

**NEW UNITS OF INSTRUCTION, PUBLIC SERVICE,
AND RESEARCH AT PUBLIC UNIVERSITIES**

Submitted for: Action.

Summary: This item requests approval of four degree programs and one institute at four public universities.

Action Requested: That the Illinois Board of Higher Education approve the following:

Illinois State University

- Doctor of Education in Curriculum and Instruction in the North Suburban Region

Southern Illinois University Carbondale

- Bachelor of Science in Workforce Education and Development in the Central Region

University of Illinois at Chicago

- Bachelor of Arts in Public Health in the Chicago Region

University of Illinois at Urbana-Champaign

- Bachelor of Science in Agricultural Leadership and Science Education in the Prairie Region
- Institute for Genomic Biology in the Prairie Region

STATE OF ILLINOIS
BOARD OF HIGHER EDUCATION

**NEW UNITS OF INSTRUCTION, PUBLIC SERVICE,
AND RESEARCH AT PUBLIC UNIVERSITIES**

By statute, the Illinois Board of Higher Education is responsible for approving new on-campus and off-campus units of instruction, organized research, and public service, and units of administration proposed by public university governing boards. The Board's approval criteria, defined in rules adopted for administering the statute, address university mission, academic control, faculty and staff, support services, financial resources, student demand, curriculum, statewide need, and congruence with Board policies and priorities. In addition to the approval criteria in rules, each new program was reviewed for its contributions to the goals of the *Illinois Public Agenda for College and Career Success*, which sets forth new priorities to guide Illinois higher education. Staff recommendations are based on analyses of application materials and responses to staff questions.

Illinois State University

Proposed Program Title: Doctor of Education in Curriculum and Instruction in the North Suburban Region

Projected Enrollments: Illinois State University has projected an enrollment of 10 students in the proposed program in the first year, which will grow to 30 students by the fifth year.

Background

Illinois State University (the University) requests authority to offer the Doctor of Education (Ed.D.) in Curriculum and Instruction in the North Suburban Region. This Ed.D. program is based entirely on the existing program that is offered on-campus, maintaining the scope, sequence, and integrity of the program. School District 211 had contacted the University in the past about arranging an on-site Doctoral program in Curriculum and Instruction, but for a variety of reasons, those plans never made it past conversations between the parties. The district is now anxious to begin the program, and the Curriculum and Instruction Department (the Department) is in a position to implement it at the district site. The Department of Educational Administration and Foundations (EAF) at Illinois State University will offer courses within the program since some of the Curriculum and Instruction Ed.D. requirements include statistics courses offered only in EAF. In addition, the school district would like some leadership courses in the concentration area, which EAF would also provide. The Department of Educational Administration and Foundations is committed to offering these courses at the scheduled time. This ongoing partnership between the two Departments has allowed the University to offer a number of off-campus Ed.D. and Ph.D. programs in Curriculum and Instruction and EAF.

Need

1050.30(a)(6): A) The unit of instruction, research, or public service is educationally and economically justified based on the educational priorities and needs of the citizens of Illinois; B) The unit of instruction, research, or public service meets a need that is not currently met by existing institutions and units of instruction, research, or public service.

The University has articulated the need for this doctoral program quite succinctly. It was crafted out of a stated need. District 211 contacted Illinois State University about offering a quality doctoral program on site. They have, as part of their mission, a plan to provide graduate education to their practicing teachers in order for them to become teacher leaders within their district to provide the best possible education for the district's students. The benefits also include salary increases with the additional graduate coursework. Teachers in this program are currently employed by the district. However, the district has a requirement for further graduate study in order to remain employed. They have met that initial requirement by earning master's degrees. This is the next logical step in their graduate work. Completion of the doctorate will possibly open other employment opportunities within the district. Therefore, the need for the program in the North Suburban Region is real.

The Illinois Public Agenda for College and Career Success

The program will address Goals 1, 2, and 3 of *The Illinois Public Agenda for College and Career Success* in various ways. For instance, it will expand opportunities for teachers in School District 211 to obtain advanced education through a partnership with the school district. Program participants will enhance their school leadership expertise, and thus, enhance the learning environments for school children throughout the district. It will address the achievement gap in the state by increasing the number of degrees and the educational attainment of Illinois residents. Because classes will be provided in the workplace to allow students to remain fully employed while completing the doctoral degree, scheduling classes after work, and also using distance education technology in appropriate courses, will help minimize travel costs for students. Both of these will meet the college affordability criterion of the *Illinois Public Agenda for College and Career Success*. Therefore, this will be a benchmark for meeting the *Illinois Public Agenda for College and Career Success* criterion for providing "high quality credentials to meet economic demand." There will be ongoing education and professional development of teachers in the school district, which will enhance the learning environment for all students in the district. These teachers may move into leadership positions in other schools in Illinois, thus utilizing their expertise to enhance other educational environments.

Comparable Programs in Illinois

As earlier noted, School District 211 contacted Illinois State University to explore the possibility for a Curriculum and Instruction doctoral program to be offered on-site. The most recent similar, but not identical, program offered from the University was an Educational Administration and Foundations Type 75 Administrative program, and it was successful. The Illinois Board of Higher Education (IBHE) degree program inventory shows that there are no similar doctoral programs in the North Suburban Region currently approved for that particular region. Although other Chicago-area institutions (Loyola University of Chicago and the University of Illinois at Chicago) offer Doctor of Education degrees in that same CIP code, neither is approved to offer that degree, and there are no Notices of Intent (NOIs) for such a program at this time.

Mission and Objectives

Criterion 1050.30(a)(1): A) The objectives of the unit of instruction, research, or public services are consistent with the mission of the college or university; B) The objectives of the unit of instruction, research, or public service are consistent with what the unit title implies.

Illinois State University was founded as a state teacher training institution. Its teacher education graduates still comprise the largest single category of graduating seniors. The University's mission statement and its strategic plan, *Educating Illinois 2008-2014*, stress the University's mission to serve the citizens of Illinois and beyond. The University's core value of "public opportunity" assures students access to educational opportunities through a wide range of educational programs.

In the Graduate Catalog (2010-2011), the mission statement includes the following information:

"The Graduate School seeks to encourage qualified undergraduates to pursue graduate study, to foster in each graduate student a spirit of inquiry and a quality of scholarship or artistic excellence consistent with the highest traditions in graduate work, and to prepare graduates who are able to assume the professional and scholarly responsibilities of educated persons in a free society." (p. 5)

This proposed program is a doctoral program consistent with the University's mission. It is designed to produce graduates who will assume the professional and scholarly responsibilities of educated persons in curriculum and instruction. In this case, the professional and scholarly responsibilities learned as a result of completing the program will benefit students within the district.

Curriculum and Assessment

Criterion 1050.30(b)(1): A) The caliber and content of the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum and consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives, and appropriate academic record keeping.

1050.30(a)(2): the design, conduct, and evaluation of the unit of instruction, research, or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.

Admission

Admission requirements for the doctoral program are clearly stated in the University's catalog. Prospective candidates must have a minimum cumulative grade point average (GPA) of 3.0 on a 4.0 scale for either the last 60 hours of undergraduate coursework or any previous work in a master's program. International students must have a Test of English as a Foreign Language (TOEFL) score of at least 79 on the Internet-based test (iBT), 213 on the computer-based test, or 550 on the paper-based test. The minimum acceptable International English Language Testing

System (IELTS) band score is 6.5. Students must submit their professional resumes and three signed letters of recommendation from persons who know the applicants in a professional capacity. The three letters must document academic ability and professional performance. At least one of these recommendations should be from a person in a position to comment specifically on the applicant's ability to undertake advanced academic study. In addition, prospective candidates must provide an academic writing sample consisting of one of the following: a single-author published article or conference paper completed within the last five years; a critical review (not less than three pages) of representative professional literature on a topic of interest; a critical analysis (not less than three pages) of a journal article on a topic of interest; and a chapter or relevant section of a thesis. Finally, applicants must submit official transcript(s) from each higher education institution attended; official Graduate Record Examination (GRE) scores; and official TOEFL/IELTS scores (if applying as an international student).

Curriculum

Candidates of this doctoral program will systematically examine trends, issues, theories, and/or policies that have or will impact teacher education. Candidates will engage in written and verbal interaction to expand the knowledge base related to teacher education and/or curriculum and instruction. This interaction includes: critically interpreting scholarly works; designing research methodology and collecting data; analyzing and synthesizing research; and understanding research integrity and responsibility. Candidates demonstrate ability to work both individually and with others, contributing to a learning community through shared problem solving and decision making.

Requirements for graduation from this program include 66 hours of coursework (15 hours in the core, six hours of foundations, 15 hours in the area of concentration, three hours of professional practice, 12 hours of research courses, and 15 hours of dissertation research.) A written comprehensive exam must be passed at the end of the coursework. A dissertation committee is comprised of at least three members from within the department and may include additional internal or external committee members at the department's discretion. All committee members must have terminal degrees, and the majority of members must have full graduate faculty status at Illinois State University. A successful dissertation proposal hearing is followed by the completion of the dissertation. A defense of the dissertation is evaluated by the committee. The doctoral program is designed to prepare researchers and practitioners for curriculum and instruction roles in colleges or universities as well as the public and private sector. Students in this off-campus program are currently employed in the school district and will most likely remain so following receipt of the Ed.D. This degree will provide them with the expertise to become teacher leaders within their district, will enhance their salary, and will open up other employment opportunities within this school district and others in Illinois. The plan for the sequence of courses will allow for students to be finished in three to five years. The time required for completion of the dissertation will vary from student to student. All students will have the opportunity to finish their coursework and dissertation within the department-established eight-year limit. Courses will be taught utilizing a variety of teaching formats including face-to-face, blended/hybrid format, and completely distance learning. Scheduling of each course will depend on what works well within students' schedules in a given semester or summer. Course schedules, including methods of delivery, will be established one year in advance.

