SOUTH DAKOTA BOARD OF REGENTS

Committee on Academic and Student Affairs

AGENDA ITEM: III – B (1) (b)

DATE: April 2-3, 2014

SUBJECT: Intent to Plan: USD Ph.D. in Health Sciences

The University of South Dakota requests authorization to develop a proposal for a Ph.D. in Health Sciences.

USD believes the program will prepare practicing health care professionals to assume leadership roles in academia, research, and/or clinical practice settings. The University notes a national shortage in health science instructors possessing doctorate degrees. Despite this shortage, terminal degree expectations and accreditation standards have moved in the direction of advanced practice or research doctorate requirements. South Dakota has no other Ph.D. programs in health science fields with the exception of the Ph.D. in Nursing at SDSU.

USD plans to use distance delivery for the program with limited requirements for face-to-face contact (approximately three times during the term of the program).

The proposed program supports the Board of Regents Economic Development & Quality of Life strategic goal (Policy 1:21) by promoting growth of research initiatives, expanding graduate education, and contributing to workforce development and quality of life by expanding academic programs to meet future workforce needs.

USD does not intend to request new State resources for the program.

RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR

Authorize the University of South Dakota to develop a proposal for a Ph.D. in Health Sciences with the following conditions:

1. The university will research existing curricula, consult with experts concerning the curriculum, and provide assurance in the proposal that the program is consistent with current national standards and with the needs of employers.
2. The proposal will define the specific knowledge, skills, and competencies to be acquired through the program, will outline how each will be obtained in the curriculum and will identify the specific measures to be used to determine whether individual students have attained the expected knowledge, skills, and competencies.
3. The university will not request new state resources and the program proposal will identify the sources and amounts of all funds needed to operate the program and the impact of reallocations on existing programs.
1. University Mission

The statutory mission of The University of South Dakota is provided in SDCL 13-51-1:

Designated as South Dakota’s liberal arts university, the university of South Dakota, established and located at Vermillion, in Clay county, shall be under the control of the board of regents and shall provide undergraduate and graduate programs of instruction in the liberal arts and sciences and professional education in business, education, fine arts, law and medicine, and other courses or programs as the board of regents may determine.

Board Policy 1:10:1 University of South Dakota Mission Statement identifies the degrees authorized for the University. The University has authority for associate, baccalaureate, first professional and graduate degrees.

2. Related Programs within the System

Practice doctorates exist in a variety of fields, for example, Doctor of Physical Therapy (DPT) and DNP, (Doctor of Nursing Practice). There is a PhD in Nursing offered at South Dakota State University. However, these are programs for practitioners and they do not prepare individuals to assume roles in teaching and research. This proposed program will provide an inter-professional PhD program which will meet the needs of other health science practitioners, administrators, and educators.

3. System Strategic Goals, State Initiatives, and Workforce Development

The proposed program supports the system strategic goals (Policy 1:21):

- Expand graduate education.
- Contribute to workforce development and quality of life by expanding academic programs to meet our future workforce needs. This program would be designed to prepare practicing health care professionals to assume leadership roles in academia, research, and/or clinical practice settings.

4. Off-Campus and Distance Delivery

The University of South Dakota intends to request distance delivery authority. The proposed program will be delivered online with limited expectations for face-to-face contact (approximately 3 times during the program of study).

5. Resources

USD does not intend to request new State resources or new or increased student fees. The program would be offered with reallocations of existing funds and tuition revenue generated by students in the program.
South Dakota Board of Regents
Intent to Plan for a PhD in Health Sciences

Use this form to request authorization to plan a new baccalaureate major, a new associate degree program, or a new graduate program. The Executive Director or the Board may request additional information.

<table>
<thead>
<tr>
<th>UNIVERSITY:</th>
<th>USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEGREE(S) AND TITLE OF PROGRAM:</td>
<td>PhD in Health Sciences</td>
</tr>
<tr>
<td>INTENDED DATE OF IMPLEMENTATION:</td>
<td>Fall 2015</td>
</tr>
</tbody>
</table>

University Approval
To the Board and the Executive Director: I certify that I have read this intent to plan, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

President of the University 2/10/14

After approval by the President, a signed copy of the proposal should be transmitted to the Executive Director. Only after Executive Director review should the proposal be posted on the university web site and the Board staff and the other universities notified of the URL.

