**To:** President Michael F. Adams

**Re:** DOCUMENT NUMBER: 2005.9.22.06

**Issue:** A proposal for an Undergraduate Certificate in Educational Psychology and Instructional Technology.

**Discussion:** None

**Action:** The vote was called and the proposal was approved.

Submitted by: _Rebecca R Macon_     _9.2t.05_
Rebecca L. Macon, Secretary          Date

☑ Approved
☐ Reconsider
☐ Vetoed (see attached explanation)
☐ Received

_M. F. Adams_     _10-6-05_
Michael F. Adams, President          Date

Attachment

April 27, 2005

To:    Dr. Arnett Mace

From:  Dr. Kathleen deMarrais (Interim) Associate Dean for Students, Curriculum and
       Accreditation

Re: Interdisciplinary Certificate Program in Educational Psychology and Instructional
Technology

Please find enclosed the original and two copies of the Undergraduate Level
Interdisciplinary Certificate Program as offered by the Department of Educational
Psychology and Instructional Technology.

The College of Education Curriculum Committee has met and approved this program for
the next level of review. If you should have any questions, please do not hesitate to get in
contact with me at 542-0360 or by email at kpd@uga.edu

Approved

Dean, College of Education

# INTERDISCIPLINARY CERTIFICATE PROGRAM

## I. Basic Information

**1. Institution:** University of Georgia
   **Date:** Tuesday, August 31, 2004
**2. College:** College of Education
**3. Department:** Department of Educational Psychology and Instructional Technology
**4. Level:** Undergraduate Level Certificate
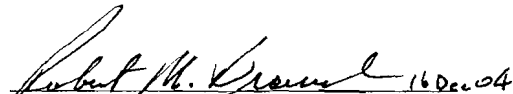**5. Proposed starting date:** Fall 2005

### 6. Abstract:

The integration of technological tools into the educational system as created a large demand for pre-service teacher training in the use of educational technologies. All teachers in the state are required to have some basic knowledge of the use of educational technologies. Rarely do they have substantial exposure to the full range of issues related to technology and society. The proposed certificate seeks to expand the undergraduate training of pre-service teachers to promote a more thoughtful and systematic view of the influence and use of technological tools in schools. This will include the analysis, design, development, implementation, and evaluation of technology-based products. Moreover, it will provide avenues for the investigation of the pedagogical implications of technological artifacts, and their part in a multicultural/democratic educational system. The sequence of courses proposed by this certificate addresses these objectives. These courses provided a comprehensive analysis of educational technologies, while requiring students to collaborate with schools and other organizations in implementing their educational products.
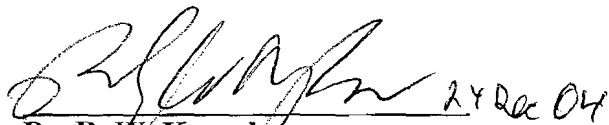
It is expected that a student who has completed this program will be more responsible, thoughtful, and effective in his/her use of educational technologies in the K-12 school.

### 7. Letters of support from academic unit heads:

The only unit affected is EPIT. The faculty in the Instructional Technology Program within EPIT has approved this program.


_(signature)_ 16 Dec 04
**Dr. Robert M. Branch**
Program Chair
Instructional Technology Program


_(signature)_ 2 4 Dec 04
**Dr. R. W. Kamphaus**
Department Head
Department of Educational Psychology
and Instructional Technology

_(signature)_
**Dr. Louis Castenell**
Dean
College of Education

**II. Response to the Criteria for All Programs**

**1. Program objective**
    **A. Purpose and objectives**
    To provide a certificate in instructional technology for pre-service teachers that encourages (1) practical and developmental knowledge of technology within a (2) framework of service to the community by working with practicing teachers solving pedagogical problems and a (3) global, multinational and multicultural perspective of technology integration. These objectives are in line with recent College of Education initiatives in multiculturalism and technology issues.
    **B. Interdisciplinary nature**
    The program and its courses will be housed in the Instructional Technology program within the Department of Educational Psychology and Instructional Technology. As a field, Instructional Technology appeals to all majors and pre-service teachers: it is recognized as an interdisciplinary field. Because of our special focus faculty with expertise in many areas in the college can contribute to their direction: multicultural education (Social Foundations of Education), technology literacy (Reading Education), cognitive science (Educational Psychology), and service-learning (Social Science Education).