Program Assessment

According to the application, assessment models were developed by graduate faculty in the Department of Curriculum and Instruction to evaluate the learning objectives as described in the program standards. They are categorized using a system provided by the National Council for Accreditation of Teacher Education (NCATE). For this program, the assessments include the following: 1) Content: Grades in the core courses (content is defined as the course content) - Individual students will be assessed using their own core course grades. Core course grades will be gathered to observe group performance in core courses; 2) Content: Dissertation (content is defined as research) - The dissertation is assessed using an established rubric. It is acknowledged that there will be components unobserved in the rubric due to the varied nature of individual students' dissertations; 3) Pedagogy: Curriculum project (completed in C&I 576) - A curriculum project will be completed in C&I 576 (Contemporary Curriculum Theory and Design). The project is in the form of a reflection paper with specific requirements designed by the faculty instructor for which an established rubric is implemented; and 4) Professional Practice: Professional Practice Experience (C&I 598) - The professional practice experience is designed to be applicable to an individual student's experiences and intentions for dissertation. The faculty member mentoring the student for the professional practice will evaluate the student using an established rubric. Review of the program will be conducted in a number of ways. The ongoing review of the Curriculum and Instruction Doctoral program for NCATE accreditation purposes ensures an external review of quality. Student Learning Outcome Assessment Plans are reviewed by the Assessment Advisory Council, with guidance by University Assessment Services. The Process to Review Academic Assessment Plans (PRAAP), established in 2005, ensures that all degree programs have active student learning outcome assessment plans used to improve student learning. Assessment plans include multiple performance measures gathered from a variety of key stakeholders including students (all classes must conduct student evaluations at least annually and most are done every semester and summer), alumni (through the Alumni Surveys conducted by the University Assessment Office and via advisory councils) and, when appropriate, employers (also via surveys and advisory councils).

A three-year progress report will be required of the program. This report is reviewed by the Office of the Provost, the Academic Planning Committee, and the Administrative Affairs and Budget Committee of the Academic Senate. Each degree program is reviewed through the University's ongoing program review process. The program review process is critical and constructive and is designed to help an academic unit identify the strengths and weaknesses of its degree programs. At the same time, the review process encourages the development and maintenance of high-quality academic programs that are administrated efficiently and that are consistent with the University's mission. An off-campus program is reviewed at the same time as the comparative on-campus degree program. A series of questions specific to an off-campus program is included in the program review self-study guide lines.

Facilities (space, equipment, instructional materials)

Criterion 1050.30(a)(4):A) Facilities, equipment, and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support high academic work in the unit of instruction, research, or public service are available and maintained; B) Clinical sites necessary to meet the objectives of the unit of instruction, research, or public service; C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research, and public service, are conveniently available and accessible, and can be maintained.

For its proposed program, the University has given the assurance of having made provisions for facilities suitable for instruction with the commitment and contributions of School District 211, which requested this program be offered in the North Suburban Region. Up-to-date instructional technologies are available on-site in the District's classrooms and computer labs that will support this program. In addition, the University has significant resources for conducting distance education, including Blackboard/Sakai for asynchronous and Elluminate for synchronous instruction. These resources and others are currently used to support the Ed.D. program offered on campus. As needed, courses for the program will be delivered in a face-to-face, blended, or online format.

Library

The full range of services available to students in the program includes on-campus library resources, as well as online access to the Illinois State University Milner Library. New students will be provided an extensive orientation to computer and technology skills necessary to be successful in the program.

Faculty and Staff

Criterion 1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research, or public service are met; B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities; C) The involvement of faculty in the unit of instruction, research, or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which are directly assigned to the unit of instruction, research, or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

Illinois State University has identified policies that ensure faculty and other academic professionals hired for the proposed program have the appropriate training, credentials, and other related qualifications to support its proposed Doctor of Education in Curriculum and Instruction program. These individuals have earned terminal degrees in the field, and they have experience in classroom practices.

Based on their curriculum vitae, faculty members of the program are very active in research and scholarship in the field of curriculum and instruction, teacher education, and bilingual/bicultural education. They have published many journal articles, books, and book chapters. In addition, several members serve in leadership capacities on professional associations in the discipline, including on editorial boards. All of these indicate that the number and qualifications of the existing faculty members are sufficient to support the proposed program.

Fiscal and Personnel Resources

Criterion 1050.30(a)(5): A) The financial commitments to support the unit of instruction, research, or public service are sufficient to ensure that the faculty, staff and support services necessary to offer the unit of instruction, research, or public service can be acquired and maintained; B) Projections of revenues necessary to support the unit of instruction, research, or public service are based upon supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or government grants and contracts.

The University has given the assurance that no new state appropriations are required to support the delivery of the doctoral program in the North Suburban Region. The school district is covering all costs of instruction through their district budget. It should also be added that Illinois State University has a long history of fiscal stability and accountability. Given the funding model used to support this proposed program, there is no fiscal risk to the University. Indeed, the University has given the assurance that benefits to the University are great because the collaboration will afford an opportunity to strengthen relationships with a school district that not only provide many opportunities for student teachers, but is also one of the larger feeder districts for incoming freshman students. The program will also provide opportunity for the University faculty to interact with practicing teachers. The University is known to be diligent in developing and sustaining programs that support the mission of the University as articulated in *Educating Illinois* and that promote the Illinois Board of Higher Education's (IBHE) *Illinois Public Agenda for College and Career Success*.

Accreditation and Licensure

1050.30(b)(3): Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

1050.50(a)(1) Three years after approval of a new program, the institution shall provide a program progress report to the Board as part of the institution's annual report. The third year progress report shall describe the institution's performance in meeting program objectives and show where any improvements are necessary. The placement of a program in voluntary temporary suspension will not negate the requirement of submitting a third year progress report.

1050.50(a)(2)(c) Requirement for programs in which State Licensure is Required for Employment in the Field: In the case of a program in which State licensure is required for employment in the field, a program can be found to be in good standing if the institution is able to provide evidence that program graduates are eligible to take the appropriate licensure examination and pass rates are maintained as specified in the objectives of the unit of instruction. If there is no such evidence, the institution shall report the program as flagged for review.

Illinois State University's teacher education programs are currently accredited by the National Council for the Accreditation of Teacher Education (NCATE), and all of the teacher certification programs are approved by the Illinois State Board of Education (ISBE). NCATE accreditation is no longer limited to only teacher certification programs. The accreditation now encompasses all education programs offered by departments, schools, and/or colleges of education. As a result, the existing Ed.D. in Curriculum and Instruction will participate in the NCATE review in 2011-2012 for the first time. If the proposed program is approved by the Illinois Board of Higher Education (IBHE), it will be covered by the NCATE accreditation. In

addition, the University's accreditation by The Higher Learning Commission (HLC) covers all its active degree and certificate programs.

Program Information

Criterion 1030.30(b)(2)(A) The information the institution provides for students and the public shall include the following: (i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; (ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, and cancellation and refund policies; (iii) Student rights and responsibilities; (iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; (v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; (vi) Evidence of arrangements for the transfer of courses of credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; (vii) A statement of the institution's most recent graduation rates as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS); and (viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. (B) The information listed in the subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.

Illinois State University has published materials available for students that provide information on degree programs, program requirements, and other information on the completion of degrees within the University. The University's cancellation and refund policies are fair and reasonable, and its publications include accurate statements about its accreditation and about limitations on transferability of earned credits to other institutions. Information regarding the program and any other matters relating to the undergraduate programs are on the program's website: <http://www.coe.ilstu.edu/c/i/undergraduate/programs/elem.html>.

Staff Conclusion: The staff concludes that the Doctor of Education in Curriculum and Instruction program proposed by Illinois State University meets the criteria to implement the Board of Higher Education Act (110 ILCS 205) as set forth in the Board of Higher Education administrative rules (23 Ill. Adm. Code 1050.30), and the Illinois Board of Higher Education policies pertaining to assessment and accreditation.

Southern Illinois University Carbondale

Proposed Program Title: Bachelor of Science in Workforce Education and Development in the Central Region

Projected Enrollments: Southern Illinois University Carbondale has projected that enrollments in the Bachelor of Science in Workforce Education and Development will grow from a cohort of 25 students in the first year to 90 students in the fifth year. Also, it has projected that approximately 25 degrees will be awarded in the first year and approximately 75 degrees will be awarded annually from the second year onward. The program will enroll students who have completed at least an equivalent of an associate degree program from community colleges.

Background

Southern Illinois University Carbondale (the University) requests authority to offer the Bachelor of Science (B.S.) in Workforce Education and Development in the Central Region to cohorts of qualified students. The program is designed to prepare its students for careers in the field of human resource development (HRD) who will work in careers such as instructional designers, curriculum instructional writers, and instruction and learning specialists. The program is for students who have already completed the equivalent to an associate degree at Lincoln Land Community College and other community colleges in the Central Region, and who are unable to participate in similar programs currently offered on the University's campus and in the Southwestern and North Suburban Regions. The three programs currently offered by the University enrolled 802 students in 2009 and awarded 541 degrees in fiscal year 2009. The University offers similar programs on military bases. Over the years, the program has graduated over 19,000 military personnel and civilians in various locations.

The University first offered a Bachelor's degree program in Workforce Development in 1973 under the name of Vocational Education Studies. In 1993, the name of the program and the name of the department changed to Workforce Education and Development.

The University plans to offer this program in response to significant job growth in Illinois in occupations related to healthcare, information technology, transportation and logistics, and manufacturing, as well as the high student demand for the program in the three higher education regions where it is currently offered. A total of 37 prospective students, who responded to the University's survey to determine student need for the program in 2011, indicated their interest in enrolling in this program if it is offered in the Central Region.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically justified based on the educational priorities and needs of the citizens of Illinois; B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

The 802 enrollments in 2009 in the University's three existing bachelor's programs in this field testify to the strong student demand for the proposed program in Illinois. State and national occupational data support the University's experience regarding the high student interest in the field and job growth for human resource development professionals. For example, the United States Department of Labor Bureau of Labor Statistics has reported in the 2010 Edition of the *Occupational Outlook Handbook*, that in 2008 through 2018, occupations related to human resources, training, and labor relations are expected to add almost 200,000 jobs, which is more than a 22 percent growth rate. Mirroring this growth, but at a much higher rate, the Illinois Department of Employment Security (IDES) has projected that jobs related to HRD occupations will grow by almost 40 percent between 2008 and 2018, which equals approximately 750 jobs. It is expected that college graduates will have the best employment opportunities during this period.

