

**General Education in Research Universities**

**The Careful Beginning of a Big Idea**

**The George Washington University**

**Grant Number  
2001-6225**

**Interim Report  
May 24, 2002**

## **The Careful Beginning of a Big Idea The George Washington University**

### **Overall goals of the project:**

With the aim of enhancing the undergraduate academic experience, the GW Hewlett Project is a two-year process to create and implement courses that:

- Make central use of GW's Washington location and resources, and
- Employ an active-learning pedagogy that allows undergraduates to share in the excitement of inquiry and research usually experienced only at the graduate level.

This first year of Hewlett activity has reinforced the soundness and feasibility of the project goals: incorporating Washington-based, active-learning courses into the Columbian College of Arts and Sciences (CCAS) undergraduate curriculum. The crucial role that assessment will play in these courses has also become explicit early on, and it is clear to the Hewlett faculty that they can use assessment as a vital pedagogical tool.

After only one academic year of the project, grant activity has effected several striking changes:

- It has placed at center stage the charge that, as a research university, we should "reinvent" what we offer our undergraduates, and aim for an undergraduate academic experience richer and substantively different from what is available at non-research universities.
- It has fostered an atmosphere of pedagogic investigation and initiative in the Columbian College of Arts and Sciences, focusing on different constructive methods to more fully engage our undergraduate students.
- It has made it clear that regular pedagogic investigation is an absolute necessity if the changing needs of students are to be met, if faculty are to continue to develop as high quality, stimulating teachers, and if careful thought and long-range planning for curriculum change are to be possible.
- It has brought together a group of talented, enthusiastic faculty, many of them at the senior level, from diverse disciplines, to learn new methods, and share their collective experience; this has not only increased communication across the various Columbian School of Arts and Sciences disciplines, but has established a core group of faculty committed to innovative curriculum development and excellence in undergraduate teaching, and who are committed to sustaining the Hewlett initiative.
- It has inspired faculty in both CCAS and other schools of the university to develop new courses and programs that incorporate pedagogical strategies for enhancing student academic engagement, citing the Hewlett project as their model.
- It has brought GW faculty into fruitful contact with faculty, staff, and students from other institutions who are also exploring change in pedagogy and curriculum.

There is little doubt that the atmosphere that this project has created among participating faculty, an atmosphere of easy communication, of wide-ranging pedagogic analysis, and of carefully considered change, will quickly spread to the rest of the GW community.

**Specific goals:**

- 1. Prepare 15 Washington-specific, inquiry-based courses that fulfill general curriculum requirements in the Columbian College of Arts and Sciences, offered during the 2002-03 academic year.**

Fifteen Washington-specific, inquiry-based courses that fulfill part (or all) of the general curriculum competencies in the natural sciences, quantitative reasoning, humanities, social sciences, and creative arts will be offered during the 2002-03 academic year. Eight courses will be offered in the fall 2002 semester and seven will be offered in the spring 2003 semester (one of which will be a repeat of a Fall 02 course). (Descriptions of fall 2002 courses and a list of spring 2003 can be found in Appendix A.)

Soon after GW was awarded the Hewlett Foundation grant, in May 2001, faculty were invited to propose courses for this project. The Hewlett Steering Committee reviewed all the proposals and selected fifteen from among them. The instructors of these courses, the “Hewlett Fellows,” began their training in the Fall 2001 semester. The courses have been scheduled, advertised, and partially developed; the Hewlett Fellows will spend Summer 2002 developing and refining the course, creating the syllabus, researching Washington resources, and developing assessment measures. Throughout the summer, the Fellows will be receiving support from the Hewlett Steering Committee, the GW Office of Academic Planning and Assessment, and the GW Center for Instructional Design and Development.

Early in the fall semester, it became apparent that the magnitude of change that these courses would entail was great. After a year of training, listening to a series of informative and motivational speakers, and having countless discussions with their peers, faculty are very excited about developing their Hewlett courses.