**2. Need for the program**
    **A. Program necessity**
    Of the many developments in education, two of the most vital forces are those of emerging educational technologies and the presence of multiple cultures, nationalities, races, and ethnicities in the classroom. As technology breaks the boundaries of the classroom, reaching out to different states and countries, the school will become increasingly heterogeneous. Pre-service teachers must embrace technology and diversity as forces that have the power to shift the paradigm of education. Technology and diversity are cyclical currents. As technology increases outreach through distance education and collaboration, the school will encompass a more varied population of students. An increasingly diverse student base then requires the sensible use of technologies. Currently, only a small number of education majors are required to take a 2000-level course that introduces them to the use of computing in the classroom. This requirement does not offer comprehensive training to undergraduate, pre-service teachers on the complex interaction between technology and learning. The proposed certificate provides opportunities for students to learn a comprehensive set of developmental and analytical skills related to the role of technology in schools and society.

    **B. Additional information**
      1. The program will begin Fall 2005.
      2. After approval, the program will be fully implemented by the end of Fall 2005.
      3. First certificates will be awarded Spring 2006.
      4. Because many majors in the College of Education have open elective credits, it is expected that many will undertake this certificate program. During Fall 2005, eight students will participate in this certificate program as part of a Brazil-USA exchange program offered by the Department of Educational Psychology and Instructional Technology under a Fund for the Improvement of Post-Secondary Education program (FIPSE). We expect to award an average of 15-20 certificates per year.
      5. The introductory class (EDIT 2000) currently enrolls approximately 200 students per semester. We expect that approximately 10% of these students will demonstrate an interest in pursuing this certificate.

**3. Evidence of student interest**

Many students currently enrolled in the introductory course (EDIT 2000) have demonstrated interest in extending their knowledge of instructional technologies. The instructors report that approximately 2-3 students in every course session request information on upper level instructional technology courses.

Every effort will be made to recruit minority students to this program. In fact, because the program will be initially offered in collaboration with the Brazilian exchange program, a greater number of minority students are expected to participate.

**4. Curriculum**

    **1 & 2 Curriculum Outline and Existing Courses**

    The certificate is comprised of four core courses and one elective:

    **Core Course 1**: *Introduction to Computers for Teachers* [EDIT 2000, 3 credits]
    This course will explore technology and its educational applications for pre-service teachers, with an emphasis on integrating computer tools into classroom instruction. Students will focus on computer-based educational applications in the areas of instruction, text and data processing, multimedia, and telecommunications. Existing course.

    **Core Course 2**: *Introduction to Computer-Based Education* [EDIT 4150, 3 hours]
    The computer, modern technology, and its educational applications. Computer-based education in the areas of instruction, technology integration, multimedia, and new designs for teaching and learning. Philosophical perspectives on the role of modern technology in education. Existing course.

    **Core Course 3**: *Design and Development Tools* [EDIT 4160, 3 credits]
    Students will learn a variety of tools appropriate for computer-based development. These include graphics, media, and software development tools. Students will be required to write a contract for the specific tools and curriculum materials they choose to learn. Students will work independently learning computer-based tools. In addition, scheduled class time will allow students to self select workshops, collaboration with peers, and assistance opportunities with instructors. This class will employ a mixture of structured learning and independent learning experiences at the discretion of the student. Ultimate performance in the class will be evaluated using a complex rubric that focuses on the major application project that students construct independently. Existing course.