As the United States population increases, while at the same time a larger share of adults seek educational services, demand for human resource development workers will increase. Entry level jobs will be filled by new college graduates with the appropriate training and education while experienced and/or better educated HRD personnel will fill higher level jobs.

The Illinois Public Agenda for College and Career Success

The proposed B.S. in Workforce Education and Development will address Goals 1 and 3 of *The Illinois Public Agenda for College and Career Success*. Goal 1: “Increase educational attainment to match the best-performing U.S. states and world countries” will be addressed by offering this program in the Central Region where no similar program is currently offered to meet the educational needs of place-bound prospective students who have completed the equivalent of an associate degree in appropriate fields of study.

Goal 3: “Increase the number of high-quality post-secondary credentials to meet the demands of the economy and an increasingly global society” will be addressed by enrolling qualified students, educating them, and awarding them the degree to address the state’s workforce and economic development needs. As indicated in the “Background” section above, since 1973, when the University first offered a similar program, over 19,000 degrees were awarded by the University in similar programs.

Comparable Programs in Illinois

Currently, no similar program at the baccalaureate level in workforce education and development is offered in the Central Region. The University currently offers the same program on-campus and also in the Southwestern and North Suburban Regions in Illinois.

Mission and Objectives

1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university; B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.

The Bachelor of Science in Workforce Education and Development is to be delivered using a cohort and Analyze, Design, Develop, Implement, and Evaluate (ADDIE) model. The curricular delivery mode is a blended approach, including face-to-face courses, online courses, and independent study courses. While the online courses will be delivered in a half-semester format, independent study courses will be delivered in a 16-week semester format. It is expected that the Workforce Education and Development Department Chair and the Off-Campus Degree Program Manager will make regular site visits to this program to be sure that the program curriculum, policies, procedures, and implementation are in a manner consistent with similar programs currently offered in the three higher education regions.

Objectives of student learning for this program are to prepare students enrolled in the program to:

- Understand the historical, philosophical, psychological, sociological, and legislative foundations of workforce education;
- Analyze and understand workplace performance problems;
- Design, develop, and implement solutions to workforce performance problems;
- Evaluate the implementation of solutions to workplace performance problems using the Kilpatrick Four-Level evaluation model; and
- Investigate career opportunities in the field of human resource development and create appropriate documents that demonstrate student competencies.

The mission, goals, and objectives of this program are congruent and supportive of the University's mission and priorities.

Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content to the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives and appropriate academic record keeping.

1050.30(a)(2): The design, conduct, and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.

Admission Requirements

Admission requirements for this program consist of the following: a minimum of a 2.0 grade point average (GPA) on a 4.0 scale from an accredited college or completion of an associate degree in an appropriate academic major; at least two years of work experience in an occupational specialty or career field; and career goals consistent with the content of this program. The applicant may substitute one year or 18 semester hours of supervised work experience in an occupational specialty for two years of documented work experience.

Curriculum

The curriculum of the B.S. in Workforce Education and Development consists of a minimum of 121 semester hours of which 60 semester hours are from general education courses, as well as courses to complete the associate degree which meet the University's general education requirements, 36 hours for the major, and 18 to 30 hours that may be awarded for appropriate two to four years of work experience. These requirements are very similar or the same as the requirements for similar programs currently offered by the University on campus and in the two higher education regions.

The curriculum provides for students in the program an opportunity to select one of four options in Business, Marketing, and Computer Education; Family and Consumer Science; Health Careers; and Technology Education. Within each option, the student may pursue different specialized career tracks such as Instruction and Learning Specialist, Curriculum Developer-Instructional Systems Designer, Human Resource Specialist, and Evaluation and Quality Specialist. Each career track is supported by a set of appropriate technical courses at the 300 and 400 levels. For example, the Evaluation and Quality Specialist track courses include: Occupational Analysis and Curriculum Development, Workforce Education Needs Assessment, Assessment of Learner Performance, Instructional/Professional Internship, and Quality Control I and II. Also, there are courses designed to support each of the four options in the program.

Curriculum of the program includes a required Capstone Experience for each student to complete through an internship for three to six semester hours. The internship is designed for each student to gain additional experience performing duties aligned with the specific competencies gained in the program, including those related to the option selected and career track chosen. Each intern is to be supervised by a worksite supervisor who will submit an evaluation of the student's demonstrated ability at the end of the internship.

Assessment of Student Learning Outcomes

Assessment of student learning outcomes in this program will be accomplished using tests and examinations in courses and specific projects, reports, or research papers to determine the student's level of success in each course. In the WED 460: Occupational Analysis & Curriculum Development course, for example, students will complete projects based on their technical area to show achievement of the course's objectives. Additionally, students must complete and pass two written tests in the course. In the WED 382: Career Development course, students are required to examine trends, issues, roles, and the required competencies in the human resource development field. In addition, each student will complete an individual skills summary report. Each report or project will be evaluated by the appropriate faculty member responsible for the course. A chart submitted with the proposal summarizes the number of tests and reports, papers, or projects to be completed by each student enrolled in courses for this program.

Each student will complete three to six hours of internship in an organization closely related to his or her career plan and/or career track selected. The internship is to give students an opportunity to demonstrate their ability to apply the competencies studied in the program. Evaluation by each student's worksite supervisor of the student's strengths and weaknesses is to be an integral part of the student learning outcomes assessment.

Program Assessment

Consistent with the Illinois Board of Higher Education (IBHE) staff requirements, the University will submit to the IBHE a progress report on the Bachelor of Science in Workforce Education and Development at the end of the third year of operation. The report will summarize key areas of accomplishments by the faculty and any remaining challenges and how each challenge will be addressed. In addition, the program faculty will participate in the University's eight-year program review process to assess the program using multiple measures including evaluation of faculty teaching in the program by students, the level of faculty research and scholarship, awards and honors, retention and graduation rate of students in the program, and the level of alumni and employer satisfaction with the program. Also, the faculty will use measures such as the percent of graduates employed in occupations closely related to workforce education and development or human resource development. A summary of the program review, including the program's strengths and weaknesses, as well as steps to be taken to improve the program, will be submitted by the University to the IBHE with summaries of other programs reviewed in the same cycle.

Facilities (space, equipment, instructional materials)

1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high quality academic work in the unit of instruction, research or public service are available and maintained; B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service; C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.

The relatively new Center for Workforce Development (the Center) in Springfield is located on the Lincoln Land Community College campus where this program will be based in the Central Region. The Center is managed by the University and the Department of Workforce Education and Development, which will be responsible for this program. The Center has office space and dedicated classrooms for this program, and it has more than enough facilities and equipment for this program. Enough funds have been budgeted for the program, including the needed facilities, services, and equipment at the Center.

Library

The University currently offers the B.S. in Workforce Education and Development on campus and in two higher education regions in the state. The proposed program and the existing programs have essentially the same needs and requirements. As a result, very significant resources, including library resources, instructional technology, and to some extent faculty and staff to support this program are already available and adequate to support this program. Over 20 electronic, academic journals that will support this program already exist at the University, in addition to appropriate online databases such as: *Academic Search Premiere, Credo Reference, Business Source Complete, Education Abstract, ERIC, and PsychINFO*. The journals are available electronically 24 hours a day to faculty, staff, and students.

Technology and Instructional Resources

The Department of Workforce Education and Development has offered programs similar to the proposed program for 38 years, and over the years it has stayed on top of the cutting-edge technology used to deliver the program. The resources include Internet access and T-1 to each smart classroom on campus and in the Center for Workforce Development, with significant band width to meet the needs of the Department and this program. Faculty members are to be provided with Dell computers, individual printers, and webcams that are used for videoconferencing. Also, the program will have access to a multimedia lab and a webcast studio, which are great resources for students in this program to learn the state-of-the arts in the profession. One staff member will provide technical support for the face-to-face classes on weekends.

Faculty and Staff

1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met; B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities; C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

A full-time faculty member will be hired when the program is approved to oversee the day-to-day operation of this program in the Central Region. In addition, eight full-time tenured or tenure track faculty will support this program on a part-time basis as needed. They include the Interim Dean of the College of Education and Human Services, the Department Chair of Workforce Education and Development, and the Department's Off-Campus Degree Program Manager. Also, there are two highly qualified faculty members in the Department with expertise in human resource development and assessing learning performance, as well as human resource development and understanding the adult learners. They have been at the University since 2005.

Fiscal and Personnel Resources

1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained; B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

No new state resources are needed to establish this program because this program will be offered in the Central Region based on a cost recovery plan which depends on the tuition and fees paid by students. It is expected that students will pay approximately \$225.00 per credit hour. To meet the needs of this program, it is projected that the program will cost approximately \$173,363 in the first year, increasing to \$194,874 in the fourth year. In addition, existing resources that currently support the same programs offered on campus and in the two higher education regions will also support this program. The resources include library resources, the Department's support staff, and instructional technology.

Accreditation and Licensure

1050.30(b)(3) [applicable only to units of instruction]: Appropriate steps have been taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

Reporting Requirement (Board Policy, April 2002): Programs in which state licensure requires specialized accreditation for students to obtain professional licensure, but which have not yet achieved accreditation, will undergo full review and report to IBHE every three years until accreditation is achieved.

There is currently no specialized accreditation or certification for degree programs in human resource education and development. However, the University's existing campus-wide accreditation by The Higher Learning Commission (HLC) will cover this program if it is approved.

Program Information

1050.30(b)(2) [applicable only to units of instruction]: The information which the institution provides for students and the public accurately describes the unit of instruction, including its objectives, length, residency requirements if any, schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies, student rights and responsibilities, and such other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. Such information shall be available to prospective students prior to enrollment.

Information about Southern Illinois University Carbondale's Bachelor of Science in Workforce Education and Development, including a detailed description of the curriculum, admission requirements, tuition, fees, and other cost information as well as University and graduate school policies, will be published on the University's website: www.siu.edu. Comparable information about the program will be published in hard copy in the University's Undergraduate Catalog. Similar information may be available from the College of Education and Human Services or the Department of Workforce Education and Development upon request.