- 2. Train the Hewlett Fellows to use inquiry-based pedagogy, to expand their knowledge and usage of Washington resources, and to develop appropriate measures to assess learning outcomes, instructional strategies, and student engagement.**

During the 2001-02 academic year, the Hewlett Fellows and Steering Committee met monthly. The two keynote speakers, Robert Thompson, Dean of Trinity College, Duke University and Shirley Kenny, President of SUNY at Stony Brook and Chair of the Boyer Commission on Educating Undergraduates at Research Universities, spoke forcefully and eloquently about the need to revamp and

invigorate undergraduate education, describing models from other schools. Barbara Duch, Director of University of Delaware's Institute for Transforming Undergraduate Education, gave a half-day workshop on how to prepare and present a problem-based learning course. Bernard Wood, the Henry Luce Professor of Anthropology at GW, described his experiences "Learning Not to Teach" in his inquiry-based Hominid Paleobiology graduate course. (A complete list of the events is in Appendix B.)

Each of the monthly meetings generated lively discussions about pedagogy, student engagement, assessment, and grading practices. However, the most exciting aspect was the group's gradual coalescing into a community of educators. The meetings became forums where members were comfortable sharing their classroom experiences, asking for, offering suggestions about different pedagogical tools and grading practices, and experimenting with new instructional technologies and pedagogies. A number of faculty started incorporating what they were learning into their current courses, and reported on their progress to the group.

While faculty have become more informed about the topics addressed in the monthly meetings, it is clear to all those involved that in developing these courses myriad other issues are raised, all of which require careful analysis. The challenge is both exciting and daunting.

Nina Mikhalevsky, Coordinator for Hewlett Seminars and Faculty Training, with the support of two graduate students, will assist the Hewlett Fellows in arranging their class visits to Washington locations. The graduate students will be supported by the Hewlett grant (wages) and by GW (tuition credits).

The proposal addresses the importance of assessment in the evaluation of the goals. During Summer 2002, while preparing their courses, each Hewlett Fellow will meet with Cheryl Beil, the Director of the GW Office of Academic Planning and Assessment, and one of the Co-Chairs of the Hewlett Steering Committee, to work out the details of the various types of assessment that particularly suits their course. Administering and interpreting the results of this regular assessment, and providing the Hewlett Fellows and Steering Committee with regular reports, will be the major task during the Fall 2002 and Spring 2003 semesters when the courses are in progress.

The yearlong training began in general terms, with two very motivating speakers and, as the year progressed, became more focused on the details of incorporating Washington resources, of PBL, and, in particular, of assessment.

**3. Establish a centralized resource that provides information about and support for pedagogic initiatives.**

The Hewlett Fellows and members of the Steering Committee include many of GW's most experienced and respected faculty. Their involvement in this two-year project, the information that they received from the various visiting experts, their close analysis of the methods and results of the assessment of the Hewlett courses, will serve to make them a very well informed and cohesive group.

The dissemination of information about pedagogic initiatives is already in place, albeit informally, at GW. Faculty in other schools at GW and in CCAS have approached members of the Hewlett Steering Committee to learn more about incorporating inquiry-based pedagogy in their courses. Moreover, based on the excitement generated about the Hewlett courses, the School of Engineering and Applied Science and the Elliott School of International Affairs have proposals that recommend including inquiry-based courses in their curriculum.

In addition, a comprehensive, detailed web site is in the process of being set up with the aim of providing easy access to all the information that an interested faculty member would need to develop such courses. Beside linking to the whole range of relevant sites, including sites at other universities involved in similar pedagogic initiatives, it will provide detailed information about the GW Hewlett courses, ranging from syllabi, lecture notes, and handouts, to student comments, assessment materials, and suggestions for further improvement. This web site, currently in its infancy, is at [www.gwu.edu/~oapa/hewlett.html](http://www.gwu.edu/~oapa/hewlett.html). We expect it to grow enormously over the next year and become an exciting resource for faculty.

## Appendix A:

### HEWLETT COURSES

All but the two large lectures (Astronomy 1.11 and Math 710) will be offered at the Mount Vernon Campus. The large lectures are capped at 75, the others at 25 or less (venue size restricts some even further). The 15 Hewlett courses may be used to satisfy some or all of the CCAS General Curriculum Requirements (GCR) in five of the seven competencies. The two GCRs not covered by Hewlett courses are the Literacy GCR and the Foreign Language/Culture GCR. The description of the courses below is found in the Fall 2002 course offerings.

