

Creating Research Groups in an Undergraduate Psychology Curriculum

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Research constitutes the backbone of any empirical discipline. However, at the undergraduate level, psychology students have the reputation of avoiding courses that involve quantification and actual research. In the past thirty years, over 70 articles about statistics and research methods have appeared in the journal *Teaching of Psychology*.

Typical, large research methods courses may be inappropriate for generating a positive attitude regarding research. Small-group research may ameliorate the situation. As Prince (2004) noted, meta-analysis has revealed that cooperation (versus competition) and collaborative work improve academic achievement, quality of interpersonal interactions, and self-esteem. When students work in a collaborative environment on research projects, it seems reasonable to predict that they will achieve academic success while enjoying the social nature of the research culture.

One can see an added advantage to the collaborative model of teaching research. When students enter their careers, the ability to work in teams is paramount for success (Landrum & Davis, 2004). It is also likely that students who are personally inculcated into the culture of research will respond more positively to empirical projects than will students whose first encounter with research involves large lectures and abstract content divorced from application.

Unfortunately, many undergraduate psychology programs incorporate little research into their curricula (Perlman & McCann, 2005) even though graduating seniors advise first year students to do research (Norcross, Slotterback, & Krebs, 2001). This lack of research-based curricula is nothing new, having been identified half a century ago (Buxton et al., 1952).

Although it may seem counterintuitive, one of the best ways to meet these challenges may be to immerse students deeply in the research environment. The Psychology Department at Ithaca College has developed a program that involves a well-defined continuum of courses that is quite research-intensive, culminating in three semesters of group research.

Description of College and Department

Ithaca College is a private, primarily undergraduate institution with about 5,900 undergraduates and between 200 and 300 Master's students. The Psychology Department is exclusively undergraduate with about 225 B.A. Psychology majors and 50 B. S. Applied Psychology majors. There are 12 tenure-line faculty. Psychology majors at Ithaca College complete seven semester-long courses involving statistical and empirical aspects of research during their four undergraduate years. These courses generally begin with the first course in their first year, a laboratory course accompanying the introductory course. Figure 1 presents a schematic diagram of the Ithaca College Psychology curriculum. Psychology majors complete 15 courses, with little choice among them. Students can (and do) take elective courses in psychology beyond those that are required (see Figure 1).

Ithaca College offers a second option for psychology students: they can major in Applied Psychology. Ironically, these students are not required to take Research Team. Further, they must take courses in Mathematics, Computer Science, Economics, Business, Accounting, and Communications; these disciplines provide the applications in the title of the major. The intent of this major historically was to prepare students for jobs in the business world. There is a 3 or 4 to 1 ratio of traditional psychology majors to applied psychology majors.

The unique feature of our program is the required-three semester commitment to a Research Team led by a single professor as part of the teaching load. The Research Teams span a variety of topics, as shown in Table 1, so virtually any student can find research to his or her liking.

Amid the positive aspects of this research program, there is a significant price the department pays. Because Research Teams are relatively small, (i.e., typically about a dozen students), the teams require considerable faculty resources. The department has to cover the required courses and,

because the Research Teams are small, needs several sections to accommodate all students in the major. Consequently, there is little flexibility in teaching schedules.

Furthermore, the department regularly faces difficulty placing all students on Research Teams because space limitations are a reality. There is literally a cap on how many students can join a given team because of room capacities based on fire codes. Beyond this, the faculty recognize the need to keep teams relatively small in order to promote close interpersonal interaction between faculty and students and among students. Each semester, a small number of students must defer joining a team for a semester due to space limitations; typically these are younger students (e.g., first semester sophomores).

Outcomes of the Research Team Program

Ithaca College psychology students learn early that the discipline is research-based, and the rigorous, empirical nature of the psychology major does not deter students.

Student Presentations

Some notable outcomes illustrate the fact that students embrace their research opportunities, all of which are entirely optional. Students regularly attend and present at two regional conferences, the University of Scranton Psychology Conference and the Eastern Colleges Science Conference and occasionally at others. Students also co-author and co-present their work at professional conferences, such as the annual conventions of the American Psychological Society, the Eastern Psychological Association, the New England Psychological Association, the Society for Research in Child Development, and the Society for Personality and Social Psychology.

During the 2005-2006 academic year, 30 psychology students presented their work at conferences. The range of projects is considerable, as shown in Table 2. The current listing plus work in previous years is on the Psychology Department's web site: <http://www.ithaca.edu/psychology/students/student-present.htm>.

This extensive productivity by the students has been fairly consistent over the past 15 years. The faculty in the Psychology Department have a shared vision of the value of this activity, so the culture of research has flourished among both faculty and students.

Independent Research Projects

After the students complete their required research, they often elect to continue their research experience through independent research project. Approximately 30 students elect to take this path during a given year. All of these projects are voluntary and reflect student interest rather than a mandate.

