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Agenda Items 3.02.B.1-8

**Commission on
Higher Education**

Rayburn Barton
Executive Director

November 7, 2002

MEMORANDUM

To: Mr. Dalton B. Floyd, Jr., Chairman, and Members, Commission on Higher Education

From: Ms. Dianne Chinnes, Chairman, Committee on Academic Affairs and Licensing

D. Chinnes

Analyses of Eight New Program Proposals

Please find attached the staff summaries and analyses for eight new program proposals, Agenda item 3.02.B.1-8.

The Committee on Academic Affairs and Licensing will consider these eight items at its meeting on November 6, 2002 and will make their recommendation to the Commission on November 7.

As always, please do not hesitate to call me or Dr. Gail Morrison should you have any questions or concerns about our analyses or recommendations.

New Program Proposal
Associate in Agriculture degree with a major in Horticulture Technology
Horry-Georgetown Technical College

Summary

Horry-Georgetown Technical College requests approval to offer a program leading to the Associate in Agriculture degree with a major in Horticulture Technology, to be implemented in Fall 2003.

The proposed program was approved by Horry-Georgetown Technical College on March 14, 2002. It was approved by the State Board for Technical and Comprehensive Education on July 16, 2002. It was received by the Commission for review on August 14, 2002, and was approved without substantive comment by the Advisory Committee on Academic Programs on October 1, 2002.

The program proposal is appropriate to the mission of the institution as a two-year technical college seeking to provide relevant programs for employment, including agriculture technology, in its service area. The need for the program is said to be growing in the Grand Strand region served by Horry-Georgetown Technical College, in the state of South Carolina, and throughout the United States. According to the study of need conducted by Horry-Georgetown Technical College for the 2002-2004 period there will be a demand for 384 (231 full-time and 153 part-time) horticulture technicians in the College's service area.

The program will require a minimum of 70 semester hours of coursework. Nine new courses will be added to the catalog of the College for delivery of this program; one of these will be new also to the statewide list of approved technical college course offerings. If approved, this program will be the third degree program of its type in South Carolina. The other two programs (at Trident Technical College and Spartanburg Technical College) both show healthy enrollment, rates of graduation, and employment status for their graduates. The chief academic officers of Horry-Georgetown Technical College has indicated the intention of the institution to develop an articulation agreement between this proposed program and the corresponding baccalaureate program in Horticulture at Clemson once the proposed program is implemented. Clemson's chief academic officer has indicated support for this initiative with a caveat that the mathematics requirement for this program's general education component is significantly different from that required for the baccalaureate degree program.

Horry-Georgetown Technical College projects a total student population for this program of 30 students (38 FTE) in the first year, 51 (60.4 FTE) in the second year, and 51 (60.4 FTE) in the third year. Attrition is expected to keep the second and third year enrollments at the projected numbers listed here.

According to the proposal, the new program will require a total of one (1) new faculty (1.0 FTE) position. In addition, two (2) part-time faculty (.6 FTE) will be hired to assist this full-time faculty member after the first year of the program's implementation. No additional staff support is contemplated at this time.

It will be necessary to build a greenhouse for the program. Based upon the projected size of the program, other existing facilities will be adequate for at least five years. Facilities already used for other agriculturally-related degree and certificate programs (e.g., Turf Management) will be used at Conway campus and potentially the other two campuses of the College at the Grand Strand and in Georgetown. In addition, the partnership between the institution and Brookgreen Gardens will make facilities at the Gardens available for use by students in their coursework.

Total costs for the new program are estimated by the institution to amount to \$426,045 for the first three years of the program's operations. These costs will be for faculty salaries (\$260,260), supplies and materials (\$44,000), library resources (\$10,535), equipment (\$1,600), facilities (\$76,650), and A/V materials, travel, and marketing (\$33,000.)

No accrediting bodies exist for academic programs of this type. Nevertheless, the institution will encourage its Horticulture Technology degree graduates to seek the South Carolina Nurseryman's Certification and the Landscape Certification through the South Carolina Nursery and Landscape Association.

Shown below are the estimated projections of existing and any new costs associated with implementation of the proposed program for its first three years as compared with the estimated revenues projected under the Mission Resource Requirement and the Resource Allocation Plan.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$296,020	\$0	\$296,020	\$0	\$90,039	\$90,039
2004-05	470,516	0	470,516	142,850	142,954	285,804
2005-06	470,516	0	470,516	227,227	142,954	370,181

These data demonstrate that even if Horry-Georgetown Technical College can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will not cover new costs with revenues it generates in the first three years of its implementation. Nevertheless, the institution is committed to providing the program with the operating funds it needs to be successful.

In summary, the program is needed, has been supported by Horry-Georgetown Technical College, the State Board for Technical and Comprehensive Education, and the Advisory Committee on Academic Programs.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing commend favorably to the Commission approval of the program leading to the Associate in Agriculture degree with a major in Horticulture Technology at Horry-Georgetown Technical College for implementation in Fall 2003, provided that no "unique cost" or other special state funding be required or requested.

New Program Proposal
Associate in Health Science degree with a major in Radiologic Technology
Aiken Technical College

Summary

Aiken Technical College requests approval to offer a program leading to the Associate in Health Science degree with a major in Radiologic Technology, to be implemented in Fall 2003.

The proposed program was approved by Aiken Technical College on June 1, 2002. It was approved by the State Board for Technical and Comprehensive Education on July 16, 2002. It was received by the Commission for review on August 14, 2002, and was approved without substantive comment by the Advisory Committee on Academic Programs on October 1, 2002.

The program proposal is appropriate to the mission of the institution as a two-year technical college seeking to provide relevant programs for employment and health promotion in its service area. The need for the program is said to be growing in the Savannah River region served by Aiken Technical College, in the state of South Carolina, and throughout the United States. According to the study of need conducted by Aiken Technical College for the 2002-2004 period there will be a demand for 30 full-time and 27 part-time radiologic technologists in the Aiken County service area.

Eighteen new courses will be added to the catalog of the College for delivery of this program. The program will require a minimum of 91 semester hours of coursework. Other approved programs in Radiologic Technology in the technical college system are offered in a range from 81 to 94 semester hours. Thus, the degree program at Aiken Technical College will be among the most extensive and, consequently, among the most expensive, of all the state's Radiologic Technology two-year degrees.

The staff of the Commission has discussed the breadth of minimum semester hours required in the Radiologic Technology degree programs with the staff of the State Technical College System. Both staffs agree that the relatively large range of semester hours required in these programs deserves study. The Technical College System's staff will appoint a study group drawn from the peer group for radiologic technology programs and deans of allied health programs to study this issue and provide a report within a year.

If approved, this program will be the eleventh degree program of its type offered in the state's technical colleges. Only nine of these have been reviewed for meeting productivity standards, since the tenth program was just approved at the Technical College of the Lowcountry for implementation in 2003. The nine implemented programs all meet enrollment and degree production productivity standards. The rate of vacancies for radiologic technologists in South Carolina and the United States is high and growing.

Aiken Technical College projects a student population for this program of 20 students (25.46 FTE) in the first year, 14 (19.53 FTE) in the second year, and 20 (25.46 FTE) in the third year. The reason for the diminished numbers in the second year of the program is the anticipated level of attrition from the original cohort in the first year. The College will take in a new cohort only every other year. Thus, the enrollments will go up and down every other year.

According to the proposal, the new program will require a total of two new faculty (2 FTE) positions. In addition, part-time faculty will be hired to assist these full-time faculty members, as needed. A half-time support staff person, currently employed at the College, will be diverted from other current responsibilities.

A new healthcare teaching facility approved in the most recent bond bill will house this and other allied health programs at Aiken Technical College. A total of 1.2% of the costs associated with the building of this new facility is attributed to the proposed program in Radiologic Technology. Altogether, costs for the new program will total \$807,309 for the first three years of the program's operations. These costs will be for faculty salaries (\$372,793), supplies and materials (\$5,500), library resources (\$10,000), equipment (\$226,274), facilities (\$86,760) and "other", including fringe benefits, fees and services, travel, and postage and printing (\$105,982.)

The institution will seek accreditation as soon as notification of approval for the new program has been received. The program accrediting body will be the Joint Review Committee on Education in Radiologic Sciences (JRCERT.)

Shown below are the estimated projections of existing and any new costs associated with implementation of the proposed program for its first three years as compared with the estimated revenues projected under the Mission Resource Requirement and the Resource Allocation Plan.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$413,146	\$0	\$413,146	\$0	\$67,473	\$67,473
2004-05	316,889	0	316,889	197,945	51,788	249,733
2005-06	413,146	0	413,146	151,981	67,473	219,453

These data demonstrate that even if Aiken Technical College can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will not cover new costs with revenues it generates in the first three years of its implementation. Nevertheless, the institution is committed to providing the program with the operating funds it needs to be successful.

In summary, the program is needed, has been supported by Aiken Technical College, the State Board for Technical and Comprehensive Education, and the Advisory Committee on Academic Programs.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing commend favorably to the Commission approval of the program leading to the Associate in Health Science with a major in Radiologic Technology at Aiken Technical College for implementation in Fall 2003, provided that no "unique cost" or other special state funding be required or requested.

**New Program Proposal
Bachelor of Arts in Economics
Winthrop University**

Summary

Winthrop University requests approval to offer a program leading to the Bachelor of Arts degree in Economics, to be implemented in Spring 2003.

The proposed program was approved by the President of Winthrop University on April 12, 2002. A program summary was received by the Commission on May 17, 2002. The full proposal was considered and approved without substantive comment by the Advisory Committee on Academic Programs on October 1, 2002.