    **Core Course 4**: *Technology-Enhanced Learning Environments* [EDIT 5500, 3 credits]
    Students in this class will analyze issues in technology integration in the K-12 environment. Specifically, students will perform needs analyses, design and develop curriculum materials and lesson plans based on these needs, and learn to evaluate their own work as well as providing peer feedback to others. This course will require students to perform field-work in partnership with public/educational institutions, non-profit organizations, or any other appropriate agency to apply the concepts learn in this course, following a service-learning format. This partnership will develop technology solutions to challenges in adapting to diversity, learning styles, bridging the digital divide, and other relevant issues. Inherent in this course is the intent to develop lasting solutions and strategies that will have immediate as well as long term pedagogical impacts on teaching practice. Existing course.

Elective options (student will select one elective course):

**Elective Course 1**: *Multicultural Perspectives on Technology* [EDIT 4600, 3 credits]
Investigation of the policies, motivations, and beliefs surrounding the use of technology in educational systems around the globe. Students will learn to recognize, analyze, and benefit from different perspectives on the use and meaning of technology in educational contexts. Existing course.
**Elective Course 2**: *Instructional Design* [EDIT 4170, 3 credits]
Systematic procedures for designing, developing, evaluating, and revising instruction to meet identified goals and objectives. Existing course.

### 3. Identify model program
While a number of certificate programs exist in the field, a recognized and successful model is that of the Instructional Technology department at Indiana University-Bloomington [http://www.indiana.edu/~compendo/courses.html].

Table 1. *Comparison of certificate programs*

| Indiana University | University of Georgia |
|---|---|
| *Five core courses:* | *Four core courses:* |
| Technology introduction course | covered by EDIT 2000 |
| Survey of computer-based education | covered by EDIT 4150 |
| Technical issues in computer-based education | covered by EDIT 4160 |
| Computer-based teaching methods | covered by EDIT 4160/EDIT 5550 |
| Practicum in computer-based teaching methods | covered by EDIT 5550 |
| *One elective, choosing on from a variety of fields:* Multimedia, simulation, human-computer interaction, business technology, networking, computer art, music, etc. | *One elective, including:* EDIT 4600 EDIT 4170 |

### 4. Accreditation
No accreditation will be available through this certificate.

**5. Faculty resources**
**A/B. Faculty body**
Initially, all courses will be taught by Dr. Michael Orey and Gretchen Thomas. Others in the Department of Educational Psychology and Instructional Technology can teach in the program in the future.

**Dr. Michael Orey, Associate Professor**
**Degrees:**
B.S. Mathematics Education, Purdue University
M.A.Ed. Curriculum and Instruction, Virginia Tech
Ed.D. Curriculum and Instruction, Virginia Tech

**Specialty:**
Project-based learning, online/distance education, educational theories, blended learning

**Recent relevant (last five years) activity**
FIPSE-CAPES grant program with Brazil (Changing Perspectives: Technology Integration and the Multicultural Classroom) -- pre-service teacher exchange program between two US and two Brazil institutions (2003-2007).

**Projected responsibility and adjustment in assignment**
Will serve as the coordinator for the certificate. No adjustments will be necessary.

**Gretchen Thomas, Instructor**
**Degrees:**
B.S.Ed in Middle Grades Education, UGA
M.Ed. in Middle Grades Education, UGA
Ed.S. in Instructional Technology, UGA

**Specialty:**
finding ways of providing quality professional development for inservice teachers, assisting undergraduates in portfolio development, and working with students to design games with everyday software, like PowerPoint

**Projected responsibility and adjustment in assignment**
Will take on an additional load so that we can offer one additional course per semester.

# 6. Resources

## A. Available library resources

Current resources are sufficient. The library contains a number online and print journals in education that contain articles related to multicultural education, technology integration, and community service. Many online resources have also been identified.