Staff Conclusion: The staff concludes that the Bachelor of Science in Workforce Education and Development program proposed by Southern Illinois University Carbondale meets the criteria to implement the Board of Higher Education Act (110 ILCS 205) as set forth in the Board of Higher Education administrative rules (23 Ill. Adm. Code 1050.30), and the Illinois Board of Higher Education policies pertaining to assessment and accreditation.

University of Illinois at Chicago

Proposed Program Title: Bachelor of Arts in Public Health in the Chicago Region

Projected Enrollments: The University of Illinois at Chicago has projected that enrollments in the proposed Bachelor of Arts in Public Health will grow from 20 students in the first year to 100 students in the fifth year. Also, it has projected that 20 degrees will be awarded in the second year and 80 degrees in the fifth year.

Background

The University of Illinois at Chicago (the University) requests authority to offer a Bachelor of Arts (B.A.) in Public Health in the Chicago Region. Students apply to the program after attaining 60 hours of coursework and matriculate in the B.A. program as juniors. The proposed program has two tracks: the Professional Track, which is for students who will seek employment in public health and related fields after graduation, and the Academic Track, which is for students who plan to pursue advanced studies at the graduate level or in professional schools. The interdisciplinary program is designed to contribute to addressing the current and future crisis related to pervasive inequities and disparity in the health of the public in not only the Chicago area, but also regionally and nationally. The inequities and disparity are most acute in areas populated primarily by ethnic minorities such as Latinos and African Americans. This program is designed to respond to the recommendation of the United States Bureau of Health Professions of the Health Resources and Services Administration that “An adequate supply of well-prepared public health professionals is essential to an effective public health system in America.” This program will build upon the strengths and successes of the University’s existing Master of Public Health, which enrolled 397 students in Fall of 2009, and two doctoral programs in public health, as well as other existing health science professions/programs, and liberal arts programs. If approved, the program will be housed within the School of Public Health, which is accredited by the Council on Education for Public Health. Although offering baccalaureate programs in public health is a relatively recent approach, in 2009, 12 accredited schools of public health in the United States already offered baccalaureate programs, and they met or exceeded their enrollment targets.

To increase the probability of success of this program, there has been a concerted effort to galvanize the collaboration and partnership of over 20 organizations to date, including community organizations that will work with the School of Public Health to implement this program. They have developed special programs aimed at widely increasing the pool and competitiveness of applicants from diverse ethnicity and backgrounds because it is expected that graduates with diverse backgrounds would be interested in serving diverse communities. Together, the partners plan to implement effective programs such as recruitment, pre-public health education, research and training, mentoring, counseling, facilitation of retention strategies, conducting public health assemblies, all year and summer enrichment, and academic and public health activities. The partner organizations include a number of academic and administrative units at the University, in addition to the Health Careers Opportunity Program for sixth through twelfth grade students, which is partially supported by Illinois legislative funds, Chicago State University, the City Colleges of Chicago - Wright College, Humboldt Park Community of Wellness, Puerto Rican Cultural Center, and the statewide Area Health Education Centers Network Program. Possible future partners with the program are Oakton Community College, College of Lake County, Prairie State College, as well as outreach to returning veterans and Native American students.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically justified based on the educational priorities and needs of the citizens of Illinois; B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

The Bachelor of Arts in Public Health is created in response to three distinct current important trends related to inequities and disparity in access and quality of health services in the Chicago area and in most other parts of the state: the need to revitalize and expand the workforce in the relevant occupations and the documentation that public health is one of the top five academic majors that entering college students are interested in pursuing.

The Institute of Medicine of the National Academies concluded in its 2003 report authored by G. Rosenstock and L. Hernandez that “keeping the public healthy required not only a well-educated public health workforce but also an educated citizenry.” It is recommended in the report that “all undergraduates should have access to education in public health” in order to be prepared to understand emerging public health issues, analyze options for addressing the issues, and provide the needed financial and political support needed to address them.

In their publication, “*Confronting the Public Health Workforce Crisis: ASPH [Association of Schools of Public Health] Statement of the Public Health Workforce*,” Rosenstock, et al, note that the public health workforce must confront emerging communicable diseases, prevent environmental hazards, address chronic diseases, and assist communities in preparing for disasters. Despite increasing public health challenges, the trained public health workforce-to-populations ratio has been declining for decades. Growing student demand to enroll in undergraduate and graduate programs in public health is a positive sign.

The Illinois Department of Employment Security (IDES) projections for 2008 to 2018 indicate significant growth in employment in fields closely related to public health. The annual projected growth varies from a minimum of 1.0 percent to 2.5 percent. Examples of the public health occupations include: Medical and Health Service Managers, Substance Abuse/Behavioral Disorders Counselors, Survey Researchers, Health Educators, Social and Human Service Assistants, and Technical Writers. Related to these, the social assistance industry in local government employment is projected to grow by three percent annually. Finally, according to the United States Bureau of Labor Statistics, the occupation of public health manager, which is likely to benefit directly from graduates of bachelor’s programs in public health, is expected to grow much faster than the national average for all occupations through 2014.

The Illinois Public Agenda for College and Career Success

The proposed program will address Goals 1 and 3 of *The Illinois Public Agenda for College and Career Success*. Goal 1: “Increase educational attainment to match the best-performing states and U.S. world countries” will be addressed by recruiting and educating students from all groups, including those that are typically underrepresented in higher education. To increase the probability of the students succeeding academically, a number of additional support programs/services are planned and will be implemented when this program is approved.

Goal 3: “Increase the number of high quality post-secondary credentials to meet the demands of the economy and an increasingly global society” will be addressed by recruiting, educating, and graduating this program’s students to increase the number of Illinoisans with high quality credentials. It is expected that graduates of the program will come from diverse communities in the state, and they are expected to return to their communities to help reduce the existing inequities and disparity in access to health services in the state, particularly in the Chicago area.

Comparable Programs in Illinois

Only Northern Illinois University currently offers a B.S. in Public Health, and it enrolled 287 students in Fall of 2009. Additionally, four related programs are offered in Illinois: a B.S. in Community Health at Chicago State University, a B.S. in Environmental Health at Illinois State University, a B.A. in Health and Wellness at Northeastern Illinois University, and a B.S. in Community Health at the University of Illinois at Urbana-Champaign. These five institutions offer programs with specified areas of emphasis related to public health. The programs are more narrowly focused, (*e.g.*, public health education), and generally do not address the full array of disciplines and challenges in the public health arena. The University currently has the only fully accredited School of Public Health in Illinois. With accreditation comes the requirement to offer degree programs in at least the five basic disciplines of public health.

Mission and Objectives

1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university; B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.

The Bachelor of Arts in Public Health is designed to educate its students to be capable of, for example, systematically examining biological, environmental, cultural, behavioral, historical, economic, and political factors that mitigate health. Graduates of the program will be equipped with an array of skills that can be applied to many forms of inquiry, analysis, scientific and moral reasoning, and practice. The array of skills is consistent with the recommendations of the Council on Linkages Between Academia and Public Health Practice. Graduates who complete the Professional Track may seek employment in public health as communicable disease investigators, public health educators, program coordinators, information specialists, and other roles commensurate with their skills. The goals and objectives of this program are consistent and supportive of the University's mission and priorities.

The overarching goals and objectives of this program in public health are to produce graduates who will:

- Rise to the challenge of understanding the world in a nuanced way by expressing a broad world view and an expansive view of health;
- Be informed, attuned, and energized advocates of health and exercise individual responsibility to effect positive change;
- Demonstrate a variety of skills, particularly skills in critical and analytical thinking;
- Communicate effectively both orally and in writing with a variety of audiences;
- Be sensitive and astute observers;
- Be committed to being educated consumers of health information; and
- Apply skills and tools acquired to an array of roles in the realm of employment that contribute directly or indirectly to public health.

Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content to the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives and appropriate academic record keeping.

1050.30(a)(2): The design, conduct, and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.

Admission Requirements

Typically, admission to the program requires that an applicant successfully completes 60 semester hours of pre-public health undergraduate coursework including: public health prerequisite courses PUBH 100: Health and the Public, PUBH 110: Public Health and Global Societies, and PUBH 120: Public Health & the Study of Disease and Epidemics with a grade of "B" or better in each course. Applicants should have a grade point average (GPA) of 2.75 on a 4.0 scale. The same admission standards apply to transfer students. Each applicant must indicate in his or her application whether the preference is for the Professional Track or the Academic Track of the curriculum.

Curriculum

The curriculum for the program has a strong liberal education component organized around three principles related to inquiry and intellectual judgment, social responsibility and civic engagement, and integrative and culminating learning. It has six major themes that will be revisited throughout the duration of the program. The themes are: Health as a Moral Endeavor, which involves exploring the moral importance of health and healthcare and encompassing individual and societal commitments and obligations; Health Equity, which pertains to having equitable access and the means to resources to attain one's full life potential; Life Course Perspective, which encompasses the cumulative, evolutionary, pre-generational, prenatal, and life events and circumstances that influence health at any one point in time; One Health [Human-Animal-Environment], which involves the inextricable relationship among animal, human, and environmental health as determined by, e.g., evolutionary biology, human behavior, and environmental phenomena; Cultural Relevance, which is exploring the lens through which life events are experienced and interpreted and through which meaning is ascribed; and Local/Global Impact, which involves the appreciation for the global systems that influence the processes, dynamics, and activities of the world's populations, and health as a multi-faceted state shaped within contexts such as biology and culture.

The curriculum for the B.A. in Public Health consists of at least 120 semester hours comprised of 60 hours of pre-public health courses, including nine hours of prerequisite public health courses; 33 semester hours of required core courses that every student in the program must complete; three hours of Public Health Fieldwork to support the Professional Track; 12 to 15 hours from selective courses to support the students' areas of focus; and 12 semester hours from elective courses at the 100, 200, and 300 levels, six semester hours which require approval, and six semester hours that are unrestricted. The 33 hours of 300 or 400 level required core courses

consist of vital public health courses such as Health Equity and Health Disparities; Ecologies of Health and Modern Life; Critical Thinking in Public Health; Health Systems; Health Policy; Health Literacy; Using the Public Health Tool Box; Historical and Contemporary Public Health Challenges I and II; and Baccalaureate Project in Public Health.