The purpose of the proposed program is appropriate to the mission of the institution as a public four-year teaching university with a commitment to a strong and basic undergraduate program of studies in the tradition of the liberal arts and sciences. The need for the program is said to be great and growing in the state and in the country, because of the demand for the intellectual skills and knowledge bases associated with an economics degree. According to the proposal, economics majors are highly sought after in business upon graduation from undergraduate school and command an average salary of \$41,500 in the world of work. Likewise, the proposal states that economics is considered one of the best preparations for passing the LSAT, the entrance examination for law school.

The program will require a minimum of 124 semester hours of coursework. No new courses will be needed for delivery of this program, because the program will use all the existing economics courses currently offered in the B.S. in Business Administration with a Concentration in Economics degree. The difference between the existing B.S. in Business Administration with a concentration in Economics and the proposed B.A. in Economics is one of emphasis. The proposed B.A. in Economics will contain no Business Administration courses but will require instead a variety of courses in the arts and sciences (including at least one political science or geography course) to develop skills and knowledge bases focused on global understanding and analysis.

Winthrop University projects a student population for this program of 20 students (4.4 FTE) in the first year, 25 (10.8 FTE) in the second year, and 30 (12.8 FTE) in the third year, 35 (14.8 FTE) in the fourth year, and 40 (16.8 FTE) in the fifth year and thereafter. This estimated set of student enrollments was supplied

October 10, 2002, as a revision to the original proposal's calculation of estimated enrollments and semester hours. These estimated student enrollments will meet the statewide program productivity requirements of the Commission on Higher Education.

Existing facilities will be adequate for at least the first five years of the program's implementation. No specialized, professional accreditation is available for this major as a standard liberal arts and sciences program.

Although the proposal states that the new program will create no additional costs during the first five years of its operation, it also states that one new faculty position (1.0 FTE) will be added. This new faculty member's salary has been acknowledged by Winthrop University academic affairs office as a new cost. The costs associated with the new faculty member over five years will total \$399,018.

Certain existing costs associated with the B.S. in Business Administration with a Concentration in Economics will be shared with the new B.A. in Economics program. Existing costs to be apportioned to the new B.A. in Economics degree program in the first five years of its operations will total \$30,000 for program administration and \$15,000 for clerical/support. No additional funding is said to be needed for supplies and materials, library resources, equipment, or facilities.

Shown below are the estimated projections of existing and any new costs associated with implementation of the proposed program for its first five years as compared with the estimated revenues projected under the Mission Resource Requirement and the Resource Allocation Plan.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$39,160	\$0	\$39,160	\$0	\$26,995	\$26,995
2004-05	96,120	0	96,120	21,994	66,603	88,597
2005-06	113,920	0	113,920	53,767	79,216	132,983
2006-07	131,720	0	131,720	63,546	91,358	154,904
2007-08	149,520	0	149,520	73,625	103,500	177,125

The model from which these data have been derived assumes the program is a new one, even though it is simply a variant from the existing B.S. program in Business Administration with a Concentration in Economics. The data show that revenues

derived from the program will exceed costs by the third year of the program's implementation, given the projected student enrollments in the program.

In summary, the program is one for which nationally and in South Carolina there has been sustained demand among students in other colleges and universities. Employers have found graduates with this degree background to be prepared for many different professional arenas in the workforce. The degree program is appropriate to the mission of the institution as a teaching university with a relatively wide array of basic liberal arts and sciences undergraduate degree programs. The proposed program has been supported by Winthrop University and the Advisory Committee on Academic Programs.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing commend favorably to the Commission approval of the program leading to the Bachelor of Arts degree in Economics at Winthrop University for implementation in Spring 2003, provided that no "unique cost" or other special state funding be required or requested.

New Program Proposal
Bachelor of Science in Early Childhood Education
College of Charleston

Summary

The College of Charleston requests approval to offer a program leading to the Bachelor of Science degree in Early Childhood Education, to be implemented in Fall 2003.

The Board of Trustees approved the proposal on April 16, 2002. This proposal was submitted for Commission review on August 13, 2002. The proposal was reviewed without substantive comment and voted upon favorably by the Advisory Committee on Academic Programs at its meeting on October 1, 2002.

The purpose of the program is to train teachers to serve in the grade spans of pre- K to three. Presently the College of Charleston offers an add-on program within its elementary education degree program through which students can obtain the qualifications for early childhood certification. However, the State has recently revised certification levels and the current program at the College will no longer meet the standards for early childhood certification. The College has responded to these changes in certification levels by proposing two new programs in Early Childhood and Middle Level Education and revising the existing program in Elementary Education. This proposed program will allow teacher education majors to take the specialized program required for certification in early childhood education. The need for the program is that the College is the only public institution in the Lowcountry area that offers a program in early childhood education. As of this fall, the S.C. Center for Teacher Recruitment's (SCCTR) database indicated that there were still vacancies in the surrounding school districts for early childhood educators indicating the continued demand for graduates of the program.

The program proposal was shared with the staff of the Division of Teacher Quality of the S.C. Department of Education. The staff raised concerns about the differentiation of the program from that being proposed in elementary and middle level education. The staff also wanted additional information on how the proposed program would meet the standards of the specialty organization (National Association for the Education of Young Children).

Ten public and 13 private institutions in the state have an early childhood program and these programs tend to serve their local areas. The demand for early

childhood teachers has increased in the last few years as a result of the implementation of full-day kindergarten and the class-size reduction mandates for the early grades. While the program is technically a new one, the College has been producing early childhood teachers within its "add-on" curriculum for many years. The teaching area of early childhood was removed from the critical subject area needs list for academic year 2002-03. However, it is not yet considered an oversupply area, and the SCCTR currently has listed 11 vacancies in this teaching area.

The curriculum consists of 126 credit hours. Of these, 63 are in general education, 51 are in education, and 12 are in student teaching. The 51 credit hours in education require completion of 18 credit hours in pre-K courses and 33 credit hours in professional education courses. The proposal indicates that the curriculum has been designed to meet the standards of the National Association for the Education of Young Children (NAEYC). Sixteen new courses will be required. Of these, six of the new courses will be shared with the proposed programs in Elementary Education and Middle Level Education.

While the program will be sharing courses with the elementary and middle level programs, it is important to delineate how the three programs will differ so that they will meet the standards of the appropriate accrediting body as well as ensure that students receive skills and knowledge pertinent to their area of teaching. The College has supplied to the staff a matrix (see **Attachment 1**) indicating which courses will meet the standards of NAEYC. The three new proposed programs are designed such that in the student's initial year in teacher education (typically the first semester of the junior year) they have experiences that enable them to make a certification area choice. During the first and third semesters of the education program concepts are introduced in courses that are common to all teaching levels, but then these concepts and central ideas are extended through assignments and activities specific to the teaching area. In the second semester, students concentrate on content areas and courses required for each certification level, i.e., early childhood majors will take courses such as Teaching Mathematics PreK-3, Teaching Reading/Learning Strategies PreK-3, among others. Courses during this semester are designed to meet the specific requirements of the accrediting body. The programs are designed to have students come together in common coursework in the third semester with differentiated understandings of curriculum and pedagogy that will then be applied to assignments and activities specific to the grade levels to be taught. The program culminates in the fourth and final semester with student teaching. The sharing of courses at the three teaching levels will also allow students to gain an understanding of the continuum of the educational process and how there are developmentally differentiated teaching needs at each of these levels.

The College of Charleston indicates that no new faculty will be needed for the proposed program. Faculty serving the program will begin at 3 headcount (2.25 FTE) in FY 2003-04 and will remain at this level for the first five years of the program

Enrollment in the proposed program is estimated to begin at ten headcount students in FY 2003-04 and increase to 55 headcount students in FY 2007-08. Enrollment estimates are based on projections from current enrollment figures at the College of students who will require the proposed program to be eligible for early childhood certification. If enrollment estimates are realized, the proposed program will meet the Commission's program productivity standards.

The program will be required to obtain accreditation from the National Council for the Accreditation of Teacher Education (NCATE) and meet the standards of the professional association (NAEYC). As noted above, the College has supplied a matrix indicating how the program was designed to meet NAEYC standards.

There are no physical plant or equipment needs for the proposed program. The library holdings were compared against the standards of the Association of College Research Libraries in September 2000 and were deemed adequate at that time. This comparison did not, however, include over 7,000 volumes in the Curriculum Laboratory in the School of Education that also support the holdings in early childhood, elementary, and middle level education. The proposed program indicates that the College will utilize \$1,000 per year of its library budget to increase acquisitions related primarily to early childhood education.

Total new costs for the proposed program are estimated to begin at \$11,000 and include salaries for graduate assistants (\$8,300), supplies (\$200), library support (\$1,000), and other general expenses (\$1,500). The costs are estimated to remain nearly level over the first five years with a slight increase (\$800) by the fifth year of the program. The total estimated new costs for the first five years of the program is \$56,000.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with implementation of the proposed program for its first five years. Also shown are the estimated revenues projected under the MRR and the Resource Allocation Plan as well as student tuition.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$115,472	\$0	\$115,472	\$0	\$105,973	\$105,973
2004-05	206,200	0	206,200	71,014	190,266	261,280
2005-06	309,300	0	309,300	127,174	284,325	411,499
2006-07	391,780	0	391,780	189,968	359,822	549,790
2007-08	488,007	0	488,007	240,796	448,410	689,206

These data demonstrate that if the College of Charleston can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will be able to cover new costs with revenues it generates by the second year of its implementation.