1. **What is the general nature of the proposed program? What is the expected demand for graduates in South Dakota? What is the need for the proposed program?**

The University of South Dakota requests authorization to develop an interdisciplinary PhD in Health Sciences. This interprofessional degree program is designed to prepare practicing health care professionals to assume leadership roles in academia, research and/or clinical practice settings. Designed for working professionals, features of the proposed program include:

- Minimum of 80 credits beyond the baccalaureate degree;
- Core curriculum comprised of three content threads: teaching, scholarship, and leadership in service/advanced practice;
- Ability to tailor learning to meet individual career aspirations and research interests through elective coursework, projects completed within courses, and the dissertation;
- Online course delivery with limited expectations for face-to-face contact. Resident experiences include an initial orientation, a two-week *Dissertation Boot Camp*, and defense of the dissertation;
- With advisor approval, dissertation research can be completed off-campus in most instances.

USD does not intend to request new state resources. The program would be funded through the self-support tuition model. Program expenses will be funded through tuition dollars received.

*Expected Demand for the Program*
The US Department of Labor, Bureau of Labor Statistics projects a 17% increase in the need for postsecondary educators in health and human service professions between 2010 and 2020 (http://www.bls.gov/ooh/Education-Training-and-Library/Postsecondary-teachers.htm#tab-6). One of the challenges to meeting this shortage is that most professionals are not prepared at the doctoral level.

- Approximately 1200 faculty teaching in health-science related programs at public and private colleges and universities in the region (SD, MN, NE, IA, and ND) do not hold a doctoral degree.
- 80% of current occupational therapy and physical therapy faculty were masters-prepared at initial hire and completed their doctorate post-hire.
- In 2009-2010, only 64% of occupational therapy faculty in the US held a doctoral degree. http://www.aota.org/en/Education-Careers/Educators.aspx
- In 2012-2013, nearly 9% of PT faculty, 207 individuals, were enrolled in doctoral education. The number seeking advanced research doctorates is expected to grow as more programs require faculty with education beyond the entry-level practice doctorate. http://www.capteonline.org/uploadedFiles/CAPTEorg/About_CAPTE/Resources/Aggregate_Program_Data/AggregateProgramData_PTPrograms.pdf

Many health care practitioners enter academia after years of clinical experience without holding a terminal degree. In addition, terminal degree expectations and accreditation standards have shifted in recent years, requiring an advanced practice or research doctorate. A PhD with three emphases, teaching, scholarship, and leadership/advanced practice, provides the diversity and flexibility needed in post-professional education of health science practitioners. This diversity enables learners to seek or advance their careers in academia, research, administration, leadership and policy development. There is a particular demand for doctorally-prepared nurse educators. Other than the PhD in Nursing at SDSU, there are no other PhD programs in health sciences in SD. Individuals are currently seeking degrees out of state to meet career aspirations.

The online delivery of the proposed program, with limited residency requirements, makes the program highly accessible to non-traditional working professionals.

**Workforce Demand for Graduates**
**Regional and national shortage**

- **Behavioral Science/Health Educators**
  - The US Department of Labor projects a 37% job growth.
  - In 2010, 63,400 people were employed as health educators and projections show that 86,600 will be employed as health educators in 2020.
  - In SD, there were 200 employed health educators in 2010 and the projection for 2020 is 220, with at least an 11% increase. http://www.bls.gov/ooh/Community-and-Social-Service/Health-educators.htm

- **Dental Hygiene**
  - The PhD in Health Science was viewed as an appropriate advanced degree; few other degree options are available.

- **Medical and Health Service Managers**
  - At the national level, there were 303,000 individuals employed in these capacities in 2010 with a projected employment of 371,000 by 2020.
In South Dakota, there were 710 employed in 2010 with a projected employment of 810 by 2020.

The national growth is projected to be over 22% and the growth in South Dakota is projected to be at least 14%.

http://www.bls.gov/ooh/Management/Medical-and-health-services-managers.htm

- Nursing:
  - USD Nursing anticipates a 34% vacancy in faculty positions due to program growth and faculty retirement in years 2015-2016. On average, 18% of faculty FTEs are covered by adjuncts.
  - A shortage of faculty is a primary obstacle to meeting the expanding workforce demand for nurses.

- Occupational Therapy
  - In 2011-2012, there were 157 vacant positions for occupational therapy faculty.
  - 30% of faculty FTEs are filled with adjuncts.
  - In occupational therapy programs offering master’s entry, ACOTE Standards require 51% of faculty to hold doctoral degrees. In programs offering doctorate entry, all faculty must hold a doctoral degree.