The program is to be assisted by more than one advisory committee consisting of a variety of stakeholders who represent different aspects of public health. One such committee was formed in order to incentivize Latino student interest in the program by involving a number of Latino educators and community leaders. Other groups will be convened to respond to specific needs of the program, such as the public health fieldwork. To address this aspect of the program, it is envisioned that preceptors and site coordinators representing relevant agencies and professionals associated with public health will constitute a critical fieldwork council.

Assessment of Student Learning Outcomes

To conduct the assessment of student learning outcomes in the program, the Program Director will be assisted by an advisory committee composed of a broad representation of stakeholders to advise faculty and staff in the program with particular attention to community engagement and fieldwork experiences. In addition, the Program Director will work with the Program's Evaluation Committee, which will consist of representatives of faculty, students, practitioners in public health, and an external evaluator. After the first two-year cycle of the program, the Program Evaluation Committee will set measurable targets for the program such as entry GPA, rates of student retention, graduation rates, relevant job categories, rates of employment, and enrollment and completion of post graduate education, including professional schools in health fields. Other measures of student academic success in the program will include student grades and the quality of the student's fieldwork.

Program Assessment

Consistent with the Illinois Board of Higher Education (IBHE) staff requirements, the University will submit to the IBHE a progress report on the Bachelor of Arts in Public Health at the end of the third year of operation. The report will summarize key areas of accomplishments by the faculty, any remaining challenges, and how each challenge will be addressed. In addition, the program faculty will participate in the University's eight-year program review process to assess the program using multiple measures including student evaluation of faculty teaching in the program, the level of faculty research and scholarship, awards and honors, retention and graduation rate of students in the program, and the level of alumni and employer satisfaction with the program. Also, the faculty will use measures such as the proportion of graduates of the program that are enrolled or who have successfully completed post-graduate and professional programs, and the percent of graduates employed in occupations closely related to public health. Statements by the Council on Education for Public Health (the Council), the accrediting agency for public health, on the quality of this program when the Council evaluates the School of Public Health will be taken into consideration in this program's assessment. A summary of the program review, including the program's strengths and weaknesses, as well as steps to be taken to improve the program, will be submitted by the University to the IBHE with summaries of other programs reviewed in the same cycle.

Facilities (space, equipment, instructional materials)

1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high quality academic work in the unit of instruction, research or public service are available and maintained; B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service; C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.

No special equipment and/or laboratories are needed for this program. The existing classrooms and other facilities to be used by the program are functionally equivalent to others in the School of Public Health. Office space for faculty and staff will be standard office space available in the School of Public Health and the College of Liberal Arts and Sciences.

Library

The School of Public Health has established access to relevant journals, databases, and other academic resources that have been reviewed by library faculty and deemed adequate to support this program and the different certificates and degree programs through the doctorate level offered in the School of Public Health.

The list of textbooks that will support this program covers more than two pages. In addition, six primary and secondary databases, as well as numerous existing electronic journals, films, and documentaries are more than enough to support this program. According to the library faculty members, additional audiovisual materials may be needed, which will cost approximately \$4,700. This amount has been included in the program's budget.

Technology and Instructional Resources

Smart classrooms equipped with current and up-to-date equipment and software, including Blackboard, which is widely used in the University, will be used in this program. There is no need for additional instructional technology for the program at this time.

Faculty and Staff

1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met; B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities; C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

Sixteen faculty members with strong and appropriate academic qualifications will be responsible for this program, and each of them will be involved in teaching at least one course in the program. All of them have doctoral and/or J.D. degrees, except one who has a master's degree and extensive experience in health and healthcare advocacy. The faculty specialties encompass many areas including: epidemiology and infectious diseases, health policy and administration, community health sciences, environmental and occupational health sciences, law and public health, and literature and medical education. To strengthen the capability of some faculty members and others who will support this program, the program will create a faculty mentoring program that will capitalize on the talents of existing master teachers in the School of Public Health. Potential mentees in the program will include community practitioner partners, recent alumni, adjunct faculty members, departmental affiliates, young faculty members, and doctoral candidates.

The B.A. in Public Health program is human resource intensive because of its emphasis on action learning and community-engaged participatory learning pedagogies for its students. To make the components of the program achievable, several core staff (some shared with other units) will support the program, including the Program Director, Program Coordinator, pre and post matriculation Academic Advisors, a Fieldwork Coordinator, a Student Affairs Advisor, and a Research Assistant.

Fiscal and Personnel Resources

1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained; B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

No new state resources are needed to establish the Bachelor of Arts in Public Health. The program will be supported by some of the existing resources in the School of Public Health and generated tuition funds. There is no need for a new facility to house the program, as existing facilities are adequate to meet the need of the program. It is projected that the budget for the program will grow from \$411,140 in the first year to \$706,006 in the fifth year of operation. Between \$39,370 and \$43,467 of the budget per year will be allocated for supplies, services, and equipment. The total budgets may increase or decrease depending on future student demand for the program.

Accreditation and Licensure

1050.30(b)(3) [applicable only to units of instruction]: Appropriate steps have been taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

Reporting Requirement (Board Policy, April 2002): Programs in which state licensure requires specialized accreditation for students to obtain professional licensure, but which have not yet achieved accreditation, will undergo full review and report to IBHE every three years until accreditation is achieved.

The School of Public Health (the School) will be responsible for this program. It has been accredited by the Council on Education for Public Health since the mid-1970s. The accreditation extends to all degree programs in the School that meet the requirements of the Council. However, because baccalaureate programs in public health are relatively new, the Council is in the process of determining the requirements for baccalaureate programs. It is expected that the proposed program will be included in the School's self-study document that will be submitted to the Council for the next accreditation visit.

There is currently no certification or licensure in public health.

Program Information

1050.30(b)(2) [applicable only to units of instruction]: The information which the institution provides for students and the public accurately describes the unit of instruction, including its objectives, length, residency requirements if any, schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies, student rights and responsibilities, and such other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. Such information shall be available to prospective students prior to enrollment.

Information about the University of Illinois at Chicago's Bachelor of Arts in Public Health, including a detailed description of the curriculum, admission requirements, tuition, fees, and other cost information, as well as the University and undergraduate policies, will be published on the University's website: www.uic.edu. Comparable information about the program will be published in hard copy in the University's Undergraduate Catalog. Similar information may be available from the School of Public Health upon request.

Staff Conclusion: The staff concludes that the Bachelor of Arts in Public Health program proposed by the University of Illinois at Chicago meets the criteria to implement the Board of Higher Education Act (110 ILCS 205) as set forth in the Board of Higher Education administrative rules (23 Ill. Adm. Code 1050.30), and the Illinois Board of Higher Education policies pertaining to assessment and accreditation.

University of Illinois at Urbana-Champaign

Proposed Program Title: Bachelor of Science in Agricultural Leadership and Science Education in the Prairie Region

Projected Enrollments: The University of Illinois at Urbana-Champaign has projected that approximately 45 students will enroll in the first year of the proposed Bachelor of Science in Agricultural Leadership and Science Education, and it is projected that this number will grow to 70 students by the fifth year.

Background

The University of Illinois at Urbana-Champaign (the University) requests authority to offer and grant the Bachelor of Science (B.S.) in Agricultural Leadership and Science Education degree in the Prairie Region. The B.S. in Agricultural Leadership and Science Education is sponsored by the College of Agricultural, Consumer, and Environmental Sciences (ACES). Undergraduate and graduate programs in Agricultural Education have a long history at the University of Illinois, dating back to the 1950s. Agricultural Education has had administrative homes over the years in the College of Agriculture, the College of Education, and most recently, the College of Agricultural, Environmental, and Consumer Sciences (1995- present).

When the College of Agriculture was reconfigured in 1995 to become the College of ACES, the freestanding Agricultural Education unit was moved to the Department of Human and Community Development in the College of ACES. The Agricultural Education major was then modified to comprise two concentrations within the major of Agricultural and Environmental Communications and Education (AECE). The AECE major included three concentrations: 1) Agricultural Leadership Education; 2) Agricultural Education; and 3) Agricultural, Consumer, and Environmental Sciences Communication. The latter concentration was recently approved by the Illinois Board of Higher Education (IBHE) in December of 2010 to become a separate degree program major (Agricultural Communications), which is a joint program offered by the College of ACES and the College of Media.

The departure of the Agricultural Communications program from the AECE major creates a unique opportunity for the growth and maturation of the academic programs in agricultural education. Thus, two changes are proposed: 1) the creation of a new degree major in Agricultural Leadership and Science Education; and 2) as outlined in the accompanying proposal, the relocation of the Agricultural Education Program from the Department of Human and Community Development to the College of ACES Office of Academic Programs, where it will serve the entire College through its interdisciplinary academic, research, and outreach programs. Relocating the Agricultural Education Program to the College of ACES Office of Academic Programs will provide the program with greater visibility in its interdisciplinary, College-wide role, and will better serve College faculty who are all engaged in agricultural education as they teach students in the College. The Department of Human and Community Development will continue to maintain its strong programs, including the Human Development and Family Studies major.

The proposed Agricultural Leadership and Science Education program will require specific courses currently offered in the AECE major, under the Agricultural Education (AGED) rubric. The AGED rubric will be maintained under the new degree program. Several new AGED courses have recently been developed to provide a more complete curriculum to fulfill State of Illinois standards for agricultural education and secondary education for the Agricultural Science Education concentration, as well as a more focused and rigorous curriculum for students in the Agricultural Leadership Education concentration. The Agricultural Science Education concentration and Agricultural Leadership Education concentration in the proposed Agricultural Leadership and Science Education degree program are patterned after the respective concentrations in the AECE major, but have been redesigned to update and strengthen those programs while aligning the curriculum across the concentrations and capitalizing on the well-established synergy that exists between those curricular areas. The fields of Agricultural Leadership and Agricultural Education have been closely integrated in curricula and programs nationally for many decades. As a college-level program, new opportunities exist to integrate

education and leadership scholarship with those of the disciplines represented in the other Departments of ACES.