In summary, the College of Charleston will be re-designing its undergraduate teacher education programs to implement a freestanding degree in Early Childhood Education. The proposed program has been designed to meet the new certification requirements of the State and allow graduates of the program to be eligible for elementary education certification.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing commend favorably to the Commission the program leading to the Bachelor of Science degree in Early Childhood Education at the College of Charleston, to be implemented in Fall 2003, provided that no "unique cost" or other special state funding be required or requested and provided further that the program be approved by the State Board of Education.

Note: Attachment 1 is not included in the electronic mailout but is available upon request.

Early Childhood Education Courses: Semester I

Standards: NAEYC Initial Certification Core Standards Elements	EDFS 303 Human Growth and the Educational Process	EDEE 323 Mathematics: Language of Logic	EDEE 325 Language and Literacy Development	EDFS 326 Introduction to Educational Technology	EDEE 327 Field I: Learner Development and Context Learning
1. Knowing & understanding young children's characteristics and needs learning	I/E	I/E	I/E	I/E	I/E
1. Knowing & understanding the multiple influences on development & learning	I/E	I/E	I/E		I/E
1. Using developmental knowledge to create healthy, respectful, supportive, and challenging learning environments.	I/E				I/E
2. Knowing about & understanding family & community characteristics	I/E		I/E		I/E
2. Supporting & empowering families & communities through respectful, reciprocal relationships					I/E
2. Knowing families & communities in their children's development & learning	I/E				I/E
3. Understanding the goals, benefits & uses of assessment.		I	I		I/E
3. Knowing & using observation, documentation, & other appropriate assessment tools & approaches					I/E
3. Understanding & practicing responsible assessment	I				I/E
3. Knowing about assessment partnerships with families & other professionals	I	I	I		I/E
4a. Know, understand & use positive relationships & supportive interactions as foundation for work	I	I	I		I/E
4b. Foster oral language & communication			I/E		E
4b. Draw from a continuum of teaching strategies					I/E
4b. Make the most of environment & routines					I/E
4b. Capitalize on incidental teaching					I/E
4b. Focus on children's characteristics, needs & interests	I/E	I/E	I/E		E
4b. Link children's language & culture to ECE program			I/E		E
4b. Teach through social interactions					E
4b. Create support for play	I/E	I	I		I/E
4b. Address children's challenging behaviors	I/E	I/E	I/E		E
4b. Support learning through technology	I/E				E
4b. Use integrative approaches to curriculum					E
					I/E

Coding:

I=Introduction of concepts

E=Extension of Concepts specific to certification area

A=Application of concepts specific to certification area

4c. Common features in candidate's work across content areas									
4c. Language & literacy			I						IE
4c. Arts -- 100 languages of children				IE					IE
4c. Mathematics									IE
4c. Physical activity & PE									
4c. Science									
4c. Social studies									
4d. Building curriculum: Security & self-regulation									IE
4d. Building curriculum: Problem-solving & thinking skills									IE
4d. Building curriculum: Academic and social competence									IE
5. Identifying & involving oneself with the early childhood field									E
5. Knowing about & upholding ethical standards & other professional guidelines									E
5. Engaging in continuous, collaborative learning to inform practice									E
5. Integrating knowledge, reflective, reflective & critical perspectives on ECE									E
5. Engaging in informed advocacy for children & the profession									E

Coding:

I=Introduction of concepts

E=Extension of Concepts specific to certification area

A=Application of concepts specific to certification area

Early Childhood Education Courses: Semester II

Standards: NAEYC Initial Certification Core Standards Elements	EDEE 365 Teaching Mathematics PK-3	EDFS 375 Reading / Learning Strategies PK-3	EDEE 387 Teaching Science	EDEE 371 Teaching Social Studies	EDEE 326 Health and P.E.	EDEE 380 Field II: Application of Curriculum & Instruction
1. Knowing & understanding young children's characteristics and needs	E	E	I,E	I,E	I,E	E,A
1. Knowing & understanding the multiple influences on development & learning	E	E	I,E	I,E	I,E	E,A
1. Using developmental knowledge to create healthy, respectful, supportive, and challenging learning environments.	E	E	I,E	I,E	I,E	E,A
2. Knowing about & understanding family & community characteristics	E	E	E	E	E	E,A
2. Supporting & empowering families & communities through respectful, reciprocal relationships						E,A
2. Involving families & communities in their children's development & learning	E	E	E	E	I,E	E,A
3. Understanding the goals, benefits & uses of assessment.	E	E	I,E	I,E	I,E	E,A
3. Knowing & using observation, documentation, & other appropriate assessment tools & approaches	E	E	I,E	I,E	I,E	E,A
3. Understanding & practicing responsible assessment	E	E	I,E	I,E	I,E	E,A
3. Knowing about assessment partnerships with families & other professionals	E	E	E	E	E	E,A
4a. Know, understand & use positive relationships & supportive interactions as foundation for work	E	E	E	E	E	E,A
4b. Foster oral language & communication	E	E	E	E		
4b. Draw from a continuum of teaching strategies	I,E	I,E	I,E	I,E	I,E	E,A
4b. Make the most of environment & routines	E	E	E	E	E	E,A
4b. Capitalize on incidental teaching	E	E	E	E	E	E,A
4b. Focus on children's characteristics, needs & interests	E	E	E	E	E	E,A
4b. Link children's language & culture to ECE program	E	E	E	E	E	E,A
4b. Teach through social interactions	E	E	I,E	I,E	I,E	E,A
4b. Create support for play	E	E	E	E	E	E,A
4b. Address children's challenging behaviors	I,E	I,E	I,E	I,E	I,E	E,A
4b. Support learning through technology	E	E	E	E	E	E,A
4b. Use integrative approaches to curriculum	I	I	I	I	I	E,A
4c. Common features in candidate's work across content areas	I	I	I	I	I	E,A

Coding:

I=Introduction of concepts

E=Extension of Concepts specific to certification area

A=Application of concepts specific to certification area

Early Childhood Education Courses: Semesters III & IV

Standards: NAEYC Initial Certification Core Standards Elements		EDEC 403 Visual and Performing Arts	EDEC 409 Meeting the Needs of Diverse Learners	EDEC 401 Literacy Assessment	EDEC 407 Creating Learning Environments	EDEC 415 Field III: Curriculum, Instruction & Assessment	EDEC 455 Student Teaching
1. Knowing & understanding young children's characteristics and needs learning		I/E	E/A	E/A	E/A	E/A	A
1. Using developmental knowledge to create healthy, respectful, supportive, and challenging learning environments.		I/E	E	E	E	E/A	A
2. Knowing about & understanding family & community characteristics		I/E	A	A	A	A	A
2. Supporting & empowering families & communities through respectful reciprocal relationships			E	E	E	E	A
2. Involving families & communities in their children's development & learning		I/E	E	E	E	E	A
3. Understanding the goals, benefits & uses of assessment.		I/E	E	E	E	E/A	A
3. Knowing & using observation, documentation, & other appropriate assessment tools & approaches.		I/E	E/A	E/A	E/A	E/A	A
3. Understanding & practicing responsible assessment		E	E/A	E/A	E/A	E/A	A
3. Knowing about assessment partnerships with families & other professionals		E	E	E	E	E	A
4a. Know, understand & use positive relationships & supportive interactions as foundation for work		A	A	A	A	A	A
4b. Foster oral language & communication		E	A	A	A	A	A
4b. Draw from a continuum of teaching strategies		I/E	E/A	E/A	E/A	E/A	A
4b. Make the most of environment & routines		E	E	E	E	E/A	A
4b. Capitalize on incidental teaching		E	E	E	E	E/A	A
4b. Focus on children's characteristics, needs & interests		E/A	E/A	E/A	E/A	E/A	A
4b. Link children's language & culture to ECE program		E/A	E/A	E/A	E/A	E/A	A
4b. Teach through social interactions		E	E/A	E/A	E/A	E/A	A
4b. Create support for play		E/A	E	E	E	E/A	A
4b. Address children's challenging behaviors		E	E	E	E	E/A	A
4b. Support learning through technology		E	E	E	E	E/A	A
4b. Use integrative approaches to curriculum		E/A	E/A	E/A	E/A	E/A	A

Coding:

I=Introduction of concepts

E=Extension of Concepts specific to certification area

A=Application of concepts specific to certification area

New Program Proposal
Bachelor of Science in Elementary Education
College of Charleston

Summary

The College of Charleston requests approval to offer a program leading to the Bachelor of Science degree in Elementary Education, to be implemented in Fall 2003.

The Board of Trustees approved the proposal on April 16, 2002. This proposal was submitted for Commission review on August 13, 2002. The proposal was reviewed without substantive comment and voted upon favorably by the Advisory Committee on Academic Programs at its meeting on October 1, 2002.

The purpose of the program is to train teachers to serve in the grade spans of two to six. Presently the College of Charleston offers an elementary education degree program that allows students to be eligible for certification in elementary education, grades one to eight. However, the State has recently revised certification levels and the College has responded to these changes in certification levels by proposing two new programs in Early Childhood and Middle Level Education and revising the major in Elementary Education. The proposed program will allow teacher education majors to take the specialized program required for certification in elementary education. The need for the program is that the College is the only public institution in the Lowcountry that offers a program in elementary education. Charleston Southern University, a private institution, offers a similar program. As of this fall, there were still vacancies in the surrounding school districts for elementary educators indicating the continued demand for graduates of the program.

The program proposal was shared with the staff of the Division of Teacher Quality of the S.C. Department of Education. The staff raised concerns about the differentiation of the program from that being proposed in early childhood and middle level education. The staff also wanted additional information on how the proposed program would meet the standards of the specialty organization (Association for Childhood Education International).