#### Washington-Based Hewlett Courses Fall: 2002

The remarkable range of intellectual and cultural institutions in the nation's capital makes Washington, D.C. an exceptional setting for the work of a university. The Washington-based Hewlett Seminars seek to exploit the city's resources to introduce students to the liberal arts in ways that are engaging and challenging.

The Hewlett Seminars, supported by a grant from the Flora and William Hewlett Foundation, are highly interactive courses where students and faculty engage in a series of inquiry-based activities that take them beyond the traditional classroom to explore the resources of Washington, DC. Most of the seminars are small (less than 25 students), and all are taught by some of GW's best faculty. Each Hewlett seminar meets a Columbian College general curriculum requirement. Students may register for only one Hewlett seminar in the Fall semester. Hewlett courses are not open to students in the University Honors Program.

#### **ASTR 1.11: Introduction to Astronomy 1: Journeys into the University**

Instructor: Earl F. Skelton, Visiting Professor of Physics  
Natural Sciences GCR

*When I behold the heavens, the work of thy fingers, what is man that thou art mindful of him?* This question, recorded in the *Old Testament*, was asked by the ancient Hebrews as they contemplated the awesome heavens. From that time to the present, all peoples, and all religions, continue to ask: *Why are we here? What is the cosmos? Where does the universe begin and end?*

In modern times, we add some newer questions: *Are we alone? Can we travel backward or forward in time? What was there before there was time and space? When and how will the universe cease to exist?* All of these profound riddles about the cosmos will be addressed, as we journey together and learn what science presently knows and can answer.

This course will consider the breadth and scope of the known universe, and our place within it. In the first semester, our solar system will be studied: *How did it come into*

*existence? How does the Sun generate the energy that is necessary for all life on Earth?*  
We will discuss the planets and how they differ from comets, and asteroids.

All of this fascinating subject matter will be presented in an easy to understand, fun, and engaging manner. There will be viewings of the popular Carl Sagan's *Cosmos* series and similar videos, student visits to astronomy shows, exhibits at the National Air and Space Museum, among other interesting web-based ways of gaining insights into the universe around us.

Earl Skelton is a Visiting Professor in the Department of Physics. In 1999, he retired from research in order to pursue his true passion full time: *teaching*. Dr. Skelton is the "Patch Adams" of academia. His teaching philosophy is that he will do anything, within the law, to make learning fun and pleasurable.

**BISC 710.MV: Biology in the City I** (freshmen only)

Instructor: Terry Hufford, Professor Emeritus of Botany  
Natural Sciences GCR

The course introduces students to science through the process of discovery and the utilization of observation and information-gathering using the vast resources in Washington, DC. The topics that will be covered are: the nature of science and scientific inquiry/the biology of cells; the flow of matter and energy; and heredity. Sites that will be visited include the Potomac and Anacosta Rivers (each quite different in their water chemistry and biological populations), the local water supply reservoir, Rock Creek, and a variety of terrestrial sites. Students will then engage in a variety of laboratory investigations appropriate to the particular area being covered.

Professor: Terry L. Hufford is Professor Emeritus of Botany and a Distinguished Teaching Professor.

**ENGL 710.MV: Washington, DC: Literature, Politics and Culture** (*freshmen only*)

Instructor: Christopher Sten, Professor of English  
Humanities GCR

Washington, DC, has a rich literary history that reveals much about life in the nation's capital from early in the nineteenth century to the present. While some writings are of local interest and portray the lives of everyday citizens, many others engage large national issues and conflicts-slavery, the Civil War, the corruption of government by money and special interests, Black migration, Cold War politics, the imperial state. This course will focus on the work of several prominent American writers who engage these larger national issues-Frederick Douglass, Williams Wells Brown, Walt Whitman, Louisa May Alcott, Henry Adams, Willa Cather, Gore Vidal, and Robert Coover-and some who speak more directly about everyday life in the nation's capital-Jean Toomer and Marita Golden. Students will read, discuss, and present reports on these works and related subjects, and complete research projects, using local libraries and historical sites, on the life and writings of other Washington-based writers. The class will also take several field

trips to explore the many resources, especially museums and archives, of contemporary Washington having relevance to the course's principal themes.