With the approval of this application to create an Agricultural Leadership and Science Education degree program in the College of ACES, the current concentrations in the Agricultural and Environmental Communications and Education major (Agricultural Education and Agricultural Leadership Education) will become redundant with the new major and so will be phased out.

Comparable Programs in Illinois

According to the proposal, there are currently four teacher preparation institutions in Illinois that prepare middle and high school agriculture teachers. The University of Illinois at Urbana-Champaign, Illinois State University, Western Illinois University, and Southern Illinois University Carbondale all have a teacher preparation program. Southern Illinois University Carbondale and the University of Illinois at Urbana-Champaign are the only two programs in the state that offer graduate degrees in Agricultural Education. The University of Illinois at Urbana-Champaign is the only institution that promotes and that has a clear path for dual certification in both agricultural education and science education. This enables graduates from the University to be more marketable and places those graduates in a position to teach core science areas in secondary schools, while at the same time expanding the agricultural education program into a true full-time high school teaching position. One impact of this enhanced marketability is realized at a state-wide level because the University's graduates are positioned to accept teaching positions at secondary schools desiring to initiate or further develop new agricultural education programs. The impact of this proposal's approval on other institutions is expected to be minimal at the undergraduate level because all four institutions have stable programs and have maintained those programs over previous decades. Current faculty appointments in teacher preparation at the four institutions include: one for Illinois State University, two for Southern Illinois Carbondale, one for Western Illinois University, and seven for the University of Illinois at Urbana-Champaign.

In comparable Agricultural Leadership programs, the University of Illinois at Urbana-Champaign has the only Agricultural Leadership Education sequence in the state. The proposed Agricultural Leadership and Science Education degree program major includes a concentration in Agricultural Leadership Education that provides coursework aimed at preparing students for positions of leadership in a variety of contexts and includes core elements of effective teamwork and capacity building for the corporate business structure, along with foundational information and experiential learning related to human resource, business management, and public relations. Illinois State University offers a program in Agriculture Communication and Leadership, with a focus for students who desire a career in the agricultural press or corporate communications. Programs from these two universities provide complementary, yet diverse background knowledge for their graduates.

Mission and Objectives

1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university; B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.

The proposed B.S. degree in Agricultural Leadership and Science Education is consistent with the University's mission to deliver to the Prairie Region a high quality, accessible, and affordable undergraduate degree program for which there is demonstrated need by the society for services of its graduates. The mission of the University of Illinois is to transform lives and serve society by educating, creating knowledge, and putting knowledge to work on a large scale and with excellence; to serve the state, the nation, and the world through innovation and creativity in research and scholarship; and to prepare students for lives of impact and address critical societal needs through the creation, transfer, and application of knowledge.

The mission of the Agricultural Leadership and Science Education degree program specifically supports the University's mission through the preparation of agricultural educators that will: serve today's youth and tomorrow's leaders through formal educational programs; serve the state and national agricultural industries through training and non-formal educational programs; and serve society at large by creating an educated community of leaders and scholars literate in the importance of agriculture, science, and education. The program strives to be the preeminent national program in agricultural education. The degree program aims to enhance the scholarship of teaching and learning through experiential and outreach education in the agricultural, consumer, and environmental sciences. The goal of creating this degree program is to ensure that the University of Illinois and the College of ACES continue to educate undergraduate students to become certified high school teachers of agriculture and to become leaders and educators of agriculture and related fields in both formal and non-formal contexts. This goal will be met by providing students with courses and programs that value experiential learning, inquiry-based learning, science-based content, personal and organizational development, community-based education, outreach education, leadership, and scholarship.

The new degree program is designed to prepare students to be leaders as agricultural educators, whether they use their educator skills as high school teachers in a formal educational setting or as leaders and educators in non-formal settings, such as extension, instructional design and evaluation, organizational consulting, and community development and outreach. The Agricultural Leadership and Science Education major will prepare students for careers in agricultural education and related fields and will develop science literacy regarding the role and importance of the agriculture, food, fiber, and natural resources in everyday life. The major also will enable students in the Agriculture Science Education concentration to meet Illinois State Board of Education (ISBE) regulations for teacher certification.

All of these trends highlight the increasing importance of helping prepare a cadre of highly skilled communicators who know the food and agriculture complex and can help it operate effectively within and among societal groups. It is for this and other related purposes already highlighted that the new B.S. in Agricultural Leadership and Science Education degree program at the University of Illinois at Urbana-Champaign was birthed.

Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives and appropriate academic record keeping.

1050.30(a)(2): The design, conduct, and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.

Admission Requirements

The University has put in place admission requirements that meet, and in some cases, exceed, the standard for freshman and transfer applications in most public universities in the state and around the country. Freshman and transfer applications will be reviewed holistically based on the following criteria: academic performance based on grade trends throughout high school, English levels (*i.e.* honors and AP), grades received in honors and AP courses, and class rank (if available); academic rigor; standardized test scores such as American College Test (ACT) scores; involvement/related experience (involvement where commitment to the activity is evident, as well as any type of directly related experience is valued in the review process, and is considered a plus); essays (the quality of writing in the essays will be noted as well as genuine interest in the intended area of study); recruited groups (including out-of-state, students of color, community colleges, low sending counties, first generation, students who attend an Educational Opportunity Program (EOP) high school, or veterans); and honors and awards (a unique award or one that directly pertains to the intended area of study).

Curriculum

A minimum of 126 hours is required for graduation. Students pursuing this major select from two concentrations: Agricultural Leadership Education or Agricultural Science Education. Students completing the agricultural science education concentration will be eligible for Illinois teacher certification in agricultural education, and will have instruction in key pedagogical areas as well as agriculture. For teacher education requirements applicable to all curricula, see the Council on Teacher Education website: <http://www.cote.illinois.edu/>.

Agricultural Leadership Education Concentration

The Agricultural Leadership Education concentration prepares students for educational leadership, training, and outreach positions in agricultural, extension, community and governmental agencies. Coursework focuses on designing educational/training programs, making professional presentations, leadership development, teaching/training methods, and interpersonal communications. A minimum of 480 hours of leadership education experience with a business, institution, or agency is required. Experience typically is gained through internships. The curriculum provides the flexibility for students to specialize in a chosen area of agriculture.

Agricultural Science Education Concentration

The Agricultural Science Education concentration prepares students to teach agricultural science, agribusiness, agricultural mechanics, and horticulture in Illinois high schools. State of Illinois certification requirements include a minimum of 2,000 hours of experience in agriculture and a minimum of 80 contact hours of early educational field experience (*e.g.*, classroom observation). Teacher education students must maintain a 2.5 or above content, professional education, and overall grade point average (GPA) to remain in good standing. In addition, candidates must complete an eight to 12 week teaching internship in an approved secondary agriculture program. Review procedures are provided by the Council on Teacher Education website: <http://www.cote.illinois.edu/>.

Assessment of Student Learning Outcomes

The University has developed and implemented a comprehensive assessment tool for evaluating student learning outcomes for its proposed B.S. in Agricultural Leadership and Science Education. Learning objectives specific for students in the Agricultural Science Education concentration reflect the Standards for Agricultural Education established by the Illinois State Board of Education. According to the application, the competent agricultural education teacher must: have a firm grasp of 12 outstanding outcomes and/or tasks, the first four being to understand the foundations of work, the career development process, occupational skills standards, and workplace skill requirements; demonstrate the ability to plan, deliver, and evaluate instruction based upon knowledge of subject matter in the field; understand student organizations, students, and community and work needs; understand curriculum goals; understand findings of educational research; understand the process of reading and demonstrate instructional abilities to teach reading in the content area of agricultural education; and understand the curriculum in the area of agricultural science.

The University has established well-defined policies for its program assessment. For instance, the degree program contains a variety of assessments relevant to coursework in the program, as well as portfolio requirements and a capstone experience (student teaching internship or leadership internship experience). Details of the assessments used for students in the Agricultural Science Education concentration are available on request. Parallel assessments are in place for assessing student learning through the Agricultural Leadership Education concentration, which does not require the administrative oversight of the Council on Teacher Education (CoTE). Student teaching internships are conducted in coordination with the Illinois State Board of Education (ISBE) Teacher Certification program that is administrated through the CoTE at the University of Illinois at Urbana-Champaign. A copy of the portfolio rubric and student teaching mid-term/final evaluations are available on request. Through the completion of a “satisfactory” teacher portfolio as well as earning “satisfactory” on the final student teaching evaluation administered by CoTE, the student/teacher-candidates have proven themselves in numerous capacities, including planning and delivery of instruction; providing an appropriate learning environment; and meeting needs of diverse audiences. As part of the certification process, students must take and pass two different tests: the Ag Content exam and the Assessment of Professional Teaching exam, which indicate that students have the appropriate background knowledge and have learned what is required to be successful in the teaching field.

Program Assessment

Consistent with the Illinois Board of Higher Education (IBHE) staff requirements, the University will submit to the IBHE a progress report on the Bachelor of Science in Agricultural Leadership and Science Education program at the end of the third year of operation. The report will summarize key areas of accomplishments by the faculty, any remaining challenges, and how each challenge will be addressed. In addition, the program faculty will participate in the University's eight-year program review process to assess the program using multiple measures including student evaluation of faculty teaching in the program, the level of faculty research and scholarship, awards and honors, retention and graduation rate of students in the program, and the level of alumni and employer satisfaction with the program. Also, the faculty will use measures such as the proportion of graduates of the program that are enrolled or who have successfully completed graduate programs, and the percent of graduates employed in occupations closely related to the proposed academic major. The success of graduates of this program in the Illinois certification exams for teachers in agricultural education will be taken into consideration in this program's assessment. A summary of the program review, including the program's strengths and weaknesses, as well as steps to be taken to improve the program, will be submitted by the University to the IBHE with summaries of other programs reviewed in the same cycle.