- Physical Therapy
  - In 2012-2013, there were 153 vacant positions for faculty
  - 105 position vacancies in allocated positions were projected
  - Survey respondents estimated 50 new positions to be filled
    http://www.capteonline.org/uploadedFiles/CAPTEorg/About_CAPTE/Resources/Aggregate_Program_Data/AggregateProgramData_PTPrograms.pdf

- Physician Assistant
  - 149 programs encountered barriers to hiring new faculty. The most common barrier was salary, followed by lack of qualified candidates.

Number near retirement

- Addiction Studies
  - The mean age of addiction educators in 2010 was 51.4 years.

- Nursing:
  - 39% of USD Nursing faculty are over the age of 50 with 6% expected to retire soon.
  - A 2012-2013 AACN survey of nursing faculty revealed that the average age of doctorally-prepared nurse faculty at the ranks of professor, associate professor, and assistant professor was 61, 58, and 52 years, respectively.

- Occupational Therapy
  - In 2010, 52% of occupational therapy faculty were 50 years and older; 16% are expected to retire in 2015-2019.
• Physical Therapy
  o In 2012-2013, the average age of PT faculty was 50 years.
  o 58.4% of male faculty and 51% of female faculty were 50 years and older
    http://www.capteonline.org/uploadedFiles/CAPTEorg/About_CAPTE/Resources/
    Aggregate_Program_Data/AggregateProgramData_PTPrograms.pdf

• Physician Assistant
  o The median age of PA faculty in 2010-2011 was 50 years old with 16% at 60 and
    above

Need for the Proposed Program
The proposed program will meet the state and national shortage of doctorally-prepared faculty
and leaders in health sciences, preparing graduates as qualified teachers, high-caliber researchers,
and administrators in health and human services. The interdisciplinary skills of program
graduates will prepare them to address complex problems in health and human service provision
and to contribute to interdisciplinary evidence-based practice and research. The program will
also expand the capacity of faculty to compete for extramural research dollars.

2. What is the relationship of the proposed program to the University’s mission as
provided in South Dakota statute and Board of Regents Policy?
A PhD in Health Sciences supports the Board of Regents 2014 Priorities:
  • Enroll and graduate more citizens
  • Attract new residents to SD
  • Leverage university-based research and development
  • Grow graduate programs

A PhD in Health Sciences supports the system strategic goals (Policy 1:21) and State initiatives.
The following goals are presented in order of relation to the program outcomes:
  Economic Development & Quality of Life
  • Promote growth of research initiatives;
  • Expand graduate education;
  • Contribute to workforce development & quality of life by expanding academic
    programs to meet our future workforce needs, offering off-campus and online
    programs, and creating corporate training partnerships.

  Educational Attainment
  • Increase college participation rates.
  • Keep our graduates in state.

  Academic Quality & Performance
  • Promote high standards for student learning, quality instruction, and research.
  • Encourage student engagement in research and service.
  • Expand use of technology to enhance learning.
University of South Dakota  
Intent to Plan: PhD in Health Sciences

The proposed program relates directly to USD’s mission of providing graduate programs and professional education related to medicine and education.

The statutory mission of The University of South Dakota (USD) is provided in SDCL 13-57-1:

Designated as South Dakota’s liberal arts university, the university of South Dakota, established and located at Vermillion, in Clay county, shall be under the control of the board of regents and shall provide undergraduate and graduate programs of instruction in the liberal arts and sciences and professional education in business, education, fine arts, law and medicine, and other courses or programs as the board of regents may determine. [SDCL 13-57-1](http://legis.state.sd.us/statutes/DisplayStatute.aspx?Type=Statute&Statute=13-57-1)  
[http://www.usd.edu/about-usd/our-mission-vision-values.cfm](http://www.usd.edu/about-usd/our-mission-vision-values.cfm)

The legislature established The University of South Dakota as the liberal arts university to meet the needs of the State and region by providing undergraduate and graduate programs in the liberal arts and sciences, and professional education in business, education, fine arts, law, and medicine, and other courses or programs as the Board of Regents may determine (SDCL 13-57-1). The Board implemented SDCL 13-57-1 by authorizing undergraduate and graduate programs in the liberal arts and sciences and in professional education and by requiring the university to promote excellence in teaching and learning, to support research, scholarly and creative activities, and to provide service to the State of South Dakota, the region and beyond The University of South Dakota is the comprehensive university with the South Dakota System of Higher Education.  
[http://www.sdbor.edu/policy/1-Governance/documents/1-10-1.pdf](http://www.sdbor.edu/policy/1-Governance/documents/1-10-1.pdf)

The proposed program is consistent with strategic goals and priorities of the University of South Dakota:

**USD Strategic Goals:**

Undergraduate, Graduate & Professional Student Experience  
- Goal 2: Enrich academic experiences for graduate and professional students.