Christopher Sten is Professor of English. He teaches American literature, with special interest in the American novel, modernism, ethnicity, the city, and the writings of Herman Melville.

**FA 710.MV: Monuments as Image? On Becoming an Artist**

Instructor: Jeffrey L. Stephanic, Associate Professor of Design  
Creative and Performing Arts GCR

This course will exploit the visual resources of the Washington Metropolitan Area by posing the problem of creating an on-line and physical exhibition of works of art relating to monuments and monumentality. Collaborating on discovering what is necessary to define, create and mount both an on-line and physical exhibition relating to the theme of “Monuments” is the focus of the course. Students with varying degrees of visual art expertise are encouraged to register. The emphasis is focused on the whole process of being an artist rather than on development of expertise with a particular medium.

Although all will be required to learn how to use the computer as a visual arts tool, any medium may be used for the exhibited works. All will contribute to the design of the exhibition, web site and promotional material. All students will be required to participate in: defining the theme Monuments; focusing the theme of exhibition; defining venues for promotion of project; designing on-line version of exhibition; and creating works of art and mounting physical exhibit

Jeffrey Stephanic is an Associate Professor of Design in the Department of Fine Arts and Art History. His artistic research currently focuses on digital printmaking and he is represented by Anton Gallery. A forthcoming print and multimedia exhibit at Anton Gallery will focus on the theme “Identity.”

**MATH 710.10: The Mathematics of Social Choice**

Instructor: Daniel Ullman, Professor of Mathematics  
Quantitative and Logical Reasoning GCR

There is a fascinating, rich, and not-widely-known theory of social choice that illustrates the way mathematical reasoning addresses problems of the real world. The problem of apportionment is a familiar example from the political arena where a mathematical treatment is available and where a theorem is known that asserts the impossibility of solving the problem subject to certain axioms about avoiding paradoxes. Another such problem is that of deciding elections when voters submit a list of their preferences. Also there is the theory of voting power in block voting schemes like our electoral college. In addition, we will explore several areas of mathematics, such as game theory and probability theory, that impinge on decision-making.

Student learning will be problem-based. Class time will be devoted to exploration of issues of social choice, with model problems devised to stimulate controversy and discussion. There will be lectures, group work, experiments, simulations, and debates. In addition, students will meet with those involved in elections, apportionment, and redistricting policy. The course is targeted toward students of the liberal arts. There is no mathematical prerequisite.

Daniel Ullman is Professor of Mathematics and current Chair of the Department of Mathematics.

**REL 710.MV: Religion and the Public Square**

Instructor: Harry Yeide, Professor of Religion  
Humanities GCR

Because Washington DC is the seat of national government, many groups have offices and staffs placed here with the primary goal of helping to influence legislation and public policy formation. Among them are the public affairs offices -- known by a variety of names -- of a wide variety of religious communities, all eager to find their place and voice their concerns in the "public square." The Constitutional separation of Church and State both encourages and sets limits to this type of activity. These offices differ from many other groups in forming their judgments on the basis of deeply held religious and moral convictions. Additionally, they generally see themselves responsible to educate their constituencies regarding important public issues. Often, those who staff these agencies are politically at some distance from the communities they represent.

This class will select several issues that seem important to class members. Different groups in the class will do preliminary research on these problems. This will be followed by research into the views being developed in religiously sponsored public affairs offices on those issues and the reasoning by which they arrive at those views. For comparison reasons, some attention will be paid to agencies that are not religiously based, but for which the selected issues seem important. This phase of the course will involve extensive interviewing as well as study of the publications from these offices. Using the selected cases, some insight should be developed regarding the degree to which these agencies can and cannot cooperate with one another. It is anticipated that this class will develop new knowledge about the activities of these offices and arrive at a deeper understanding of how the public can participate in national policy formation.