Ten public and 18 private institutions in the state have an elementary education program and these tend to serve their service areas. The demand for elementary education teachers has increased in the last few years as a result of the efforts in class-size reduction in the elementary grades. The teaching area of

elementary education was removed from the critical subject area needs list for academic year 2002-03. However, it is not yet considered an oversupply area, and the S.C. Center for Teacher Recruitment currently has listed 15 vacancies in this teaching area including one in Charleston and one in Dorchester Two school districts.

The curriculum consists of 126 credit hours. Of these, 63 are in general education, 51 are in education, and 12 are in student teaching. The 51 credit hours in education require completion of 12 credit hours in 2-8 courses and 33 credit hours in professional education courses. The curriculum has been designed to meet the standards of the Association for Childhood Education International (ACEI). Sixteen new courses will be required. Of these, six of the new courses will be shared with the proposed programs in Early Childhood and Middle Level Education.

While the program will be sharing courses with the early childhood and middle level programs, it is important to delineate how the three programs will differ so that they will meet the standards of the appropriate accrediting body as well as ensure that students receive skills and knowledge pertinent to their area of teaching. The College has supplied to the staff a matrix (see **Attachment 1**) indicating which courses will meet the standards of ACEI. The programs are designed such that in the student's initial year in teacher education (typically the first semester of the junior year) they have experiences that enable them to make a certification area choice. During the first and third semesters of the education program concepts are introduced in courses that are common to all teaching levels but then these concepts and central ideas are extended through assignments and activities specific to the teaching area. In the second semester, students concentrate on content areas and courses required for each certification level, i.e., elementary education majors will take courses such as Teaching Mathematics grades 2-8 and Teaching Reading/Learning Strategies grades 2-8, among others. Students who will teacher elementary students will have materials and experiences that focus on grades 2-5. Courses during this semester are designed to meet the specific requirements of the accrediting body. The programs are designed to have students come together in common coursework in the third semester with differentiated understandings of curriculum and pedagogy that will then be applied to assignments and activities specific to the grade levels to be taught. The program culminates in the fourth and final semester with student teaching. The sharing of courses at the three teaching levels will also allow students to gain an understanding of the continuum of the educational process and how there are developmentally differentiated teaching needs at each of these levels.

The College of Charleston indicates that no new faculty will be needed for the proposed program. Faculty serving the program will begin at 22 headcount

(16.5 FTE) in FY 2003-04 and will decrease to 15 headcount (11.25 FTE) in FY 2007-08. Decrease in faculty support parallels the expected enrollment decreases as students enter the new programs in Early Childhood and Middle Level Education. Faculty will be reassigned to support increased enrollments in the other two new programs.

Enrollment in the proposed program is estimated to begin at 450 headcount students in FY 2003-04 and decrease to 235 headcount students in FY 2007-08. Enrollment estimates are based on projections from current enrollment figures at the College of students who will require the proposed program to be eligible for elementary education certification. The College expects that there will be a decrease in the number of students in the proposed program as students opt for a major in either Early Childhood or Middle Level Education. If enrollment estimates are realized, the proposed program will meet the Commission's program productivity standards.

The program will be required to obtain accreditation from the National Council for the Accreditation of Teacher Education (NCATE) and meet the standards of the professional association (ACEI). As noted above, the College has supplied a matrix indicating how the program was designed to meet ACEI standards.

There are no physical plant or equipment needs for the proposed program. The library holdings were compared against the standards of the Association of College Research Libraries in September 2000 and were deemed adequate at that time. This comparison did not, however, include over 7,000 volumes in the Curriculum Laboratory in the School of Education that also support the three new proposed programs in early childhood, elementary, and middle level education. The proposed program indicates that the College will utilize \$1,000 per year of its library budget to increase acquisitions primarily related to elementary education.

Total new costs for the proposed program are estimated to begin at \$11,300 and include salaries for graduate assistants (\$8,300), supplies (\$500), library support (\$1,000), and other general expenses (\$1,500). The costs are estimated to decrease by approximately \$300 in the fifth year of the program with the total new costs over the first five years of the program to be \$56,000.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with implementation of the proposed program for its first five years. Also shown are the estimated revenues projected under the MRR and the Resource Allocation Plan as well as student tuition.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$3,629,120	\$0	\$3,629,120	\$0	\$3,334,327	\$3,334,327
2004-05	2,683,074	0	2,683,074	2,229,877	2,465,144	4,695,021
2005-06	2,082,620	0	2,082,620	1,648,580	1,923,394	3,561,974
2006-07	2,000,140	0	2,000,140	1,279,674	1,837,206	3,116,880
2007-08	1,917,660	0	1,917,660	1,229,211	1,761,708	2,990,919

These data demonstrate that if the College of Charleston can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will be able to cover new costs with revenues it generates by the second year of its implementation.

In summary, the College of Charleston will be re-designing its undergraduate teacher education programs to implement a revised degree program in Elementary Education. The proposed program has been designed to meet the new certification requirements of the State and allow graduates of the program to be eligible for elementary education certification.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing commend favorably to the Commission the program leading to the Bachelor of Science degree in Elementary Education at the College of Charleston, to be implemented in Fall 2003, provided that no "unique cost" or other special state funding be required or requested, and provided further that the program be approved by the State Board of Education.

Note: Attachment 1 is not included in the electronic mailout but is available upon request

Elementary Education Courses: Semester 1

<u>Standards</u>	EDFS 303 Human Growth and the Educational Process	EDEE 323 Mathematics: Language of Logic	EDEE 325 Language and Literacy Development	EDFS 326 Intro to Educational Technology	EDEE 327 Field Experience I
DEVELOPMENT, LEARNING AND MOTIVATION					
1. Development, Learning and Motivation – Candidates know, understand, and use the major concepts, principals, theories, and research related to development of children and young adolescents to construct learning opportunities that support individual students' development, acquisition of knowledge, and motivation.	I and E	I and E	I	I and E	I and A for level I courses
CURRICULUM					
2a. Central concepts, tools of inquiry, and structure of content – Candidates know, understand, and use the central concepts, tools of inquiry, and structures of content for students across the K-6 grades and can create meaningful learning experiences that develop students' competence in subject matter and skills for various developmental levels.			I	I	I and A for level I courses
2b. English language arts – Candidates demonstrate a high level of competence in use of English language arts and they know, understand, and use concepts from reading, language and child development, to teach reading, writing, speaking, viewing, listening, and thinking skills and to help students successfully apply their situations, materials, and ideas.					I and A for level I courses
2c. Science – Candidates know,					I and A for level

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<p>understand, and use fundamental concepts in the subject matter of science - including physical, life, and earth and space sciences - as well as concepts in science and technology, science in personal and social perspectives, the history and nature of science, the unifying concepts of science, and the inquiry processes scientists use in discovery of new...? It is cut off here</p>		I and E			I courses
<p>2d. Mathematics - Candidates know, understand, and use the major concepts, procedures, and reasoning processes of mathematics that define number systems and number sense, geometry, measurement, statistics and probability, and algebra in order to foster student understanding and use of patterns, quantities, and spatial relationships that can represent phenomena, solve problems, and manage data.</p>					I and A for level I courses
<p>2e. Social studies - Candidates know, understand, and use the major concepts and modes of inquiry from the social studies - the integrated study of history, geography, the social sciences, and the other related areas - to promote elementary students' abilities to make informed decisions as citizens of a culturally diverse democratic society and interdependent world.</p>					
<p>2f. The arts - Candidates know, understand, and use - as appropriate to their own understanding and skills the content, functions, and achievements of dance, music, theater, and the several visual arts as primary media for communication, inquiry, and insight among elementary students;</p>					
<p>2g. Health education - Candidates know,</p>					

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<p>understand, and use the major concepts in the subject matter of health education to create opportunities for student development and practice of skills that contribute to good health.</p>					
<p>2h. Physical education – Candidates know, understand, and use – as appropriate to their own understanding and skills – human movement and physical activity as central elements to foster active, healthy life styles and enhanced quality of life for elementary students.</p>					<p>I and A for level I courses</p>
<p>2i. Connections across the curriculum – Candidates know, understand, and use the connections among concepts, procedures, and applications from content areas to motivate elementary students, build understanding, and encourage the application of knowledge, skills, and ideas to real world issues.</p>					<p>I and A for level I courses</p>
<p>INSTRUCTION</p>					
<p>3a. Integrating and applying knowledge for instruction – Candidates plan and implement instruction based on knowledge of students, learning theory, subject matter, curricular goals, and community.</p>					<p>I and A for level I courses</p>
<p>3b. Adaptation to diverse students – Candidates understand how elementary students differ in their development and approaches to learning, and create instructional opportunities that are adapted to diverse students.</p>	<p>I and E</p>				<p>I and A for level I courses</p>
<p>3c. Development of critical thinking, problem solving, performance skills – Candidates understand and use a variety of teaching strategies that encourage elementary students' development of critical thinking, problem solving, and performance skills.</p>					<p>I and A for level I courses</p>

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<p>3d. Active engagement in learning – Candidates use their knowledge and understanding of individual and group motivation and behavior among students at the K-6 level to foster active engagement in learning, self motivation, and positive social interaction and to create supportive learning environments;</p> <p>3e. Communication to foster collaboration – Candidates use their knowledge and understanding of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the elementary classroom.</p>	I and E	I	I	I	I and A for level I courses
<p>4. Assessment for instruction – Candidates know, understand, and use formal and informal assessment strategies to plan, evaluate and strengthen instruction that will promote continuous intellectual, social, emotional, and physical development of each elementary student.</p>		I	I	I	I and A for level I courses
<p>5a. Practices and behaviors of developing career teachers – Candidates understand and apply practices and behaviors that are characteristic of developing career teachers.</p>		I	I	I	I and A
<p>5b. Reflection and evaluation – Candidates are aware of and reflect on their practice in light of research on teaching and resources available for professional learning; they continually evaluate the effects of their professional decisions and actions on students, parents, and other professionals in the learning community and actively seek out opportunities to grow professionally.</p>		I	I	I	I and A for level I courses
<p>5c. Collaboration with families –</p>	I	I	I	I	I and A for level

