3 metrics negatively, and this also represents a significant drain on our limited advising resources. Another cause for a concern is that students

from New England region receive a tuition discount, and each year we find students abusing this benefit with no intention of being an astronomy major – these students do not take any astronomy courses and receive little useful academic or career advising. This is a persistent problem that also drains our limited advising resources and negatively impacts these metrics.

- Destination of Choice, Overall Effectiveness, Student Experience (Senior Survey satisfaction – access to classes, career preparation)
 - Not enough data to offer any insight.
- Destination of Choice, Student Engagement, Faculty Contact and Engagement (NSSE: Quality of interactions with advisors, Senior Survey: Satisfaction with academic advising in your major)
 - Not enough data to offer any insight.
- Information/Data on Internships/Co-Ops/Career Placement: Can be obtained from Career Services (Candice Serafino) and/or School/College own database

Part Two. Goals for Academic and Career Advising and the Student Experience

- A. Part One's "Look in the Mirror" was an opportunity to provide a description and evaluation of how academic and career advising is being performed, and to look at key data metrics and student feedback in these areas. Part Two is asking you to develop specific goals in these areas:
- Academic Advising
 - Career Advising
 - Division of Labor/Usage of Personnel
 - Data Analytics/Tracking
 - Experiential Opportunities

Each college should formulate specific ambitions and pathways to move toward their realization. Here are some that the deans and the campus leadership as a whole, embraces as worthy objectives:

- 1) Every first year student will know during their first semester the "routes" (where to go, who to speak with) on campus to receive academic and career advising.
 - 2) School/Colleges are asked to identify their goal for % of students who perform an internship or career preparation practicum/experience prior to graduation, and provide plans on how to reach that goal.
 - 3) School/Colleges are asked to identify their goal for increasing student satisfaction with Senior Survey items on Academic Advising and Career preparation and guidance in their major (i.e., goal of increasing by XX), and provide plans on how to reach that goal.
 - 4) School/Colleges are asked to identify their goal for utilization of the EAB SSC advising tool by their advising faculty and staff.
 - 5) By a certain point in time (i.e., a student's junior or senior year) the student can articulate curricular and co-curricular preparation they have received to an employer. What goals does the School/College have in supporting all of our students in how to articulate their undergraduate experience and preparation to a potential employer.
 - 6) What are other goals/ambitions and pathways to get there that have been identified within the School/College in the areas of academic and career advising.
- B. What types of information/data would each School/College/Department like to be able to monitor so that we can collectively hold ourselves accountable for the work being done in academic and

career advising (i.e., % of students seeing an academic advisor on a semester/yearly basis, success/failure rate of early intervention programs that may be in place, student internship placement, job placement, student satisfaction, etc.)? Please identify.

The most interesting data for Astronomy Dept would be the % of students who found a job that is related to their training (1) by the time they graduate; (2) within the first 2 yr of graduation; and (3) within the first 5 yr of graduation. Also interesting to know is HOW they landed their job (e.g., family/friends, alumni, internship, social media) and what part of their training was the most useful in their career development.

Part Three. Academic and Career Advising Action Plan

- 1) What specific actions can you take now, within existing resources, to address the aspects you have identified in need of improvement? Identify a timeline for implementation.
 - a. Clearer NSO instructions for course selection should be formulated and communicated before the start of the next NSO this summer. Our advisors will be more directly involved in the NSO events (on a limited basis).
 - b. We might develop a social media network of astronomy alumni to serve as resources for the current major to seek advice and network.
- 2) If there is a specific action or need(s) identified that can only be addressed with additional resources? Describe what you would like to do and what resources would be needed.
 - a. Astronomy Alumni Seminar is currently funded through the re-direction of 3 faculty members' Flex grants (Yun, Gutermuth, Whitaker) and volunteer work by the UMass Astronomy Club. Sustaining this effort or expanding it beyond the current format will require additional funds, either through the University/College/Department or through donations by the alumni.
 - b. A new 1-credit Junior Seminar focused on career development should be developed. The implementation should be possible soon, although this might require some additional resources such as a dedicated instruction time by a faculty advisor.

Process:

- 1) The Associate Deans (UG Academic Deans) serve as the point person overseeing the process, focusing on the School/College vision and approach to Academic and Career Advising that is then supplemented with departmental approaches supported by the School/College. If needed based on the current organization of career services being provided, the Associate Deans should work with Central Career Services.
- 2) The Department Heads/Chairs are informed by the Deans of this review being performed within their School/College. The Department Heads/Chairs will work with the Associate Deans on what they need to do.
- 3) The Associate Deans (UG Academic Deans) will compile the information, utilizing the services of Marcy Clark and others in Student Affairs and Campus Life for aspects of career services that are performed centrally, and prepare the document. This report is then provided to the Dean of the School/College.

- 4) The Dean will then review and provide a final document to the Provost as well as the Vice Chancellor for Student Affairs and Campus Life.
- 5) Timeline:
 - a. Launch: Beginning of Spring 2016 semester
 - b. Associate Deans deadline to Deans: April 29th
 - c. Deans deadline to Provost and Vice Chancellor for SACL: June 10th