The Research Team experience obviously suits students given the number who continue after they have finished their requirement. In some cases, students continue to study the topic of their Research Team, but sometimes they venture into new areas.

Graduate School Acceptances

A final measure of the effectiveness of the curriculum is reflected in the acceptances of our students into graduate programs. Some choose to study psychology, but they show a diversity of paths. Naturally, many students pursue education in the helping professions like counseling, school psychology, and social work. But each year, a handful of students enter doctoral programs with a research emphasis. A listing of graduate acceptances appears on the Ithaca College Psychology web site: <http://www.ithaca.edu/psychology/students/graduate.htm>.

Such accomplishment would not be predictable from our students' academic profiles when they enter college. Ithaca College's Psychology majors are above average on the SAT, but not overwhelmingly so. The typical psychology student's SAT score is around 1050 or 1100. With such a student population, one might not expect to see so many proceed to graduate school. Given the priority that graduate programs place on research experience (*Getting in*, 2007), it seems reasonable to conclude that the research experience fosters their acceptances.

Conclusion

Social scientists know that empirical research is the fundament of our disciplines. In many instances, though, incoming students are more interested in the content of the discipline than in the methodology. The Ithaca College model inculcates students into a culture of research that complements the content.

Students have responded well, with upper level students serving as positive role models for beginning students. For example, on most teams, advanced students take lead roles on research projects and make presentations at conferences. Consequently, younger students have models to emulate. As a

function of the psychology curriculum at Ithaca College, students starting their Research Team experience take it for granted that psychology students conduct research, a recognition that is reinforced when they see what advanced students accomplish. They often express puzzlement about how one could be a psychology major without doing significant amounts of research. The overall effect of this research-intensive program, with group research as the centerpiece, is to attract a large number of majors whose accomplishments as undergraduate are impressive.

References

Buxton, C. E., Cofer, C. N., Gusstad, J. W., MacLeod, R. B., McKeachie, W. J., & Wolfe, D. (1952). *Improving undergraduate instruction in psychology*. New York: Macmillan.

Getting in: A step-by-step plan for gaining admission to graduate school in psychology (2nd ed.). (2007). Washington, DC: American Psychological Association.

Landrum, R. E., & Davis, S. D. (2004). *The psychology major: Career options and strategies for success*. Upper Saddle River, NJ: Pearson.

Perlman, B., & McCann, L. I. (2005). Undergraduate Research Experiences in Psychology: A National Study of Courses and Curricula. *Teaching of Psychology*, 32, 5-14.

Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93, 223-231.

Norcross, J. C., Slotterback, C. S., & Krebs, P. M. (2001). Senior advice: Graduating seniors write to psychology freshmen. *Teaching of Psychology*, 28, 27-29.

Table 1

The Current Research Teams in the Psychology Department at Ithaca College.

Research Team Name	Research Team Description
Human Motivation	This team investigates the impact of perceived judgments of responsibility for disease onset on person perception and behavioral response.
Cognitive Development	Two areas of focus are infant language and the impact of emotion on cognition.
Psychology of Humor	This team studies psychological aspects of humor, including factors that influence the appreciation of humor.
Psychology of Television and Other Media	This team conducts research concerning television and social cognition, especially as it relates to social and cognitive development in children.
Neuroscience	This team is designed to expose students to laboratory and research techniques in behavioral neuroscience.
Social Judgment	This team takes a social-personality psychology approach to studying how people make sense of their internal states, and how the sense they make affects their motivation and social judgments.
Clinical and Mental Health Research	this team revolves around broad issues of mental health and abnormal psychology, particularly as they apply to college students.
Developmental and Educational Psychology	This team focuses on qualitative and quantitative research to study development and learning and to evaluate educational programs.

Table 2

Titles of psychology student presentations at undergraduate research conferences in the 2005-2006 academic year.

Oral Presentations

How expectations affect perceptions of offensive humor
Speech-gesture synchrony in mother-to-infant word presentation
Infant looking behavior in synchronous vs. Asynchronous bimodal object sound
How much fruit is in froot loops? Effectiveness of a media literacy
Curriculum in improving children's nutritional knowledge
The role of speakers: gestures in supporting early word acquisition
A great schism: how differences between religiosity and spirituality are related to identity styles and anxiety
Effective teaching methods for foreign language acquisition and learning
The effect of language on infant looking behavior
Perceptions of offensive humor