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Candidates know the importance of establishing and maintaining a positive collaborative relationship with families to promote the academic, social and emotional growth of children.					I courses
5d. Collaboration with colleagues and the community – Candidates foster relationships with school colleagues and agencies in the larger community to support students' learning and well being.	I	I	I	I	I and A for level I courses

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Elementary Education Courses: Semester 2

<u>Standards</u>	EDEE 366 Teaching Mathematics	EDEE 377 Reading/Learning Strategies	EDEE 368 Teaching Science	EDEE 373 Teaching Social Studies	EDEE 326 Health and P.E.	EDEE 382 Field Experience II
DEVELOPMENT, LEARNING AND MOTIVATION 1. Development, Learning and Motivation – Candidates know, understand, and use the major concepts, principals, theories, and research related to development of children and young adolescents to construct learning opportunities that support individual students' development, acquisition of knowledge, and motivation.	E	E	E	E	E	E and A for Level I and II courses
CURRICULUM 2a. Central concepts, tools of inquiry, and structure of content – Candidates know, understand, and use the central concepts, tools of inquiry, and structures of content for students across the K-6 grades and can create meaningful learning experiences that develop students' competence in subject matter and skills for various developmental levels.	E	E	E	E	E	E and A for Level I and II courses
2b. English language arts – Candidates demonstrate a high level of competence in use of English language arts and they know, understand, and use concepts from reading, language and child development, to teach reading, writing, speaking, viewing, listening, and thinking skills and to help students successfully apply their developing skills to many different situations, materials, and ideas.		E				E and A for Level I and III courses
2c. Science – Candidates know, understand, and use fundamental concepts in the subject matter of science – including physical, life,			I and E			I, E and A for Level I and II courses

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<p>and earth and space sciences – as well as concepts in science and technology, science in personal and social perspectives, the history and nature of science, the unifying concepts of science, and the inquiry processes scientists use in discovery of new...? It is cut off here</p>						<p>E and A for Level I and II courses</p>
<p>2d. Mathematics – Candidates know, understand, and use the major concepts, procedures, and reasoning processes of mathematics that define number systems and number sense, geometry, measurement, statistics and probability, and algebra in order to foster student understanding and use of patterns, quantities, and spatial relationships that can represent phenomena, solve problems, and manage data;</p>	<p>E</p>			<p>I and E</p>		<p>E and A for Level I and II courses</p>
<p>2e. Social studies – Candidates know, understand, and use the major concepts and modes of inquiry from the social studies – the integrated study of history, geography, the social sciences, and the other related areas – to promote elementary students' abilities to make informed decisions as citizens of a culturally diverse democratic society and interdependent world;</p>						
<p>2f. The arts – Candidates know, understand, and use – as appropriate to their own understanding and skills the content, functions, and achievements of dance, music, theater, and the several visual arts as primary media for communication, inquiry, and insight among elementary students;</p>						
<p>2g. Health education – Candidates know, understand, and use the major concepts in the subject matter of health education to create opportunities for student development and practice of skills that contribute to good health;</p>					<p>I and E</p>	<p>I, E and A for Level I and II courses</p>

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<p>2h. Physical education – Candidates know, understand, and use – as appropriate to their own understanding and skills – human movement and physical activity as central elements to foster active, healthy life styles and enhanced quality of life for elementary students:</p>					I and E	I, E, and A for Level I and II courses
<p>2i. Connections across the curriculum – Candidates know, understand, and use the connections among concepts, procedures, and applications from content areas to motivate elementary students, build understanding, and encourage the application of knowledge, skills, and ideas to real world issues.</p>	E	E	E	E	E	E and A for Level I and II courses
INSTRUCTION						
<p>3a. Integrating and applying knowledge for instruction – Candidates plan and implement instruction based on knowledge of students, learning theory, subject matter, curricular goals, and community:</p>	E	E	E	E	E	E and A for Level I and II courses
<p>3b. Adaptation to diverse students – Candidates understand how elementary students differ in their development and approaches to learning, and create instructional opportunities that are adapted to diverse students:</p>	E	E	E	E	E	E and A for Level I and II courses
<p>3c. Development of critical thinking, problem solving, performance skills – Candidates understand and use a variety of teaching strategies that encourage elementary students' development of critical thinking, problem solving, and performance skills:</p>	E	E	E	E	E	E and A for Level I and II courses
<p>3d. Active engagement in learning – Candidates use their knowledge and understanding of individual and group motivation and behavior among students at the K-6 level to foster active engagement in learning, self motivation, and positive social interaction and to create supportive learning</p>	E	E	E	E	E	E and A for Level I and II courses

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environments: 3e. Communication to foster collaboration – Candidates use their knowledge and understanding of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the elementary classroom.		E				E	E and A for Level I and II courses
ASSESSMENT 4. Assessment for instruction – Candidates know, understand, and use formal and informal assessment strategies to plan, evaluate and strengthen instruction that will promote continuous intellectual, social, emotional, and physical development of each elementary student.		E	E	E	E	E	E and A for Level I and II courses
PROFESSIONALISM 5a. Practices and behaviors of developing career teachers – Candidates understand and apply practices and behaviors that are characteristic of developing career teachers.		E	E	E	E	E	E and A for Level I and II courses
5b. Reflection and evaluation – Candidates are aware of and reflect on their practice in light of research on teaching and resources available for professional learning; they continually evaluate the effects of their professional decisions and actions on students, parents, and other professionals in the learning community and actively seek out opportunities to grow professionally.		E	E	E	E	E	E and A for Level I and II courses
5c. Collaboration with families – Candidates know the importance of establishing and maintaining a positive collaborative relationship with families to promote the academic, social and emotional growth of children.		E	E	E	E	E	E and A for Level I and II courses
5d. Collaboration with colleagues and the community – Candidates foster relationships with school colleagues and agencies in the larger community to support students'		E	E	E	E	E	E and A for Level I and II courses

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learning and well-being.

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Elementary Education Courses: Semester 3 and 4

Standards	<u>Third Semester</u>				<u>Fourth Semester</u>	
	ED EE 403 Visual and Performing Arts	ED EE 409 Meeting the Needs of Diverse Learners	ED EE 401 Literacy Assessment	ED EE 407 Creating Learning Environments	ED EE 416 Field Experience III	ED EE 457 Student Teaching
DEVELOPMENT, LEARNING AND MOTIVATION						
1. Development, Learning and Motivation -- Candidates know, understand, and use the major concepts, principals, theories, and research related to development of children and young adolescents to construct learning opportunities to support individual students' development, acquisition of knowledge, and motivation.		I, E, and A	E and A	I, E, and A	A for Level I, II, and III courses	A
CURRICULUM						
2a. Central concepts, tools of inquiry, and structure of content -- Candidates know, understand, and use the central concepts, tools of inquiry, and structures of content for students across the K-6 grades and can create meaningful learning experiences that develop students' competence in subject matter and skills for various developmental levels.		I, E, and A	E and A	I, E, and A	A for Level I, II, and III courses	A
2b. English language arts -- Candidates demonstrate a high level of competence in use of English language arts and they know, understand, and use concepts from reading, language and child			E and A		A for Level I, II, and III courses	A

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<p>development, to teach reading, writing, speaking, viewing, listening, and thinking skills and to help students successfully apply their developing skills to many different situations, materials, and ideas.</p>		E and A		E and A	A for Level I, II, and III courses	A
<p>2c. Science – Candidates know, understand, and use fundamental concepts in the subject matter of science – including physical, life, and earth and space sciences – as well as concepts in science and technology, science in personal and social perspectives, the history and nature of science, the unifying concepts of science, and the inquiry processes scientists use in discovery of new....? It is cut off here</p>		E and A		E and A	A for Level I, II, and III courses	A
<p>2d. Mathematics – Candidates know, understand, and use the major concepts, procedures, and reasoning processes of mathematics that define number systems and number sense, geometry, measurement, statistics and probability, and algebra in order to foster student understanding and use of patterns, quantities, and spatial relationships that can represent phenomena, solve problems, and manage data.</p>		E and A		E and A	A for Level I, II, and III courses	A
<p>2e. Social studies – Candidates know, understand, and use the major concepts and modes of inquiry from the social studies – the integrated study of history, geography, the social sciences, and the other related areas – to promote elementary students' abilities to make informed decisions as citizens of a culturally diverse democratic society and interdependent</p>		E and A		E and A	A for Level I, II, and III courses	A

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world:								
2f. The arts – Candidates know, understand, and use – as appropriate to their own understanding and skills the content, functions, and achievements of dance, music, theater, and the several visual arts as primary media for communication, inquiry, and insight among elementary students;	I, E, and A	E and A		E and A		A for Level III courses		
2g. Health education – Candidates know, understand, and use the major concepts in the subject matter of health education to create opportunities for student development and practice of skills that contribute to good health;		E and A		E and A		A for Level III courses		
2h. Physical education – Candidates know, understand, and use – as appropriate to their own understanding and skills – human movement and physical activity as central elements to foster active, healthy life styles and enhanced quality of life for elementary students;		E and A		E and A		A for Level III courses		
2i. Connections across the curriculum – Candidates know, understand, and use the connections among concepts, procedures, and applications from content areas to motivate elementary students, build understanding, and encourage the application of knowledge, skills, and ideas to real world issues.		A		A		A for Level I, II, and III courses		
INSTRUCTION								
3a. Integrating and applying knowledge for instruction – Candidates plan and implement instruction based on knowledge of students, learning theory, subject matter, curricular goals, and community;	A	I, E, and A	A	I, E, and A		A for Level I, II, and III courses	A	
3b. Adaptation to diverse students –	A	I, E, and A	A	I, E, and A		A for Level I,	A	

