UMass Amherst's Educational Effectiveness Plan (EEP) provides departments with an ongoing structure for conducting systematic inquiry into the effectiveness of their efforts to support student success. Departments initially developed and submitted their EEP inquiry plans and evidence gathering strategies in spring 2018 and are asked to provide updates on their progress on a regular basis. EEP activity is also incorporated into the University's strategic planning process – with departments including their EEP progress and findings into their <u>2021 Strategic Planning Refresh</u>. What follows is the department's most current reporting, as synthesized by the Office of Academic Planning and Assessment (OAPA).

Economics EEP

Identify the evidence you currently use (beyond GPA) to determine that your undergraduates have achieved the objectives you have for them.

Currently, the Department grants awards for the best papers and best student performance; the Undergraduate Awards Committee assesses the students' written work and faculty evaluations. In addition, professors in upper-level courses report on student preparation for advanced work and professors employing undergraduate research assistants under the Economics Undergraduate Research Assistance (EURA) program report on students' preparation.

We also look at a variety of centrally located data such as senior survey results, data on student satisfaction from the Office of Academic Planning and Assessment (OAPA), and SRTI results. Finally, our department's academic advisers report on student responses to instruction.

Recently, the Department has carried out a review of the Integrative Experience and of the Junior Year Writing Program.

Please describe the focus of your inquiry and explain why this inquiry is important to your department right now.

Line of Inquiry 2018: The Economics Department prides itself in its openness to alternative perspectives in Economic theory and policy. It is a question whether our undergraduates pick up these alternative perspectives. The Department also confronts an ongoing problem of teaching a very large and very diverse student body including a great number of students who join the major late after being rejected by the ISOM, and a smaller number interested in advanced economic analysis.

Progress your department has made toward addressing your line of inquiry, and the types of evidence that you have collected to inform your inquiry.

The Economics Department evaluated the following elements of the undergraduate program: How do classes meet Student Learning Objectives (SLO) and Aspects of the Student Experience (Exp)? Through interviews with faculty and review of course syllabi, we completed a grid assessing how each course meets each of the seven Student Learning Objectives (SLO) and six Aspects of the Student Experience (Exp). For each course and each SLO we assessed: (N) Student Learning Objective is not an articulated goal of this course; (0) Student Learning Objective is a goal of this course and has not been fully integrated into the curriculum; (1) Student Learning Objective is a goal of this course and has been successfully integrated into the curriculum; (2) Student Learning Objective is a special goal of this course, one of the reasons for introducing this course to the Economics curriculum; (V) Student Learning Objective may vary based on instructor expertise and goals.

The Economics EEP process also sought to assess progression through the major. Economics has historically been a "late addition" major, with students joining the major as late as their third or fourth years at UMass Amherst (although there are indications that this profile is changing). Economics is a highly scaffolded field of study, with introductory and intermediate economic theory courses (Intro Micro, Intro Macro, Intro Political Economy, Intermediate Micro, Intermediate Macro, and Intermediate Political Economy), a two-course calculus sequence, and a one-course statistics requirement widely seen as important preparation for full engagement in upper level courses. The combination of late entry and the need for extensive preparation creates a dilemma for Economics majors. We sought to assess the extent to which our undergraduates complete one or both 200-level intermediate-theory requirements and the Calculus sequence (especially the second Calculus course) before taking upper-level courses. This assessment is still pending data collection. Responding to a longstanding shortfall of women in the Economics major at UMass Amherst, the EEP process reviewed the gender composition of the economics major using data from Spire, OAPA, and national sources.

The Economics department has recently developed an undergraduate Political Economy (PE) track to offer undergraduates access to the methods and ideas for which the Department is globally recognized. The EEP describes the development of this track using review of program descriptions, syllabi, and interviews with faculty offering this track. The EEP process examined co-curriculars and professional development, many of which are covered in the grid-based review of course offerings. Through interviews with faculty and review of students records, we assessed the functioning of the following four co-curricular programs: (1) Economics Undergraduate Research Assistantships (ECON 496R) (2) Undergraduate Economics Club (3) Job Skills for Economics Majors (ECON 491I) (4) Cooperatives certificate program including Cooperatives Practicum.