Poster Presentations

Individual and confederate group effects on conformity
State of the union: red state and blue state identities predict
Stereotyping
A study of male student-athlete identities
College students in transition: contributions to identity
The interactive effects of emotions and ease of recall on predictions of behaviors of self and others
The effects of priming on humor responses
The serendipitous effects of uniform in a quasi-experimental study of anxiety
Exploratory study of prescription amphetamine use on a college campus
Part of this complete breakfast: an analysis of children's food commercials
That's not my pyramid! Nutritional content of foods advertised to different target audiences on television
Personality dimensions and perceived sense of humor
The role of context in violent humor
Beyond the written word: effects of regulatory fit on transportation and persuasion via narratives
Factors that influence reporting of socially undesirable behaviors
Seasonal congruence and its effects on transportation
Knowledge of media literacy and internet credibility among US college students
The effects of floral scents on cognitive performance, subjective well being, and physiological responses
The relationship between race, diabetes status, and the believability of health information sources.
The role of speakers' gestures in supporting early word acquisition.
Personality characteristics and humor
Cross cultural differences in the predictors of depression

Psychology Curriculum at Ithaca College

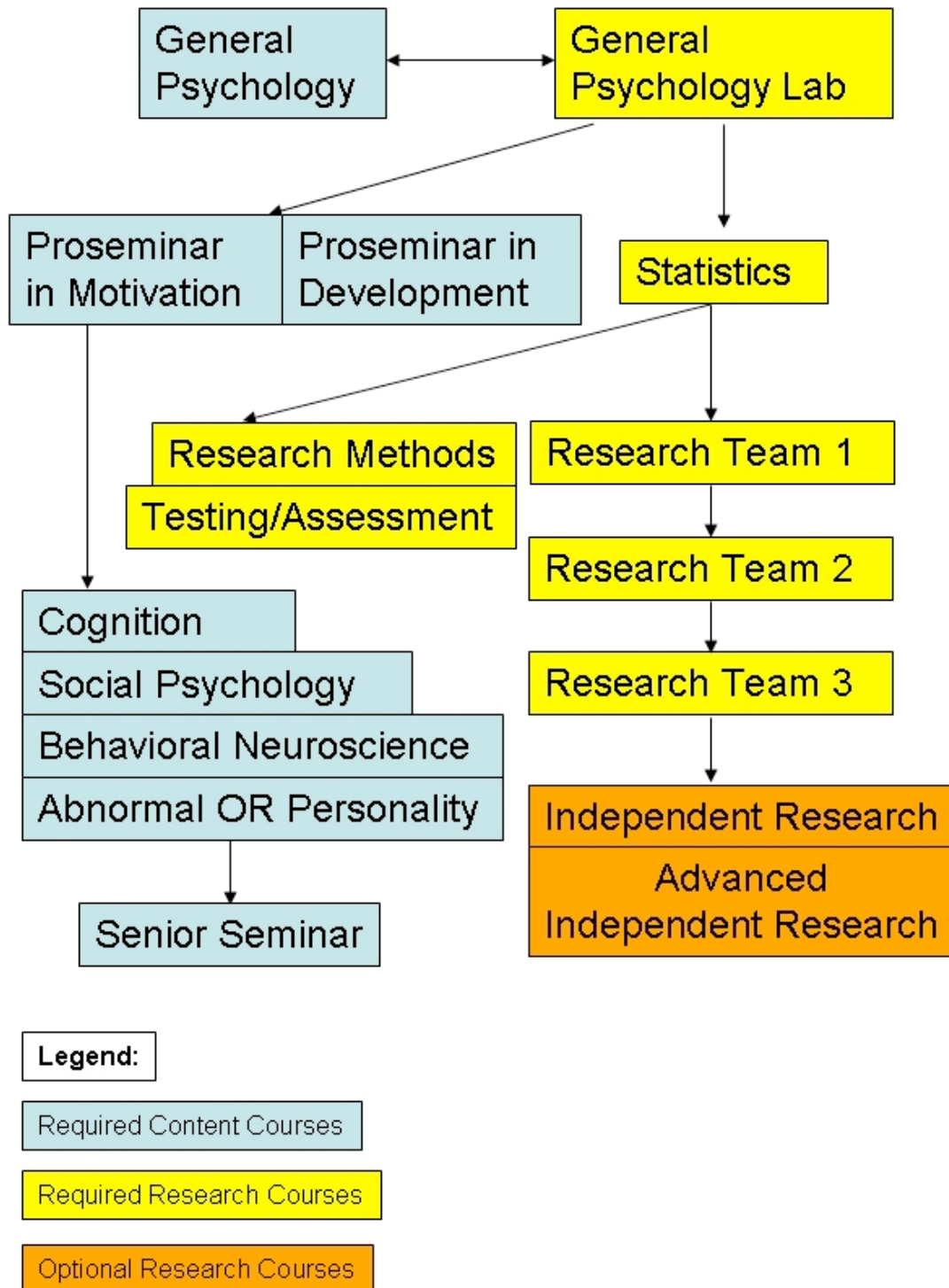


Figure 1. Psychology Curricula at Ithaca College