Harry Yeide is Professor of Religion. He has a special interest in the interface between the different religions and moral life. This interest has led him to do special work in Bioethics and in Peace Studies. Both of these interests in turn entail an interest in the formation of public policies in the United States.

**SMPA 710.MV: Democracy and the Development of Culture(s)**

Instructor: Patricia Phalen, Assistant Professor of Media and Public Affairs  
Social and Behavioral Sciences GCR

Critics blame the American mass media for being too liberal, too conservative, too biased, too invasive, too irresponsible and too passive. So which is it? Do the media create our culture or simply mirror it? Do they control political elections or facilitate them? What influence, if any, does the public have on the content of the mass media, and how do the media affect people's lives? Do we get the information we need to make informed decisions and work towards a better society, or are we all just victims of Hollywood and Madison Avenue? These are just a few of the questions we'll discuss in "Information, Democracy and Culture". Whether you intend to create media products or just consume them – you'll never look at news stories, sitcoms, crime dramas, Internet sites, talks shows or any other media product in the same way again.

Patricia Phalen has been at George Washington University for three years.

**SOC 710.MV: American Criminal Justice Philosophy: Myths and Realities**

Instructor: Charis Kubrin, Assistant Professor of Sociology  
Social and Behavioral Sciences GCR

Should criminal defendants be given more Constitutional rights? Do private attorneys provide better representation? How do lawyers' perceptions of their clients influence their work? What are the effects of the increased role of plea-bargaining in the court process? Is our court system just? American Criminal Justice Philosophy: Myths and Realities attempts to answer these questions. This course addresses the ongoing debate about what criminal justice is and ought to be in our society by concentrating on the process and decision-making that occurs in criminal courts in Washington D.C. Students will observe and study the court process at various stages including bail hearings, trials and sentencing hearings, as well as interview the key players involved such as prosecutors, defense attorneys, public defenders, judges, members of advocacy groups, and law professors at The George Washington University. Using evidence from observations and interviews, students themselves decipher the myths and realities of American criminal justice.

Charis Kubrin is an Assistant Professor in the Sociology Department. Professor Kubrin's research interests include neighborhood correlates of crime and violence, with an emphasis on race and violent crime. She has taught undergraduate courses including Introduction to Criminal Justice and Deviant Behavior and the graduate course, Race and Crime.

**Spring 2003 Courses**

**ANTH 710: Introduction to Anthropology**

Instructor: Bernard Wood; Anthropology, Hominid Paleobiology  
Natural Sciences GCR

**ASTR 2.11: Introduction to Astronomy II: Journeys Into the Universe** (large lecture)  
Instructor: Earl Skelton, Physics  
Natural Sciences GCR

**GEOL 710: Washington DC: The Land Before the City**  
Instructor: George Stephens, Earth and Environmental Science  
Natural Sciences GCR

**MATH 710.10: The Mathematics of Social Choice** (large lecture; repeat)  
Instructor: Daniel Ullman, Mathematics  
Quantitative and Logical Reasoning GCR

**PSC 710: International Relations in Central and Eastern Europe**  
Instructor: Sharon Wolchik, Political Science, International Affairs  
Social and Behavioral Sciences GCR

**SOC 711: Mr. Marx Goes to Washington: A Study of Class, Inequality and Poverty**  
Instructor: Daina Eglitis, Sociology  
Social and Behavioral Sciences GCR

**TRDA 710: The Uneasy Alliance: Government Support of the Arts During the Federal Theatre Project**  
Instructor: Leslie Jacobson, Theatre and Dance  
Humanities GCR

## Appendix B:

### HEWLETT PROJECT EVENTS

In addition to preliminary, planning meetings of the Steering Committee and informal, brown-bag meetings of the Steering Committee and Hewlett Fellows during the course of the Fall semester, the following events were held. All but the October 12 kickoff event were restricted to the Hewlett Steering Committee and Hewlett Fellows; the kickoff event was widely advertised across the campus and all CCAS faculty were invited.