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<p>Candidates understand how elementary students differ in their development and approaches to learning, and create instructional opportunities that are adapted to diverse students.</p>					<p>II, and III courses</p>	
<p>3c. Development of critical thinking, problem solving, performance skills – Candidates understand and use a variety of teaching strategies that encourage elementary students' development of critical thinking, problem solving, and performance skills.</p>	A	A	A	A	<p>A for Level I, II, and III courses</p>	A
<p>3d. Active engagement in learning – Candidates use their knowledge and understanding of individual and group motivation and behavior among students at the K-6 level to foster active engagement in learning, self motivation, and positive social interaction and to create supportive learning environments.</p>	A	A	A	A	<p>A for Level I, II, and III courses</p>	A
<p>3e. Communication to foster collaboration – Candidates use their knowledge and understanding of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the elementary classroom.</p>	A	A	A	A	<p>A for Level I, II, and III courses</p>	A
<p>ASSESSMENT 4. Assessment for instruction – Candidates know, understand, and use formal and informal assessment strategies to plan, evaluate and strengthen instruction that will promote continuous intellectual, social, emotional, and physical development of each elementary student.</p>	A	A	A	A	<p>A for Level I, II, and III courses</p>	A

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PROFESSIONALISM								
5a. Practices and behaviors of developing career teachers – Candidates understand and apply practices and behaviors that are characteristic of developing career teachers;	A		A		A		A for Level I, II, and III courses	A
5b. Reflection and evaluation – Candidates are aware of and reflect on their practice in light of research on teaching and resources available for professional learning; they continually evaluate the effects of their professional decisions and actions on students, parents, and other professionals in the learning community and actively seek out opportunities to grow professionally;	A		A		A		A for Level I, II, and III courses	A
5c. Collaboration with families – Candidates know the importance of establishing and maintaining a positive collaborative relationship with families to promote the academic, social and emotional growth of children.	A		A		A		A for Level I, II, and III courses	A
5d. Collaboration with colleagues and the community – Candidates foster relationships with school colleagues and agencies in the larger community to support students' learning and well-being.	A		A		A		A for Level I, II, and III courses	A

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New Program Proposal
Bachelor of Science in Middle Level Education
College of Charleston

Summary

The College of Charleston requests approval to offer a program leading to the Bachelor of Science degree in Middle Level Education, to be implemented in Fall 2003.

The Board of Trustees approved the proposal on April 16, 2002. This proposal was submitted for Commission review on August 13, 2002. The proposal was reviewed without substantive comment and voted upon favorably by the Advisory Committee on Academic Programs at its meeting on October 1, 2002.

The purpose of the program is to train teachers to serve in the grade spans of five to eight by offering specialized training focused on the unique needs of adolescents. The need is based on the new middle-level certification requirements of the State Board of Education. In January 2002, the State approved middle-level certification for teachers and there is a great need for the specialized training required to attain this certification. When this certification was enacted by the state, there were no middle level teacher education programs. The State has recently revised all certification levels and the College has responded to these changes in certification levels by proposing two new programs in Early Childhood and Middle Level Education and revising the major in Elementary Education.

The proposed program will allow teacher education majors to take the specialized program required for certification in middle level education. The need for the program is based on the State requirement that after September 1, 2005, any a graduate of a teacher education program wishing to teach in grades 5-8 must complete an approved middle level teacher education program. This need has been compounded by the federal *No Child Left Behind Act* of the federal government that requires a highly qualified teacher in every classroom by 2006. For Title I schools, this requirement had a deadline of September 2002. With approval of this program, there will be four public institutions with degree programs in middle level education. The other three initial programs are at Coastal Carolina University, Winthrop University, and USC-Spartanburg. No private institutions have developed a middle level teacher education program.

The curriculum consists of 129 credit hours. Of these credit hours, 63 are in general education, 36 are in education, 12 are in student teaching, and 18 are in

one of two concentration content areas with nine hours taken in each content area (English, mathematics, science, or social studies). The 18 credit hours in the content areas are in addition to content courses required under general education that allow students to take 15 to 17 total credit hours in each of the required two content areas. The 36 credit hours in education require completion of 12 credit hours in middle-level courses and 24 credit hours in professional education courses. The curriculum has been designed to meet the standards of the National Middle School Association (NMSA). Sixteen new courses will be required. Of these, six of the new courses will be shared with the proposed programs in Elementary Education and Early Childhood Education.

While the program will be sharing courses with the early childhood and elementary education programs, it is important to delineate how the three programs will differ so that they will meet the standards of the appropriate accrediting body as well as ensure that students receive skills and knowledge pertinent to their area of teaching. The College has supplied to the staff a matrix (see **Attachment 1**) indicating which courses will meet the standards of NMSA. The programs are designed such that in the student's initial year in the teacher education (typically the first semester of the junior year) they have experiences that enable them to make a certification area choice. During the first and third semesters of the education program concepts are introduced in courses that are common to all teaching levels but then these concepts and central ideas are extended through assignments and activities specific to the teaching area. In the second semester, students concentrate on content areas and courses required for each certification level, i.e., elementary education majors will take courses such as Teaching Mathematics grades 2-8, Teaching Reading/Learning Strategies grades 2-8, among others. Students that will teach in the middle grades will have materials and experiences that focus on grades 5-8. Courses during this semester are designed to meet the specific requirements of the accrediting body. The programs are designed to have students come together in common coursework in the third semester with differentiated understandings of curriculum and pedagogy that will then be applied to assignments and activities specific to the grade levels to be taught. The program culminates in the fourth and final semester with student teaching. The sharing of courses at the three teaching levels will also allow students to gain an understanding of the continuum of the educational process and how there are developmentally differentiated teaching needs at each of these levels.

The College of Charleston indicates that one new faculty will need to be hired for the proposed program during its third year of operation. The College has recently made two new hires of faculty with middle level backgrounds. The program proposal indicates that there are ten faculty that have some experience in middle level education and also provides a plan for enhancing the middle level

knowledge of these faculty. Faculty serving the program will begin at 2.75 headcount (2.1 FTE) in FY 2003-04 and will increase to 3.75 headcount (2.8 FTE) in FY 2007-08. New faculty will be required to have a background in middle school curriculum and instruction and at least three years teaching experience at the middle level.

Enrollment in the proposed program is estimated to begin at 15 headcount students in FY 2003-04 and increase to 30 headcount students in FY 2007-08. Enrollment estimates are based on projections from current enrollment figures at the College of students who are currently enrolled in the add-on programs as well as the results of recruitment efforts. If enrollment estimates are realized, the proposed program will meet the Commission's program productivity standards.

The program will be required to obtain accreditation from the National Council for the Accreditation of Teacher Education (NCATE) and meet the standards of the professional association (NMSA). As noted above, the College has supplied a matrix indicating how the program was designed to meet NMSA standards.

There are no physical plant or equipment needs for the proposed program. The library holdings were compared against the standards of the Association of College Research Libraries in September 2000 and were deemed adequate at that time. This comparison did not, however, include over 7,000 volumes in the Curriculum Laboratory in the School of Education that also support the three new proposed programs in early childhood, elementary, and middle level education. The proposed program indicates that the College will utilize \$1,000 per year of its library budget to increase acquisitions primarily related to middle level education.

Total new costs for the proposed program are estimated to begin at \$11,000 and include salaries for graduate assistants (\$8,300), supplies (\$200), library support (\$1,000), and other general expenses (\$1,500). The costs are estimated to increase to \$59,300 in the third year of the program with the addition of new faculty (\$48,000) and an increase in supplies (\$500). The total estimated new costs for the program over the first five years is \$200,000.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with implementation of the proposed program for its first five years. Also shown are the estimated revenues projected under the MRR and the Resource Allocation Plan as well as student tuition.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$136,092	\$0	\$136,092	\$0	\$125,020	\$125,020
2004-05	247,440	0	247,440	83,630	227,184	310,814
2005-06	247,440	0	247,440	152,121	227,184	379,305
2006-07	247,440	0	247,440	152,121	227,184	379,305
2007-08	247,440	0	247,440	152,121	227,184	379,305

These data demonstrate that if the College of Charleston can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will be able to cover new costs with revenues it generates by the second year of its implementation.

In summary, the College of Charleston will be re-designing its undergraduate teacher education programs to implement a new degree program in Middle Level Education. Programs are needed in the state in middle level education to meet the state and federal requirements to have teachers certified at the middle level by 2005. The proposed program has been designed to meet the new certification requirements of the State and allow graduates of the program to be eligible for middle level certification.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing commend favorably to the Commission the program leading to the Bachelor of Science degree in Middle Level Education at the College of Charleston, to be implemented in Fall 2003, provided that no "unique cost" or other special state funding be required or requested, and provided further that the program be approved by the State Board of Education.

Note: Attachment 1 is not included in the electronic mailout but is available upon request.