Facilities (space, equipment, instructional materials)

1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high quality academic work in the unit of instruction, research or public service are available and maintained; B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service; C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.

Library

The University has given the assurance that it has made adequate provisions for all necessary library resources for the program, including textbooks, text and electronic journals, and instructional materials. Agricultural Leadership and Science Education students will have equal access to facilities and equipment in the University's libraries. In addition, the Agricultural Leadership and Science Education Documentation Center (ACDC), maintains the largest existing collection in this field. It includes about 35,000 documents, such as books, reports, journal and trade articles, research studies, and conference proceedings. These documents involve agricultural leadership and science education in 170 countries. The Agricultural Leadership and Science Education degree program will have access to the facilities and equipment of the College of Agricultural, Consumer, and Environmental Sciences. The program is housed in Bevier Hall on the University's campus. Faculty, instructional staff, and support staff have separate offices, as well as office and storage space for graduate students and teaching assistants, and storage space. The program has access to a teaching laboratory room in Bevier Hall that includes state-of-the-art audio-visual equipment. Some courses in the degree program also are taught in Christopher Hall and the ACES Library, Information, and Alumni Center. Program staff will have access to campus teaching space in accordance with campus instructional space oversight. Students seeking teacher certification in Agricultural Education complete a semester of student teaching in a high school agricultural studies program in Illinois. Faculty and staff of this degree program maintain cooperative agreements with about 40 such high school agriculture programs

around the state, thereby offering a wide range of high quality opportunities for students in the degree program to complete their clinical experience.

Students seeking internship experiences will have access to a wide range of opportunities both on campus and off campus. The degree program staff maintains strong interactions with agricultural industries that have interests in hosting student internships. The College of ACES Office of Academic Programs maintains resources to help students find potential internships as well as post-graduation employment opportunities through its Office of Career Services. The program maintains a collection of resources on teacher education that is accessible to students in the program, which is housed in Bevier Hall on the University's campus. The collection offers examples of content, teaching methods, and other resources that students may find useful in establishing their careers post-graduation, whether for setting up an agricultural sciences program in a high school or developing a training program in an agricultural industry. Students in the degree program will have access to the facilities and information resources of the Illinois Leadership Center (the Center) on the University's campus. The Center maintains a wide range of resources that relate to leadership theory and practice, as well as programs that are aimed at enhancing students' development as leaders.

Technology and Instructional Resources

Agricultural Leadership and Science Education students will have equal access to facilities throughout the campus. In addition, the College of ACES Academic Computer Facility will also be available to students and will be used to teach students in the program.

Faculty and Staff

1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met; B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities; C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

The University has indicated that there will be sufficient qualified faculty responsible for the proposed program.

The University will ensure that its faculty and staff are appropriately prepared and credentialed to serve the proposed program by using only those faculty approved by the pertinent academic departments based on their requirements for hiring, promotion, and tenure decisions.

Fiscal and Personnel Resources

1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained; B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

No new state resources are requested to establish the B.S. in Agricultural Leadership and Science Education degree program. The program will be wholly funded by tuition and fees, in addition to reallocated resources. Any additional funding needs will be met by internal reallocation of University funds.

Accreditation and Licensure

1050.30(b)(3) [applicable only to units of instruction]: Appropriate steps have been taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

Reporting Requirement (Board Policy, April 2002): Programs in which state licensure requires specialized accreditation for students to obtain professional licensure, but which have not yet achieved accreditation, will undergo full review and report to IBHE every three years until accreditation is achieved.

Upon completion of the Agricultural Science Education concentration, students will be eligible for Illinois teacher certification in Agricultural Education and will have instruction in key pedagogical areas as well as agriculture. Certification is granted once a student satisfies the requirements for program coursework and the Common Assessment Plan (CAP), and passes the Illinois State Certification (ICTS) tests. The CAP requirement means the student must meet or exceed program expectations on the completed teaching portfolio, including a teaching philosophy statement; all Illinois Professional Teaching Standards, Technology Standards, and Language Arts Standards; and provide ample work documenting impact on student learning. The ICTS certification tests that must be taken and passed include the Agriculture Content Area test and the Assessment of Professional Teaching (APT) test. If all requirements are met, the graduate is issued an Initial Secondary (6-12) teaching certificate, which must be renewed every four fiscal years (July 1 – June 30).

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically justified based on the educational priorities and needs of the citizens of Illinois; B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

The University's application has amply demonstrated that the need for a B.S. in Agricultural Leadership and Science Education program is real because several studies and data from employment projections indicate that a shortage of professionals in the field of agricultural education remains a problem throughout the nation, as discussed below. Currently, there is only one state that meets demand for agricultural educators on an annual basis. Approximately 70 post-secondary institutions prepare undergraduates for teaching agriscience in public schools. In a few states, including Illinois, there are efforts to provide special scholarships and tuition waivers for those committed to teaching tomorrow's youth about the agricultural industry and profession.

According to the Illinois State Board of Education's Facilitating Coordination in Agricultural Education (FCAE) project, there have been, on average, 50 openings in Illinois for agriscience teachers in each of the previous five years. Over this same period, the four Illinois universities that prepare agriscience teachers provide only 15 graduates annually. This graduate-to-openings deficit results in teachers being imported from surrounding states or in local school districts filling teacher vacancies with provisionally certified teachers who may be less well-equipped to prepare tomorrow's agriculturally literate youth and future scientists.

Statewide employment projections for 2008-2018 from the Illinois Department of Employment Security (IDES) do not specifically identify agriscience teachers as a category. However, the IDES employment projections do indicate a nine percent increase in the employment opportunities for vocational and career and technical education teachers. Meanwhile, revitalization in teaching the science of agriculture, along with the nation's expanding interest in our food and fiber systems and the growing desire for environmentally friendly alternatives to the use of petroleum products, has resulted in an increased demand for teaching of science-based information about agriculture, food, fiber, and natural resources in urban, suburban, and rural high schools, as well as more high school students selecting an agricultural course during their high school coursework.

The impact of preparing agriscience teachers goes beyond the supply and demand of job opportunities in teaching. There is currently a shortage of scientists for agricultural positions throughout the country. Employment data from the USDA *Report on Employment Opportunities for College Graduates in the U.S. Food, Agricultural, and Natural Resources System* (CSREES, 2005) projected a deficit of nearly 3,000 graduates per year for 2005-2010. Additionally, USDA reported that 25 percent of all job openings in the agricultural industry require scientific and engineering expertise. These projections have come to fruition as the industry's leading corporations indicate they cannot find suitable graduates with expertise in agricultural sciences. While many colleges of agriculture have experienced an increase in student numbers over the past decade, fewer students maintain their agricultural focus through successful placement in an agriculturally-based scientific position upon graduation (Dyer, Lacey, & Osborne, 1996). To meet these needs, the Agricultural Education program will strive to: create awareness and interest at the middle and secondary school level for careers in the agricultural sciences, prepare and retain teachers for instruction at the middle school and secondary levels, and prepare effective leaders and communicators for tomorrow's agriculture, food, and environmental industries.

The recent publication by the National Research Council (2009), *Transforming Agricultural Education for a Changing World*, called for enhanced strategies to provide professional education in agriculture and to reach and prepare a diverse student body and future workforce to support the largest food production system in the world. Woven across this need for professional undergraduate programs that are attractive to, supportive of, and challenging for

students, is the foundational need for career discovery at the high school and middle school levels. Careers in agriculture often go unnoticed by those not enrolled in a high school or middle school agriscience program. The recruitment of quality students who have agricultural experience, as well as students from urban and suburban backgrounds who are willing to learn about agricultural sciences as part of their post-secondary education, are vital to the future success of the agricultural industry. As more students become familiar with the significance of agricultural sciences for society, a cyclical action will be initiated in which more agriculturally literate college graduates will enter agricultural industries. In addition, as more agricultural education graduates are prepared, more schools will opt to open new secondary school agriscience programs.

With fewer and fewer potential employees having been raised directly in an agriculture environment, the need for agriculturally literate youth originating from urban backgrounds becomes critical for successfully meeting demand in the agricultural industries. With leading corporations calling for these graduates with authentic agricultural experiences and a sound foundation in agricultural literacy, programs such as this Agricultural Education program are in a prime position to expand into suburban and urban areas, as well as maintain their effectiveness in rural Illinois. In fact, agricultural education is taught through experiential learning that provides pre-service teachers with the ability to use effective authentic problems in the middle school and high school classrooms. Furthermore, students taught agricultural education in their secondary education tend to change majors less often and remain in colleges of agriculture when compared to peers.

Program Information

1050.30(b)(2): [applicable only to units of instruction]: The information which the institution provides for students and the public accurately describes the unit of instruction, including its objectives, length, residency requirements if any, schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies, student rights and responsibilities, and such other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. Such information shall be available to prospective students prior to enrollment.

Information about the University's B.S. in Agricultural Leadership and Science Education program, including a detailed description of the curriculum, admission requirements, tuition, fees, and other cost information, as well as University and graduate school policies, will be published on the University's website: <http://illinois.edu/>. Comparable information about the program will be published in hard copy in the University's Undergraduate Catalog. Similar information may be available from the College of Agricultural, Consumer, and Environmental Sciences.

Staff Conclusion: The staff concludes that the Bachelor of Science in Agricultural Leadership and Science Education program proposed by the University of Illinois at Urbana-Champaign meets the criteria to implement the Board of Higher Education Act (110 ILCS 205) as set forth in the Board of Higher Education administrative rules (23 Ill. Adm. Code 1050.30), and the Illinois Board of Higher Education policies pertaining to assessment and accreditation.

Proposed Center/Institute: Institute for Genomic Biology in the Prairie Region

Projected Enrollments: This proposal is for a new Institute for Genomic Biology and not a degree program. As such, the Institute for Genomic Biology will neither enroll students nor award degrees. However, students will be involved in the Institute's many research projects. Already, more than 300 graduate students and 200 undergraduate students are involved conducting research during the Institute's temporary approval period. As the Institute matures, more students may participate in its research activities.