- Trip to the University of Delaware, where the whole undergraduate curriculum has been converted into PBL and inquiry-based courses. Beil, Mikhalevsky, and Moses spent the day at the university, talking with PBL instructors from the sciences, humanities, and arts, visiting classes and talking with students, meeting with those involved in assessing the success of this pedagogy, and discussing with members of the administration the special resources and training required for PBL courses.
- September 21, 2001: Robert Thompson, Dean of Trinity College, Duke University: *Pedagogies of Engagement*  
Dean Thompson presented a forceful invitation to revamp and invigorate undergraduate education and provided an excellent introduction to the many details involved in any large-scale redesign of the academic program, from curriculum issues to faculty workloads. Thompson then focused on examples of pedagogy that promote student engagement including inquiry-based courses, PBL courses, and strategies for integrating undergraduate research into courses.
- October 12, 2001: (kickoff event) Shirley Kenney, President of SUNY at Stony Brook (and Chair of the Boyer Commission on Educating Undergraduates at Research Universities): *Reinventing Undergraduate Education: The New Agenda*  
In a thoughtful and thought-provoking talk, President Kenney charged research universities such as ours with providing our undergraduate students with an education that is substantially different from that provided at non research universities: one that is intellectually rich, academically challenging, and exposes students from the very beginning to the passion, excitement, and rewards of academic research.
- November 9, 2001: Barbara Duch, University of Delaware Institute for Transforming Undergraduate Education: *Introduction to PBL*. Duch offered a presentation of Problem Based Learning with specific examples and faculty participation. Duch also discussed the details of preparing and presenting a PBL course.
- December 7, 2001: Bill Koffenberger, Director of the Center for Instructional Design and Development, GW: *Incorporating Instructional Technology*  
A discussion of the various resources that the GW's Center for Instructional Design and Development had to offer the Hewlett Fellows as they develop their courses.

- February 22, 2002: (Teleconference) Tom Angelo: *Teaching and Assessing for Critical Thinking and Deep Learning*  
A discussion of the advantages of employing various types of assessment, with a focus on promoting and measuring critical thinking skills in students.
- March 8, 2002: Cheryl Beil, Director of the Office of Academic Planning and Assessment, GW: *The Nuts and Bolts of Assessment*  
A more detailed discussion of the various types of assessment that the Hewlett courses will employ: measuring student understanding of the course material, before, during, and after the course; measuring the effectiveness of the PBL pedagogy; measuring the relative suitability of PBL to various types of material (science, art, humanities), various class sizes, etc.
- April 5, 2002: Bernard Wood, Henry Luce Professor of Anthropology and instructor of a currently offered PBL course in Hominid Paleobiology, GW: *PBL --- Learning Not to Teach*  
A detailed description of a currently offered GW PBL course (in Hominid Paleobiology), with class handouts, PBL problems, student comments, etc.
- May 3, 2002: Nina Mikhalevsky, Director of Women's Leadership Programs, GW: *DC Resources* and PBL Student Panel (Guest speakers: Marya Annette McQuirter of the Humanities Council of Washington DC, who talked about the Washington D.C. Online project, and Sharon Widmayer of GW's Center for Instructional Design and Development)  
A discussion of the features, landmarks, and resources of Washington that could be easily and advantageously incorporated into the Hewlett courses, opportunities for student research growing out of the Hewlett courses to be published in the new DC Encyclopedia, a brief discussion on instructional design, and a conversation over lunch with students from the abovementioned GW Hominid Paleobiology PBL course.
- June 16 to 20, 2002: PBL Workshop in Baltimore  
Hewlett faculty and members of the Steering Committee will attend the conference and workshops on PBL.
- Early July 2002: Meeting to discuss the Baltimore workshop and determine whether there are any further resources that the Hewlett Fellows need while they prepare the details of their courses during the last two months of the summer.
- Fall 2002 semester: First 8 Hewlett courses offered. There will be regular brown-bag discussion sessions and dialogue on the list serve to monitor the courses as they progress, but the number of organized Hewlett meetings will be scaled back to allow the Fellows to concentrate on teaching.
- December 2002: Meeting, or meetings, of the Hewlett Fellows and Steering Committee to evaluate the Fall 2002 Hewlett courses.

- Spring 2003: Remaining 7 Hewlett courses offered. Regular meetings of the Hewlett Steering Committee to work on the Hewlett project report.
-