Middle School Education Courses: Semester 1

Standards	EDFS 303 Human Growth and the Educational Process	EDEE 323 Mathematics: Language of Logic	EDEE 325 Language and Literacy Development	EDFS 326 Introduction to Education Technology	EDEE 327 Field Experiences I
I. Young Adolescent Development	Knowledge 1,2,5,7,8 (I) Dispositions 1(I)	Knowledge 1,2 (I) Dispositions 2 (I)	Knowledge 1,2 (I) Dispositions 2 (I)		Knowledge 1 (A); 3 (I, A) Dispositions 1,2 (A); 7 (I, A)
II. Middle Level Philosophy and School Organization	Knowledge 1,4 (I) Dispositions 1 (I)				Knowledge 4 (A); 5 (I, A) Dispositions 1 (A)
III. Middle Level Curriculum and Assessment		Knowledge 1,2,3,4,7 (I) Dispositions 1,2,3,4 (I)	Knowledge 1,2,3,4,7 (I) Dispositions 1,2,3,4 (I)	Knowledge 5,8 (I) Performance 9 (I)	Knowledge 1,2(A); 8 (I, A) Dispositions 1,2,4 (A)
IV. Middle Level Teaching Fields		Knowledge 1 (I) Dispositions 1,2,3 (I) Performances 6 (I)	Knowledge 1 (I) Dispositions 1,2,3 (I) Performances 6 (I)	Knowledge 4 (I) Dispositions 4 (I)	Dispositions 1,3 (A)
V. Middle Level Instruction and Assessment	Dispositions 2,3 (I)	Knowledge 2,3,6 (I) Dispositions 1,2,3,5,7 (I)	Knowledge 2,3,6 (I) Dispositions 1,2,3,5,7 (I)		Knowledge 2,3 (A); 7(I, A) Dispositions 1,2,3,7 (A); 4

						(1,A)
VI. Family and Community Involvement	Knowledge 1,2,3,9 (I) Dispositions 1,2,3,5,6,7 (I)					Dispositions 5,6 (A)
VII. Middle Level Professional Roles	Knowledge 8 (I) Dispositions 1,3,5 (I)				Knowledge 10 (I) Performances 5 (I)	Performances 1 (1,A)

Middle School Education Courses: Semester 2

<u>Standards</u> National Middle School Association	Middle level candidates will choose two courses from among EDEE 366, 377, 368, and 373 based on their declared subject area concentrations.	Middle level candidates will enroll in three courses through the CoFC schools of arts and sciences in partial fulfillment of requirements for two subject area concentrations.	EDEE 384 Application of Curriculum and Instruction in the Middle School
I. Young Adolescent Development	<p>Knowledge 3 (E); 4,6 (E) Dispositions 3 (E); 4, 7 (I) Performances 2,4,5,6,10 (I)</p>		<p>Knowledge 1,3,4,7 (A) Dispositions 1,2,3,4,5,6,7, (A) Performances 1,2,4,5,6,10 (A); 3,7,8 (I,A)</p>
II. Middle Level Philosophy and School Organization	<p>Knowledge 1,4 (E); 3,5 (I) Dispositions 1 (E); 2,3,4 (I) Performances 1,3 (I)</p>		<p>Knowledge 1,3,4,5 (A); 6 (I,A) Dispositions 1,2,3,4 (A) Performances 1,3 (A); 2,4,5 (I,A)</p>
III. Middle Level Curriculum and Assessment	<p>Knowledge 1,2,3,4,5,7,8 (E); 6,9,10,11 (I) Dispositions 1,2,3,4 (E); 5 (I) Performances 2,3,4,8 (I); 9 (E)</p>	<p>Knowledge 3 (E)</p>	<p>Knowledge 1,2,3,4,5,6,7,8,9,10, 11 (A) Dispositions 1,2,3,4,5 (A) Performances 1,2,3,4,5,6,7,8,9 (A)</p>

<p>IV. Middle Level Teaching Fields</p>	<p>Knowledge 1,4 (E); 2,3 (I) Dispositions 1,2,3,4 (E) Performances 2 (I); 6 (E)</p>	<p>Knowledge 1 (E) Dispositions 1 (E) Performances 6 (E)</p>	<p>Knowledge 2,3,4 (A) Dispositions 1,2,3,4 (A) Performances 2,6 (A); 1,3,4,5 (I,A)</p>
<p>V. Middle Level Instruction and Assessment</p>	<p>Knowledge 2,3,6,7 (E); 1,4,5,8,9 (I) Dispositions 1,2,3,4,5,7 (E); 6,8 (I)</p>		<p>Knowledge 1,2,3,4,5,6,7,8,9 (A) Dispositions 1,2,3,4,5,6,7,8 (A) Performances 1,2,3,5,9 (A); 4,6,7,8,10 (I,A)</p>
<p>VI. Family and Community Involvement</p>	<p>Dispositions 6 (E) Performances 3(I)</p>		<p>Knowledge 2 (A); 5 (I,A) Dispositions 1,6 (A) Performances 3 (A); 2,4 (I,A)</p>
<p>VII. Middle Level Professional Roles</p>	<p>Knowledge 8 (E); 6,10 (I) Dispositions 1 (E); 6 (I) Performances 5 (E)</p>		<p>Knowledge 2 (I,A); 6,8,10 (A) Dispositions 1,3,5,6 (A); 2,7 (I,A) Performances 1,5 (A); 2,3 (I,A)</p>

Middle School Education Courses: Semester 3 and 4

<p>Standards National Middle School Association</p>	<p>EDFS 409 Meeting the Needs of Diverse Learners</p>	<p>EDEE 401 Literacy Assessment</p>	<p>EDEE 407 Creating Educational Environments</p>	<p>Teaching field concentration course in CoFC arts and sciences</p>	<p>EDEE 417 Curriculum, Instruction, and Assessment (Field)</p>	<p>EDEE 459 Student Teaching in the Middle School</p>
<p>I. Young Adolescent Development</p>	<p>Knowledge 2,6 (E) Dispositions 2,4,6 (E) Performances 2,4,5,6,10 (E)</p>	<p>Performances 4,6 (E)</p>	<p>Dispositions 2,3,4,6 (E) Performances 2,8 (E); 9(f)</p>		<p>Knowledge 1,3,4,7 (A) Dispositions 1,2,3,4,5,6,7 (A) Performances 1,2,3,4,5,6,7,8,9,10(A)</p>	<p>This experience is built on the TARGET PERFORMANCE narratives of all seven NMSA Standards, with emphasis on all performances within each standard.</p>
<p>II. Middle Level Philosophy and School Organization</p>	<p>Knowledge 1,4,5 (E) Dispositions 1,2,3,4 (E) Performances 1,3 (E)</p>	<p>Knowledge 4 (E)</p>	<p>Knowledge 1,4,5 (E) Dispositions 1,2,3,4 (E) Performances 1,3 (E)</p>		<p>Knowledge 1,2,3,4,5,6 (A) Dispositions 1,2,3,4 (A) Performances 1,2,3,4 (A)</p>	
<p>III. Middle Level Curriculum and Assessment</p>	<p>Knowledge 1,6,10 (E) Dispositions 1,4,5 (E) Performances 3,4 (E)</p>	<p>Knowledge 2,3,4,6,7,8,10,11 (E); 12(f) Dispositions 1,2,3,4 (E) Performances 2,8,9 (E)</p>	<p>Knowledge 1,9,10,12 (E) Dispositions 1,2,3,4,5 (E) Performances 2,3,4 (E)</p>	<p>Knowledge 3 (E)</p>	<p>Knowledge 1,2,3,4,5,6,7,8,9,10,11,12(A) Dispositions 1,2,3,4,5 (A) Performances 1,2,3,4,5,6,7,8,9 (A)</p>	
<p>IV. Middle Level Teaching Fields</p>	<p>Knowledge 2 (E) Dispositions 2 (E)</p>	<p>Knowledge 2,3,4 (E) Dispositions 2,3,4 (E)</p>	<p>Knowledge 2,3,4 (E) Dispositions 1,2,3,4 (E)</p>	<p>Knowledge 1 (E) Dispositions 1 (E)</p>	<p>Knowledge 2,3,4 (A) Dispositions 1,2,3,4 (A)</p>	

		Performances 2 (E)		Performances 6 (E)	Performances 1,2,3,4,5,6 (A)	
V. Middle Level Instruction and Assessment	Knowledge 2,7,8 (E) Dispositions 1,2,3,5,8 (E)	Knowledge 2,3,4,9 (E) Dispositions 1,2,3,5,6,7,8 (E) Performances 9 (E)	Knowledge 1,2,3,5,6,7,8(E) Dispositions 1,2,3,4,5,8 (E) Performances 2 (E)		Knowledge 1,2,3,4,5,6,7,8,9 (A) Dispositions 1,2,3,4,5,6,7,8 (A) Performances 1,2,3,4,5,6,7,8,9,10, (A)	
VI. Family and Community Involvement	Knowledge 1,2,6,9 (E) Dispositions 1,2,3,5,8 (E) Performances 3 (E)		Knowledge 1,2,5,6,9 (E) Dispositions 1,5,6,7 (E) Performances 3 (E)		Knowledge 1,2,3,4,5,6,7,9 (A) Disposition 1,2,3,4,5,6,7,8 (A) Performances 2,3,4 (A); 5,6 (I,A)	
VII. Middle Level Professional Roles	Knowledge 2 (E) Dispositions 6 (E)	Knowledge 10 (E) Dispositions 6 (E)	Knowledge 6 (E) Dispositions 1,6 (E)		Knowledge 2,6,8,10 (A); 1,3,4,5,7,9(I,A) Dispositions 1,2,5,6,7 (A); 4 (I,A) Performances 1,2,3,5 (A); 4 (I,A)	

New Program Proposal
Center for Safety Research and Education
Clemson University

Summary

Clemson University requests approval for a new Center for Safety Research and Education, to be established upon approval by the Commission.