Background

The University of Illinois at Urbana-Champaign (the University) requests authority to establish, on a permanent basis, an interdisciplinary Institute for Genomic Biology (the Institute). Initially, the Institute was approved on a temporary basis by the Illinois Board of Higher Education (IBHE) staff in 2003. Very significant accomplishments of the Institute during the temporary period led the University to seek the IBHE's permanent approval in this proposal. Examples of the accomplishments include the Institute's participation in an FY2007, \$500 million grant award from the British Petroleum (BP) to three research universities to work on major energy projects; a \$35 million, five year grant award from the National Institute of Health to establish an "Enzyme Function Initiative" in FY2007; 14 inventions; and five patent applications. The Institute has currently 76 faculty members occupying space in the Institute's building. In addition, there are 82 faculty members affiliated with the Institute who are in other facilities at the University. As indicated above, over 500 graduate and undergraduate students have participated in the Institute's research projects.

The University has very significant investments in the biological science fields, which directly or indirectly support the proposed Institute. The investments include seven baccalaureate degree programs, ten master's programs, and ten doctoral programs. In addition, there are five bachelor's degree programs, seven master's programs, and five doctoral programs in health science/professions which have some relationship to the interdisciplinary mission of the Institute. Also, the University has many organized research and public services centers and institutes that have varying degrees of relationship with the Institute. Examples include: the Beckman Institute for Advanced Science and Technology, the Center for Biophysics and Computational Biology, the Center for Advanced Bioenergy Research, and the Biotechnology Research unit.

Need

Research and investment in genomic biology and related fields is very important to the University, the state, the United States, and globally for many reasons, such as expectation to address a spectrum of significant human and societal issues, such as genes and human behavior, global climatic change, antibiotic resistance, women's health, regenerative medicine, and renewable energy.

The ability to sequence the genomes of microbes, plants, and animals has led to remarkable advances in biology. This "first genomic revolution" has been based on the genome sequences of only a relatively small number of organisms. The relentless push to lower DNA sequencing costs for biomedical purposes will continue, and it will soon make it possible to sequence the genomes of most species of interest for any biological question. Lowering sequencing costs will usher in a "second genomic revolution" with a transformative effect on all areas of biology because genome sequence information can be used to illuminate questions at all levels of biological organization.

It is expected that the “second genomic revolution” will enable scientists to answer fundamental questions about how life and natural systems evolve, are governed, and respond to changing environments, as well as apply new and existing knowledge and tools to solve pressing problems including: environmental crisis of global climate change, biodiversity loss and the introduction of non-native species, serious concerns for human health, and emerging and pandemic diseases. It is for these reasons and others that the Institute receives from the University significant recurring state funds, and why its faculty and scientists were able to win millions of dollars of external grants and contracts within its relatively short history. With the support of the University’s vast resources and talent in its academic disciplines, and with the Institute’s great beginning, the Institute is positioned to lead in many areas of the “first and second genomic revolutions.”

The Illinois Public Agenda for College and Career Success

The Institute for Genomic Biology will address Goal 4 of *The Illinois Public Agenda for College and Career Success* related to “better integrate Illinois’ educational, research, and innovation assets to meet economic needs of the state and its regions.” The goal will be addressed through the Institute’s many goals and outcomes associated with workforce development and economic development, including research products, employment related to the Institute’s activities, research training, inventions and patents, as well as significant external grants awarded to the Institute and its affiliated faculty members and staff. The Institute’s projected total annual budget during the first four years is over \$4.8 million in research productivity. Additionally, it is expected that some of the Institute’s inventions, patents, and innovations may lead to the development of new businesses or expansion of existing businesses for the benefit of the state and the United States.

Mission and Objectives

The interdisciplinary Institute for Genomic Biology is designed to advance life science research at the University and to stimulate economic and workforce development by contributing significantly to training future academics and researchers. More specifically, the Institute is dedicated to transformative research in agriculture, human health, the environment, and energy production. In the near term, the Institute’s mission will focus on three major program areas related to Systems Biology, Cellular and Metabolic Engineering, and Gnomic Technology. Research within these broad themes focuses on major problems facing humanity, such as treating chronic human diseases, managing new and emerging pests and pathogens, and maintaining an abundant and healthy food supply. The Institute’s mission also encompasses programs that explore the ethical, legal, and social issues arising from genomic research.

The work of the Institute is and will be carried out through the following eight research themes and one externally funded research institute:

- Biocomplexity;
- Business, Economic, and Law of Genomic Biology;
- Cellular Decision Making in Cancer;
- Genomic of Neural & Behavioral Plasticity;
- Host-Microbe Systems;
- Mining Microbial Genomes;
- Regenerative Biology & Tissue Engineering; and
- Energy Biosciences Institute.

Accomplishments of the Temporary Institute

During its seven years of temporary approval, the Institute for Genomic Biology has had increasingly significant development and accomplishments. The notable examples include:

- Participation in a ten year, \$500 million grant award from BP to three research universities to work on energy projects;
- A \$35 million, five year grant award from the National Institute of Health to establish an Enzyme Function Initiative;
- Partnership with the Howard Hughes Medical Institute, purchased a \$500,000 multi-photon Zeiss LSM 710 confocal microscope for research;
- 14 inventions and five patent applications;
- 76 core faculty members occupying space in the Institute's building and an additional 82 faculty affiliated members;
- Awards to the leading faculty and scientists, which includes two members of the National Academy of Sciences, three Howard Hughes Medical Institute Investigators, a Pioneer Award from the National Institute of Health (NIH), and many other awards;
- An estimated over 2,000 publications by faculty affiliated with the Institute; and
- Over 500 graduate and undergraduate students participate in the Institute's research activities.

Administrative Structure and Responsibilities of the Institute

Administrative structure of the Institute consists of the Director, who is assisted by the Associate Director, and the faculty team leaders for the eight core themes, and the Energy Bioscience Institute of the proposed Institute. The Director, Associate Director, and the theme leaders comprise the Executive Committee, which meets on a monthly basis. The Director reports to the University's Vice President for Research.

Facilities (space, equipment, instructional materials)

The Institute is housed in a 186,000 square foot state-of-the-art facility equipped with ample equipment to support its mission. The building design facilitates collaboration among researchers and provides space to advance technology transfer, education, and engagement with partners in the Institute's major research activities. Each research area is housed in a thematic lab module, which includes facilities for biology, bioengineering or chemistry, and bioinformatics. The staff, faculty, and students have access to the University's vast library resources, including appropriate specialized databases, text, and electronic journals.

Faculty and Staff

As indicated above in the “Background” section, the Institute currently has 76 core faculty members who use the Institute’s building. In addition, there are 82 faculty members affiliated with the Institute, but who use other facilities. Over 500 graduate and undergraduate students participate in the Institute’s research projects. The Institute is managed by a Director, who is assisted by the Associate Director, an Executive Committee, and other staff. At this time, the Institute has sufficient faculty and staff to support its needs.

Fiscal and Personnel Resources

No new state resources are needed to establish the Institute for Genomic Biology on a permanent basis. It is reported in the proposal that the total annual budget of the Institute is projected to be \$4,814,000 during the first four years of operation. Most of the funds will come from recurring state funds, while the rest will come from millions of the Institute’s external research grants, which derive from a number of sources. Total annual projected expenditures for the first four years are slightly lower than the projected total resources.

Multi-year external grant funding for the Institute over the last seven years varied from \$3.6 million to \$26.5 million per year, with an annual average of \$16.9 million. Given the strong short history of the Institute, it is expected that when approved by the IBHE, it will maintain or exceed its past achievements in various areas of its multi-faceted goals.

Assessment, Quality Assurance, and Program Review

Consistent with IBHE policies, the Institute will submit its progress report at the end of the third year of operation. The report will summarize the Institute’s accomplishments and any challenges that remain to be addressed. Also, it will participate in the University’s well established eight-year program review process, and a summary of the review findings and actions that will be taken to improve the Institute will be submitted to IBHE staff with summaries of other programs and centers/institutes reviewed in the same cycle.

The Institute for Genomic Biology will use an External Scientific Review Committee to evaluate each of its eight research themes and the Energy Bioscience Institute every five years to determine the extent of which each theme is meeting its stated mission and goals. The results will be used to determine whether the theme should be expanded, downsized, or eliminated. Additionally, another External Advisory Committee composed of high level members of academia, industry, and the government will be appointed to meet and conduct a bi-annual review of the entire Institute, including the unit’s administration, to determine if it is meeting its mission and goals. The results will be used to make any needed improvements in the Institute.

Program Information

1050.30(b)(2) [applicable only to units of instruction]: The information which the institution provides for students and the public accurately describes the unit of instruction, including its objectives, length, residency requirements if any, schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies, student rights and responsibilities, and such other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. Such information shall be available to prospective students prior to enrollment.

Information about the University of Illinois at Urbana-Champaign's Institute for Genomic Biology, including a summary description of the goals, objectives, as well as summaries about current resources and organizational structure will be published on the University's website: www.uiuc.edu. Comparable information about the Institute will be published in hard copy in the University's catalogs. Similar information may be obtained from the Institute or the Office of the Vice President for Research upon request.

Staff Conclusion: The staff concludes that the Institute for Genomic Biology proposed by the University of Illinois at Urbana-Champaign meets the criteria to implement the Board of Higher Education Act (110 ILCS 205) as set forth in the Board of Higher Education administrative rules (23 Ill. Adm. Code 1050.30), and the Illinois Board of Higher Education policies pertaining to assessment and accreditation.

The staff recommends adoption of the following resolutions:

The Illinois Board of Higher Education hereby grants to Illinois State University authorization to establish the Doctor of Education in Curriculum and Instruction in the North Suburban Region subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants to Southern Illinois University Carbondale authorization to establish the Bachelor of Science in Workforce Education and Development in the Central Region subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants to University of Illinois at Chicago authorization to establish the Bachelor of Arts in Public Health in the Chicago Region subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants to University of Illinois at Urbana-Champaign authorization to establish the Bachelor of Science in Agricultural Leadership and Science Education and the Institute for Genomic Biology in the Prairie Region subject to the institution's implementation and maintenance of the conditions that were presented in its applications and that form the basis upon which these authorizations are granted.