Research, Scholarship & Creative Work  
- Goal 1: Expand interdisciplinary research, scholarship, and creative work.  
- Goal 2: Increase national-level recognition in a select number of research and creative areas.

By 2017, USD aims to increase enrollment in graduate and professional programs by 3,000 and anticipates that enrollment in off-campus and distance courses will be 5,100. The development of this program supports those efforts. In addition, preparing additional faculty at the doctoral level in health sciences supports both the breadth and quality of educational programs offered.
USD Institutional Priorities:
1. Increase quality of undergraduate or graduate teaching, including the integration of advanced technology into instruction.
2. Increase recruitment and retention of students, with an emphasis upon retention of diverse students.
3. Increase impact of research/creative activity, particularly extramurally-funded activities bearing full cost of the research.

3. Are there any related programs in the regental system? If there are related programs, why should the proposed program be added? If there are no related programs within the system, enter “None.”

Practice doctorates exist in a variety of fields, for example, Doctor of Physical Therapy (DPT) and DNP, (Doctor of Nursing Practice); however, these do not prepare practitioners to assume roles in teaching and research. There is a PhD in Nursing offered at South Dakota State University; however there are no interprofessional PhD programs which meet the needs of other health science practitioners, administrators, and educators. This proposal intends to alleviate that gap.

4. Are there related programs at public colleges and universities in Minnesota, North Dakota, Montana, and Wyoming? If there are related programs in these states list below under each state and explain why the proposed program is needed in South Dakota. If there are no related programs in a state, enter “None” for that state.

   Minnesota
   University of Minnesota, School of Public Health has related two Ph.D. programs, neither is offered by distance.
   • Environmental Health Sciences Ph.D. http://sph.umn.edu/programs/ehsphd/
   • Health Services, Research, Policy, and Administration Ph.D. http://sph.umn.edu/programs/hsrpaphd/

   North Dakota: None

   Montana: None

   Wyoming: None

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1 This question addresses opportunities available through Minnesota Reciprocity and the Western Undergraduate Exchange in adjacent states. List only programs at the same degree level as the proposed program. For example, if the proposed program is a baccalaureate major, then list only related baccalaureate majors in the other states and do not include associate or graduate programs.
5. Are students expected to be new to the university or redirected from other programs? How many majors are expected in the first years of the program? How many graduates are expected?

USD expects to recruit 15 new students in the first years of the program with sustained enrollment of approximately 25-30 annually. We anticipate that enrollment will be primarily on a part-time basis (6 credits per semester); therefore graduation rates will be fewer, approximately 10-15 graduates are anticipated beginning in the fifth year.

Data from the USD School of Education indicates that approximately 36 students enrolled in Adult and Higher Education over the past 10 years likely would have been redirected to the PhD in Health Sciences. Enrollees represented a variety of disciplines including nursing, athletic training/kinesiology, radiology, addiction studies, health sciences, communication disorders, physical therapy, medical school administration, medical lab science, and biology.

Core curriculum and courses unique to the PhD will be open to students enrolled in other graduate programs as well.

6. Does the university intend to seek authorization to deliver this entire program at any off-campus locations? Does the university intend to seek authorization to deliver this entire program by distance technology?

<table>
<thead>
<tr>
<th>Off-campus</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance delivery</td>
<td>Yes; online delivery with limited expectations for face-to-face contact (approximately 3 times during the program of study).</td>
</tr>
</tbody>
</table>
7. **What are the University’s plans for obtaining the resources needed to implement the program?** Indicate “yes” or “no” in the columns below.

This program will be delivered on self-support tuition. Program expenses will be funded through tuition dollars received.

<table>
<thead>
<tr>
<th></th>
<th>Development/Start-up</th>
<th>Long-term Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reallocate existing resources</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Apply for external resources</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Ask Board to seek new State resources</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Ask Board to approve new or increased student fee</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Use of current coursework offered online will serve as the majority of the curriculum core.

8. **Curriculum Example: Provide (as Appendix A) the curriculum of a similar program at another college or university.** The Appendix should provide the required and elective courses in the program. Catalog pages or web materials may be used. **Identify the college or university and explain why the program may be used as one model when the proposed program is developed.**

The curriculum for the PhD in Health Sciences offered by Rush University is provided in Appendix A. Rush University College of Health Sciences offers a PhD in Health Sciences that is similar to that conceived by USD School of Health Sciences. It is a distance-delivery program designed for working professionals from a variety of health science disciplines who seek to advance their careers in academia, research leadership, administration, and policy. The curriculum for the PhD in Health Sciences at Rush consists of three threads similar to the curriculum proposed by USD, Education, Research and Statistics, and Leadership, as well as ten professional tracks that allow the student to specialize in his or her clinical practice area.