The University's Board of Trustees approved the Center on September 24, 2002. The Commission's Advisory Committee on Academic Programs reviewed the proposal at its October 1, 2002, meeting and without substantive comment, voted unanimously to approve the Center. Under its *Guidelines for New Academic Program Approval* (1998), the Commission retains new program approval authority over proposed new centers, bureaus, and institutes that seek funding from the State. Clemson is seeking a significant amount of special state funding ("below the line") to support the implementation of the new Center for Safety Research and Education.

The purpose of the proposed new Center for Safety Research and Education is three-fold: 1) to develop, demonstrate, and evaluate healthy lifestyles education; 2) conduct action research; and, 3) collect, analyze, and disseminate research to improve the safety and health of South Carolina's citizens. Specific objectives of the Center include: 1) generating awareness of the six safety and health risk factors; 2) developing and packaging healthy lifestyles education programs (e.g., youth traffic safety programs, pedestrian safety); 3) encouraging the participation of students of all ages in experiential learning initiatives related to safety; 4) disseminating information on safety and health issues to the public schools as well as other community agencies and businesses; 5) providing community leaders with training and support to help resolve safety and health issues; and, 6) developing materials and training opportunities to address problems of accessibility and accommodation of the physically challenged.

Clemson's decision to develop such a center, which focuses concretely on issues related to the health and safety of South Carolinians, is to be commended. The statistics relating to health and safety concerns in South Carolina are indeed worrisome, especially those pertaining to children and youth. According to the proposal, which draws considerable statistical information from the *South Carolina Kids Count 2001* publication, deaths by automobile crashes, deaths by suicide, and engagement in risky sexual behavior are all on the increase among teenagers in South Carolina. All by itself, one alarming statistic—adolescents in the state die at a 34 percent higher rate than the national average, mostly because

of automobile crashes—certainly helps Clemson make a compelling case for the Center for Safety Research and Education.

The proposed Center will offer no credit-bearing coursework or degree programming. Clemson anticipates that the Center, through its outreach efforts to children, youth, and educators, will reach at least 100 to 200 people per year with its formal programs. The impact on the state could be much broader, however, depending on the ability of the Center to fulfill its objectives.

Clemson will house the Center in the College of Health, Education, and Human Development (HEHD). The Center will work closely with the Departments of Public Health Sciences and the Department of Psychology as well as the Center for Collaborative Health Research and the Joseph Sullivan Center (a health care practice clinic) at Clemson. Additionally, the University will collaborate with the School of Public Health at USC-Columbia as well as with South Carolina State University and the South Carolina Department of Public Safety among other agencies. There is no other entity in the higher education community in South Carolina that focuses specifically on safety research and education. Moreover, Clemson will be one of only two major universities in the nation that will possess a center related to the topic; the Pennsylvania State University runs a Prevention Research Center for the Promotion of Human Development.

Almost all of the total cost for the Center's implementation in year one of operation (academic year 2002-03) is devoted to faculty and staff salaries (\$270,000 of a total budget of \$310,000). Supplies, equipment, and travel costs comprise the remaining \$40,000. There are no facilities costs associated with the proposed new Center. According to the proposal, the Center will retain four full-time faculty members, three classified as research associates and one as a lecturer, one administrative assistant, and four graduate assistants. Clemson is requesting that the entire cost for year one be covered by "below the line" funding from the State of South Carolina. The University projects no additional costs beyond year one, but will petition for special state funding in subsequent years to cover the same personnel and miscellaneous costs.

In summary, the Center for Safety Research and Education at Clemson is an important new entity that may help South Carolina address in a more organized fashion its significant health and safety problems. Costs for implementing the proposed new Center, while not prohibitive, are fairly high, and are mostly related to salaries and benefits. Clemson will need to make sure that it can support the Center adequately through private, external funds should special state funding not be forthcoming in subsequent years.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing commend favorably to the Commission approval of the Center for Safety Research and Education at Clemson University for implementation immediately upon Commission approval.

New Program Proposal
South Carolina DNA Learning Center
Clemson University

Summary

Clemson University requests approval for a new South Carolina DNA Learning Center, to be established on July 1, 2003.

The University's Board of Trustees approved the Center on September 25, 2002. The Commission's Advisory Committee on Academic Programs reviewed the proposal at its October 1, 2002, meeting and without substantive comment, voted unanimously to approve the Center. Under its *Guidelines for New Academic Program Approval* (1998), the Commission retains new program approval authority over proposed new centers, bureaus, and institutes that seek new funding from the State. Clemson is seeking significant amount of special state funding ("below the line") to support the implementation of the new DNA Center.

The South Carolina DNA Learning Center will be a collaborative venture between Clemson and the Cold Spring Harbor Laboratory Dolan DNA Learning Center (CSHL), "a worldwide...producer of educational materials in recombinant DNA technology and human genomic technology." The proposed new Center will focus on educating South Carolinians—and especially K-12 teachers and students—on topics related to plant genomics. Clemson will use its current agricultural extension and teacher professional development networks for the educational dissemination component of the Center's mission. More specifically, the South Carolina DNA Learning Center will seek to "increase the number of K-12 teachers with basic competency in biotechnology and genetics" through graduate coursework in these areas and through the development of "providing classroom lessons and materials kits for modern genetics and biotechnology." Importantly, too, the Center will "assist the public understanding of food biotechnology" through the statewide involvement of county extension agents.

Clemson is well prepared to establish a center emphasizing the education of the public about plant genomics and biotechnology in general. The University already has in place a Genomics Institute, which focuses on plant genomics, and has recently established a Department of Genetics and Biochemistry. Additionally, Clemson will collaborate with Lander University, which offers a genetics option within its undergraduate biology degree program, the Greenwood Genetic Center, and the Upper Savannah Science and Mathematics Hub, a regional science and mathematics teacher resource center. Moreover, the Center

is unique in South Carolina: there is no other center in South Carolina devoted to the development of linkages between K-12 education and plant genomics.

The proposed South Carolina DNA Center will offer coursework in four areas: 1) two undergraduate courses aimed at Clemson and Lander undergraduate students (AG ED 404, Biotechnology in Agricultural Education and AG ED 203, Teaching Agriscience); 2) two graduate courses leading to graduate credit for in-service teachers and county extension agents, which will be taught in the summer on the Clemson campus and via distance education as well (Biotechnology for Teachers and Modern Genetics for Teachers); 3) middle and high school student laboratory experiences; and, 4) workshops and other training sessions for teachers, extension agents, and other professionals. The proposed Center will offer no degree programs.

Clemson projects enrollment in the undergraduate courses will begin at approximately 20 headcount in year one of operation (academic year 2003-04) and increase to around 100 headcount in year five (academic year 2007-08) in the Biotechnology in Agricultural Education course and 40 headcount in the Teaching Agriscience course. Clemson anticipates that both graduate courses aimed at in-service teachers will enroll approximately 12 students each year in the summer on-campus sessions and between 25 to 50 students per year via distance education.

The University anticipates hiring several new staff and faculty related to the South Carolina DNA Learning Center. A half-time (0.5 FTE) director will oversee the Center; this individual will double as a full professor in the life sciences at the University. Other new part-time faculty associated with the Center include an associate professor and approximately four assistant professors, all of whom together will comprise two full-time equivalent faculty members devoted to Center work. Over the first five years of the proposed Center's operation, Clemson will hire six full-time equivalent staff members who will perform tasks such as laboratory preparation and instruction, distance education and Internet coordination, and administrative support. The University will also add two new graduate assistantships linked to the work of the Center. Costs associated with the hiring of all faculty and staff are projected to run just over \$2 million over the first five years of operation (2003-08). According to the proposal, full staffing will depend "in part on success in obtaining external (non-state) funding."

The proposed new South Carolina DNA Learning Center will require significant equipment and facilities costs, too. Clemson will house the new Center in Jordan Hall in its first year of operation, and costs associated with renovating the building (mostly devoted to laboratory upgrades) come to \$500,000. Also, the University will spend approximately \$200,000 in the first year of operation to purchase new equipment for the Center (mostly teaching laboratory equipment).

Additional costs associated with library materials are minimal (a one-time expenditure of \$3,000), as Clemson's library already maintains an adequate collection related to biotechnology and plant genomics. Other new costs associated with implementing the South Carolina DNA Learning Center come in the form of approximately \$367,000 for supplies and materials for the first five years of operation and approximately \$260,450 for participant support and travel over the same period.

Total costs associated with implementing the new Center are as follows:

\$1,036,150	\$467,595	\$538,604	\$638,641	\$661,780	\$3,342,770
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Clemson has requested special state funding ("below the line") to cover \$536,150 of the needs for the first year of operation, a request which the staff in the Division of Academic Affairs and Licensing at the Commission views as appropriate given the important, statewide objectives of the Center and its unique mission in the state. The University will petition for special state funding in successive years, too. It is important to note that Clemson hopes to garner approximately \$1.2 million in external funding to support the South Carolina DNA Learning Center over the first five years of operation, although much of this money is not yet in hand.

In summary, the South Carolina DNA Learning Center is an important new initiative at Clemson University, one whose timeliness and application to the entire state through K-12 educators and students and county extension agents make it truly commendable. However, costs associated with implementing the new Center are high, and while the staff believes that the significance of the new Center's work makes it a credible candidate for external funding, Clemson will need to plan carefully to ensure that it can adequately fund the Center on an on-going basis, whether or not special state funds are approved.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing commend favorably to the Commission approval of the South Carolina DNA Learning Center at Clemson University for implementation in July 2003.