The Economics EEP process also reviewed two recent reports carried out in the Department on two key programs: the Integrative Experience and the Junior Year Writing Program. Using interviews with faculty, students, and undergraduate advisors, the EEP process examined the state of tutoring for our undergraduate majors. The highly technical content of many Economics courses, especially the introductory and intermediate theory courses that students encounter early in the major, necessitates access to tutoring. The EEP process undertook an analysis of the faculty ratio and class-size in courses. A goal for the Economics Department is to meet the high need for classroom seats while simultaneously offering a significant amount of classroom contact and discussion with faculty in small classes. To meet both goals, the Economics department has aimed for a bimodal distribution of course offerings, with some courses offered in large lecture and the majority of classes offered in a small-classroom format capped at 25 students. We seek to avoid "mid-size" classes with 50-90 students which offer neither the advantage of many seats nor the advantage of small-classroom experience with extensive discussion and opportunities for writing graded by faculty. Using interviews with faculty, students, and undergraduate advisors, the EEP process examined the state of sections led by Teaching Assistants (TAs). Some Economics courses are offered in large lecture format, and we sought to assess whether sections are effective for students.

What are your department's next steps regarding your continuing and/or upcoming EEP line of inquiry?

Several key elements require more information, both quantitative from OAPA and qualitative from interviews: (1) Progression through the major. As noted above, the extensive scaffolding required for a truly effective undergraduate major in Economics makes sequencing the introductory and intermediate theory courses and the required mathematics courses a high priority, yet late addition of the major interferes with this progression. We need a better understanding of how students are progressing through the major and a plan to improve sequencing. (2) Effectiveness of TA Sections. Initial analysis indicates substantial variation in the content and quality of the experience of TA sections. We need more systematic information and we would like to review section design from other Departments that are known for making especially effective use of TA Sections. (3) Improving the gender mix in the major. Economics nationally and at UMass has a chronic gender imbalance with substantial underrepresentation of women. The UMass Economics Department has an international reputation for high quality research in feminist economics and the economics of gender and, by disciplinary standards, high representation of women at the faculty and graduate level. The shortfall in the undergraduate major remains a puzzle and a challenge.

In upcoming semesters, we plan to conduct ongoing research on progression through the major and effective use of TA sections, and on progression through the major and effective use of TA sections. We also are developing a plan to improve progression through the major and effective use of TA sections.

What are the Student Learning Objectives for your department or program(s)?

Economics, B.A.

- Students are able to provide a clear and compelling description of Economics and articulate their intellectual interests and potential professional goals relative to the field.
- Students regularly assess and refine their own competencies and accomplishments and are able to integrate and communicate their academic, co-curricular, experiential, and professional development skills as they relate to their intellectual and career goals.
- Students are able to interpret models of production, distribution, and consumption.
- Students learn to be critical consumers of economic information and are able to evaluate the merits and limitations of key theoretical perspectives.
- Students are able to analyze quantitative data using modern tools, including spreadsheets and statistical applications.
- Students are able to use analytical tools such as constrained maximization and marginal analysis, game theory, cost-benefit analysis, discounting, and class analysis to model the economy.
- Students can write about the economy in prose that will be understood by educated lay readers, decision-makers, and economists.

Experiential Goals

- All students will take part in team-based learning.
- Some students will have a capstone experience.
- Some students will study abroad.
- Some students will have a research assistantship with a faculty member (EURA).
- Some students will have internships related to the discipline (Co-ops).
- Jobs skills seminar for seniors, featuring alums.

Economics Department Graduate Student Learning Objectives:

- Students acquire competency in Economic History, Econometrics, Macroeconomics, Microeconomics, and Political Economy.
- Students achieve mastery of one branch of economic theory: Political Economy, Microeconomics, or Macroeconomics.
- Students achieve mastery of one field of economics, and competency in a second field of economics.
- Students acquire breadth of understanding of the economics discipline.
- Students achieve familiarity with inter-disciplinary approaches to economics questions.
- Students are able to conduct independent original empirical or theoretical research in a field of economics and to interpret and present the results of the research.