Similar programs that have been reviewed include:

1. PhD in Health Sciences: University of Medicine & Dentistry New Jersey PhD in Health Sciences (UMDNJ) (online)

2. PhD in Interdisciplinary Health Sciences: Western Michigan University (online).
   [http://www.wmich.edu/healthsciences](http://www.wmich.edu/healthsciences)

3. PhD in Health Studies: Texas Woman’s University (online & hybrid)
4. PhD in Health Sciences: University of Wisconsin- Milwaukee (1/2 credits must be in residence)
   http://www4.uwm.edu/chs/academics/phd_health_sciences/

5. PhD in Health and Rehabilitation Sciences: The Ohio State University (full-time 4-year resident program)
   http://medicine.osu.edu/hrs/phd/pages/index.aspx
Appendix A

Curriculum Example: Rush University – Chicago, IL
vLevel2Page%2FLevel_2_College_GME_CME_Page

Degree Requirements:
The university is based on the quarter system; semester equivalents are provided in parentheses.

<table>
<thead>
<tr>
<th>Education Core Courses</th>
<th>12 (8.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 601 Education Theories and Methods</td>
<td>3 (2.00)</td>
</tr>
<tr>
<td>HSC 602 Curriculum and Instruction</td>
<td>3 (2.00)</td>
</tr>
<tr>
<td>HSC 603 Methods and Evaluation</td>
<td>3 (2.00)</td>
</tr>
<tr>
<td>HSC 604 Teaching Practicum</td>
<td>3 (2.00)</td>
</tr>
<tr>
<td>Research Core Courses</td>
<td>21 (14.00)</td>
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<tr>
<td>HSC 610 Research Design I</td>
<td>4 (2.67)</td>
</tr>
<tr>
<td>HSC 611 Research Design II</td>
<td>4 (2.67)</td>
</tr>
<tr>
<td>HSC 612 Statistics I</td>
<td>4 (2.67)</td>
</tr>
<tr>
<td>HSC 613 Statistics II</td>
<td>4 (2.67)</td>
</tr>
<tr>
<td>HSC 614 Grantsmanship</td>
<td>3 (2.00)</td>
</tr>
<tr>
<td>HSC 615 Research Seminar I</td>
<td>1 (0.33)</td>
</tr>
<tr>
<td>HSC 616 Research Seminar II</td>
<td>1 (0.33)</td>
</tr>
<tr>
<td>Leadership Core Courses</td>
<td>10 (6.67)</td>
</tr>
<tr>
<td>HSC 620 Leadership Theory</td>
<td>3 (2.00)</td>
</tr>
<tr>
<td>HSC 621 Issues in Health Care</td>
<td>3 (2.00)</td>
</tr>
<tr>
<td>HSC 622 Ethics in Clinical and Research Settings</td>
<td>1 (0.33)</td>
</tr>
<tr>
<td>HSC 623 Management and Supervision</td>
<td>3 (2.00)</td>
</tr>
<tr>
<td>Professional Tracks</td>
<td>16 (10.67)</td>
</tr>
<tr>
<td>See Professional Sections for Listings</td>
<td>*</td>
</tr>
<tr>
<td>Elective Courses</td>
<td>19 (12.67)</td>
</tr>
<tr>
<td>Electives</td>
<td>**</td>
</tr>
<tr>
<td>Independent Study (Variable Credit)</td>
<td>VAR</td>
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<tr>
<td>Independent Study</td>
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</tr>
<tr>
<td>Dissertation</td>
<td>12 (8.00)</td>
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<tr>
<td>HSC 617 Dissertation Research</td>
<td>****</td>
</tr>
<tr>
<td>MS Graduate Transfer Credit</td>
<td>30-45 (20-35)</td>
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</table>
Graduate Course credit Transfer

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<table>
<thead>
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<tbody>
<tr>
<td>*</td>
<td>Variable: Minimum 16QH</td>
</tr>
<tr>
<td>**</td>
<td>Elective courses may be taken at Rush or other appropriate institutions</td>
</tr>
<tr>
<td>***</td>
<td>Variable credit with Advisor approval</td>
</tr>
<tr>
<td>****</td>
<td>Variable: Minimum 12QH</td>
</tr>
</tbody>
</table>

Total Credits: 120 Quarter Hours or 80 Semester Hours