## B. Instructional equipment

The College of Education hosts a number of high-end computer labs with both Macintosh and IBM-compatible computers that will sufficiently address the needs of our students, as evidenced by our experience with current technology-intensive courses.

# 7. Physical space

No additional space is necessary to accommodate the certificate courses. The computer laboratory in rooms 616 and 618, currently used to teach many of our computer-intensive courses such as EDIT 2000 and EDIT 4160 will continue to be used for this course. Based on our experience with many technology-intensive courses, students are able to make use of the two computer laboratories with ease to complete their projects and work in groups. EDIT 5500 and EDIT 4600 will be taught at the regular classroom setting or at a distance through existing (and currently used) online technology tools (e.g., WebCT and/or HorizonLive).

# 8. Expense to the institution

## A. Funding

## 1. Personnel

Funds for the design, development, and implementation of these courses are available from a four-year FIPSE grant awarded to the department of Instructional Technology in the Fall of 2003. Personnel funds directed towards this end total approximately $85,000 throughout 2003-2007.

Table 2. *Budget for the establishment of certificate program*

| Year | 2003 | 2004 | 2005 | 2006 |
|------|------|------|------|------|
| **Phase** | Analysis | Design and development of EDIT 4600 | First group of students take courses | Evaluation of courses |
| | Design of course – EDIT 4600 | | | EDIT 2000 offered every semester |
| | Cross list course – EDIT 5500 | | | EDIT 4150 offered every semester EDIT 4160 offered every year |
| | Approval of courses cross-listing and certificate | | | EDIT 4170 offered every year EDIT 4600 offered every year EDIT 5550 offered every year |
| **Funds** | $20,000 | $20,000 | $40,000 | $5,000 |

## 2. Operating costs

Four courses are regularly offered in the department [EDIT 2000, 4150, 4160, 4170]. EDIT 4600 will initially be offered by Dr. Michael Orey in the Fall of 2004 as a special topics seminar, and again in the Fall of 2005 as an undergraduate course. EDIT 5500 will be offered in the Fall of 2005 by Dr. Orey as well. All costs will be covered through the FIPSE grant program.

**3. Capital outlays**
The existing infrastructure will be used to cover the course offerings for this certificate program.

**4. Library acquisitions**
No library acquisitions will be necessary.

**5. Total**
Both EDIT 2000 and 4150 will continue to have the same number of sections. EDIT 5500 will be taught once a year. Therefore, the costs of running this program amount to an additional 2 sections per year. The cost of offering two additional sections per year [EDIT 4160 and 5500] will be managed within the existing EDIT 2000 course offering budget. The bottom line is that there will be no additional costs for offering this program.

|  | First Year | Second Year | Third Year |
|---|---|---|---|
| **(1) Personnel** | $0 | $0 | $0 |
| **(2) Operating Costs** | $0 | $0 | $0 |
| **(3) Capital Outlays** | $0 | $0 | $0 |
| **(4) Library Acquisitions** | $0 | $0 | $0 |
| **(5) TOTAL** | $0 | $0 | $0 |

**B. Student support**
Fellowships in the amount of $4,000 are available for the first eight students participating in the Brazil-USA exchange program as part of the FIPSE grant project. Subsequent support will not be needed.

9. **Commitment of financial support**

**A. Sources of additional funds**
The department intends to apply to similar international exchange grant projects with other countries to continue to offer international opportunities for those participating in this certificate program. Other programs such as the North-America and European grant programs, which function in a similar manner, offered by FIPSE are being targeted.

**B. Long-range plans**
It is a departmental goal to establish this program as a certificate that K-12 administrators look for when interviewing teacher applicants. As such, a continual cycle of improvement will be used to assure the quality of the program and its appeal.

10. **Administration**

Students will be admitted to the program. Only students who are admitted to other university programs can receive this certificate. The certificate will be issued to those students who successfully complete the courses aligned in this program proposal.